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**The impact of research partnerships on community development projects:
A case study of the Limpopo Basin Development Challenge Programme**

by

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DECLARATION

I, Sithembile Ndema Mwamakamba declare that the dissertation which I hereby submit for the degree of Master of Social Sciences (Development Studies) at the University of Pretoria, is my own work and has not previously been submitted for a degree at this or any other tertiary institution. Where secondary material is consulted, this has been acknowledged carefully and referenced in accordance with university regulations.



June 2015

Signature:.....

Date:.....

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ABSTRACT

The concept of partnership has in the last decade emerged as being fundamental for successful poverty eradication. The importance of partnerships in development efforts is reflected in high level regional and global commitments and initiatives such as the New Partnership for Africa's Development (NEPAD) of 2001, the Paris Declaration on Aid Effectiveness of 2005, the Accra Agenda for Action of 2008 and the Busan Partnership for Effective Development Co-operation of 2011.

With the emergence of the partnership approach to development, there has also been a significant change in focus and direction of development approaches with new approaches such as Research for Development becoming prominent. Partnerships in Research for Development projects are viewed as important means for contributing to knowledge generation resulting in better and improved services, and development programmes. Although partnerships are believed to be essential in achieving development outcomes, little is known about their impact on the communities which their research is supposed to improve.

This thesis examines the impact of research for development partnerships using the Challenge Programme on Water and Food's (CPWF) Limpopo Basin Development Challenge Programme (LBDC) as a case study. The LBDC was organized into four interlinked technical research projects and one coordination project (L1-L5). The diverse range of partners in the LBDC evident in the range of disciplines and sectors represented in the partnership presented an excellent case study into how different organizations with undoubtedly different mandates come together to work on research for development programmes.

The objectives of the study were: to determine the key steps for establishing successful research partnerships; examine how partnerships are communicated to communities and relevant stakeholders paying particular attention to the different communication approaches used and the challenges experienced; assess the success of the partnership in achieving its objectives and the contribution of the partnership to the development of the community; and identify valuable lessons that can be considered by those wanting to replicate, and apply of the partnership approach to other projects.

The findings are based on primary and secondary data collected using in-depth semi-structured interviews with 19 LBDC programme partners, qualitative document analysis and participant observation. Results indicate that largely the Limpopo Basin Development Challenge partnership was successful in delivering on its objectives as the programme was able to raise awareness of the most up to date available research evidence on agricultural water management and results were shared with basin authorities.

Results further support existing knowledge on partnerships and they confirm many of the observations and claims made by established commentators in this field regarding good practice in partnerships. It is clear that the establishment of partnerships is a process that has to be well thought out, the importance of communication within and outside the partnership and external role and stakeholder engagement at all phases of the partnership and especially in monitoring and evaluating the progress of the partnership's work is crucial. Lessons and recommendations from the study could be valuable to development professionals who carry out their research and development work in partnership.

Keywords: Partnerships, Research for Development, monitoring and evaluation, impact, assessment, effectiveness, agricultural water management, community, basin development challenge, poverty

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LIST OF ACRONYMS

AGRITEX	Zimbabwe Agricultural Technical Extension Services
ARC	Agricultural Research Councils
AU	African Union
BDC	Basin Development Challenge
BFP	Basin Focal Project
CASS	Centre for Applied Social Sciences
CBO	Community Based Organizations
CEEPA	Center for Environmental Economics and Policy in Africa
CGIAR	Consultative Group on International Agricultural Research
CIRAD	French Agricultural Research Center for International Development
CPER	Challenge Programme External Review
CPMT	CPWF Management Team
CPs	Challenge Programmes
CPWF	Challenge Programme on Water and Food
CRP	CGIAR Research Programme
CSIR	Council for Scientific and Industrial Research
EOI	Expression of Interest
FANRPAN	Food Agriculture and Natural Resources Policy Analysis Network
GWP-SA	Global Water Partnership-Southern Africa
IAE	Institute for Agricultural Engineering
IBLF	International Business Leaders Forum
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
ICT	Information Communication Technology
ID	Identification Number
IFWF	International Forum on Water and Food
IMF	International Monetary Fund
ISCW	Institute for Soil, Climate and Water
IWEGA	International Centre for Water Economics and Governance in Africa
IWMI	International Water Management Institute
IWRM	Integrated Water Resource Management
IWS	Institute for Water Studies
KFPE	Swiss Commission for Research Partnerships with Developing Countries

LBDC	Limpopo Basin Development Challenge
LDA	Limpopo Department of Agriculture
LIMCOM	Limpopo Water Course Commission
MAP	Millennium Africa Recovery Plan
MCC	Mzingwane Catchment Council
MDG	Millennium Development Goals
MoU	Memoranda of Understanding
NEPAD	New Partnership for Africa's Development
NGO	Non-Governmental Organizations
OLM	Outcome Logic Models
R&D	Research and Development
R4D	Research for Development
RDC	Rural District Council
RECs	Regional Economic Communities
RISDP	Regional Indicative Strategic Development Plan
SADC	Southern African Development Community
SAPs	Structural Adjustment Programmes
SEI	Stockholm Environment Institute
SSA	Sub-Saharan Africa
SWI	Small Water Infrastructure
TORs	Terms of References
UEM	Universidade Eduardo Mondlane
UKZN	University of KwaZulu-Natal
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UWC	University of the Western Cape
WLE	Water, Land and Ecosystems
WSSD	World Summit for Sustainable Development
ZINWA	Zimbabwe National Water Authority

CHAPTER 1: BACKGROUND AND INTRODUCTION

1.1. Background

For many years, sub-Saharan Africa (SSA) has been known for famines, conflict, disease and poverty (Handley et al., 2009). Poverty reduction still features prominently in the development agenda of many countries in Africa and development organizations such as the World Bank and the United Nations have analyzed its root causes at length (Sachs et al., 2004).

Over the last 30 years, worldwide absolute poverty has fallen sharply from about 40 percent to under 20 percent, but the percentage has barely fallen in most African countries (Chandy and Gertz, 2011:4-5). According to the 2013 Millennium Development Goals (MDG) report, the slow pace of poverty reduction has resulted in an increase in people living under a \$1.25 per day, the common international poverty line. Africa represents almost 25 percent of the global population categorised as poor. Statistics show that between 1990 and 2010, the number of people living in extreme poverty rose from 289.7 million to 413.8 million in Southern, East, Central and West Africa (United Nations, 2013).

Poverty in Africa mostly occurs in rural areas, where unequal power relations trap the vulnerable in a never-ending cycle of deprivation, food insecurity and low human development. An estimated 70 percent of the continent's poor people live in rural areas where poverty is at least three times higher than in urban areas in several countries. East and Southern Africa has one of the world's highest concentrations of poor people, among who are rural poor people (United Nations, 2013)

Eradicating poverty is a shared objective of the international community. The twenty first century has seen significant changes in the understanding of poverty and hunger and in priority setting to tackle development challenges. In 2001, world leaders and the world's leading development institutions endorsed the Millennium Development Goals (MDGs), eight measureable goals which were supposed to address extreme poverty by year 2015 (Alkire, 2010:51).

The MDGs include targets of halving extreme poverty, providing universal primary education, promoting gender equality and women empowerment, reducing child mortality, improving

maternal health, curbing the proliferation of HIV/AIDS, malaria and other diseases, ensuring environmental sustainability and establishing a global partnership for development. These goals, have spurred the global community to work together in addressing the world's development challenges (UNDP, 2003).

Partnerships in the last decade have emerged as being fundamental for successful poverty eradication. The importance of partnerships in development efforts is reflected in a number of high level regional and global commitments and initiatives such as the New Partnership for Africa's Development (NEPAD) of 2001, the Paris Declaration on Aid Effectiveness of 2005, the Accra Agenda for Action of 2008 and the Busan Partnership for Effective Development Co-operation of 2011.

Significantly, these commitments were born out of years of experience of what works in development, and what does not. They are founded on the conviction that varied expertise plays a key role in development and that broad, dynamic partnerships are essential in the quest to achieve sustainable development. Whilst global leaders generally agree that some key challenges remain, there is evidence that partnerships are successful in a number of countries (OECD, 2000).

The rise of partnerships as an approach to development comes at a time when there has also been a significant change in focus and direction of development approaches. In the 1960s, development programmes focused on assistance to developing countries that were newly independent. Support in this case was through donor supported national development plans and nationalisation. In the 1980s, development focus shifted to Structural Adjustment Programmes (SAPs), aimed at to increasing developing countries' competitiveness through increased investments and privatisation (Rein et al., 2009).

During the 1990s and presently, donor agencies are promoting 'sector programmes' which entail developed countries providing direct budget support to developing countries. The programmes call for close cooperation across sectors between development agencies and national governments. The concept "research in development" has been central to the new changes in development thinking since the 1990s (Rein et al., 2009). According to de Haan et al. (2006), research institutions are increasingly working in partnership to understand the development context, improve their practice, and enhance their effectiveness and impact.

The challenges are massive and achieving development goals means that it cannot be business as usual. The search for more effective ways of using research to tackle the ever more complex development agenda has led to the rise of a series of new research approaches such as Research for Development (R4D) (Hall, 2013). R4D goes beyond analyzing the underlying causes of global change. It takes into account the development targets of different stakeholders and contributes to transforming research evidence into real action (ICRD, 2012).

The Consultative Group on International Agricultural Research (CGIAR) is respected globally as an international partnership, which addresses wide-ranging agriculture related development challenges through research programmes (del Castillo, 2012:1). Established in the mid-20th century, the CGIAR conducts high-quality international agricultural research in order to find sustainable solutions for pressing development challenges such as poverty and food insecurity, poor human health and nutrition, and dwindling natural resources (CGIAR, 2013).

Since its establishment, the CGIAR has gone through key organisational transformations, which have seen it move from a loose coalition in the 1990s into a global network of 15 research centers and again into Challenge Programmes (CPs) in 2001 (CGIAR 2013). The CGIAR research centers are independent, non-profit research organizations spread around the globe. They generally work in partnership with other research organizations such as national and regional agricultural research institutes, civil society organizations, academia, and the private sector.

The centers have close to 10,000 scientists, researchers, technicians, and staff working on hands-on research programmes (CGIAR, 2013). The CPs on the other hand were initiated in order to bring together the strengths of the different centers in tackling specific development challenges. The CPs called for partnerships across a wide range of institutions, including non-traditional CGIAR research partners (Woolley and Douthwaite, 2011).

1.2. Contextual Overview

1.2.1. The Challenge Programme on Water and Food

In 2002, the Challenge Programme on Water and Food (CPWF) was launched as one of the first three CPs. It was a global research initiative involving several institutions with a strong emphasis on north–south and south–south partnerships. The CPWF was designed to bring in new partners to work with the CGIAR centers (CPWF, 2009). To this end, research was carried out in partnership with over 200 strategic actors at different levels who are able to influence, change and continue the work even after the CPWF has ended; CPWF, 2005).

The CPWF was implemented in two phases. The first phase (2004–2008) was dedicated to developing ground breaking methods to describing water and food problems, and to effectively address challenges through improved partnerships. Sixty-eight projects aimed at exploring a broad set of water and food issues were implemented in 10 benchmark river basins in Africa, Asia and Latin America (CPWF, 2009).

A large number of Phase 1 projects were self-contained in terms of activities and outputs. The projects were all focused on some form of water resources management. Some of the overarching themes in the projects included rainwater harvesting, management, multiple-use systems at the community level integrated land, water management, and water governance (CPWF, 2012).

Each basin implemented a Basin Focal Project (BFP) in order to provide a comprehensive background for the projects. BFPs were designed to unpack linkages between poverty, water availability, water productivity, and local institutional arrangements. The BFPs were set up this way to bring about global improvements in agricultural water use efficiency. This theme driven approach of the CPWF was inspired by the science it wanted to generate rather than the development it wanted to generate (CPWF, 2012).

The second phase (2009 – 2013) of the CPWF was developed based on lessons learned in Phase 1. One key lesson from Phase 1 was the need to change from independent projects to integrated programmes at the basin level in order to have impact. The focus also shifted from the ten river basins to six priority basins namely: the Andes, Ganges, Limpopo, Mekong, Nile and Volta (CPWF, 2009).

Selection of the six river basins was largely based on the potential of CPWF's research adding value by addressing a specific development challenge in the focus basin. The CPWF focused on developing appropriate models for alleviating poverty in and beyond the basins in order to increase farmers' income and ensure that they are better able to deal with global development challenges such as climate change (CPWF, 2009).

In 2011, when the CPWF was one year into its Phase 2 projects the CGIAR underwent another restructuring process. The CPWF Board was absorbed into the Board of the International Water Management Institute (IWMI), which is in charge of the CGIAR Research Programme (CRP) on Water, Land and Ecosystems (WLE), launched in 2012 replacing CPs. Phase 2 CPWF projects continued for about 15-18 months and were concluded as had been planned (CGIAR, 2011).

1.2.2. Basin Development Challenge Programmes

Phase 2 research was designed based on CPWF Phase 1 results, consultations with and feedback from basin experts, and discussions at the CPWF international forum. The first phased sort to contribute to solving an important and pressing Basin Development Challenge (BDC) in the six priority basins (CPWF, 2009). In selecting the BDCs, key stakeholders were consulted and agreed on the importance of the challenge and motivation to work on it, and the high impact potential for CPWF's contribution (Ekboir et al., 2013).

The BDC partnership model was designed to support cooperative interaction between researchers, government institutions, development experts and the basin communities in addressing development challenges. The model also encouraged the identification of adequate forms of partnership to design and implement research through sub-projects and the creation of multi-stakeholder platforms and (CPWF, 2012).

The six BDC programmes consisted of four to five different projects. The individual projects had a lead regional or international institution and supporting partners (BDC = 4-5 projects x 1 lead partner per project x 5+ implementing partners), such that each basin programme was comprised of 20 or more partner institutions that formed a diverse, multi-disciplinary research team. For each basin, there was a Basin Leader responsible for coordinating the BDC research projects in that basin. Each of the project partnerships were representative of the different

stakeholder groupings such as vulnerable communities, policy makers, development actors and researchers (CPWF, 2012).

A coordination project in each basin was responsible for leading internal innovation research and coordinating external innovation research. The BDC projects in essence were experiments in putting research into use and they were monitored by means of outcome and impact pathways. Overall the BDC Programmes targeted public, private, non-governmental development agents, investment agents in development, researchers, training institutes (universities), policy makers, farmers and rural communities and CPWF Management (CPWF, 2012).

The CPWF considered the following as key development challenges in the six priority basins during its Phase 2:

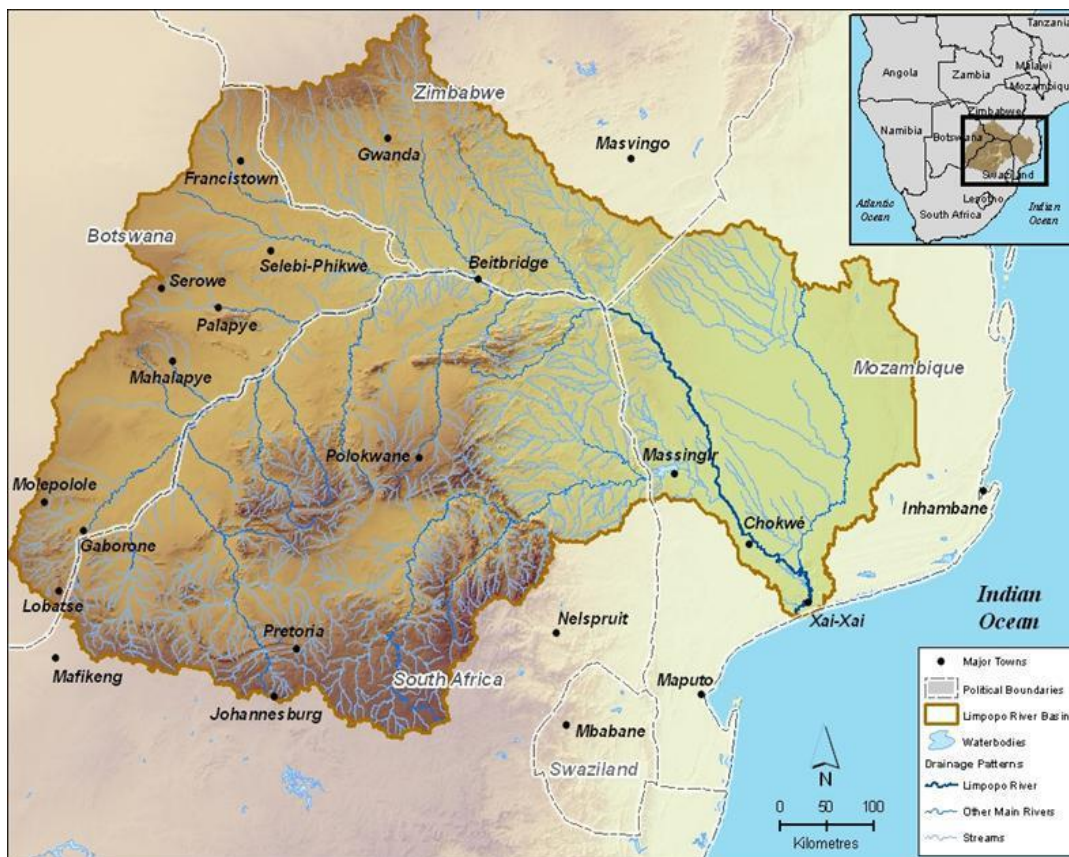
- Andes - Equitable benefit sharing mechanisms to increase water productivity and reduce water-related conflict
- Ganges - To reduce poverty and strengthen livelihood resilience through improved water governance and management in coastal areas of the Ganges Basin.
- Limpopo - Improve integrated management of rainwater to benefit smallholder productivity and livelihoods and reduce livelihood risk.
- Mekong – To reduce poverty and foster development by optimizing the use of water in reservoirs
- Nile - To strengthen rural livelihoods and their resilience through a landscape approach to rainwater management
- Volta - Strengthen integrated management of rainwater and small reservoirs so that they can be used equitably and for multiple purposes (CPWF, 2012).

Specifically this study focused on the partnership working to address the development challenge in the Limpopo river basin.

1.2.3. The Limpopo River Basin Profile

The Limpopo river basin flows over a total distance of 1,750 kilometres and is shared by Botswana, Mozambique, South Africa and Zimbabwe. It is one of the largest drainage areas in Southern Africa measuring 413,000 km² and covering almost 14 percent of the total area of its four riparian states. South Africa occupies 44 percent of the basin's total land area, Mozambique occupies 21 percent, Botswana occupies almost 20 percent and Zimbabwe occupies 16 percent (LBPTC, 2010). Figure 1 below shows the drainage area and major cities of the Limpopo basin

Figure 1: Limpopo River Basin Profile



Source: LBPTC (2010)

The Limpopo basin is the driest of the six focus river basins the CPWF was working in for its Phase 2. The basin catchment characteristics differ according to climatic and topographic zones as well as between sub-catchments and countries (Sullivan and Sibanda, 2010). Annual rainfall in the basin can be as low as 250 mm in the hot dry western and central areas or be as high as 1 050 mm in the high rainfall eastern areas (CPWF 2012).

Due to constant droughts and flooding, farming, whether rain fed or irrigated is for most smallholder farmers an unreliable source of livelihood (FAO 2004). According to Leira et al. (2002), farmers cannot afford to use technologies such as groundwater for supplementary irrigation that can reduce risk. In addition, existing infrastructure for smallholder irrigation has been found to be largely dysfunctional (Sullivan and Sibanda, 2010).

The basin supports 14 million people, including some of the region's poorest and richest communities. The number of people who live in and depend on the basin's resources for their livelihood differs greatly across the four countries, from 59 percent in Botswana to less than 10 percent in Mozambique and Zimbabwe (Table 1) (Sullivan and Sibanda, 2010).

Table 1: Population Distribution in the Limpopo Basin by Country

Country	Population of Country in Basin	Fraction of Country's Population in Basin	Country share of total basin area	Fraction of country area in basin	National rural population density (WDI 2008)*
	<i>Million</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>/km²</i>
Botswana	1.0	59	19	14	230.8
Mozambique	1.3	7	21	11	307.9
South Africa	10.7	24	45	15	125.1
Zimbabwe	1.0	9	15	16	253.7

Source: Sullivan and Sibanda (2010)

Although each country faces the same challenge of reducing poverty in the face of highly uneven distribution of resources, the national interests and priorities of the riparian countries differ when it comes to water resources management (LBPTC, 2010). For instance for Botswana the priority is water use control, for South Africa the interest and priority is to improve the lives of underprivileged people. The priority for Zimbabwe is irrigation and agricultural development whilst for Mozambique its flood control (Myles and Cook, 2012).

As with most countries in SSA, poverty is one of the most persistent problems affecting the basin. Poverty is more pronounced in Zimbabwe and Mozambique in the northeast of the basin. In South Africa, poverty areas formerly designated as homelands during the apartheid years (1948 - 1990) exhibit the highest levels of poverty. Approximately 38 percent of the

Mozambican population lives on less than US\$1 per day making Mozambique the basin country with the highest national population below the poverty line compared to Zimbabwe's 36 percent and Botswana's 33 percent (Sullivan and Sibanda, 2010).

The main causes of poverty in the basin include lack of access to productive resources such as land and capital. Furthermore, basin residents have poor access to markets where they can engage in the purchase and sell of goods and services (LBPTC, 2010; Myles and Cook, 2012). According to Sullivan and Sibanda (2010), the poverty situation in the basin is compounded by income inequalities, which stem from the aftermath of apartheid and colonialism in South Africa and Zimbabwe, respectively (LBPTC, 2010).

Over the years, governments of the four countries in the basin have developed national policies aimed at reducing poverty. Generally, these policies include public sector reforms, such as land and natural resources development, environmental protection, integrated rural development and disaster management. However, efforts have not yielded significant changes as inequality and poverty in the basin is still the highest in the basin countries (Sullivan and Sibanda, 2010).

1.2.4. Limpopo Basin Development Challenge Programme

As part of efforts to address the basin's challenges, the CPWF designed the Limpopo Basin Development Challenge (LBDC) research programme on "Integrated management of rainwater to improve smallholder productivity and livelihoods and reduce risk". The overall programme goal was to improve governance and management of rainwater and small water infrastructure in the basin to raise productivity, reduce poverty, and improve livelihood resilience (CPWF 2012).

Limpopo basin related research from the CPWF Phase I came up with a number of projections to manage rainfall at field and basin levels efficiently. The issue of how to target programmes and successfully scale them out was identified as a key research and potential development area for Phase 2. The thinking was that addressing this challenge would not only address the identified BDC but would also identify opportunities that could possibly change or improve the livelihoods of rural communities (CPWF, 2012).

The programme had five interlinked projects: L1 on targeting and scaling out, L2 on small-scale infrastructure, L3 on farm systems and risk management, L4 on water governance and L5 on learning for innovation and adaptive management also known as the coordination project. All five projects had some relevance for all basin countries. However, the level of activities addressing specific issues differed from one country to another (FANRPAN, 2012).

Key challenges identified as hindering poverty reduction within the Limpopo basin by Phase I of the CPWF included low and highly variable rainfall, weak mechanisms for transferring skills, knowledge and technologies, as well as the inadequate policy and investment environment. A number of potentially successful rainwater management practises at field to basin scale were identified (FANRPAN, 2012).

The L1 project was designed to address the development challenge by producing a decision support tool to identify areas with the greatest opportunities for the out-scaling of interventions related to particular agricultural water interventions. The purpose was to contribute towards improved water management and increasing food production in the basin, given existing social-economic and biophysical conditions (FANRPAN, 2012).

Research results from CPWF Phase 1 revealed that water accessibility for small-scale agricultural production in the basin is low due to either dysfunctional or unavailability of adequate water infrastructures. This has resulted in poor crop yields, reduced livestock and elevated poverty levels linked to food insecurity. Therefore Phase 2 was designed to assist farmers and rural communities to optimize the utilization of low rainwater and existing small water infrastructure (SWI) to boost agricultural productivity, standard of living and reduce poverty (CPWF, 2012).

The L2 project was therefore aimed at engaging smallholder farmers and rural communities in establishing limitations and failures of SWIs in order to develop guidelines for better establishment, rehabilitation and operation of infrastructures, including rainwater-harvesting technologies. It proposed to accomplish this by undertaking an inventory of SWIs across the basin and creating a database of which ones work and which ones do not (FANRPAN, 2012).

Another challenge identified during Phase 1 of the CPWF was that despite dry conditions, smallholder farmers in the basin continued to practise crop production in order to feed their

families. This raised an important technical question of whether increased fodder production in the dry conditions of the basin, would improve levels of food security and water productivity. This is because fodder is a more resilient production system compared to grain (CPWF, 2012).

In order to address this question, L3 was therefore designed to look at how issues of market access, crop and livestock technologies, and risks related to investments in water and market scarce environments interact. It was hoped that this would lead to technology adoption by farm families enabling them to enhance food security and incomes through more efficient water use. The project specifically targeted private sector, non-governmental organizations (NGO) and community based organizations (CBO) agents to bring about market-related changes for smallholder farmers (CPWF, 2012).

The goal of the L4 project was to improve access to and control of water for rural communities from farm to basin level, by improving management of the technologies they use to access water as well as increase the value of related goods and services. The project anticipated that this would increase the productivity of water-related farming enterprises and potentially raise agricultural output of the various livelihood strategies, which use water as a major input (CPWF, 2012).

The project was designed against a backdrop of national and regional policies and initiatives aimed at reforming water governance that have not always produced results at the local level. The L4 project's interest was on governance systems relating to the various 'intervention platforms' commonly found in the basin such as enhanced rain fed farming, crop-livestock interactions, and management of small water infrastructure such as multipurpose dams (CPWF, 2012).

In designing the LBDC programme, the CPWF was aware that in order to improve agricultural productivity in rain fed systems in the basin it was essential to bring different stakeholder groups together. Hence the L5 project was planned to aid the four LBDC projects (L1-L4) conduct comprehensive quality research that would contribute to beneficial change in the basin (FANRPAN, 2012).

1.2.5. The LBDC Programme Partners

Consortia of local, national, regional and international partners implemented the projects described above (L1-L5). Each consortium linked out of basin research organizations with in-basin research organizations and development organizations. The table below presents the LBDC partner institutions. The core LBDC partnership included international research institutions, national universities, governmental organizations, regional networks, NGOs and private sector organizations (FANRPAN, 2012).

Table 2: LBDC Project Partners

PROJECT	PROJECT PARTNERS	INSTITUTION TYPE
Targeting and Out scaling	<ul style="list-style-type: none"> Stockholm Environmental Institute (SEI) 	<ul style="list-style-type: none"> International Research Institution
Limpopo project 1 (L1)	<ul style="list-style-type: none"> WaterNet University of Witwatersrand International Water Management Institute - South Africa (IWMI) 	<ul style="list-style-type: none"> International/Regional Network National University International Research Institution
Small Scale Water Infrastructure (SWI)	<ul style="list-style-type: none"> The South African Agriculture Research Council (ARC) 	<ul style="list-style-type: none"> Governmental Institution
Limpopo Project 2 (L2)	<ul style="list-style-type: none"> Agricultural Research Council - Zimbabwe Limpopo Department of Agriculture University of Botswana University of KwaZulu-Natal Universidade Eduardo Mondlane 	<ul style="list-style-type: none"> Governmental Institution Governmental Institution National University National University National University
Farm systems and risk management	<ul style="list-style-type: none"> The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) Zimbabwe 	<ul style="list-style-type: none"> International Research Institution
Limpopo Project 3 (L3)	<ul style="list-style-type: none"> Agricultural Research Council - South Africa 	<ul style="list-style-type: none"> Governmental Institution

	<ul style="list-style-type: none"> • Limpopo Department of Agriculture • Progress Milling • Agricultural Technical Extension Services - Zimbabwe; • World Vision • Rural District Councils 	<ul style="list-style-type: none"> • Governmental Institution • Private Sector • Governmental Institution • Non-Governmental Organization • Governmental Institution
<p>Water Governance Limpopo Project 4 (L4)</p>	<ul style="list-style-type: none"> • WaterNet • International Center for Water Economics and Governance in Africa (IWEGA) • International Water Management Institute - South Africa (IWMI) • University of Zimbabwe • Mzingwane Catchment Council • University of the Western Cape • Zimbabwe National Water Authority 	<ul style="list-style-type: none"> • International/Regional Network • International Research Institution • International Research Institution • National University • Governmental Institution • National University • Governmental Institution
<p>Change and coordination Limpopo Project 5 (L5)</p>	<ul style="list-style-type: none"> • Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN) • Global Water Partnership-Southern Africa (GWP-SA) • WaterNet 	<ul style="list-style-type: none"> • International/Regional Network • International/Regional Network • International/Regional Network

The diverse range of partners in the LBDC evident in the range of disciplines and sectors presents an excellent case study into how different organizations with undoubtedly different mandates come together to work on R4D projects. The study looked at what each partner brought to the programme and how different mandates, skills and expertise were brought together to achieve the ultimate objective of the LBDC.

1.3. Statement of the Problem

Although partnerships are believed to be essential in achieving development outcomes, little is known about their impact on the communities, which their research is supposed to improve (Maselli et al., 2006). According to Sanginga (2006), cases of successful partnerships are either very rare or not properly acknowledged. He argues that simple methodologies that permit research and development practitioners to use as a point of reference the status of their partnerships are lacking.

Studies addressing the issue of partnership in the context of the CGIAR have been conducted over the years (CGIAR Science Council, 2006; CGIAR Science Council, 2008; Smith and Chataway, 2009; Horton et al., 2009). The studies have focused more on the management of partnerships concerning the CGIAR and other stakeholders such as the private sector and civil society organizations, rather than on understanding the nature of the dynamics between partners and the effectiveness of partnerships to the development of communities where they are working (Horton et al., 2009).

Concerning the CPWF, the First Challenge Programme External Review (CPER) conducted in 2008 failed to deliver a thorough assessment of the impact and effectiveness of partnerships as an approach to development research (CGIAR, 2008). The lack of analysis of the effectiveness of partnerships in the CPWF is a major knowledge gap and raises questions on the usefulness of the approach in tackling development challenges by the CPWF. Bezanson et al. (2004) and other scholars have stressed the need to understand the nature of the dynamics between partners and the effectiveness of these partnerships to the development of communities where they are working.

This study therefore addresses this need and contributes to a greater understanding of the nature of partnerships in research for development initiatives. The study also facilitates the conceptualization of new questions and issues for further research regarding the effectiveness of the partnership approach to research for development within the CGIAR and partner organizations. Lessons and recommendations from the study could be valuable in the design and implementation of new R4D initiatives.

Findings of the study will be of use to development professionals, donors and programme designers, researchers, and decision makers who carry out their research and development work in partnership. Other stakeholders who will find this research useful include programme managers who are involved in programmes being implemented in partnership or other practices involving different stakeholders. The findings will also provide the CGIAR and other development partners with a better understanding of how to implement programmes that require the expertise of several organizations.

1.4. Research Objectives and Questions

The research, through a study of the LBDC Programme endeavours to:

1. Determine the key steps for establishing successful research partnerships.
2. Examine how partnerships are communicated to communities and relevant stakeholders paying particular attention to the different communication approaches used and the challenges experienced.
3. Assess the success of the partnership in achieving its objectives and the contribution of the partnership to the development of the community.
4. Identify lessons that would be useful in the expansion, replication, and broader application of the partnership approach to other projects.

The main research questions of this study are as follows:

1. What are the key components necessary for successful partnerships in research for development?
2. What lessons can be learned from the experience of the partnership established as part of LBDC programme that can be transferred to other development projects and programmes?

1.5. Thesis Overview

The thesis is organized into eight chapters. The first Chapter provides an overview of the emergence of the partnership approach in development. The chapter defines the scope of the thesis by a brief discussion of the CPWF and the LBDC programme partners. The nature of the research problem, research objectives and specific research questions are clearly stated.

Chapter two presents a careful examination of previous research relevant to key aspects of the study and is followed by chapter three which provides a detailed description of all aspects of the design and methods used to obtain and analyze the evidence for purposes of answering the research questions. The results of the study are discussed in detail in chapters' four to six.

Chapter four addresses research objective one, which focuses on the key steps for establishing successful partnerships whilst chapter five and six address research objective two which focuses on how successful the LBDC project has been in achieving its objective and research objective three which focuses on knowledge management and communication arrangements in the LBDC project.

The thesis concludes with chapters seven which addresses research objective four focusing on identifying themes, lessons and recommendations from the study that could be valuable to development professionals who carry out their research and development work in partnership. The chapter also provides a concluding discussion of the findings of the study.

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

As interest in the use of the partnership approach in international development has grown, so has the body of literature addressing this subject. However, according to Williams and Sullivan (2007:24), “there is no single theoretical framework or consolidated body of inter-organizational theory that adequately explains partnerships”. Instead, there is what Oliver and Ebers, (1998:549) call “a cacophony of heterogeneous concepts, theories, and research results”. The most prominent body of work in the context of research for development partnerships comes from the Swiss Commission for Research Partnerships with Developing Countries (KFPE) and from the Partnering Initiative of the International Business Leaders Forum (IBLF).

In the context of the CGIAR, different arrangements of association (e.g., partnerships, networks, alliances and consortia) have raised considerable interest over at least the past two decades. Partnership work has been reviewed by several leading experts on several occasions (CGIAR Interim Science Council, 2002; Bezanson et al., 2004; Bevege et al., 2006; CGIAR Science Council, 2006; CGIAR Science Council, 2008b; Smith and Chataway, 2009; Horton et al., 2009).

This chapter examines the available literature on partnerships as a developmental approach to understand better, how partnerships are established, what their contribution to development is and the different communication approaches used by the partnerships. First, the chapter traces the history of the emergence of the partnership concept in development and unpacks the concept of R4D, before reflecting on the framing processes that different interests use to explain partnerships and delving into the key features of partnerships created to address development challenges.

2.2. Partnership as a Development Model: The Historical Context

For many years, the world has been faced with insurmountable development challenges. Over 1 billion people continue to live under the poverty line of \$1, 25 per day and income disparity between the world’s nations continues to rise (UNDESA, 2013). According to Helleiner (2000), concerted effort, increased cooperation, a reorientation and leveraging of resources and effort is needed in order to reach the critical mass required to reduce poverty. The idea of

working in partnership was therefore born out of a need to find better and more effective ways of addressing the world's ever-growing development challenges.

The term partnership became a common rhetoric in development after the Pearson Commission published the 'Partners in Development' report in 1969. The Pearson Commission was the first of the international commissions to suggest a new practice to development, focused on research and knowledge in developing countries. The report called for new development cooperation that went beyond developed countries simply transferring funds to developing countries (Pearson, 1969). This new approach, according to Maxwell and Christiansen (2002), called for the establishment of new sets of relationships based on a common understanding and self-respect and a clear definition of responsibilities acceptable to both developed and developing countries.

Partnership was again a key concept in the Brandt Report, 'North South: A Programme for Survival', of 1980. The Report provided an understanding of drastic differences in the economic development of the world's developed and developing countries (Brandt, 1980). The Brandt Commission, according to Helleiner (2000), Maxwell and Christiansen (2002), envisaged a new kind of world with practical dealings among all people and nations, a world in which sharing, fairness, liberty and peace would prevail.

In 1992, the Rio Earth Summit began a partnership programme which matured ten years later at the September 2002 World Summit for Sustainable Development (WSSD). It was at this Summit that more than 220 partnership initiatives were launched. The WSSD recognized that the achievement of the commonly shared goals of sustainable development required the involvement of all relevant actors through partnerships, especially between developing and developed countries (United Nations, 2002).

Leading up to the WSSD, the United Nations Millennium Declaration of 2000 and the Monterrey Consensus of 2002 further highlighted the need for partnerships in pursuing sustainable development that played crucially important roles in driving forward progressive agendas. The former established a set of measurable development priorities to be achieved by 2015 now popularly known as the MDGs (Zadek, 2003; United Nations, 2011).

The MDGs cover a comprehensive range of important development issues ranging from poverty reduction, health and education to gender equality, access to clean water and environmental sustainability. Furthermore, the MDGs emphasize the role of developed countries in assisting developing countries in halving the number of people living in absolute poverty by 2015. Specifically, goal eight sets objectives and targets for the development of strong global partnerships in achieving development and poverty eradication (UN, 2011).

The Monterrey Consensus on the other hand created a powerful momentum that put development issues at the centre of the global agenda and arguably reinvigorated an international partnership for development. The agreement called for resources to meet the MDGs and was described by the UN as a groundbreaking charter for global development partnership. The agreement was essentially a commitment by nations to provide the means to attack poverty worldwide (UNDESA, 2003). This is something that had been lacking in the Pearson Commission and Brandt Commission reports.

Since then, world leaders have signed the Paris Declaration on Aid Effectiveness of 2005, the Accra Agenda for Action of 2008 and the Busan Partnership for Effective Development Co-operation of 2011. According to the OECD (2006), these agreements are born out of decades of experience of what works for development, and what does not. They seek to change the way development support is provided and managed with the ultimate intention of strengthening its impact and effectiveness.

While these arrangements have generated renewed commitments from world leaders to address development challenges, poverty in Africa and other parts of the world persists. A number of criticisms have emerged concerning the appropriateness of development co-operation, and its inadequacy in addressing some of the global challenges (Lister, 2000). Moyo (2010) argues that development cooperation in the form of aid has made things worse instead of alleviating poverty. She gives an example of how in the 1970s, only 10 percent of Africans were living in poverty compared to 70 percent now (Moyo and Myers, 2009).

Within the African context, the rise of partnership rhetoric can be traced back to 2001 when three initiatives on enhanced partnerships as a way of addressing Africa's development challenges were launched. The initiatives were the Millennium Africa Recovery Plan (MAP), the Omega Plan and the Compact for African Recovery initiated by the United Nations

Economic Commission for Africa (UNECA). All three initiatives had a common agenda of increasing the rate and impact of Africa's development (RCM-Africa, 2007). Consequently, these initiatives culminated in the adoption of NEPAD by African Heads of States and Governments in 2001.

It is however no coincidence that these initiatives arose after the UN Millennium Declaration of 2000. During this period, African leaders “woke up” to the fact that if they needed things to change on the continent, they had to be drivers of that change and not wait for developed nations. After many failed attempts to alleviate poverty in Africa by developed countries, it was perhaps time for Africa to lead its own development.

NEPAD was therefore established to address Africa's development problems with the overall objectives of reducing poverty, positioning Africa on a sustainable development path and putting a stop to the marginalization of Africa. NEPAD's founding fathers recognized that this could not be achieved by African governments on their own and therefore called for increased local and international partnerships (NEPAD, 2001).

Since its establishment, NEPAD has been endorsed widely by African countries as well as by its supporters such as the World Bank and the International Monetary Fund (IMF) as Africa's chief driver of the continent's development plans. NEPAD is generally accepted to be the platform through which support to Africa's development efforts can be best channeled. As a result, the NEPAD process is now widely accepted as the framework mechanism for development efforts not only by African countries and Regional Economic Communities (RECs), but also by Africa's development collaborates (UNCTAD, 2012). However, in recent years, NEPAD has received its fair share of criticism for being an ineffective body with nothing to show in terms of achieving its development goals (Ba, 2007).

Between 2004 and 2008, Africa, through the African Union (AU), developed a number of groundbreaking continent to continent and continent to country partnerships aimed at enhancing cooperation and consolidating growth of the continent (African Union, n.d). Of significance is Africa's growing economic and political partnership with China which has been surrounded by much criticism. Scholars such as Jenkins and Edwards (2005) and Chen et al., (2005) call this partnership a new form of colonization because of China's interest in Africa's resources.

Other scholars such as Taylor (2004) and Muekalia (2004) argue that Chinese investment covers a wide range of sectors, which include infrastructure, education, and information technology. These investments, they argue, can benefit Africa and all of its trading partners. Nonetheless, the guiding principle behind the AU partnerships is ‘Win-Win’ outcomes for the mutual benefit of all parties involved. The partnerships are based on trust, equality and mutual respect and they are aimed at eliminating the age-long pattern of donor-recipient relationships to one founded on reciprocal obligations and responsibilities (African Union, n.d).

2.3. Defining Partnerships

The concept of partnership according to Horton, et al., (2009) is defined differently across disciplines and communities of practice. The term, partnership is often used to generally describe different models from loose networks and alliances to more institutionalized joint ventures (Caplan et al. 2007). What is however critical in all the definitions, is the issue of shared objectives.

Bezanson et al.’s (2004) definition of partnerships draws attention to the fact that sometimes the term partnership can take account of objectives that include ‘getting to know each other better’, to learning about how two parties work together, to mutually supporting actions of two or more parties with specific roles and responsibilities.

Brinkerhoff, (2002:216), also highlights the issue of shared objectives. She defines a partnership as

’a dynamic relationship among diverse actors, based on mutually agreed objectives, pursued through a shared understanding of the most rational division of labor based influence, with a careful balance between synergy and respective autonomy, which incorporates mutual respect, equal participation in decision-making, mutual accountability, and transparency’.

According to Rein et al. (2009), an added challenge to defining partnership is that it is also used interchangeably with words and phrases such as alliance, association, collaboration, co-operation and working together. These commonly used definitions tend to cover the various obligations of partners to participate, critical non-financial contributions and the distinct

differences between organizations that make the partnership process extremely challenging (Caplan, 2006). This according to Horton et al. (2009) tends to result in misunderstandings across disciplinary boundaries and areas of work and research.

For instance, in education, partnership is defined as a dynamic collective practice that brings shared though not essentially equal benefits to the parties involved in the partnership (Rein et al., 2009). This association is grounded on respect, transparency and mutual benefit. Similarly, in Public Administration, partnerships are viewed as dynamic relationships between different players, based on commonly agreed objectives. The relationship, it is argued, is founded on principles of mutual respect, equal participation in decision-making, mutual responsibility and transparency (Horton et al., 2009).

In addition, the term partnership is at times used to describe activity-focused projects that draw on the knowledge of different stakeholders. This definition according to Urwin (2005) is usually scale specific, focusing on projects at local, national or regional level. Links between donors and recipient governments are generally classified at an international level whilst concrete initiatives between governments and non-governmental parties usually operate at a national or sometimes regional level (Urwin, 2005).

These different definitions have their own merits and shortcomings. However, one common denominator is that they are all delineated by different levels of trust, organizational cultures, target beneficiaries/areas, or shared mandates (Bezanson et al., (2004). In fact, McLaughlin (2004) argues that the lack of definitional clarity can be helpful in some situations because its very ambiguity invites multiple interpretations and, therefore, does not immediately exclude potential stakeholders.

There is evidence that many partnerships encounter difficulties that stem from different interpretations of the nature and purpose of collaboration (Sullivan and Williams, 2007). However, since the focus of this study is on R4D partnerships, it is therefore important to present a definition of partnerships within this context.

2.3.1. Research for Development Partnerships

Africa's development objectives, enshrined in NEPAD and the MDGs, have advanced into a melting pot for development research to find the main issues that nurture advancement in achieving development goals, or the lack thereof (UNDESA, 2008). According to Hurni (2010), generating shared knowledge and developing the capacity to cross several borders between understandings of realities and issues is key in achieving development objectives.

Volmink (2005) supports this by highlighting that collaboration in research is one useful means for improving research capacity in under developed countries. However, he notes that whilst African researchers usually welcome collaboration with researchers from developed countries as a way of overcoming research obstacles and encouraging the interchange of ideas, they are less keen about co-operation between countries within the continent (Volmink, 2005).

Over the years, there have been many variations of development research all with strengths and weaknesses. Development experts and scholars refer to research on development, development policy research or research for development (Volmink, 2005). Although there are many different definitions of development research, some key principles can be identified in the literature.

The first principle proposes that development research should respond to problems and needs and to specific target groups but it does not take account of the type of knowledge that is produced by the research. The second principle proposed by Volmink (2005) emphasizes that development research should produce knowledge and results which can be used in practice.

According to Hall (2013), disappointing results from the past and an ever more complex development agenda requires new development approaches. Whilst Hall (2013) does not offer a clear definition of R4D, he argues that the definitions of R4D at the moment are quite ambiguous as the current literature on the subject is surprisingly quite thin. He further argues that it is not clear what R4D actually is, an approach, a framework, a set of tools or rhetoric to cover-up business as usual.

Existing literature on the subject emphasize the point that R4D is more about practice rather than rhetoric (Court and Young, 2006a; Court and Maxwell, 2005; Court et, al., 2005; ODI, 2004). According to the Overseas Development Institute (ODI, 2004:1) "better utilization of

research and evidence in development policy and practice can help save lives, reduce poverty and improve the quality of life”.

However, different schools of practice give emphasis to different aspects, some more focused on participatory approaches and others giving great emphasis to systems thinking and institutional change (Hall, 2013). According to Court and Young (2006b) following the release of the 1998/99 World Development Report, Knowledge for Development, there has been a recognition that research can come up with solution that can inform poverty reduction strategies.

A number of authors (Maselli et al., 2006; Henson-Apollonio, 2005; Wiesmann and Stöckli, 2011) offer definitions that are useful in the context of R4D. Hagedoorn (2000; 11) defines a research partnership as ‘an innovation-based relationship that involves, at least partly, a significant effort in research and development (R&D)’. These partnerships bring together a wide range of individual researchers, research institutions, or research groups “to conduct result-oriented research and capacity-building activities at individual and institutional levels, or both levels simultaneously” (Maselli et al., 2006:13). A particular strength of this definition is that it takes into account the expected impact of the partnership.

According to Wiesmann and Stöckli (2011), research partnerships are usually established to work on a particular research project with clear objectives over a specified time. Whilst this definition is similar to the one offered by Hagedoorn’s (2000), they, however, go beyond the expected impact of the partnership by highlighting that partnerships are also time bound. Wiesmann and Stöckli’s (2011) definition implies that partnerships implement projects over a short time. They further point out that in some cases partner relationships can develop into long-term coalitions in which research agendas are developed jointly.

According to Henson-Apollonio (2005), researchers are increasingly pursuing their work in partnership as a means of maximizing limited resources and strengthening research outcomes and impacts. This argument is consistent with that of Maselli et al. (2006) who acknowledge that relating trans-disciplinary or multi-level, multi-stakeholder approaches, where all relevant participants are actively involved, helps to generate meaningful and tangible, long-term benefits and fosters processes that promote impact.

One notable trend in development research in the last thirty years has been the shift towards more multidisciplinary and interdisciplinary research (Bradly, 2007). According to Trehwella (2009), multidisciplinary research brings together researchers from different disciplines to talk about issues from each of their perspectives. These researchers may collaborate, but ultimately will maintain a separation of their disciplines during the process. At the end of the project, they go back to their respective spaces (Trehwella, 2009).

Interdisciplinary research on the other hand, brings together researchers from different disciplines in the same way as multidisciplinary research (Trehwella, 2009). However, it then uses that expertise to create new mechanisms, and approaches that would not have happened if they were handled separately. Trehwella (2009) further explains that a distinguishing element of interdisciplinary research is the need to develop a common understanding on how to address existing problems. .

By working together, researchers from different disciplines can develop a holistic understanding of development challenges. According to Upreti et al. (2012), experience shows that complementarities of skills and knowledge systems in multidisciplinary research partnerships lead to sound and significant research contributions to development (Wiesmann and Stöckli, 2011).

Partnerships of this nature also have the potential to contribute meaningfully to more evidence-based designs and decision-making in places where power inequalities and grades win out (Wiesmann and Stöckli, 2011). Furthermore, according to Hall (2013), research partnerships play an important role in terms of enhancing the capacities of partners in terms of the nature of linkages between different players, and the policy and institutional environment in which they operate. However, it is important to note that research partnerships have been criticized for the one-way flow of capacity from the North, and among other things, the absence of genuine sharing (Bailey and Dolan, 2011).

2.4. Partnerships in the CGIAR

Given that the study looks at the partnerships working within one of the CGIAR programmes, it is also important to trace the emergence of partnerships within the CGIAR. In the 1970s, partnerships within the CGIAR were perceived as the medium by which improved agriculture

technologies, information and better practices were tested, disseminated and further improved. They became avenues for two-way interactions, with information and physical products flowing among the participants (CGIAR Working Group, 2008). Fundamentally, partnerships were a means of gaining access to specialized skills set as well as a way of facilitating testing and dissemination of information.

In February 1995, the CGIAR Ministerial-Level Meeting held at Lucerne (Switzerland) called for an improved partnership approach. The meeting urged the CGIAR to not only establish partnership committees with NGOs and the Private Sector but to also cultivate a more open and hands-on system with full ownership by both developed and developing countries. The CGIAR was also encouraged to complete its move from a donor-client approach to equal partnerships of all participants from developing and developed countries within the CGIAR System (CGIAR Working Group, 2008).

In recent years, the development of partnerships within the CGIAR has been influenced by system-wide organizational changes. The adoption of the CPs in 2003 provided ample grounds for extended and successful partnerships. Currently there are close to 2000 partnerships in existence within the CGIAR system. The purpose of the partnerships is to connect researchers, extension officers, and farmers to make sure that research is put into practice. Rather than researchers doing research they think will be useful, the CGAIR is encouraging its scientists to ask what problems farmers encounter and tailor research to meet those specific needs (Geheb, 2008).

The Research Centers, CGIAR Research Programmes (CRPs), and networks throughout the system help partners develop the skills and knowledge they need to take part effectively in global agricultural research programmes. It also helps them to build and support international research networks and to develop effective partnerships with civil society organizations and private sector entities (Geheb, 2008).

The way the CGIAR is organized provides a great deal of scope for collaborating across sectors, institutions and levels. The CPWF is an excellent example of diverse partnerships. During the first Phase of the CPWF, 15 CGIAR centres, 158 National Agricultural Research and Extension Systems (NARES), 31 Agricultural Research Institutes (ARIs), 20 NGOs, 5

international public organizations and private companies participated in the programme (Geheb, 2008).

One criticism of the CGIAR relates to the hierarchical structure of CG-centers. According to Becker (2000:7), the structure “appears to be quite anachronistic and needs a serious revision, especially if partnerships are expected to play a greater role in the future. This concerns both the number of hierarchical steps in the organization, as well as their sometimes quite visible translation into working relations and social relations. Partner organizations with modern structures may find it difficult to co-operate with many CG-centers in their current structure”.

2.5. Establishing Research Partnerships

Establishing research partnerships is a dynamic process that consists of several steps, which are swayed by the individualities and experiences of the partners or stakeholders, as well as by the purpose of the partnerships (Stöckli, 2011). Whilst there is no standard set of steps for the establishment of all types of partnerships, generally, all partnerships have a development cycle that includes several phases that include preparation, beginning a work programme, executing the work programme, and monitoring and evaluation on an ongoing basis (Collective Leadership Institute, 2009).

2.5.1. Partner Motivations

According to Partnerships Resource Centre (2012), two major formation approaches exist. The first approach is fundamentally centered on the extrinsic drive of players to address an issue by establishing a new alliance. Stöteler et al., (2012) explain that with this approach, the first step in forming a partnership is the recognition of the existence of a complex issue in the community and the need to address it by one or more parties. The organization responsible for identifying the need then analyses the specific issue and decides if a partnership is necessary to address the issue.

They (Stöteler et al., 2012), further point out that the difficulty of the issue and the impossibility of this issue being addressed by the organization are extrinsic triggers to start searching for collaborating resolutions. A process of identifying and selecting partners with the capacity and experience of addressing the issue then follows. The key feature in this approach is that there

needs to be a requirement to act upon the issue by at least one organization (Stöteler et al., 2012).

The second approach is largely based on an inherent motivation to make use of an existing partnership to address another issue when an opportunity arises. This approach is characterized by an on-going discussion between two or more organizations that have a determination to work together or have a joint responsibility. In the course of this discussion, the recognition grows that there is an additional opportunity, for example, they have a shared interest or need for solving an issue (Stöteler et al., (2012).

Sometimes the two approaches work in conflict and a new partnership can replace an existing partnership or an existing partnership can deter the positive creation of a new partnership. At times, the approaches go together and provide jointly supportive or independent paths towards a partnership (Stöteler et al., (2012). It is important to note that in any partnership, participating organizations will have different reasons for being part of the partnership. However, there is always a meeting point of interests of all partners (Unwin, 2005). For that reason, partnership arrangements should be planned in such a way that all partners benefit from the partnership. The benefits derived from the partnership should be more than what should they accomplish working alone (Horton et al., 2009).

The relationship formation framework proposed by Oliver (1990) as cited in Williams and Sullivan (2007:19) suggests “the need” for the partnership should be the key driving force for the formation of partnerships. This is to be reinforced by voluntary interactions, which can be determined by either asymmetry, reciprocity, efficiency, stability or legitimacy. It is however, important to note that the reasons why different organizations join or form partnerships can change with time and change of organizational priorities or focus (Williams and Sullivan (2007).

2.5.2. Managing Partnerships

Partnerships need to be managed systematically, and have clear governance structures to make sure that decision-making and development measures are suitable and run effectively (Tennyson, 2011). Partnerships can be either formal or informal. Informal partnerships work best when the project is detailed and clearly achievable. However, they tend to be difficult to understand in detail because there is no systematic way to track those (Hagedoorn et al., 2000). Formal partnerships, on the other hand, are well documented usually by way of partnership agreements and can easily be studied. Agreements can be in the form of contracts, Partnering Agreements and/or Memoranda of Understanding (MoUs) that institute or validate existing relationships for the benefit to both partners (Hagedoorn et al., 2000).

It is important that partnership agreements be jointly agreed upon, have a well-defined purpose as well as clearly defined roles, responsibilities, and working procedures (Hagedoorn et al., 2000). But Tennyson (2011), notes that formalizing partnerships comes with its fair share of additional layers of bureaucratic complexity and long-term commitments. However, it is also important to note that no matter how informal a partnership is, a Partnering Agreement is at all times required to circumvent misunderstandings and conflicts (Hagedoorn *et al.*, 2000).

According to Tennyson (2011), there are three common partnership management styles, namely centralized and de-centralized management and management by mandate. Figure 2 below explains the different partner management styles. In addition, UNIDO (2002) highlights that the management capacity of individual partners and the effectiveness of the management arrangements can limit the ambitions of a partnership. It is therefore important that the key figures in a partnership, whether it is at project level or within each of the partner organizations, be dynamic and excellent communicators so that they can get the partnership process going and coordinate the activities (UNIDO, 2002).

Given that individual organizations have different work cultures and use different approaches in delivering on their mandates, it should be expected that even within a partnership they would naturally tend to do much of their project work independently from each other. This, according to Tennyson (2011), can make control over the implementation process quite challenging. In addition, Newman (2001), as cited in Williams and Sullivan (2007:22), argues, “that partnerships are not as efficient as they are deemed to be, instead the complexities related to

decision making can cause unnecessary delays that ultimately affect the responsiveness of said intervention”.

Figure 2: Partnership Management and Mandate Options



Source: p22 the Partnering Tool book (Tennyson, 2011)

2.5.3. Partner Roles and Responsibilities

Defining ‘who does what’ regarding delivery of activities of the partnership is a key step in the establishment of partnerships. According to Geldof et al. (2011), a partnership’s success is often dependent on a clear understanding by all partners of their roles, contributions and potential gains. Rinehart et al. (2001) support this by mentioning that defining and articulating roles and responsibilities demonstrate that the partnership has carefully planned how partners can contribute to the success of the development initiative. This promotes a robust relationship in which the possibility of confusion or conflicts and disputes is minimized.

Tennyson (2011) asserts that a stakeholder mapping exercise although often used for identifying potential partners and relevant stakeholders can also be used to outline the roles and level of engagement of the various stakeholders. He reasons further that in order for the partnership to know the available expertise within the group, each partner undertake an internal assessment of their strengths and weaknesses in relation to the purpose of the partnerships they engaged in. This can guide the process of sharing roles and responsibilities that partners are most capable of performing (Tennyson, 2011).

A number of people are often involved in different phases of any partnership, taking on a range of roles as required. According to Tennyson (2011), roles often change in the course of a partnership and partners may ‘grow’ into new roles as they become more experienced in collaborating. While a clear definition and understanding of the different roles needed at different phases of the partnership is critical, the partnership should also be flexible enough to accommodate possible role changes.

Tennyson (2011) identifies six key roles, which may be combined or filled successively as the partnership develops; namely champion, donor, manager, facilitator, promoter, broker or intermediary. A partnership manager is normally appointed by the partnership on a paid basis to manage the partnership and/or the project, especially once the partnership is established and is at the stage of project implementation. A facilitator is usually someone who is outside of the partnership and is responsible for managing a specific component of the partnering process such as dealing particular issues facing the partnership (Tennyson, 2011).

A broker or intermediary can come from within or outside the partnership, his or her main role is to build and strengthen the partnership especially in its early stages (Tennyson, 2011). A

champion will promote the partnership using their personal or professional reputation in order to raise the profile of the partnership. A promoter on the other hand champions the merits of the partnership based on its record of accomplishment rather than their own personal reputation. The champion and the promoter can be members of the partnership (Tennyson, 2011).

A donor can be entirely external to the partnership, but is responsible for funding the activities of the partnership. In cases where all partners make a contribution to the partnership, the partners become the de facto 'donors'. However, if the donor is not part of the partnership, the partners need to clarify how they relate and report to the donor without undermining the integrity of the partnership (Tennyson, 2011).

Evans et al. (2004) caution that sometimes roles and responsibilities in partnerships are often assigned in a hasty manner. Whilst it is true that partners come together in the first place to capitalize on the synergies and competencies between them, they should invest in regular reviews of their expectations around roles and responsibilities. Unwin (2009) and Geldof et al. (2011) support this by adding that there needs to be flexibility to renegotiate the agreement throughout the duration of the partnership, as expectations and implementation needs can change over time.

2.6. Knowledge Management and Communication Strategies in Partnerships

2.6.1. Knowledge Management in Partnerships

The growing challenges in the world call for innovation and learning from what works and what does not. A central question in international development since the 1950s has been how best to generate, mobilize and make available knowledge which can be applied and adapted to eradicate poverty (IFAD, 2007). Knowledge management emerged in the 1990s as a scientific discipline, which promised to answer this question and was first defined by Davenport (1994) as the process of capturing, developing, sharing, and effectively using organizational knowledge. This definition was considered inadequate, as it did not identify knowledge or data sources.

Since the 1990s, several other definitions have cropped up with a remarkable variance on meaning (Dalkir, 2011). However, the most cited definition is one developed by the Gartner Group, cited in Duhon (1998). They define knowledge management as “a discipline that promotes an integrated approach to identifying, capturing, evaluating, retrieving, and sharing all of an enterprise's information assets. These assets may include databases, documents, policies, procedures, and previously uncaptured expertise and experience in individual workers” (Duhon, 1998:8-9).

Knowledge management as defined by Davenport and the Gartner Group does not speak to global development but it speaks to how organizations manage their knowledge. This according to Koenig (2012) is not surprising because traditionally knowledge management was primarily about managing the knowledge of and in organizations. Central to the concept of knowledge management is the idea of capturing and making available knowledge and information, for use by others in the organization. According to Davenport and Prusak (1998), organizations grow by having not only collective knowledge but by how they efficiently and timeously use that knowledge.

Over the years, a number of debates on the knowledge management discipline have occurred; and different schools of thoughts have emerged (Durham, 2004; Langton, 2006; Alavi, and Leidner, 1999). However, three key schools stand out. The first, views knowledge management as techno-centric with a focus on technology, and essentially about knowledge sharing and creation enhancement (Rosner et al., 1998; Alavi and Leidner, 1998).

The second views knowledge management from an organizational lense with a focus on designing organizations to facilitate knowledge processes (Addicot et al., 2006). Lastly, for scholars such as Rao (2005), Lesser and Prusak (2001) and Martin et al. (2006), knowledge management is about how internal and external factors affect how different people work together. Although different, these three perspectives present key components of knowledge management, which makes it clear that knowledge management is about people, processes, technology, culture, and structure.

Furthermore, a distinguishing characteristic of knowledge management compared to other information management fields is the fact that knowledge management addresses both tacit knowledge and explicit knowledge (Martin et al., 2006)). Whilst tacit knowledge is difficult to

articulate and is generally understood to be knowledge in people's heads, explicit knowledge refers to content that is available in some tangible form such as words, audio recordings, or images.

Koenig (2012), however, argues that this differentiation between the two types of knowledge is too simple. Martin et al. (2006) agree with this by calling the argument a rather simplistic dichotomy. They both note that there is a general tendency to differentiate between tacit and explicit knowledge. This they argue causes confusion and fails to appreciate the broadness of the concept of knowledge management.

Koenig (2012) further argues that what would be useful is to describe knowledge as explicit, implicit, and tacit. In this instance, the traditional meaning of explicit knowledge remains, as is, palpable information or knowledge. Implicit knowledge on the other hand is understood to refer to information or knowledge that has the potential to become explicit, whilst tacit refers to information or knowledge that one cannot touch but is in someone's head (Koenig, 2012).

This approach is much more holistic and user-centred with the first step being to conduct a needs analysis to determine how improved knowledge sharing may benefit specific individuals, groups, and the organization as a whole. The documentation of successful knowledge-sharing examples in the form of lessons learned and best practices will follow, and ultimately the organization will remain with core stories (Koenig, 2012).

A study by Parise and Sasson (2002) found that knowledge management principles and techniques play an important part in the success of partnerships. Whilst they agree that there is still a lot of work that needs to be done in developing a common understanding of knowledge management approaches, they urge organizations to prioritize and dedicate resources towards incorporating knowledge management into the partnership building processes.

In the development field, there has been a growing interest from organizations to find means of assessing not only their own learning, but also the intangible impact of their work. Whilst knowledge management can provide insights on this, available literature on the subject exhibits a few gaps in this regard. According to Hovland (2003), there are several key issues that still need to be addressed concerning what knowledge management and learning can do to improve poverty reduction efforts.

These include the relationship between knowledge management and learning vis a vis impact of development organizations on policy. There is also a question on “whether knowledge management and learning can improve the translation of development policy into practice” (Hovland, 2003:5). Another issue is “how knowledge management and learning can enhance the engagement of developing countries in international development debates and decision-making processes” (Hovland, 2003:5).

In the context of this study, knowledge management is central to the CGIAR’s work and is defined as systematically collecting, analyzing, using and disseminating information so that others can find and use it. Traditionally, CGIAR knowledge management and communication were pigeonholed as corporate services, thereby isolating them from the research effort and marginalizing their importance in achieving impact (CGIAR, n.d).

However, with the restructuring and development of new strategies, knowledge management and communication is now at the center of the CGIAR’s programmes and is now recognized as critical to furthering the consortium’s work. A major shift in policy in terms of knowledge management is the stipulation that knowledge management and communication components must also be part of the research effort from the outset in order to bring about the desired changes (CRP WLE, 2011). An integrated knowledge system has been created to collate information about the consortium’s work and to simplify the process of communicating research results (CRP WLE, 2011).

2.6.2. Communication in Partnerships

Partnerships are by nature challenging, as they require close management of players from diverse organizations that may have quite different priorities, values and ways of working. A number of authors (Geldof et al., 2011; Smith and Chataway, 2009; and McManus and Tennyson, 2008) agree that a well-functioning communication system is a key component of the makeup of partnerships.

Equally important is the quality and character of interactions as they can make or break the partnership (Smith and Chataway, 2009). As partnerships are often composed of players coming from different work cultures, it is necessary for them to adjust their ways of thinking

and expressing themselves so that they can complement each other and work well in delivering on the objectives of the partnership (Geldof et al., 2011).

Furthermore, given the multidisciplinary nature of many research partnerships it is also important that the communication happen in a ‘language’ that is understood by all partners (Geldof et al., 2011). Ideally, all partners should have a comparable level of information and knowledge about the joint research activities and the environment in which they are being carried out (Mozammel and Schechter, 2005). According to Geldof et al. (2011), partnership communication strategies should encourage direct and honest communication and knowledge sharing which can create a base for common action by all partners.

Generally, clear and regular communication in earlier phases of the partnership can allow partners to bond and get to know each other. It further reduces the chances of misunderstandings, and makes the task of partnership management much easier (Mozammel and Schechter, 2005). The OECD (2006) gives equal weight to the internal and external role of communication within partnerships. Internal communication primarily focuses on the organization and interactions within the partnership. External communication on the other hand is about sharing project ideas and outputs with individuals outside the partnership; Smith and Chataway, 2009; Geldof et al., 2011).

2.1.1.1. Communicating within the Partnership

According to McManus and Tennyson (2008), good practice in communication is intricately linked to positive partnering behavior. It is important that from the onset partners work out the internal communication needs, and identify who will do what and when. Agreeing on a communication plan is as important as agreeing on a project budget. Furthermore, communication roles and tasks should be shared between the different individuals and partner organizations (McManus and Tennyson, 2008).

According to Geldof et al. (2011), internal communication within a multidisciplinary partnership happens in two ways, within the individual partner organizations and between the partner organizations. Similarly, the OECD (2006), points out that all members within a partnership generally wear two hats when it comes to communication because they act as the contact points between their institutions and the partnership. Furthermore, all partnerships

should have clearly defined internal communication guidelines to ensure that all partners are kept abreast of developments at all times (OECD, 2006).

Whilst it is important for partners to get together often enough, information communication technology (ICT) facilities such as video and telephone conferencing and e-mails have radically increased the speed of communication (OECD, 2006). It is important to note that not all partners are good communicators. McManus and Tennyson (2008) suggest that the partnership should also take it upon itself to build the communication competencies of each of the partners.

2.1.1.2. Communicating beyond the Partnership

Beyond the partners themselves, research partnerships often have a bigger audience for information and communication about the partnership's activities and accomplishments. The external role of communication in a partnership is therefore to ensure that the work of the partnership is visible, and recognized within its designated area of work (McManus and Tennyson, 2008).

External communication strategies in research partnerships enable partners to reach out to external partners such as donors, policy makers and other development or researcher organizations that can either benefit from the work of or add value to the partnership. Communicating with external partners entails sharing best practices and lessons learnt, or simply publicizing partnership activities (Smith and Chataway, 2009).

The OECD (2006) stresses the importance of paying special attention to communication at local level. Consistently engaging with local communities, the target beneficiaries of partnership interventions is crucial because community members can in some cases act as gatekeepers and have some level of influence on how successful or not, partnership work can be (OECD, 2006).

According to McManus and Tennyson (2008) partnerships tend to face challenges when it comes to agreeing and adhering to an external communication approach. In some cases, some partners may see external communication as being central to the communication strategy and may want to make public announcements about the partnership and its activities at an early

stage. Other partners, however, may be more cautious about making any public announcements about the partnership unless and until a certain level of measurable achievement or sustainability has been reached (OECD, 2006). Clear communication strategies are therefore crucial in partnerships.

Ideally, partners should agree on a strategy for communication and information sharing from the onset of the partnership. The strategy would include measures on how to deal with day-to-day information within the partnership, as well as how to share information with interested parties outside the partnership like funding partners, similar projects and the media (McManus and Tennyson, 2008).

Another method that partners can use to share information on partnership activities with outside stakeholders is to develop targeted publicity materials, which may be in web, and paper based formats and they can be used to explain the idea behind the partnership and its work. While the web enables a partnership to reach an unlimited number of people at comparatively low cost, handing out paper-based products is still considered more effective during engagement platforms. Partnerships can have regular electronic newsletters as well as printed versions of annual reports and other publications (McManus and Tennyson, 2008).

Furthermore, project reports can be packaged to target different audiences and to increase the visibility of the project and publicize its successes. Alternatively, the partnership can target engagement platforms and events where there can be opportunities to present to a different audience research findings or any other outputs relevant to the platforms (McManus and Tennyson, 2008).

However, according to Smith and Chataway (2009), it is important to note that partnerships do not begin with excellent communication capacities but their ability to communicate improves over time as partners develop trust, voice and a shared vision. Unwin (2005) and Adam et al. (2007), cited in Geldof et al. (2011:53), warn that partnerships should not fall into the trap of always having meetings with nothing to show or no visible change on the ground among the target beneficiaries.

2.7. Contribution of Partnerships to Development

The widespread promotion of partnerships as vehicles for addressing development challenges raises concerns about their value addition. Caplan et al. (2007) note that although it is widely assumed that partnership is an effective way to address sustainable development goals, there is little systematic evidence to support this claim. This view is supported by Rein et al. (2009) who also maintain that not much has been done to address the nature of partnerships and their effect on those who are either directly involved in them or the intended beneficiaries.

Stuart et al. (2011) also point out that hardly any studies have been able to explain whether partnerships are effective, under what conditions they are effective, and whether certain intermediate outcomes lead to effectiveness. Partnership literature largely focuses on the rationale, processes, and advantages of partnering (Caplan et al., 2007). According to Serafin et al. (2008) few partnerships are subjected to formal evaluation and of those that are evaluated, only a small fraction go through a process of systematic or comprehensive review to measure their overall performance and impact.

In development work however, monitoring and evaluation of interventions is important, to the work of international agencies and government bodies. It is especially important in work where donor funding has been granted to support the activities, as they have to be accountable on how they use taxpayers' money (Caplan et al., 2007). Boydell (2007:11) puts forth that "interest in evaluating partnership outcomes is commonly driven by a desire to justify the investment of resources, to identify and replicate what works and to eliminate interventions that do not work".

Over the years, a number of partnership assessment frameworks, guidelines or tools have emerged. Horton et al. (2009) identified 14 partnership guidelines and tools available on the internet. However, two key types of guidelines or assessment tools have emerged. The first set of guidelines or assessment tools were developed for general application, such as the Partnering Tool book and the Wilder Collaboration Factors Inventory.

The second set of guidelines or assessment tools are sector specific. It is important to note that for most of the guidelines and tools the theoretical and empirical foundations are unclear (Horton et al., 2009). Clearly, the wide array of available evaluation tools reaffirms the fact

that partnerships are complex and evaluating them can potentially start from a number of angles.

In the context of research partnerships, the study of the impact of North–South research partnerships commissioned by the KFPE provides key insights on the impacts of research partnerships on target groups such as policy makers and local populations. The study calls for the active involvement of target communities and key stakeholders from the outset of the project and stresses the importance of impact planning, monitoring and assessment as elements in the design and evaluation of research projects or programmes (Maselli et al., 2006).

It further makes specific recommendations to both funding institutions and the research community concerning the enhancement of desired impacts. Funding institutions are urged to design new research partnership support schemes that clearly outline the expected impact and include the views or expectations of the target communities in the programme designs (Maselli et al., 2006).

For researchers and their institutions, the key recommendations are to always plan for impact, monitor and evaluate the (planned/desired) impacts by identifying appropriate indicators from the onset. Researchers and their institutions are called on to be meticulous in the partnership selection process by choosing the right partners who are competent, committed and have the required know how to deliver on project objectives. They are urged to create mutual learning platforms and functional internal information, communication, and documentation systems (Maselli et al., 2006).

In the context of the CGIAR the future of partnerships in the CGIAR report by the Working Group 2 of the Change Management Initiative (CGIAR 2008) and the report of the Independent Evaluation of the CGIAR (CGIAR, 2008) provide important and insightful analyses of collaboration and partnership by the CGIAR.

The Future of Partnerships in the CGIAR report looks at partnerships from the perspective of ‘repositioning and raising the public profile of the CGIAR’ as a research for development and knowledge management organization oriented towards impact (Horton et al., 2009:68). One key recommendation from the report is that the “CGIAR should redefine its capacity

strengthening strategy to foster processes that prepare those in the uptake chain with the necessary skills to bring about development impacts” (CGAIR, 2008:3).

The report of the Independent Evaluation of the CGIAR on the other hand views partnership as a strong but disjointed comparative advantage of the organization (CGIAR, 2008). It assesses the CGIAR efforts in reaching out to other research and development partners and recommends “a new compact to rebalance the partnership” (Horton et al., 2009:67). It calls on the CGIAR to ensure that partners openly agree on the measurement and evaluation process and timing from the onset of the partnership (CGIAR, 2008).

According to Horton et al. (2009:93) researchers and/or development practitioners, face “methodological challenges when it comes to assessing the diverse, complex, dynamic and little understood institutional forms that are commonly labelled partnerships”. This is because partnerships do not function fully like typical organizations. As a result, available organizational evaluation and assessment methods tend to fall short (Horton et al., 2009).

Furthermore, because partners often have multiple and conflicting objectives using traditional models for evaluating, goal attainment also proves a challenge. According to Horton et al. (2009:93), “the evolution of partnership objectives and operational modes complicates partnership evaluation further, as it becomes more an art of tracking progress toward moving targets than one of measuring clear, pre-determined indicators based on well-defined planning targets”.

According to Caplan et al. (2007), there has been too much emphasis on partnerships as ends in themselves. It is, however, important to understand that partnerships and their activities are not created in a vacuum but are framed around specific contexts in which they operate. Understanding how partnership processes and outcomes relate to certain settings is important when trying to obtain information about how and why partnerships may work in a given situation and why they may not work elsewhere (Caplan et al., 2007).

In the development context, of paramount importance is the effect of partnerships on those who are most directly and immediately involved in or affected by them (Rein et al., 2009). Therefore, even though the dynamics of research for development partnerships are of interest

in their own right, the ways in which they affect the objectives of the partnership is of principal interest to this research.

2.8. Conclusion

The literature review has traced the history of partnership as a development model especially in development-oriented research by highlighting high-level commitments and initiatives that have called for partnerships. Furthermore, it has highlighted that new approaches to research such as the R4D approach are potentially powerful poverty reduction tools.

In addition, the chapter also underlined that whilst there are no standard set of steps for the establishment of partnerships, issues such as partner motivations, management structures, partner roles and responsibilities need to be agreed upon at the onset of the partnership. A review of key debates on partnership communication revealed that generally, available literature agrees that communication in partnerships happens in two ways, within the partnership (internal) and beyond the partnership (external). It further agrees that a well-functioning communication system is a key component of the make-up of partnerships and to ensuring that they achieve their objectives.

Finally, the literature review revealed that not much has been done to prove the effectiveness of partnerships as a way of addressing sustainable development goals. However, several partnership assessment frameworks, guidelines and tools are available to measure the performance of partnerships. This makes their application to different partnership situations difficult.

CHAPTER 3: RESEARCH STRATEGY, DESIGN AND METHODOLOGY

3.1. Introduction

The research design of any project is considered as a ‘blueprint’ for research as it is a general strategy for how research questions can be addressed (Polit and Hungler, 1999:66). According to Darko-Ampem (2004) the design selected for research should be the most appropriate to answer clearly and effectively the primary research question. Polit and Hungler (1999) warn that ignoring research design matters at the beginning, often results in weak and unconvincing conclusions, which fail to answer the research questions. Yin (2003:29) adds to this understanding by underlining that “a research design deals with a logical problem and not a logistical problem.

The focus of this chapter is to present a systematic flow of the entire design of the research process used to answer the research questions outlined in chapter one. The chapter is divided into four sections. The first section describes the research strategy and design used in study. Section two covers issues related to sample selection and gaining access to data sources. The third section details the data collection methods used in the study, it also looks at the strengths and weaknesses of the methods. The chapter then describes the data analysis process before concluding by looking at ethical issues and the study challenges and limitations.

3.2. Research Strategy and Design

Three of the most influential and common purposes of research are exploration, description and explanation (Bryman, 2004). The main aim of exploratory research is to identify the boundaries of the setting in which the research problems exist in. Exploratory research attempts to identify significant factors or variables that might be of relevance to the research. It is generally not cast in stone but is adjustable and often lacks a formal structure (Bryman, 2004).

The main aim of descriptive research on the other hand is to provide an accurate and valid representation of the factors or variables relevant to the research question. Descriptive research is more structured than exploratory research. Lastly, explanatory research sometimes referred to as analytical study seeks to identify any underlying connections between the factors or variables relevant to the research problem and like descriptive research; explanatory research is very structured in nature (Bryman, 2004).

There are primarily two widely recognized research approaches, namely quantitative research and qualitative research. According to Habib (2014:8), “quantitative research is an inquiry into an identified problem, based on testing a theory, measured with numbers, and analyzed using statistical techniques”. The goal of quantitative methods is to determine whether the predictive generalizations of a theory hold true (Marshall and Rossman, 1999).

In contrast, qualitative research seeks to understand a social or human problem from multiple perspectives. Qualitative research is conducted in a natural setting and involves a process of building a complex and holistic picture of the phenomenon of interest (Marshall and Rossman, 1999). Although some research may incorporate both quantitative and qualitative methodologies, in their ‘pure’ form there are significant differences in the assumptions underlying these approaches, as well as in the data collection and analysis procedures used (Denzin and Lincoln, 2005).

This study made use of an explanatory qualitative research design in examining the nature and effectiveness of research for development partnerships. This design was chosen because it investigates the why and how with a strong emphasis on description, analysis, and interpretation (Marshall and Rossman, 2006; Denzin and Lincoln, 2005). According to Patton (2002), qualitative research seeks to understand the distinctive interactions in a particular situation.

This type of research focuses more on the characteristics and meaning of the situation brought by the studied population and what is happening to them at a given time. Denzin and Lincoln (2005) and Marshall and Rossman (2006) share Patton’s view by highlighting that traditionally, qualitative research produces information only on a particular case under study as opposed to quantitative approaches which attempt to control and predict phenomena.

The uniqueness of qualitative research lies in the fact that “it is especially effective in obtaining culturally specific information such as values, behaviors, and opinions of a particular population under study” (Mack et al., 2005:1). Qualitative research often takes place in natural (rather than experimental) settings and produces text-based data through open-ended discussions and observations (Curry et al., 2009).

There are four main types of qualitative research, namely grounded theory studies, ethnographic studies, phenomenological research and case studies (Hancock, 2002). Grounded theory methodology emphasizes inductive analysis and focuses on uncovering basic social processes. The methodology tends to take a very open approach to the process being studied and is ideal for exploring integral social relationships. It is particularly useful in studying group behavior (Bowen, 2006).

Ethnographic studies in contrast seek to learn and understand a cultural phenomenon, which reflects the knowledge and system of meanings guiding the life of a cultural group (Curry et al., 2009). Ethnographic studies are greatly dependent on fieldwork and are considered adaptable compared to scientifically designed experiments, which tend to be inflexible (Whitehead, 2004).

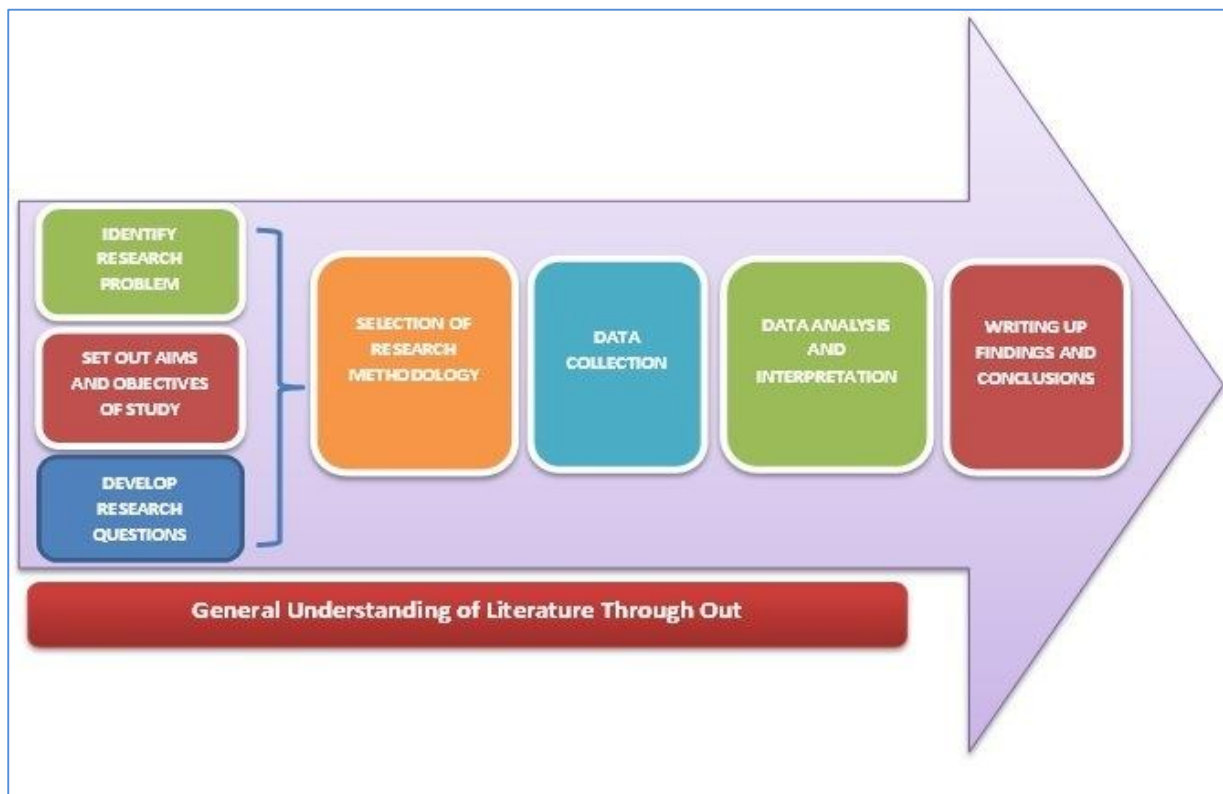
Phenomenology on the other hand according to Lester (2009; 1) “is concerned with the study of experience from the perspective of the individual.” It essentially challenges structural or normative assumptions that seeks essentially to describe rather than explain, and to start from a perspective free from hypotheses or preconceptions (Lester, 2009; Curry et al., 2009).

This research made use of the case study approach, which has the ability to generate deeper understanding on research themes. The case study approach was selected because as stated by Hancock (2002), this approach “offers a means of investigating complex social units consisting of multiple variables of potential importance in understanding the phenomenon”. Saunders et al., (2009: 146) expound further that “the case study has considerable ability to generate answers to the question why as well as what and how questions”.

Stott (2005), similar to Yin (2003), believes that the case study approach is ideal for deepening understanding into the inner workings of partnerships. This is because it offers a detailed study of a project in relation to its particular context. They suggest that carefully researched case studies can promote a stronger understanding of partnerships. According to Kothari (2004), the case study method is the recommended method for a careful and complete observation of the social unit such as a person, a family, an institution, a cultural group or even the entire community.

In the case of this study, the partners in the five projects (L1 –L5) of the LBDC programme comprised the units of analysis. The study focused on the unique interactions of the partners, and their experiences of working together over a three to four year period and their understanding of the partnership. Figure 3 below outlines the research process employed.

Figure 3: Research Process Employed



3.3. Gaining Access and Sample Selection

In qualitative research, some of the most pressing research concerns relating to the undertaking of fieldwork lie in gaining access to relevant information, research participants and sample selection (Kawulich, 2005). Several scholars (Lewis-Beck et al., 2004; Shenton and Hayter, 2004; Potter, 1996) emphasize that these two components are crucial in any research and need careful consideration for the attainment of rigor.

According to Shenton and Hayter (2004:223), gaining access involves both securing entry into a particular organization and ensuring that individuals associated with it, such as employees or partners, will serve as informants. The researcher's success in this regard will determine the nature and quality of the data collected. It will also have a significant effect on the researcher's

insight into the organizations and its members, and ultimately, on the trustworthiness of the findings (Shenton and Hayter, 2004).

Sampling, which is another pressing research concern related to the undertaking of fieldwork is the process by which the most suitable participants for the study are selected (Curry et al., 2009). The process is often determined by the study's research objectives and the characteristics of the study population such as size and diversity (Koerber and McMichael, 2008). The objective in sampling is to draw a representative sample such that the results obtained from the sample can be generalized to the population (Potter, 1996).

The most common sampling methods used in qualitative research are snowball sampling, quota sampling, and purposive sampling (Curry et al., 2009). Snowball sampling is a non-probability method that does not involve random selection. Research participants with snowball sampling are selected based on recommendations from an initial subject or participants. In quota sampling on the other hand, a detailed set of criteria is drawn up before hand and is used to select participants. The idea is to have total sample that has the same quality of characteristics that are supposedly in the population being studied (Curry et al., 2009).

In order to gain access to the LBDC programme partners, the researcher took advantage of her link with FANRPAN, the lead organization of the L5 project, which also happens to be the overall coordinator of the programme. At the time of the study, the researcher was employed by FANRPAN. It was therefore not difficult for the researcher to obtain formal permission to undertake this research within the programme. The use of contacts in terms of members of staff within FANRPAN involved in the LBDC programme, proved invaluable in ensuring that the researcher gained access to other programme partners.

Several factors can affect sample size in qualitative research, qualitative studies, samples are generally much smaller than those used in quantitative studies are (Mason, 2010). Furthermore, Mason (2010:1) indicate that “qualitative research is concerned with meaning and not making generalized hypothesis statements”, as a result “one occurrence of a piece of data is all that is necessary to ensure that it becomes part of the analysis framework” (Mason, 2010:1).

In selecting participants for this study, the researcher made use of the purposive sampling method. Purposive sampling also known as judgmental, selective or subjective sampling relies

on the judgement of the researcher when it comes to selecting the cases to be studied. This method allows the researcher to group participants according to pre-set criteria relevant to a particular research question (Glaser & Strauss, 1967; Morse, 1991).

Participants for the current study were chosen because of their extensive knowledge, experience, expertise, and involvement with the LBDC programme. Essentially, they were selected based on their ability to contribute to the overall research objectives. This method of selecting research participants is in line with Patton (1980) who notes that in purposeful sampling the researcher chooses participants who can give rich information that is suitable for detailed research. Additionally, purposeful sampling seeks to maximize the depth and richness of the data to address the research question (Curry et al., 2009).

With the help of the LBDC Basin Leader who was an employee of FANRPAN, potential participants were first contacted by way of a group e-mail introducing the researcher and requesting their participation. The researcher then followed up with the individuals who responded and expressed interest in taking part in the study. Detailed information on the objectives of the study and a consent form (Annex 1) to be completed and signed was sent to them. Those who did not respond to the introductory e-mail within two weeks were sent a second e-mail as a reminder to confirm their participation.

Although there was no set minimum or limit to the number of interview participants, the goal was to find as many participants as possible who are representative of all projects (L1-L5). Twenty- three potential interview participants were contacted and 19 individuals agreed to participate (see table 3 below). Those that did not participate could not because they were unavailable for interviewing or they felt that their position in the project did not allow them to be interviewed, as they were not coming from the lead organizations.

Table 3: Overview of Sample Size

PROJECT TITLE	SAMPLE SIZE
L1: Targeting and scaling out	4
L2: Small water infrastructure	5
L3: Farm systems and risk management	4
L4: Water governance	4
L5: Learning for innovation and adaptive management	2

3.4. Data Collection

A number of scholars including Yin (2003) and Dooley (2002) agree that case study research method can deal with multiple sources of evidence and it has well defined steps and can employ various data collection processes. Common sources of evidence in case study research include but are not limited to participant observation, document analysis, surveys, questionnaires, and interviews (Yin, 2003; Dooley, 2002). It is also important to note that although case studies often make use of qualitative evidence, they can also make use of quantitative evidence or both (Kohlbacher, 2006).

Furthermore, according to Yin (2003) and Patton (1990), good case studies benefit from having multiple sources of evidence as it also enhances data credibility. Kohlbacher (2006) supports this and argues that using evidence from various sources is a unique and critical characteristic of case study research as all evidence is of some use to the case study researcher. However, whilst the prospect of collecting data from various sources is extremely attractive, there is the danger of collecting overwhelming amounts of data that requires management and analysis. According to Baxter and Jack (2008), researchers sometimes run into a challenge of being “lost” in the data.

In partnership case studies, some of the main sources of data include contextual data from policy documents, secondary sources such as meeting minutes, MOUs and Partnering Agreements. Reviews, web literature, and primary sources such as the partners themselves, beneficiaries of the partnership, partnership brokers or staff of partner organizations are also valuable sources of information (Hurrell, 2005)

The main data collection methods used in this research study was semi-structured interviews, and qualitative document analysis (QDA). Furthermore, during the course of the study the researcher participated in an LBDC programme reflection workshop. The researcher took advantage of this opportunity to use participant observation as a complementary method for data collection. The use of more than one data collection method allowed the researcher to combine the strength of each method thereby increasing the soundness of the generated data (Curry et al., 2009).

Data collection took place over a period of four and half months from mid-April to August 2013. Relevant documents for conducting document analysis were collected during the first two months. Interviews were conducted in June. A week was spent conducting participant observation. The researcher then further spent July and August 2013 collecting documents for further QDA.

3.1.1. The Researcher's Role

In any research, it is important for the researchers to clarify their roles. This is especially necessary when using qualitative methodology as this will ensure the credibility of the research (Unluer, 2012). Notable scholars on the subject such as Adler and Adler (1994), Robson (2002) and Denzin and Lincoln (2000) assert that a researchers' role in qualitative research range from being a full member of the group being researched (an insider) to being a complete stranger (an outsider) to the research group.

According to Robson (2002:382), "the term 'insider research' is used to describe projects where the researcher has a direct involvement or connection with the research setting". Robinson (2002) further highlights that the term "insider" also covers a variety of groups which include, professionals who may carry out a study in their work setting also known as practitioner research (Robson 2002: 382). In another instance, researchers may be members of the community under study or they may become an accepted member over time community. Lastly, Robson (2002: 382) talks of collaborative research, a situation whereby both the researcher and the case under study are both actively involved in carrying out research.

At the time of the study, the researcher was employed as a programme manager at FANRPAN the institution responsible for the coordination and change project (L5). While not directly involved in the LBDC programme, the researcher had a close working relationship with the LBDC project leader and was aware of the programme's status as this was reported during the organization's monthly staff meetings and on a number of occasions highlighting FANRPAN's work.

Given that the setting of the study included the researcher's work environment, the researcher's role was to some extent that of an insider in anon-participant observer capacity (Creswell, 1994). It is important to note that the researcher was well aware of the challenges associated

with being an insider when conducting research and in terms of validity associated with insider research. The researcher did not interact as a participant in the development, delivery, or activities of the LBDC programme and no deliberate action was made to influence in anyway the work of the LBDC partners. The researcher maintained a passive role except in instances when there was need to follow up on specific issues from one of the informants.

3.1.2. Semi-Structured Interviews

In-depth semi-structured one-on-one interviews with key LBDC project partners were used to collect primary data. Semi-structured interviews are a widely used technique in development research (Bryman, 2008). Unlike formal interviews, which follow a rigid format of set questions, semi-structured interviews focus on specific themes but cover them in a conversational style. It combines both the elements of structured and unstructured interviewing (Laforest, 2009).

The interviews were conducted over a one-month period with the majority of interviews conducted during the week of the Final LBDC Reflection Workshop held from June 17 to June 21, 2013. The interviews were conducted with the help of an interview guide (Annex 2) which was developed to cover the themes that were relevant to answering the research questions. Given that the study was concerned with people's perceptions and thoughts, it was important that respondents were free to answer in their own way without much interruption from the researcher. The interview guide was used as a tool to make sure all areas of interest were covered.

Prior to the interviews the researcher contacted those who had agreed to participate in the study and scheduled appointments at a time and place that was convenient to both parties. The researcher also sent the consent form and the interview guides to respondents prior to the interviews. Some of the respondents signed and returned the consent form prior to the interviews. However, for those that did not do so the researcher had printed copies, which the respondents were asked to sign before the interview began.

All interviews were conducted in English and were between 45 - 60 minutes long. At the beginning of each interview, the researcher introduced herself to the respondents, and explained the aim of the research to familiarize the respondent with the research topic. The

researcher followed this brief introduction by asking the respondent about their position and responsibilities as a way of collecting more detail about them and at the same time creating a good atmosphere to conduct the interview and facilitate the interaction with the respondent.

As recommended by Laforest (2009) the researcher began all interviews with a general, open-ended question to get the respondents talking. On few occasions, the researcher anonymously referred to statements made in other interviews or to findings based on other data sources as a way to encourage respondents to express themselves and to validate information already gathered. All interviews were audiotaped with permission from the respondent in order to capture the responses accurately for analytic purposes (Soy, 2006).

The researcher made use of semi-structured interviews which gave the researcher leeway to control the process whilst comparing responses to a particular set of guiding questions (Burton and Cherry, 1970; Finn et al., 2000). According to Raworth et al. (2012), semi-structured types of interviews are often the best way for learning about the motivations behind people's choices and behavior, their attitudes and beliefs, and the impacts on their lives of specific policies, events or activities.

In addition, despite having specific questions, semi-structured interviews allow more probing to seek clarification and elaboration of the participant's own ideas, aspirations, and feelings while generating detailed, 'rich' context, qualitative data (Long, 2007). Use of this method allowed flexibility of inclusion of other issues that came up during the interviews that were not originally included in the interview guide, but nonetheless helped address the study research questions. After concluding the interview process and processing interview notes and transcripts, the researcher has also been able to obtain additional information by either going back to the respondents or clarifying issues by e-mail correspondence.

3.1.3. Qualitative Analysis of Documents

In addition to semi-structured interviews, the researcher also made use of the qualitative document analysis (QDA) method of data collection. This research method entails the rigorous and systematic analysis of contents of written documents by the researcher in order to shed light on a specific subject matter (Wach et al., 2013).

Wach et al., (2013) stress that the (QDA) process includes sorting collected data into themes similar to how interview transcripts are analyzed. QDA is an important research instrument and it falls within most schemes of triangulation (Wach et al., 2013). Yin (2003:87) affirmed that ‘for case studies, the most important use of documents is to corroborate and augment evidence from other sources’.

A comprehensive QDA of LBDC project documents was conducted in order to understand the history, philosophy, operation of the LBDC programme and the organization in which it operates. Reviewing existing documents helped the researcher to determine whether the implementation of the programme reflected the original programme plans. It also helped the researcher to identify differences between formal statements of programme purpose and the actual programme implementation.

In selecting documents for the analysis, the researcher considered the types of documents to be reviewed, and the time of publication and release of those documents (Ward et al., 2013). Types of documents reviewed for the QDA included CPWF management documents, strategies, guidelines or similar documents, LBDC project reports, workshop reports and reflection notes collected from the public domain or requested from contacts within LBDC partner organizations.

Publication data was considered in order to use the exercise as a ‘baseline’ to track changes and progress in programme implementation over time (Wach et al., 2013). The documents analyzed dated back as far as 2004 when the first phase of the CPWF was launched. Most of the documents were available through official websites of the CPWF and those of programme partners such as FANRPAN and SEI.

However, in cases where the researcher was not able to find appropriate documents online, the researcher requested such documents from her contacts within the LBDC partner organizations. The researcher was also granted special permission to access the LBDC wiki space, a type of content management system for the programme with restricted public access.

The documents were reviewed and analyzed with reference to three major themes relevant in understanding the nature and effectiveness of research for development partnerships. For consistency, the same themes were used in analyzing the interview transcripts. Text relevant to

each theme was highlighted, coded and based on the analysis of that text and its meaning, relevance and context, for each theme they were then entered into a coding table.

According to Wach et al. (2013:3), “this type of qualitative analysis of content, meaning and relevance in context is central to the value of the QDA, and significantly distinguishes the methodology from a search for key words”. For example, one of the themes was ‘partnership performance’, rather than conduct a search for references to programme achievements in general, the researcher aimed to assess whether the programme monitored not just functionality, but other indicators such as participation levels by community members.

One of the key advantages in conducting QDA is that you can get access to information that would be difficult to get in any other way, such as people or cases that might not be willing to talk in a formal research interview or might be difficult to track down (Wach et al., 2013). Furthermore, by using QDA the researcher minimized ‘the researcher effect’ on the study. According to Corbetta (2003), QDA is a non-reactive technique because the information given in a document is not subject to a possible distortion because of the interaction between the researcher and the respondent, as is the case with interviews.

Further advantages of using documents in research include the fact that such research is relatively low cost, particularly when the documents are easily accessible and already located in the researcher’s workplace, or on the internet. Documents vary a great deal in quality, often related to the perceived importance of recording certain information, but some types of document can be extremely detailed and yield much more information than a researcher could hope to gain from a questionnaire or interview (Wach et al., 2013).

On the other hand, documents are usually not designed with research in mind. The information recorded may be subjective or incomplete. Another challenge is that documents get misfiled, left on people's desks for long periods or simply just do not get fully completed at all (Wach et al., 2013). Also important to note is that documents may have some limitations in terms of the accuracy and completeness of the data (Patton, 2002).

3.1.4. Participant Observation

During the course of conducting the study, the researcher had an opportunity to participate in the Final LBDC Reflection Workshop held from 17-21 June 2013 in Pretoria. Although not planned, the researcher took advantage of this invitation to employ a limited form of participant observation method of collecting data for the study.

Although the researcher's participation was not in the true sense of the word, the researcher was able to observe the interactions of the project teams and listen in on some of the successes and challenges the project had faced. Observation as a data collection method was included in the study because it enabled the researcher to take note of the way the different partners related to each other, how they communicated and shared information - something that the interviews or the QDA could not have uncovered.

Observation as a data collection method according to Mack et al. (2005) has its roots in traditional ethnographic research whose objective is to help researchers learn the perspectives held by study populations. It is often used as a data collection tool in a number of disciplines in qualitative research especially about people, processes, and cultures. As a data collection method, observation enables researchers to learn about the activities of the people under study in their natural setting either through passive observation or by participating in those activities (Kawulich, 2005).

Bernard (1994) adds to this understanding by indicating that participant observation requires a certain amount of deception and impression management. He defines participant observation as the process of establishing rapport within a community and learning to act in such a way as to blend into the community so that its members will act naturally. The researcher will then exit from the setting or community to immerse him/herself in the data to understand what is going on and be able to write about it.

According to Bernard (1994), participant observation is more than just observation. He includes natural conversations, interviews of various sorts, checklists, questionnaires, and unobtrusive methods. Essentially, participant observation is characterized by such actions as having an open, non-judgmental attitude, being interested in learning more about others. The uniqueness of this method lies in the fact that the researcher approaches participants in their

own environment and tries to learn what life is like for an “insider” while remaining, inevitably, an outsider (Mack et al., 2005).

The Final LBDC Reflection Workshop happened at a point when the LBDC programme was beginning the process of capitalizing on findings, tying research messages together, and concluding programme activities. Partners from the five LBDC and selected invited guests attended the workshop. Each project team was given an opportunity to share their key messages with the entire programme team in ways they deemed most effective.

During the formal workshop sessions, the researcher paid close attention to the discussions and only engaged with the group in order to better understand the issues being discussed. During tea and lunch breaks, the researcher casually interacted with the partners. The casual conversations and interactions with members of the study population were also important components of the method as the researcher was able to gather information on individual’s views on their organization, the partnership and its context.

Furthermore, the researcher was able to gain a greater sense of perspective of the organisational mechanisms that would not have and did not come out of the interviews held. This provided a means of getting an understanding of the underlying issues of power and politics at play between the CPWF and the LBDC partners and those outside the partnership.

According to Wach et al. (2013) data obtained through participant observation serve as a check against participants’ subjective reporting of what they believe and do. Through participant observation, researchers can also uncover factors important for a thorough understanding of the research problem but that were unknown when the study was designed. This is the great advantage of the method because, although researchers may get truthful answers to the research questions asked, they may not always ask the right questions.

3.5. Data Analysis

The penultimate step in organizing and conducting successful research is the evaluation and analysis of data collected. However, some scholars such as Hartley (1994, 2004) believe that data collection and analysis should be viewed as an iterative process. This is because it follows

a process of careful description of the data and the development of categories, which have proven to be important steps in the process of analyzing the data.

According to Polit and Beck (2008), the purpose of data analysis is to organize, provide structure to, and elicit meaning from research data. According to Yin (1994), the analysis of case study evidence is one of the least developed and most difficult aspects of scientific studies. Much of the analysis depends on the case study writer's own style of rigorous thinking along with sufficient presentation of evidence and careful consideration of alternative interpretations (Yin, 1994).

The core of qualitative analysis lies in three related processes of describing phenomena, classifying it, and seeing how concepts interconnect or otherwise recombining the data collected to address the initial focus of the case study (Yin, 1994; Dey, 1993). Gray (2004) identified two main approaches for analyzing qualitative data, namely content analysis and grounded theory.

The former method attempts to identify specific categories and criteria of selection before the analysis process starts, while in the second method, no criteria are prepared in advance. All the measures and themes come out during the process of data collection and analysis. Hence, it can be recognized that grounded theory is an inductive approach and content analysis is more deductive.

The qualitative data generated by the study was analyzed using a thematic approach. Thematic analyses, as in grounded theory, call for more involvement and interpretation from the researcher. It is not just about counting explicit words or phrases but it emphasizes identifying and describing both implicit and explicit ideas within the data, that is, themes (Glaser and Strauss, 1967).

According to Guest (2012), thematic analysis is a very popular method of analysis in qualitative research. It put emphasis on singling out, examining, and recording themes within data (Braun and Clarke, 2006). In order to establish meaningful patterns, thematic analysis calls for familiarization with data, generating initial codes, searching for themes among codes, reviewing themes, defining and naming themes, and producing the final report (Daly and Glikzman, 1997; Fereday and Muir-Cochrane, 2006).

This process according to Ryan and Bernard (2003) is one of the most fundamental tasks in qualitative research and is one of the most challenging. A number of researchers have been known to use thematic analysis as a way of unpacking their data and developing some deeper appreciation of the content (Boyatzis, 1998).

For this current study, data analysis began with the manual verbatim transcription of the interview voice recordings into accessible written format. The researcher prepared the data in a typed format as Microsoft Word files. This presented the researcher with an opportunity to become immersed in the data and to know it thoroughly. Each of the interview transcripts were independently labelled with a unique respondent identification number (ID). The respondent IDs were derived by grouping the respondents according to the different projects they are working on (L1 – L5) and then randomly ranking the respondents (R1 –R5).

The transcripts were then analysed to find, refine, and elaborate concepts and themes required to answer the research questions (Rubin & Rubin, 2005). The three main themes which served as guides for the interviews namely (i) partnership establishment, (ii) partnership performance and (iii) communication within the partnership were further broken down into sub-themes for purposes of categorization of responses (see table 3 below). The themes were informed by the researcher's theoretical understanding of the subject under study.

Due to the voluminous nature of the data collected, the researcher used Microsoft Excel spreadsheets in generating a matrix into which data was charted. This formed the basis of the working analytical framework, which was then first applied by entering data as it was recorded from the transcripts before summarizing it by category from each transcript.

The researcher tried to strike a balance between reducing the data on the one hand and retaining the original meanings and ‘feel’ of the respondents’ words on the other. As a result, the matrix includes references to interesting or illustrative quotations. Similar concepts related to specific sub-themes were highlighted and grouped together and a sub-theme was dropped if only one interview participant responded specifically to it. If a theme received responses from more than one interview participant, it was deemed valid and further explored (Rubin & Rubin, 2005: 224).

Table 4: Categorization of Research Themes and Sub-Themes for Analysis

MAIN THEME	SUB-THEME I	SUB-THEME II	SUB-THEME III	SUB-THEME IV	SUB-THEME V
Partnership Establishment	Partnership history	Motivations	Partner roles & responsibilities	Partner management arrangements	
Partnership Performance	LBDC Monitoring & evaluation processes	Achievements of Partnership vs. Partnership objectives	Different levels of engagement and participation		
Communication within the partnership	LBDC Communication strategy (internal & external approaches)	Communication functions at each project level	Communication interventions in different phases of the project cycle	Research dissemination to ensure impact	Communication related challenges

Throughout this process, the researcher maintained a separate computer file where impressions, ideas and early interpretations of the data were noted. Gradually, characteristics of and differences between the data were identified, and typologies were generated. Whilst results of the analysis are presented in detail in Chapters 4 to 7, it is important to note that data generated from the study was rich enough, and allowed the researcher to go beyond description of the LBDC project partner cases to identify and explain areas that did not function well within the partnership (Gale et al., 2013).

3.6. Ethical Considerations

Issues of ethical considerations are critical when conducting effective and meaningful research and for this reason, the ethical behaviour of individual researchers is always under scrutiny. In qualitative research, potential ethical conflicts exist concerning how a researcher gains access to a community and the effects that the researcher may have on participants. Key ethical issues pertain to obtaining participants' consent, ensuring participants' protection from harm, and protecting participants' privacy (Orb et al., 2000).

All researchers are responsible for ensuring that participants are well informed about the purpose of the research they are to participate in. The participants should also be made aware of the risks they may face because of participating in the research. Furthermore, the participants have to understand the benefits that might accrue to them because of participating and they should feel free to make an independent decision without fear of negative consequences (Orb et al., 2000).

For this study, the researcher followed ethical guidelines, as specified by the University of Pretoria, Faculty of Humanities Research Proposal and Ethics Committee. This included completing an Application for Ethical Clearance, and undergoing an Ethics Review process. The ethical clearance form highlighted the objectives of the research and the sources of information and/or data for the research. Attached to the ethical clearance form was a copy of the Research Proposal, Letter of Informed Consent with an explanation of the intent of the research and a copy of the Permission letter from FANRPAN for the researcher to undertake research on the CWPF LBDC programme.

All research participants were fully informed about the research process and potential risks if any, involved in the study and they were asked to give their consent to participate by completing an informed consent form (available in Annex 1). The participants were further assured of confidentiality and that identifying information would not be made available to anyone who is not directly involved in the study.

Participants were also given the option to review transcripts of their interview but only one out of 19 participants specifically requested to review the transcript of their interview. The

researcher ensured research integrity and a better alignment of research with social needs and expectations by properly addressing potential ethical issues.

The researcher was aware of the challenges highlighted by Yin (2009) regarding the presence of the researcher influencing or manipulating the situation. To guard against this, the researcher made minimal contributions to the discussions and refrained from asking questions related to the study. Furthermore, as recommended by Mack et al. (2005) during the process of conducting participant observation, whilst the researcher was discreet enough not to disrupt the workshop process, she was not secretive or deliberately misleading the participants about the research project or her role in it. In writing up the thesis all data has been aggregated where possible to improve confidentiality and anonymity.

3.7. Challenges and Limitations

The key challenges identified in the course of conducting the study were related to the methodology as well as the partnership itself. Firstly, the study is based on data collected through interviews with the LBDC programme partners. As a result, this data is primarily dependent on the participants' own description and conceptualization of the relationships within the programme. This poses serious bias challenges, with a possibility of participants representing outcomes or embellishing events as more significant than they actually are.

Secondly, because a case study deals with only one experience/group, a researcher can never be sure whether conclusions drawn from this particular case are applicable elsewhere. The study only focused on the partnerships within the LBDC and no attempt was made to understand partnerships in the other five basins (Andes, Ganges, Mekong, Nile and Volta) where the CPWF was implementing BDC programmes. Comparing and contrasting partnership structures of different basin programmes could have provided a grounded background and enriched the study.

An added challenge is the risk of researcher bias which was a challenge as this study relied primarily on the researcher's personal constructions and interpretations of interview responses and documents analysed. On the other hand, the possibility of the study being approached from a subjective point of view embraces the essence of qualitative research, which is to gain a rich in-depth understanding of the participants' life worlds and experiences.

With regard to the partnership, the researcher found it difficult to reconstruct a clear history of the L2 partnership. This was because key staff involved in the formation of the partnership had moved on from partner organisations and the researcher was not able to interview them. These individuals would have been key in relaying their knowledge on the process of collaborating and what had taken place prior to their leaving the partnership.

Furthermore, in the process of conducting the interviews, the researcher picked up tension between partners and the CPWF Management team due to budget cuts. Some of these factors could have influenced information obtained for the study. However, despite the above-mentioned limitations, the researcher is confident that the lessons drawn from the study serves as a point of departure for other research on the topic.

3.8. Conclusion

This chapter has outlined the qualitative methodology adopted for the study, and the various methods used for data collection and analysis in order to obtain reliable and valid results and answer the research questions outlined in chapter one. The chosen mixed method approach combines in a method triangulation the data from the semi-structured in-depth interviews, the document analysis and participant observation. Given that data collection and analysis is never without its difficulties, the chapter has also provided an overview of some of the main limitations the researcher had to overcome in conducting the research. The findings of this study are presented in detail in chapters four to six.

CHAPTER 4: THE ESTABLISHMENT OF THE LIMPOPO BASIN DEVELOPMENT CHALLENGE (LBDC) PROGRAMME PARTNERSHIP

4.1. Introduction

The establishment of a partnership is a process that consists of several steps, influenced by the characteristics and experiences of the partners or stakeholders, as well as by the purpose of the partnerships (Wiesmann and Stöckli, 2011). Whilst there is no particular set of steps for all types of partnerships, generally, all partnerships have a development cycle that includes several phases.

Literature (Tennyson, 2011; OECD, 2003; UNIDO, 2002) indicates that before a partnership begins some form of preparation or exploration work has to happen. This will usually include an analysis of whether there is a need to work together, identifying the right people to bring together to form the partnership, researching and gathering relevant information, interrogating available options and confirming if all partners have the same interests (OECD, 2003).

Once partners have been identified and all preparatory work has been concluded, the next step is to develop a work programme or project with specific activities. At this stage, partners design a full project or programme proposal, agree on the partnership governance, and decision-making process. During this stage contract negotiations are concluded and detailed contractual arrangements are signed (UNIDO, 2002).

Once a work programme is in place, the next step is to implement the various plans and activities and monitor the progress on an ongoing basis. During this stage plans may be adjusted to ensure that programme or project objectives are met (Tennyson, 2011; OECD, 2003). It is also during this stage that there has to be a review of the partnership to ensure that the partnership is effective and that respective expectations are being met (UNIDO, 2002).

This chapter addresses research objective one, which focuses on the key steps for establishing successful partnerships. The chapter begins by giving a detailed history of the LBDC partnership, how the project began, and the key players involved in the programme. The chapter further explores the motivations for the partnership by presenting a discussion of what inspired the different stakeholders to come together. The chapter further presents an analysis of the organization and administration of the LBDC partnership.

4.2. Formation of the LBDC Partnership

The formation of the LBDC partnership is best understood within the bigger context of the CPWF. The second phase (2009 -2013) of the CPWF as briefly described in chapter one was structured around priority water and food development challenges identified through stakeholder consultation (CPWF, 2009; CPWF, 2005). Even though the majority of the interview respondents were not exactly sure of the commissioning process for phase two of the CPWF, they had a vague idea that it was on a closed call basis.

The QDA revealed that a specific process of identifying basin development challenges (BDCs) and designing clear basin research programmes that would contribute to tackling the challenges in its six river basins was followed (see Table 4 below).

Table 5: CPWF Phase 2 Commissioning Process

Step	Description	Selection/ Design Criteria	Sources of Info/ Responsibility
1	Identify Basin Development Challenge	<ul style="list-style-type: none"> - Broad stakeholder agreement on importance - Addresses food and water issues - Opportunity for the CPWF to contribute through its core principles (partnership, interdisciplinary, capacity building, adaptive management) - High impact potential after 10 years, with measurable progress after five years 	<ul style="list-style-type: none"> - Comprehensive Assessment - Basin Coordinator consultation - Basin Experts consultation - Consultation at the International Forum on Water and Food (IFWF2) in Addis Ababa in November 2009 - Basin Focal Projects
2	Identify opportunities for research to contribute	<ul style="list-style-type: none"> - Build on Phase 1 research and new opportunities - Link and add value to existing research-for- 	<ul style="list-style-type: none"> - Phase 1 project results - Basin Expert consultations

		development projects and networks - Outcomes likely after five years	- Stakeholder Consultation Workshops
3	Design a coherent BDC research programme	- Research linked to outcomes and impact through clearly defined and plausible pathways - To be contracted as three to five projects including a coordination project	- CPWF MT responsibility, drawing on all other sources of insight and information
4	BDC research contracted and implementation began	- Organizations invited by CPWF based on clear selection criteria to submit expressions of interests - Project proposals written together in a Proposal Development Workshop to ensure coherence and subject to external review	- Project Development Workshop to write proposals - External review of proposals

Source: adapted from <https://sites.google.com/site/cpwfbdceoi/the-process-3>

In November 2009, as Phase 1 activities were winding down, the CPWF convened a BDC Stakeholder Consultation Workshop in Pretoria, South Africa. The overall objective of this workshop was to consult key stakeholders knowledgeable about the Limpopo basin on how research could best contribute to tackling the identified BDC of rainwater management and small reservoirs (CPWF, 2009).

Members of the CPWF Management Team (CPMT) facilitated the workshop, jointly organised by the ARC South Africa and FANRPAN. Twenty-six participants from across the basin countries were invited to provide advice on how the CPMT could design a coherent research programme to tackle the BDC (CPWF, 2009). The meeting identified opportunities in six areas as potential BDC research programmes, namely:

1. Targeting water development interventions through identification of appropriate opportunities in the basin
2. Small-scale infrastructure development and management, including rainwater harvesting and small reservoirs
3. Improved farming systems in rain fed and irrigated areas
4. Water allocation for multiple uses
5. Risk management (this will be subsumed into the other projects but is left separate for this analysis)
6. Coordination project covering learning for innovation and adaptive management

In the end, the project was modified and structured into five technical projects outlined in Table 6 below. Although only two interview respondents referred to the Consultation Workshop when asked about the formation of the LBDC, analysis of the workshop report revealed that nine of the 22 institutions that eventually made up the LBDC were part of this initial consultation.

Following the workshop, the CPWF invited selected organisations (see Table 6) to submit Expressions of Interest (EOIs) to lead the five technical projects defined during the consultation workshop. According to some respondents, invitations to submit EOIs detailed the BDC projects each organisation was to lead and outlined the available budget, project duration and the partnering expectations.

Table 6: List of Organisations Invited to Lead LBDC Projects

PROJECT	LEAD ORGANISATION
L1. Targeting and scaling out	Stockholm Environment Institute (SEI)
L2. Small-scale infrastructure	Agriculture Research Council (ARC) - South Africa
L3. Farm systems and risk management	International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)
L4. Water governance	International Water Management Institute (IWMI)

L5. Innovation and adaptive management and change (coordination project)	Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN)
---------------------------------------------------------------------------------	---------------------------------------------------------------------------

The same respondent also highlighted that lead organisations were expected to assemble a consortium of partners comprised of at least one out-of-basin research organization and one in-basin research organization. Furthermore, they had to have an implementation organization that would be responsible for the uptake of research outputs and ensuring research delivered development outcomes on the ground.

Another respondent described the selection process of the lead institutions as follows:

‘The lead institutions were basically written to and asked, we would like to see you put together an expression of interest for such and such type of project and we would like to see you partnering up with XYZ or any other similar organisations’.

The QDA also revealed that partner organisations were invited to be project leaders because they had the relevant research expertise and the capacity to coordinate projects in more than one basin country. Furthermore, these organisations had the capability to work in partnership and a record of accomplishment of achievement in similar initiatives (Ekboir et al., 2013).

The five organisations developed the EOIs and assembled their consortia as outlined in Table 7 below. In the EOIs, the lead organisations also highlighted stakeholder/boundary partners whom the projects expected to influence such as researchers, development planners and investors, local farmers or technology implementers (CPWF, 2009).

Table 7: List of Original Lead Organisations and Proposed Consortium Partners

Project	Lead Organisation	Consortium Partners
L1.	Stockholm Environment Institute (SEI)	Waternet, University of Witwatersrand Council for Scientific and Industrial Research (CSIR)
L2.	Agriculture Research Council (ARC) - South Africa	University of KwaZulu Natal (UKZN) Limpopo Department of Agriculture (LDA) Agriculture Research Council (ARC)– Zimbabwe University of Botswana Ecolink
L3.	International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)	World Vision/ Care International Windmill (ZFC), Rural District Councils (RDC), Agricultural Technical Extension Services (AGRITEX) ZMS, Progress Milling, Sasol-Nitro, ARC-ISCW, Limpopo Department of Agriculture (LDA) IWMI
L4.	International Water Management Institute (IWMI) Southern Africa	Pico-team, Socio-Technical interfacing IRC
L5.	Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN)	Global Water Partnership Southern Africa (GWP-SA) Waternet

The CPWF reviewed the EOIs internally. Lead organisations together with partner representatives (based on nominations from lead organizations) were then invited to come together at a Proposal Development Workshop, held in May 2010 in Pretoria, South Africa. The objective of this workshop was for partners to agree on a shared vision, location of research sites and inter-relationships among projects (CPWF, n. d).

During the workshop, partners worked in project teams to develop project-specific proposals. According to the two respondents who referred to the Consultation Workshop, bringing teams together early in the planning process helped to build cohesion and understanding of what each partner was expected to contribute toward achieving the BDC overall goal.

As was the case in the Nile basin, “the proposals were prepared using specific formats in which project teams identified a ‘theory of change, specific changes to be achieved in terms of knowledge, attitudes and practice, and outputs that would contribute to these changes’”. Furthermore, the proposals detailed “outcomes in terms of policy or other perceived changes that would result over time and reflected CPWF core principles (Merrey et al., 2013:11).

The proposals were assessed independently against five criteria (Annex 3 presents the Evaluation Criteria and Scoring). From the discussions with the respondents, it appeared that all project teams received feedback on their proposals from the reviewers with recommendations on how to improve the design of the projects. However, some of the project teams were better able to negotiate the reviewers’ comments than others.

Possibly because of their experience in implementing similar projects and their track record, the L1, L3 and L5 project partners were able to go back to the reviewers and negotiate recommendations they could incorporate into the projects and in the process coming to consensus which ones were not realistic. L2 and L4 project partners did not negotiate the reviewers’ comments. As a result, they were forced to incorporate components into their projects, which they did not have the capacity to deliver.

By the time the LBDC programme was launched in April 2011, the partnership structure in L1, L3, and L4 projects had changed. In L1, CSIR South Africa left the partnership after an individual who had been part of the proposal development phase had left the institution. IWMI

Southern Africa then replaced CSIR. In L3, Sasol Nitro withdrew from the project due to issues related to the company's management restructuring process.

Furthermore, in L2, Ecolink, a non-governmental organisation (NGO) partner, was dropped and the University of Eduardo Mondlane was invited into the partnership. In L3, World Vision was selected as the preferred NGO partner over Care International. No specific reasons for the changes were uncovered by the study.

The L4 partnership changed completely. The final proposal submitted by IWMI Southern Africa, was not accepted by the CPWF. The IWMI Southern Africa led consortium was not contracted by the CPWF because of differences in expectations. According to one respondent, IWMI Southern Africa felt that the resources to be allocated to L4 and their consortium partners would not be adequate for them to do the proposed work. In addition, their expectations on how they would work within the bigger BDC programme were not what the CPWF envisioned.

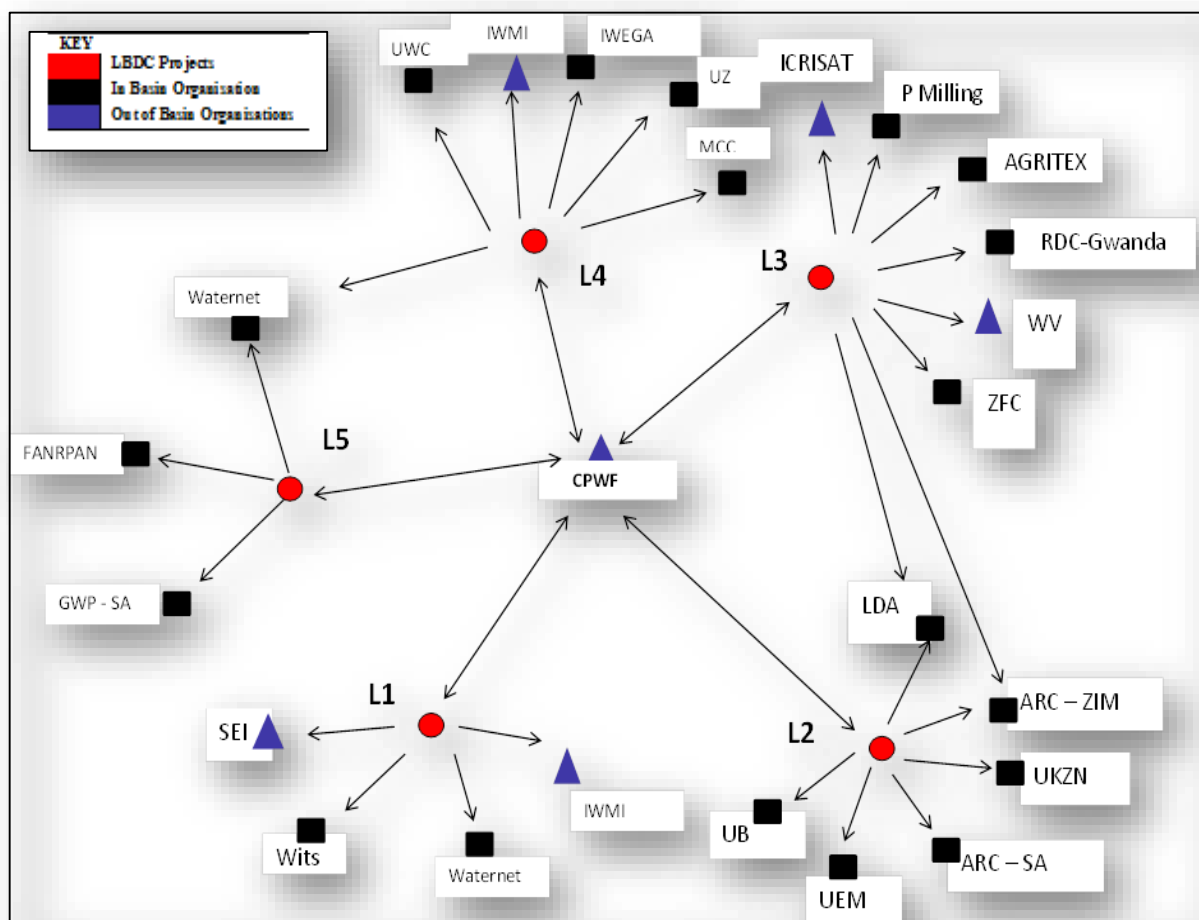
Following IWMI's withdrawal from the partnership, Waternet was invited and requested to submit an EOI as a lead organisation for L4. The consortium that Waternet put together included the University of the Western Cape, IWEGA, IWMI Southern Africa, the University of Zimbabwe and the MCC. There is no way of telling whether the L4 project could have achieved better results had the IWMI led consortium continued to lead the project.

The reasons for the change in the L4 project consortium are not that surprising. According to Horton et al. (2009), there are a number of things that should be established upfront in order to avoid problems at a later stage. Discussing potential partner expectations before getting started in any project helps in preventing any misunderstandings that can lead to problems later down the line (Horton *et al.*, 2009). In the case of IWMI, the differences in expectations could not be resolved and consequently CPWF decided to work with another partner.

The study found that due to the changes discussed above, the L4 project started later than all the other projects. This also could have significantly affected the project's capacity to negotiate the reviewers' comments discussed above. The core partnership of organizations funded to work on the Limpopo BDC and their interrelationship is shown in Figure 4 below.

In terms of programme structure, the study found that the five projects had a strong influence on one another (CPWF, nd). For example, while L1 was largely responsible for site selection, some of its work provided the background for L2 when it came to the evaluation and identification of relevant infrastructure development and rehabilitation options in each of the focus countries. It was also designed to work closely with L3 in combining infrastructure development and rehabilitation with improved farming and water management practices, as well as with L4 in pursuing infrastructure development/rehabilitation needs associated with water governance improvements (CPWF, n.d).

Figure 4: LBDC Partnership Map



Source: <http://www.fanrpan.org/projects/lbdc/maps/>

The L3 project was designed to work in sites identified by L1 in implementing technologies most relevant or appropriate to different basin environments. The project was further supposed to link up with L2 to determine how new and rehabilitated water infrastructure could contribute to improving the efficiency and sustainability of farm systems as well as their ability to adapt

to climate change. Furthermore, L3, working hand in hand with L4, was supposed to take advantage of opportunities resulting from water governance improvements to come up with an innovative farm system and risk management practices (CPWF, 2012).

In addressing water rights, management and governance issues, L4 relied on L1 to identify areas where different water governance issues are important. The L2 project explored the needs and opportunities for infrastructural development or rehabilitation while L3 looked at the gaps and opportunities for farm system and risk management changes resulting from improvements in water governance. Lastly, L5 was responsible for ensuring that the projects were working well together, sharing lessons and new knowledge to make sure that they complement each other and together form a coherent BDC (CPWF, n.d).

However, some respondents pointed out that even though the projects were designed to have functional linkages, not all of the four technical projects were designed at the same time. In addition, each project was contracted as a stand-alone autonomous project without incentives or a dedicated budget to integrate with other projects.

An analysis of the final LBDC partnerships shows that L2 did not fully meet the partnership requirements as specified by the CPWF in the invitation letters. The L2 project was composed of local partners only. They did not have a one out-of-basin research organization in accordance with the specification by the CPWF. This could have significantly affected their capacity to negotiate with an international programme like the CPWF.

According to Bradley (2007), partnerships involving northern and southern researchers often experience structural inequalities. Inequalities manifest themselves not only in the execution of collaborative research projects, but also beforehand in the process of selecting partners and setting the research agenda. Northern interests unduly dictate the agendas rather than specific challenges faced by communities (Bradley, 2007).

On the other hand, the L2 consortium could have benefited from the experiences of out-of-basin organisations. However, there is no way of knowing the impact that not having an out-of-basin research partner had on the L2 project. Even though the L2 project did not have an out-of-basin research organisation as a partner, it was in a unique position to have a lead organisation (ARC South Africa) which was both an implementer and an end user. The project

was therefore in a position to design projects relevant to the communities they were already working in.

The process followed by the CPWF in establishing the LBDC programme partnership is in line with what Tennyson (2011), OECD (2003) and UNIDO (2002) call the preparation or exploration phase of a partnership development cycle. This was a lengthy process in line with Gormley's (2001) argument that creating a complete commitment to the partnership's vision and goals takes time.

Furthermore, the steps taken by the CPWF in the establishment of the LBDC also show that special attention has to be paid in identifying the right people or organisations for a partnership. In fact, assuming that partnerships can be managed as a side-activity with few resources and little attention, according to Gomley (2001), ignores the reality that partnership formation takes a great deal of management time and resources. The findings show that the CPWF clearly invested a lot in terms of time and resources (human and financial) in the commissioning of the LBDC.

4.3. Partner Motivations

Very few studies attempt to understand the different drivers leading to partnership; most focus instead on the partnering processes. Available literature (Wiesmann and Stöckli, 2011; Caplan et al., 2007; Horton et al., 2008) on the subject claims that partnerships appeal to different organizations for different reasons. However, according to Horton et al. (2008), the type of driver¹ that leads to a partnership is likely to have a profound influence on both partnering processes and their results.

Only four respondents were able to articulate clearly their institution's motivations for joining the partnership. This is in line with Bradley (2007) who says that it is rarely possible to establish researchers' specific reasons for entering into partnerships conclusively. However, researchers involved in North-South partnerships are driven by a desire to contribute to the alleviation of poverty and the need to build up national capacities to carry out research projects and channel the results of research into policymaking processes (Bradley, 2007).

¹ Here, the term 'driver' is used to mean 'broad and/or general conditions underlying motivation for partnerships.

For the four respondents who spoke about their organisations' motivations for joining LBDC, participating in the programme was well within their organisations' mandate as the objectives of the programme were fitting well with their own organisational objectives. This sentiment is reflected strongly in the following respondent's comments:

‘Our mission is capacity building, we provide professional training courses and also fellowships for MSc students and as part of the LBDC project we were able to do that. It is about not only the education and about training but we also believe in collaborative research projects because the strength of the collaborative research project is that you test the knowledge and you also generate new knowledge based on your training. The research activities under the LBDC allowed us to test some of the knowledge and to validate it’.

The rest of the respondents explained motivation of participating in the LBDC in the context of why they were invited to be part of the partnership. This is because the programme was set up on a closed invitation basis as opposed to a competitive bidding process. Generally, for this group they became part of the LBDC because they were implementing partners of the first phase of the CPWF. For them the LBDC was a natural progression of the work that they had already done.

According to some respondents, they not only had the expertise to carry out the LBDC work but they also had the data (collected in Phase 1) which was believed to be valuable to the outcomes of Phase 2. According to Horton *et al.* (2008), the most effective partnerships have a ‘shared history’ that facilitates collaboration through well-established trust, working procedures, and localized or specialized knowledge.

One major mistake often made by development actors highlighted by Julian (2008), is that project teams often start solving problems anew rather than learning from previous projects. This often means that the end of a project is the end of collective learning. The fact that partners for the LBDC were chosen because of the data they had collected in Phase 1 is a major lesson to all development project implementers.

Another group of institutions became part of the partnership because of key individuals within those institutions who were deemed key players in the LBDC. One such example is the University of KwaZulu Natal, where one researcher who had previously been with the University of Zimbabwe and had been part of the first phase of the CPWF, was invited to be part of the second phase. By virtue of the researcher's involvement in the programme, his new institution (UKZN) also became involved.

Lastly, there are institutions that were invited to participate in the LBDC because of their experience working in other basins during the first phase of CPWF. In this instance, institutions saw the invitation to participate in the LBDC as an opportunity to expand their work into different regions of the continent. A few respondents were not able to respond to the question as they entered the programme after the partnerships had been established.

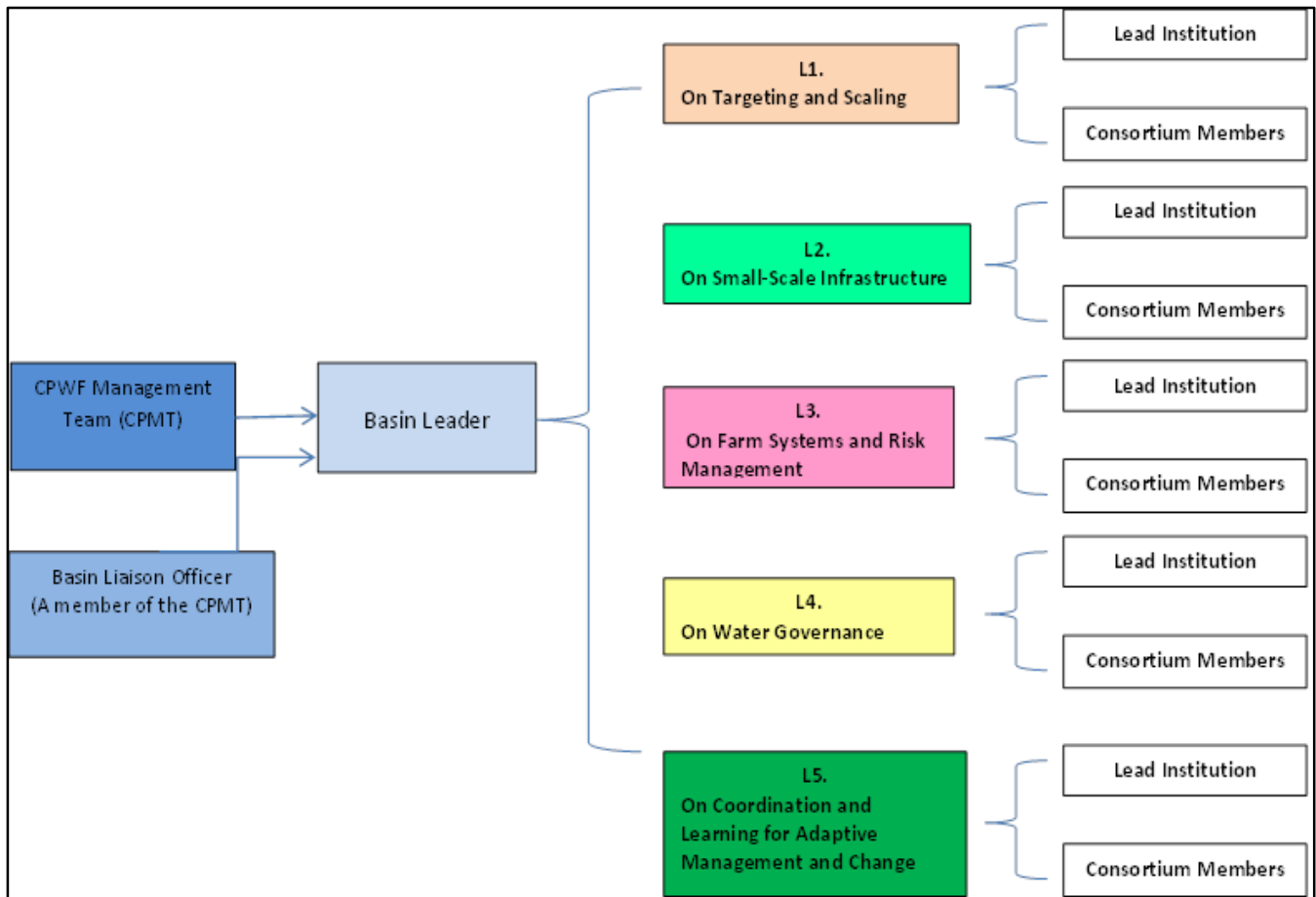
The results are in line with literature (Wiesmann and Stöckli, 2011; Caplan et al., 2007; Horton et al., 2008) that asserts that different organizations go into partnership for different reasons. At first, it may appear that the LBDC partnership was largely based on the extrinsic motivation of parties to address the identified development challenge by the CPWF. However, a close examination of the reasons why some organisations went into the partnership reveals intrinsic motivations.

4.4. Partnership Management Arrangements

A clear mechanism or structure for coordination of activities within a partnership is critical for its success. All programmes or projects need direction, management, control and communication. Management arrangements and oversight of any activities involving several partners need to be established appropriately both at programme and project levels to ensure the partnership's accountability for programming activities, results and the use of resources (OECD, 2006).

The study found that the programme consisted of three management levels (see Figure 5 below) which were fairly well understood by all respondents.

Figure 5: Management Levels of the LBDC



According to Ekboir et al. (2013), at the top of the LBDC management structure was the central CPMT, which was responsible for direction, management, overall science quality, compliance, M & E, and knowledge management. The CPMT appointed a basin liaison officer who worked closely with the LBDC teams especially with the Basin Leader and the Project Leaders.

The study found that although the role of the basin liaison officer was well documented in the CPWF management documents, none of the interview respondents mentioned the existence of this position. This could mean that this was not well communicated to the project teams or the respondents did not think that this role was significant enough to warrant mentioning. In other words, it did not have any significant impact on the operations of the projects.

The CPMT contracted five lead organizations to implement different research projects led by a ‘coordination and change’ project. A Basin Leader was then appointed as the overall

coordinator of the LBDC projects (Ekboir et al., 2013). The Limpopo Basin Leader was an employee of FANRPAN, the lead organisation for the L5 project.

All respondents were clear on the role of the Basin Leader, the second level on the management structure. According to respondents, and existing CPWF documents (Ekboir et al., 2013), the Basin Leader served as the link between the CPMT, Project Leaders, and project teams and linked the LBDC to the other five CPWF BDCs. She had management, coordination, networking and research responsibilities that were outlined in the ‘TOR for Basin Leaders’ (see Annex 4).

In terms of management and coordination, the Basin Leader was responsible for ensuring that the five LBDC projects were coherent, integrated and focused on addressing the identified CPWF basin development challenges. Furthermore, the Basin Leader was responsible for networking with likeminded initiatives and organizations in order to identify potential areas of complementarity with the LBDC and to raise awareness on progress being made by the programme (Ekboir et al., 2013).

Having clear TORs on what was expected of the Basin Leader was a key for the CPWF. Gormely (2001) argues that leadership and management in a partnership is often a challenge, as it requires a range of skills. According to some respondents, the Basin Leader served as:

‘.....the eyes and ears of the management team on the ground because when the reports came in, the basin leader would review the different project reports in order to make sure that programmes were being implemented and that different projects were honoring their commitments’.

Looking at the different partnership roles described by Tennyson (2009), highlighted in the literature review section of this thesis, the role of the Basin Leader is equivalent to that of a partnership manager. This is because both positions are essentially responsible for holding the partnership together and for steering the programme to make sure that its objectives are achieved.

The study found that the third level of management within the BDC programme consisted of Project Leaders from lead institutions and their project partners. All project team members,

particularly the project leaders, reported to the Basin Leader and through her with other teams working on the BDC in the basin. The lead institutions signed Award Letters with the CPMT for the carrying out of the research projects. The project partners signed MOUs with the lead institutions, which were appended to the Award letter (Ekboir et al., 2013).

The purpose of the MOUs was not only to regulate the relations between the lead institution and the consortium partner but also to define the scope of the research project. This is in line with Hagedoorn et al.'s (2000) call for partnering agreements as a way of minimizing misunderstandings and conflict.

Projects' funds were disbursed from the CMPT directly to the five lead institutions. The funds were disbursed based on performance by the partners and according to the schedules stipulated in the MOUs. In terms of project reporting, the process worked bottom-up. Consortium partners were responsible for supplying the Lead Institution with technical and financial reports, results and information needed to fulfil the reporting requirements of the project (CPWF, 2009).

The lead institution would in turn compile all submissions from the partners to prepare and submit the required reports on the project to the Basin Leader. The Basin Leader was then responsible for consolidating all five-project reports to prepare an overall LBDC report, which was submitted together with the individual project reports to the CPMT (CPWF, 2009).

Whilst project coordination and administration was the responsibility of the lead organisation directly contracted by the CPMT, project partners were required to identify a representative from within their organisations to participate in the project. Partner representatives along with key stakeholder representatives subsequently formed the project steering committees, where discussions and decisions on project management, developments and changes were reached (CPWF, 2009).

The study found that within any representative institution, there were four or five people assigned to the LBDC. However, there were key individuals who were ultimately accountable for reporting on the organisations' assigned roles and responsibilities. A number of respondents mentioned that there were a number of changes in key staff members within participating organisations, which proved problematic for some project teams. During the course of the

programme, L2 and L4 experienced significant changes in terms of key personnel from the lead institutions leaving for other organisations. Both projects lost their Project Leaders midway through the project. The project leaders essentially were “the brains” behind the projects as they had played a critical role during the proposal development phase and had been part of the vision of how the projects would be implemented. While the Basin Leader provided continuity from the early planning stage well into the implementation stage, the changes in personnel, had a significant impact on the subsequent implementation of the LBDC.

A number of challenges were experienced especially for L2 where the new project leaders had not been part of the project from the beginning. The new project leader came in to lead a team that had already established its own chemistry and way of working. Relationship building at this point was critical because the hand over process from the old to the new project leaders was not done properly as the new project leaders came in when the old ones had already left the institutions. This resulted in loss of institutional memory, which in turn affected the efficiency of the partnership.

The L4 case was different for two reasons; firstly, the old and new project leaders had been working closely together from the beginning of the project with the new project leader being the unofficial project manager. As a result, the handover process was smooth and no significant challenges were experienced in that regard. However, when the old project leader left, the institution was experiencing internal challenges, which could have affected the new project leader’s level of attention given to the LBDC project and the partnership because not only did he have to lead the project but he also had to deal with his own organization’s internal issues.

This shows that partnerships are not only about institutions but also about the individuals who drive the process. According to MacDonald and Moss (2014) and the OECD (2006), participation of each of the organisations involved in a partnership depends to some extent on the personal commitment of their representatives and on how such representatives fulfil their roles and functions. This is in line with Mendizabal’s (2014) argument that if people move away from the organisation then the partnership would be lost. Fortunately, for the LBDC no partnerships were lost because of staff turnover.

In terms of CPWF, presence in basins, evidence suggests that a flexible approach was used. According to the CPWF this management structure was meant to simplify demands on project

leaders, however because the LBDC and CPWF approach in general was not implemented in a business as usual approach some project leaders found the whole process overwhelming (Ekboir et al., 2013). In fact, some project leaders found the arrangement of contracting consortium partners difficult to manage as one pointed out:

‘I feel like partnerships are not necessarily bad, it is the management of partnerships that makes it messy. Having signed the MOUs our partners then compromised us to a certain extent. We trusted that people would deliver as agreed but people were not delivering on time and people were being paid without delivering outputs. It gets to be tricky’.

According to the OECD (2006) running a partnership is a very delicate operation requiring individuals who can really understand and work with different organisations and their requests. In the case of the LBDC, the presence of strong leadership played an important role in strengthening and sustaining the partnership. Three interview respondents specifically referenced the name of the Basin Leader when asked what kept the partnership together.

The findings show first that the LBDC programme was composed of ‘partnerships within a partnership’ and this required much thought. Furthermore, from the findings it is clear that partnerships need to be carefully managed to try to create a balance between personalities, between disciplines and between professionals. All this needs to be choreographed well so that at the end of the day the partnership is able to achieve its objectives. This balancing act is not easy to achieve.

4.5. Partners’ Roles and Responsibilities

Defining ‘who does what’ regarding delivery of activities of the partnership is a key step in the establishment of any partnership (OECD, 2003). Evidence from the study suggests that partner roles and responsibilities were assigned at proposal development stage. The roles and responsibilities generally remained the same throughout the life of the project and were closely related to the objectives of each of the projects.

All respondents were clear on their roles and responsibilities in the different projects and they felt that they had the experience and ability to contribute to the programme effectively. As one respondent pointed out

‘In terms of critical factors that have led to the partnership functioning well, the main success factor is that we have defined the different roles of the different partners and we have been allowed to work within the framework which we have been given to work in with minimum changes’.

In L1, SEI the lead institution was not only responsible for project coordination and administration but for technical components of the project. SEI was in charge of building, populating and validating the project’s conceptual model, assessing the representativeness of Limpopo project sites and participatory GIS training. Furthermore, SEI was responsible for the reviewing of relevant national agriculture and water policies, assessing the cost benefits of using improved targeting and simulating selected scenarios of agricultural water interventions based on scaling out/targeting tool (Barron, 2010).

Wits, an implementing partner in the L1 project was responsible for assessing potential impacts on basin water resources, which could result from successful out-scaling of specific interventions. IWMI provided expertise on social and institutional dimensions in respect of the agricultural development context, including policy analysis (Barron, 2010).

Waternet, also an implementing partner in the L1 project, was responsible for incorporating, hosting and mentoring post-graduate students as part of the project’s capacity development programme (Barron, 2010). It also played a key role in linking the project to ongoing and proposed IWRM research projects and early warning systems in the Limpopo and other southern African Basins. Speaking about Waternet’s role in the L1 project, one of the respondents said:

‘Waternet was a natural partner because it spanned over several countries of the basin and they could facilitate capacity building and they were also well connected because at that time they were in the process of getting the status of being the preferred SADC partner, therefore they had better policy connections’.

The ARC South Africa was responsible for coordinating and administering the L2 project and ensuring alignment and synchronization of L2 work with other LBDC projects including the overall BDC vision. The ARC South Africa's responsibilities included identifying small water infrastructure (SWI) case studies, data collection, and stakeholder consultation, piloting of developed manuals for selected SWIs and refining the developed guidelines. Furthermore, the ARC South Africa in collaboration with Waternet was also responsible for assessing governance and policy matters affecting optimum performance of SWIs (Jiyane, 2010).

The Limpopo Department of Agriculture (LDA) in addition to its role as the end-user and major implementer of the outcomes of the project was also responsible for contributing valuable information on the study sites. In the L2 project, the LDA played a key role in convening workshops with farmers, government officials, donors, NGOs to share the programme's outputs and for validating some of the project's findings (Jiyane, 2010).

The University of KwaZulu-Natal in the L2 project was responsible for contributing alternative designs of small-scale reservoirs and small-scale irrigation systems and providing the supervision of capacity building and training of MSc and PhD students in several fields. Whilst the University of Botswana (UB), UEM, and ARC Zimbabwe were responsible for compiling reports on previous interventions on SWIs, categorising farmers based on benefits realised from SWIs and compiling the inventory on spatial distribution of SWIs in Botswana, Mozambique, and Zimbabwe respectively (Jiyane, 2010).

Furthermore, the University of Botswana and UEM brought into the L2 project critical aspects of participatory rural appraisal and sustainable livelihoods approaches, which allowed the rural communities in Botswana and Mozambique to participate in the project. Both universities were also responsible for assisting the team in site access in the respective countries. The ARC Zimbabwe brought into the project its vast experiences on micro and conventional irrigation, wetland management, environmental management and its interface with agriculture (Jiyane, 2010).

ICRISAT was responsible for coordinating the L3 project. It was also responsible for establishing innovation platforms for crop and livestock management systems. Other responsibilities of ICRISAT included assessing climate risks and developing response strategies as well as exploring options to deal with climatic extremes and future climate change

(Dimes, 2010). The Gwanda RDC worked closely with ICRISAT in establishing innovation platforms and was responsible for providing information on market preferences to farmers and organizing auction markets for sale of livestock (Dimes, 2010).

World Vision Zimbabwe in the L3 project was responsible for input and output market development using voucher-based schemes, fairs and local retail outlets. Furthermore, World Vision, together with the Zimbabwe Fertilizer Company and Progress Milling (in South Africa) were responsible for monitoring input sale volumes across sites and surveying farmers on pack size preferences. Whilst the LDA and AGRITEX through its community level agents were responsible for technology dissemination and evaluation and served as entry agents to farm communities (Dimes, 2010).

The L4 project had four work packages focused on specific aspects of water governance. IWEGA, IWMI, Waternet and UZ were responsible for coordinating fieldwork in Mozambique, South Africa, Botswana and Zimbabwe respectively. Specifically, IWEGA was responsible for leading the first work package on multi-level governance options for improving access to water and poverty reduction and ensuring that the Limpopo Water Course Commission (LIMCOM) a principal end user of the project was kept abreast of any developments (Love, 2010).

The second work package led by IWMI, which focused on governance aspects of multiple use water points whilst the University of Zimbabwe led the third work package on governance at farm and village scale focusing on linkages to river basin organisations. Waternet the overall lead institution in L4 was responsible for leading the fourth work package and triangulating the science between the three other work packages (Love, 2010).

In terms of L5 specific partner roles and responsibilities, FANRPAN was in charge of leading the project, convening and documenting periodic planning and reflection meetings for all partners and updating the LBDC stakeholder maps. Furthermore, FANRPAN developed the programme's data management system and was responsible for uploading LBDC outputs to the CG SPACE (online information management platform) and conducting a basin wide gender audit, which resulted in the reorganizing of gender activities to other BDCs (Sullivan, 2010).

The Global Water Partnership-Southern Africa, a key partner in the L5 project, was responsible for developing the LBDC Communication Strategy and making presentations about the LBDC programme to SADC and LIMCOM technical meetings. Waternet, on the other hand, was specifically responsible for convening capacity-building events focusing specifically on how policy makers can use research evidence, how scientists can engage decision makers and how agents of development can get research evidence to appropriate audiences (Sullivan, 2010).

An analysis of the project documents together with the interview responses indicates that different partner roles and responsibilities were assigned based on individual organisation's expertise and experience. Furthermore, the partners understood that whilst the different projects were focusing on different things, the overall objective was to address the overall programme BDC and that their different roles were feeding into a bigger picture.

The study noted that a number of organisations such as IWMI, Waternet and the LDA had roles that cut across different projects. This suggests that there was recognition and appreciation across projects of the expertise that existed in other projects and it points to the flexibility of the partner roles. In some cases the cross project roles point to duplication of activities across projects, for example in L2 and L4 IWMI and Waternet were both looking at elements of governance, this could have been isolated to one project and research efforts maximized.

The roles and responsibilities of the different partners involved in the LBDC were important elements of the partnership. A clear definition of roles and responsibilities enables proper focus towards overall objectives. While the findings presented above highlight the value of each partner's technical competence, it is also important to note that all partners were effectively responsible for ultimately addressing the basin development challenge of improving integrated management of rainwater to improve smallholder productivity and livelihoods and reducing risk in the Limpopo basin.

4.6. Conclusion

This chapter has explored the establishment of the LBDC programme partnership by looking at how it was formed, what motivated the partners to be part of the programme, the programme management arrangements and the partners' roles and responsibilities. The findings presented above, clearly show that the establishment of the LBDC partnership was not an easy process but one that took time and was well thought out.

One of the most important conclusions to be drawn from this chapter is that thought, time and resources need to be factored into establishing a partnership especially one that brings together a diverse group of stakeholders and whose work spans across different countries. Furthermore, four key practical elements seem to be essential for the successful establishment of partnerships.

The first and most important of all is that thorough groundwork and preparation has to be done by the organisation that calls for the partnership. This essentially entails clearly defining the challenge to be addressed and selecting the right partners from the onset. Having specific selection criteria for the partners who can address the challenge is important. This can be a very time consuming process but if done correctly will save the partnership many headaches in the long run.

Secondly, it is important for all partners to be honest and clear about why they are part of the partnership. Motivations for being part of a partnership will often influence the level of engagement in and commitment to the partnership. Furthermore, different organisations often have something to contribute and benefits that they seek to gain from being involved in partnerships.

Thirdly, a successful partnership needs strong leadership. A competent, experienced and charismatic leader is essential in keeping all those involved in a partnership focused on delivering the partnership's objectives. Also important is clearly defining the qualities or competencies of the leader and making sure that all involved in the partnership are aware of the leader's role.

A fourth fundamental element of establishing a partnership is clearly defining the roles and responsibilities of the different partners. This will guide how the partners relate to each other and the contributions they make to achieve the overall objectives of the partnership. The different components need to be well put together so that at the end of the day the partnership is able to achieve its objectives.

CHAPTER 5: KNOWLEDGE MANAGEMENT AND COMMUNICATION IN THE LIMPOPO BASIN DEVELOPMENT PROGRAMME PARTNERSHIP

5.1. Introduction

Over the last decade there has been a lot more recognition of the importance of knowledge management and communication in enhancing research efforts (McManus and Tennyson, 2008; Maselli, et al., 2006; ECDPM, 2008). Whilst there is no single definition of knowledge management, the most commonly cited definition comes from the Gartner Group, which views knowledge management as a comprehensive process of identifying, capturing, evaluating, retrieving, and sharing an organisation's information in different formats (Duhon, 1998:120-122).

Communication on the other hand according to Lundy et al., (2013:2-3) comprises a broad range of practices and approaches. These may include information management, publishing, use of information and communication technologies, communication for development, knowledge sharing and knowledge management.

In order for R4D to achieve its potential, good knowledge management and communication (internal and external) is crucial. According to Maselli et al. (2006), a proper communication system is central to a partnership's efficiency as it can facilitate the achievement of desired impacts. Knowledge management, collecting and processing evidence, and reporting the findings accurately is indispensable for planning and tracking the progress of all research for development initiatives (ECDPM, 2012).

According to Lierni and Ribiere (2008), knowledge management is an important part of programme management as it leverages expertise across organizations to improve decision-making, innovation, partnerships and overall organizational results. A concrete knowledge management system facilitates the use of organizational knowledge and allows for sharing of lessons, experiences and innovations to create a more effective and efficient organization (Davenport and Prusak, 1998:5).

In the context of development projects, the failure to capture and transfer project knowledge increases the risk of reinventing the wheel, wasting valuable human and financial resources

and compromising project performance. Applying knowledge management in development projects minimizes these risks as lessons are transferred from one project to another, transfer of knowledge between countries is improved, and human and financial resources are better managed (Owen, 2008).

This chapter addresses research objective three, which focuses on knowledge management and communication arrangements within the LBDC programme. It discusses the knowledge management and communication approaches used by the LBDC and the related challenges experienced by the programme.

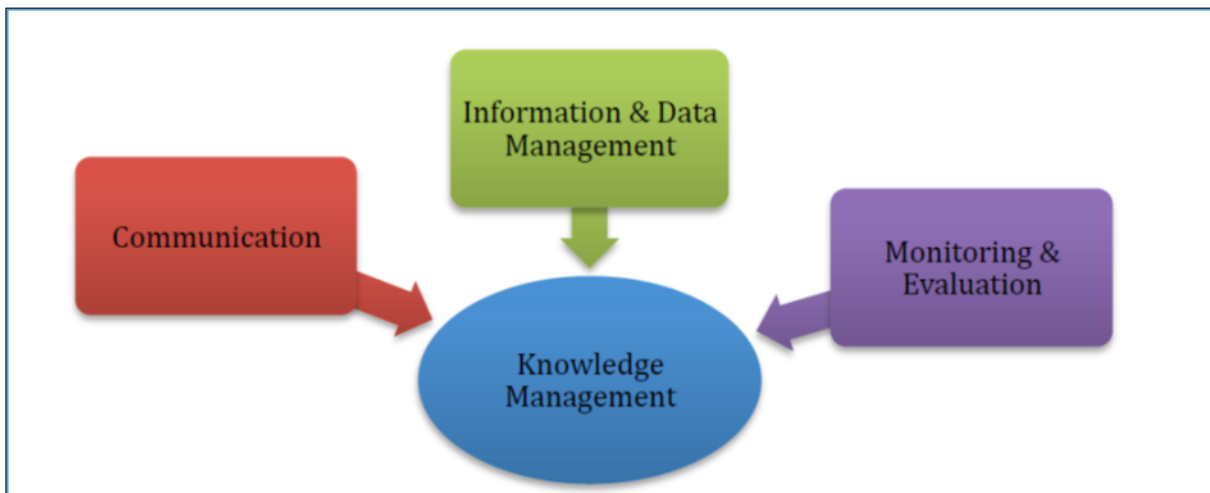
5.2. Knowledge Management within the LBDC

Through the analysis of project documents the study found that knowledge management in the LBDC and in the CPWF in general was a key component of the programme. Knowledge management was instrumental to achieving the programme's objectives, it centred on the creation and management of data and information in order to positively impact on the concerning attitude of researchers and relevant stakeholders (CPWF, 2012).

The integration of knowledge management processes and practices from the outset of the project ensured the sharing and exchange of outputs and lessons among project partners. This approach differed significantly from traditional CGIAR approaches where knowledge management played a support role (CPWF, 2012). This is in line with Merrey et al. (2013) who point out that R4D is about sharing knowledge and explicitly tapping and using the knowledge of scientists, non-scientists and community members.

The study also found that the CPWF's knowledge management approach was anchored on theories of change and impact pathways designed to link research outputs to development outcomes. Other supporting elements, aimed at influencing development processes, included stakeholder engagement and networking, (CPWF, 2012). CPWF's knowledge management efforts involved three complementary disciplines, Communication, Information and data management and monitoring and evaluation as illustrated by figure 6 below.

Figure 6: CPWF Knowledge Management Framework



Source: Victor and Schuetz (2011)

The study found that the CPMT organized three key knowledge management and communications workshops over the life of the programme. The workshops aimed at building the communication and knowledge management capacity of the basin programme partners involved mostly communication/ knowledge management specialists from the six basins involved in CPWF but also the basin leaders and external consultants.

The first knowledge management and communications workshop was held in May 2011 in Johannesburg, South Africa, and it was aimed at improving communication and collaboration practices within the CPWF and among its partners (Ballantyne, 2011). The study found that the Basin Leader and two communication experts from L5 project partner organizations represented the LBDC. Other participants included communication experts from the Volta, Nile, Andes, Mekong and Ganges partner organizations as well as members of the CPWF communications team.

The second workshop on 'Organizing, Managing, Communicating and Leveraging Information and Knowledge to Support and Deliver CRP Results', was held in October 2012 in Addis Ababa, Ethiopia. WLE and the CGIAR CRP on Livestock and Fish jointly hosted the workshop. Its objectives were to agree on the most promising ways to achieve information, knowledge and communication outcomes and share skills on information, knowledge and communication approaches and tools (Nekesa, 2014). The workshop brought together about

50 members from both CRPs including CPWF partners. The Basin Leader represented the LBDC (Nekesa, 2014).

The final workshop was held in December 2013 in Addis Ababa, Ethiopia and was aimed at drawing lessons learned, challenges and opportunities across the Basin experiences and devise steps forward. Twelve participants attended the workshop from the six basins involved in CPWF (Andes, Ganges, Limpopo, Mekong, Nile and Volta), mostly communication and knowledge management specialists but also the basin leaders for the Andes and Limpopo basins and an external consultant (CPWF, 2013).

It is interesting to note that in the three communications workshops the Basin Leader represented the LBDC. The researcher did not find any record of communications experts involvement in the first meeting held in South Africa. Whilst the researcher was able to access the Basin Leader's 'back to office reports' (BTORs), following her participation in the workshops, there is no evidence showing that knowledge gained from participating in the workshops filtered to partners.

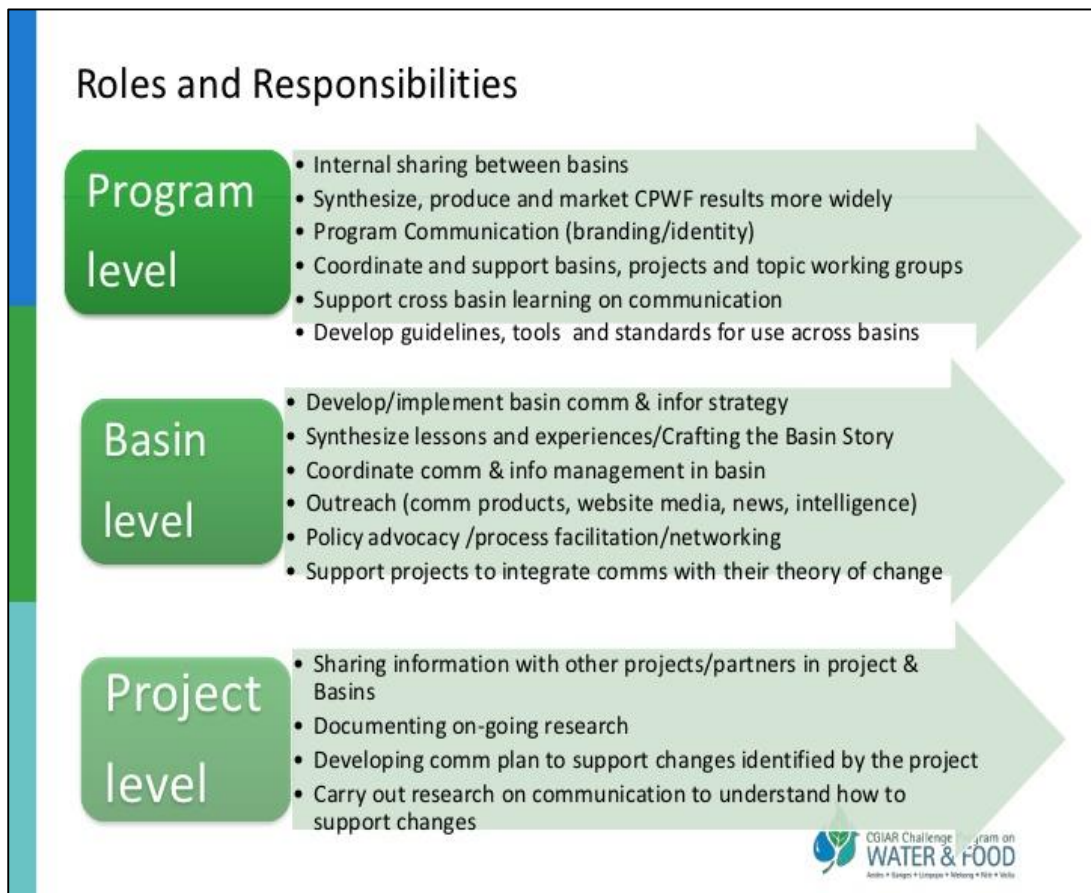
The following sections discuss the LBDC communication and information and data management approaches. The program's monitoring and evaluation approaches are discussed in chapter six, which looks at the LBDC's contribution to development.

5.3. LBDC Communication Approaches

The study found that communication within the CPWF was vital for influencing behavioural change. The CPWF's communication strategy was unconventional in that it was not focused on image management or self-promotion but was designed to feed directly into the programme's strategic objectives. This new approach to communication was therefore more focused on the processes that would ensure effective engagement of key players in the field rather than only on products (CPWF, 2012).

The CPWF used a network approach (from global, basin, down to project level) in order to implement the communication and information strategy. Different levels were responsible for different actions but were still linked together and working in a coordinated fashion at the different levels as illustrated in Figure 7 below.

Figure 7: CPWF Programme Communication Overview



Source: CPWF 2011

At the programme, level the CPMT provided communications standards, which were contextualized and adapted to the basin level. It played a catalytic role by encouraging and supporting the basin partners to become better at research communications. At basin level, the Basin Programmes, through the Coordination and Change Projects, were responsible for coordinating and implementing their own communication strategies (Victor and Schuetz, 2011).

Accordingly, the strategies had to be in line with the CPWF communication and information strategy but based on basin contexts. Basin partners' communication and information staff were expected to play a key role in coordinating and linking projects together as well as linking to the global programme. Projects, in turn, were to adhere to the relevant basin-level strategies. They were responsible for keeping actors and partners in the programme 'connected' to one another and to sources of data and knowledge. Basins projects were in charge of generating

and producing information and communication materials and developing communication processes linked to the changes, they sought (Victor and Schuetz, 2011).

The study found that LBDC communication strategy had both an internal and external function. Internal communication was about ensuring that the teams work easily together, engage with each other, and learn together. External communication on the other hand was about ensuring that the LBDC key messages were brought to the right audience, which is engaged as much as possible in LBDC work at every level possible.

Despite a clear documentation of the strategy, the majority of the interview respondents did not have an intimate knowledge of the information and communication strategy. It is through QDA that the researcher was able to determine that the strategy provided an overall framework for internal and external communication within the CPWF, basins and projects.

Within the LBDC, the L5 project was responsible for coordinating communication across and among the project teams and for facilitating communication with other stakeholders across different platforms. This is something that was clear to all LBDC partners, as one respondent put it:

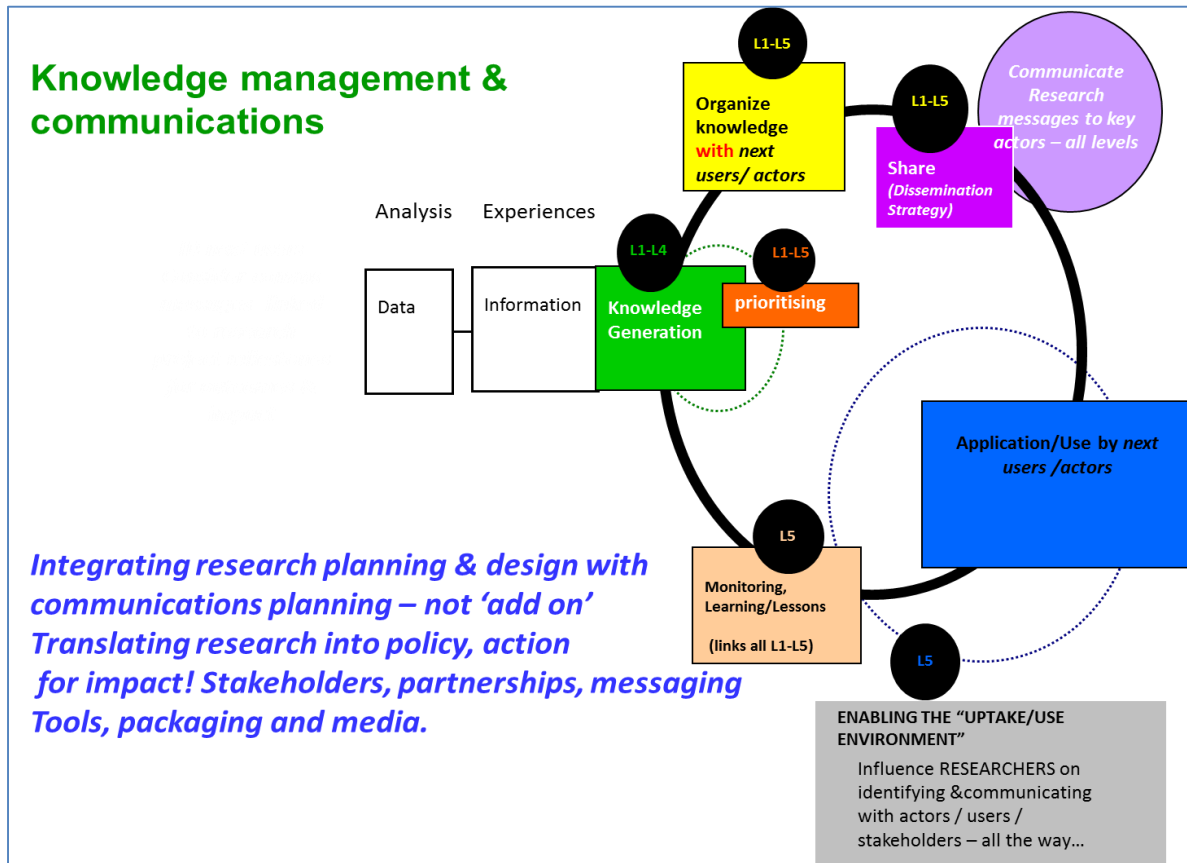
‘The L5 project led by FANRPAN is responsible for taking key messages coming from the different research projects, package them and communicate them to the relevant stakeholders’.

Some respondents pointed out that from the inception of the programme there was some sort of loose internal communication mechanisms already in place. However, by March 2011 GWP Southern Africa, a partner in the L5 project developed a knowledge management and communications strategy (see Figure 8 below). The CPWF Communications Team was also on hand to explain communication expectations at basin level and assisted LBDC teams in communications planning.

The strategy was shared with all LBDC partners at the Inception Workshop, held in tandem with a CPWF communication workshop. The strategy innovatively linked essential communication tasks, outputs and outcomes into the research projects’ milestones (in the OLM), to ensure that ‘communications’ is not treated as an ‘add on’ but firmly integrated into

research project implementation. It served as a framework, which led to the development of project-specific plans for converting project milestones into targeted communication products, for various audiences, in line with specific impact pathways from project OLMs.

Figure 8: LBDC Knowledge Management and Communication Strategy Overview



Source: Beukman et al., (2011).

The strategy formed the basis for linking researchers with strategic partners across the basin and the region. The strategy included web-based communication (wiki), written communication (project brochures in various languages), journal articles, face-to-face reflection meetings, oral communication (radio interviews) and multi-stakeholder dialogues among others (Victor and Schuetz, 2011). The study also found that enhanced dialogue between researchers and research users generated outputs that were more relevant to decision-making, had a greater potential for impact and enhanced the success of the programme.

The LBDC never employed or engaged a full time Communications or Knowledge Management specialist. Instead, the programme made use of communications experts from

within L5 partner organisations. This is something that was highlighted by one respondent who also mentioned that:

‘It is very crucial to have some dedicated staff in the partnership fully engaged on the particular project to maintain good internal communication and keep track’.

There is no way of telling if a dedicated communications specialist for the programme could have improved the levels of communication in the programme. Overall, all respondents thought that LBDC had done a good job in communication, but they differed in their assessments of to what extent internal or external communication had been as effective as it might have been. The communications support from CPWF MT and L5 was noted as being excellent throughout the project and invaluable at critical times.

5.1.1. Internal Communication Approaches

Internal communication was critical in keeping the LBDC projects synchronized and as integrated as was possible. According to the OCED (2006), clear information flows among partners is crucial to the functioning of a partnership. Functional internal communication helps the partners to understand how their alliance really functions, the constraints under which it operates, and the respective roles of the other partners, organizations and people involved.

The study found that the LBDC partners used a number of mechanisms to facilitate its internal communication system. These included the use of electronic media such as the wiki, Skype and e-mails. According to one respondent, e-mail was the most used communication medium because team members were far away from each other and using e-mail proved less expensive compared to making international calls.

This is in line with McManus and Tennyson (2008) who assert that e-mail is fast becoming the favourite communication tool used in partnerships because it is quick and easy, crosses international boundaries and, depending on the user, may be accessed 24 hours a day. The study further found evidence of two occasions when the L1 project partners, to communicate with the Basin Leader or to participate in meetings, used Skype. The L1 project partners participated via Skype in the CPWF Board meeting held in Cape Town in November 2011 and in an ad hoc LBDC meeting in the same month.

The L5 project also established the LBDC wiki, a web based platform for group communication, data sharing, event updates, and peer review. However, while the infrastructure was there, it was clear from the comments of some of the respondents, that not all project partners embraced the wiki:

‘Our understanding was that as outputs came they went to a central point where anybody could access them - maybe that was the wiki, but I am sure if you go in there and check the number of people that accessed it at a particular point you may be surprised at the results’.

The study found that only five individuals from three projects (L2, L3, and L5) uploaded files on the wiki. Eighty-eight files are available on the wiki. However, despite being underutilized by the programme partners, the wiki was a useful depository of information, which has been very useful to the researcher. Commenting on the use of electronic mediums in partnerships, McManus and Tennyson (2008) state that there is a growing trend of partnership projects having their own website / internet forum for the duration of the project.

According to the UNDP (2001), the arrival of new ICTs, in particular the internet has dramatically increased the capabilities to gather, process, and share information. The internet is an ideal medium for reporting on progress and results, as a broad target audience can access it. In fact, the CPWF had identified a number of internet-based platforms such as google domains that the BDCs could use for internal and external communication purposes.

Whilst electronic medium was central to the internal communication system of the LBDC, creative thinking and problem solving needed to be done in face-to-face interactions. Therefore, shared planning meetings, annual stakeholder meetings and inception meetings worked to foster deeper communication and clarification of issues between partners. This further helped to keep LBDC team members working toward the same goal.

The study found that all LBDC projects convened project inception workshops during the inception period. L2 and L3 held a joint inception workshop in December 2010, L1 and L4 held their individual workshops in the first quarter of 2011, L1 inception meeting was held at IWM-South Africa, Pretoria in February 2011 whilst the L4 inception workshop was held in Bulawayo, Zimbabwe, in March 2011.

According to some of the respondents, the objective of the inception workshops was to finalize project budgets, activities and their deliverables, and to agree on project sites as well as collaboration mechanisms. One other issue that was dealt with during the inception workshops was that of answering how the different projects would work together to achieve the overall LBDC objectives and also link up to the other five BDCs in which CPWF projects were being carried.

The LBDC Inception Reflection Workshop, which also served as the L5 Inception workshop, was held in May 2011. This event was the culmination of the inception period and met its objectives of reflecting on progress, revisiting theories of change, aligning the five LBDC projects, and mapping the way forward.

Project management specialists such as Burbuck (1998) assert that the overriding goal of the inception phase is to achieve concurrence among all stakeholders on the lifecycle objectives for the project. The inception phase is of significance primarily for new development efforts, in which there are significant business and requirements risks, which must be addressed before the project, can proceed.

It is worth noting that each LBDC project was represented at each of the project inception workshops. This cross participation seems to have contributed a great deal to cross project communication, collaboration and cooperation. The L5 project partners participated in each of the inception workshops and used the occasion to introduce reporting requirements, and clarify issues related to contracting, performance, etc.

The study found that throughout the life of the project only one meeting of LBDC Project Leaders was held. This meeting according to some respondents was extremely productive and regular Project Leader meetings could have been useful for increased cross-project integration. According to the OECD (2006) team, meetings are a venue to address socio-emotional or group maintenance issues such as attending to team morale and cohesion, resolving conflict issues, and developing and maintaining team norms, roles, and goals.

Furthermore, information on project activities and learnings was shared through exchange of research and progress reports. Respondents cited a number of instances when the L2 and L3 project teams sent out project updates after field visits. Respondents also recalled receiving

invitations for cross-site and team visits to engage with a range of stakeholders at community level from the L2 and L3 projects.

Generally, all respondents tended to agree that L5 and the Basin Leader were very helpful in maintaining good communications between project leaders and in responding to various concerns that the project teams had:

‘The L5 and the Basin Leader have been very helpful in maintaining good communications, inclusion in ad hoc opportunities and being responsive to various more or less important concerns. This has greatly helped.....’

Some respondents felt that communication worked well in some instances because they knew the people involved in the project prior to becoming part of the partnership:

‘The people that have been involved in this project to a certain extent knew each other, so that again helps to keep communications going. I think that is what helped’.

From the discussion above it is clear that internal communication is crucial to the functioning of a partnership to ensure that there are clear information flows among partners. Although the LBDC had a formal communication strategy, some elements obviously did not work well. Even though as the L5 project was tasked with developing a communication strategy, it had no control over communication styles within individual projects.

5.1.2. External Communication Approaches

Beyond the partners themselves, the study found that the LBDC project had a large audience for information and communication about the partnership’s activities and accomplishments. As such, the programme invested considerable resources and time into structured communication with external stakeholders. This included participation in and organization of a wide variety of events, from monthly meetings of basin projects to international forums, and from village dissemination workshops to global policy events.

External communication in the LBDC programme was directed at policy makers, NGOs and farmers whose work and lives were connected to the LBDC’s work in the Limpopo Basin and

beyond. The study identified four key approaches that were used, namely policy advocacy communication, community level communication, scientific communication and corporate communication or programme branding.

5.1.2.1. Policy Advocacy Communication

The purpose of policy advocacy communication is to influence policy makers, policy agencies and the policy agenda. This is typically done by building evidence based on research and by engaging with development planning and policy debates, in order to create reform and/or change policies, and to ensure that the policies are implemented properly (OECD, 2006).

Project partners in L5 were largely responsible for leading BDC efforts to engage consistently and authoritatively in regional and national policy-making processes. When the L5 project began, the understanding was that research uptake by decision makers in the Limpopo Basin and the wider SADC region was severely constrained by lack of awareness, understanding and communication between and among all relevant stakeholders. Linkages between the research agenda and evidence needed by decision makers in the region were rare (Sullivan, 2012).

Research respondents pointed out that in order to raise awareness of the contribution of research and dialogue to priority setting, the L5 project used existing platforms such as the FANRPAN Regional Policy Dialogue, and the WaterNet-GWP Symposia. The LBDC took advantage of these events and convened half-day sessions where the overall LBDC and individual projects were presented to and engaged with high-level regional decision makers. The audience often included several representatives of the Limpopo Basin Commission (LIMCOM), Limpopo Department of Agriculture, SADC Water Division and others. The events were significant in forging relationships with relevant regional initiatives and decision makers.

The study further found that the L5 shared LBDC research findings with decision-makers through policy briefings, which were arranged with policy makers at LIMCOM level and with the SADC technical committee. Ten meetings/workshops/seminars with a significant science-policy interface (e.g. multiple high-level policy makers present), where the L5 project either facilitated or participated in, were recorded. According to one of the respondents, the response

from regional bodies was very positive with demonstrated interest and commitment to continue investing time, energy and resources in the BDC process.

5.1.2.2. Community Level Communication

Effective communication at community level is essential for building support for community projects and activities and for developing a sense of ownership. It is very difficult for community members to get involved if they do not know what is going on; therefore, open communication helps built commitment and trust in a community (Oladele, 2013).

According to one respondent, at community level, the LBDC was formerly launched in Polokwane, South Africa in April 2011. The launch event brought together LBDC teams, basin residents and local authorities. The project team presented refined research questions and theories of change. The LBDC seemed to resonate loudest with the Department of Agriculture staff who were generally interested in the approach to linking research to impact.

Specifically, the study found that L2 and L3 were the two projects that worked at community level and communication was done through established platforms such as the agriculture extension services, district development structures and innovation platforms. L2 partners made use of existing agriculture extension services and district development structures in communicating with the communities. According to the respondents, community platforms were very efficient entry points as they allowed for interface between different stakeholders and the farmers.

The L3 project partners who used existing innovation platforms as the main communication vehicle between farming communities, researchers, NGOs and other support services. Innovation platforms are spaces for learning and change, which bring together groups of individuals (who often represent organizations) with different backgrounds and interests to diagnose problems, identify opportunities and find ways to achieve their goals. They may design and implement activities as a platform, or coordinate activities by individual members (Duncan et al., 2013).

According to Victor et al. (2013), innovation platforms help manage information and ensure an institutional memory. They also ensure that all members' voices are heard and that

everyone's agenda and the vision of change that brings them together is clarified. Innovation platforms have become attractive to a wide range of stakeholders who include researchers, development practitioners and policy makers and they were a big part of the work of the L3 project.

5.1.2.3. Scientific communication

Effective dissemination of research findings is crucial in R4D. Communication plays a key role at all stages and the sharing of knowledge is as important as its generation. In terms of communicating scientific research, the study found that the biggest platform used by the LBDC was the third International Forum on Water and Food² (IFWF3), which was held in Pretoria, South Africa, in November 2011.

The Forum was organized and facilitated by CPWF and co-hosted by IWMI and FANRPAN. It brought together close to 300 researchers from the natural and social sciences, research managers, investors, NGOs, leaders of agricultural and water management organizations, policy makers, decision makers as well as journalists and social media reporters from around the world. Policy makers and decision makers from the Limpopo, Volta and Nile River Basins attended (Joubert and Trollip, 2012).

The goal of the Forum was to amass BDC research results from across six river basins and to agree on how to get the most out of it. Keeping with the theme of innovation, the Forum participants were urged to think 'out of the box' and make recommendations on how to communicate and put into practice scientific knowledge and solutions. The Forum was especially significant because it happened at a time when the second phase of the CPWF (2009 - 2013) was halfway through. It provided not only the LBDC partners but also members of other BDCs with an opportunity to share their early successes (Joubert and Trollip, 2012).

Some respondents identified additional platforms used by the LBDC partners for scientific communication within a global context of increasing focus on water and food security. These platforms included the World Water Forum and Stockholm World Water Week as well as the African Agriculture Science Week.

² http://results.waterandfood.org/bitstream/handle/10568/16976/1_IFWF_Streams%20of%20innovationDocLR.pdf?sequence=1

At the 2013 Stockholm World Water Week, CPWF launched the online decision support tool, ‘Targeting AGwater Management Interventions (TAGMI)’, developed by the L1 project of the LBDC. In July 2013 at the AASW, the CPWF convened a side event on ‘Engagement Platforms for Food and Water Security’. The event brought together many partners including farmers, scientists and policy makers, actively engaged with the LBDC programme (Davis, 2013).

Furthermore, the study found that because publication of scientific research results remains a very important means of communication with the larger science community, refereed publications are emphasized in the performance evaluation of researchers done by most CGIAR scientists. As a result LBDC partners especially those from the science community, did a lot of scientific communication, through journal articles, books and book chapters, research reports, student theses, conference and seminar papers and posters.

The table below presents the total numbers of science publications produced by the LBDC project teams.

Table 8: List of Science Publications produced by the LBDC project teams

SCIENCE PUBLICATIONS	LBDC PROJECTS				
	L1	L2	L3	L4	L5
Journal Articles,	3	1	1	10	
Books and Book Chapters,		1			2
Research Reports,	4	14			1
Student Theses				4	
Conference and Seminar Papers	1	10		1	
Posters	4	2		2	2

According to McNutt (2013) even the most brilliant scientific discovery, if not communicated widely and accurately, is of little value. She also notes that the dissemination of scientific information, once the purview of learned societies and a handful of publishers is now attracting new models and new providers of services. This has forced the science community to explore new ways to improve upon them.

Hence, in addition to the traditional scientific channels of scientific publications, the CPWF developed three types of publications, namely working paper series, briefing papers, and outcome stories. The study found that the LBDC partners were able to contribute to the working paper series, which was used to present new thinking, ideas, and perspectives from CPWF research. It focused on the implications for development, rather than just on the analysis of research results.

Furthermore, the L2 and L3 projects produced Outcome Stories, which documented changes in knowledge, attitudes and practices that have emerged through CPWF-funded research. Project partners in L1 contributed articles to the CPWF Research for Development Series, one of the main publication channels of the programme. Papers within the series present new thinking, ideas and perspectives from CPWF research with a focus on the implications for development and research.

The LBDC projects closure reports demonstrate that there is quite an impressive range of scientific work that can be published. Also important to note is that during the course of the programme several journal articles and working papers were disseminated at regional and international conferences and workshops. All conference papers, technical reports, reference materials, case studies and other publications are available on the CPWF Water and Food repository³ and the CG space site⁴, which houses all publications from CGIAR programmes.

³ <http://waterandfood.org/research-highlights/publications/>

⁴ <http://cgspace.cgiar.org/>

5.1.3. General Communication

To facilitate communication to a wider audience a range of public relation materials such as project brochures and posters were developed. The materials were designed to communicate technical interventions as well as market the programme at regional and global level. In addition, the L5 project created an LBDC programme webpage⁵, which is linked to the CPWF website⁶ and to project partner website.

Figure 9: Screenshot of the LBDC webpage-landing page



Source: <http://www.fanrpan.org/projects/lbdc/>

The webpage was used to profile the different projects, disseminate research findings, and provide programme updates and relevant news. The study found that between November 2011 and May 2014 the total number of views on the LBDC webpage was 3034 with 50% of the traffic to the page directed from search engines, which indicates a great amount of interest on

⁵ <http://www.fanrpan.org/projects/lbdc/>

⁶ <http://waterandfood.org/>

the LBDC. The overall quality of the sites and the published material is very good and they have been important sources in this research.

In addition, the LBDC invested in new approaches for documenting and communicating research results. The approaches included social media and engagement with journalists. The study found that seven articles for media or news (radio, newspapers, newsletters, etc.), and 12 social media outputs, including web sites, blogs and wikis, were produced by LBDC partners.

The CGIAR has recently started advocating the use of social media to inform as broad an audience as possible of its research. Social media is also used to get CGAIR research outputs into the hands of people who can make them travel even further across their own communication networks and/or apply them to their own work.

According to Gray (2011), social media is an important technological trend that has big implications for how researchers communicate and collaborate. Porcari (2011) found that blogging about a paper increased the number of abstract views and downloads compared to the typical abstract views and downloads papers get. For instance, one blog post in Freakonomics is equivalent to 3 years of abstract views! In addition to social media and news articles, the LBDC partners also made use of traditional communication channels such as posters and magazines to present LBDC research findings.

5.2. Information and data management

In terms of information and data management, the CPWF was guided by a triple-A framework that called on all partners to make sure that information was accessible, applicable, and available (Victor and Schuetz, 2011). Essentially this meant that research outputs (reports, journal articles, books, research reports, posters, reference materials, etc.) were stored in appropriate open formats, which allowed public collation and sharing of content. This resonates with Reid et al., (2005) who highlight that information and data management entails putting into place policies, procedures, and best practices that ensure that data is understandable, trusted, visible, accessible, and optimized for use.

The study found that certain types of information was handled centrally in a strategically distributed manner. This meant that each basin was able to input, add and use data/information

from a global repository but the storage of the scientific data sets rested with projects themselves and the institutional systems. This was done to ensure that at the end of the CPWF, data/information would not be lost (Victor and Schuetz, 2011). Table 9 below gives an overview of the types of information that required management.

Table 9: Information Types and Information Management Systems

Info to manage	What for	Potential system	Links
Research publications	Collect, capture and present our knowledge explicitly	D-space (Currently in-built into the website, will soon be moved)(see Annex 2)	http://www.waterandfood.org/page_login
CPWF management documents	Collect and share any strategic and reflecting documents		
Finalized internal documents (e.g. of meetings, workshops, submitted reports)	Collect, capture, document internal documents for institutional memory and compliance	Knowledge tree (see Annex 3)	http://www.waterandfood.org/knowledgetree/login.php
Working documents, e.g. minutes during skype, development of a strategy, template	Develop ideas and concepts collaboratively with several colleagues contributing and inputting	Google docs	https://docs.google.com/a/cpwf.info/#folders/L
PowerPoints	Collect our explicit knowledge	SlideShare	http://slideshare.net/CPWF
Photos		Flickr	http://www.flickr.com/photos/cpwf/
Videos		YouTube	http://www.youtube.com/user/cpwfytv
Program contacts	Make contacts internally available to the CPWF Program team for networking and information sharing.	Zoho (see Annex 4)	http://www.waterandfood.org/page/All-Contacts
Research data sets	CPWF focus is on collecting meta-data of scientific raw data and linking people who want to use the datasets to the partners who collected the data. , however, if there is a suitable institution with a data management system we encourage to contribute by feeding into the existing system	Website for Phase 1, IDIS as far as IWMI is involved, open for an improved system	e.g. IWMI's and CPWF's Integrated Database Information Systems (IDIS), http://dw.iwmi.org/idis_DP/home.aspx ,

Source: Victor and Schuetz (2011)

The study found that the program invested in a number of collaboration tools, such as Yammer, wiki-spaces and blog spaces to share information. Repositories for documents, videos, pictures, presentations, were created for collecting and sharing information produced by different actors. CGSpace, a repository of agricultural research outputs and results produced

by different parts of CGIAR and partners was the ultimate storehouse. It indexes reports, articles, press releases, presentations, videos, policy briefs and more (Victor and Schuetz, 2011).

Whilst the use of several web-based project communication platforms may be seen as a positive thing, some participants complained that the portals were too many and were confusing. Respondents pointed out that there was need to merge the web-based platforms and to keep the platforms simple and to train people on how to use them.

5.3. Knowledge Management and Communication Related Challenges and Opportunities

Partnerships are by their nature challenging because of the dynamics of different players who may have quite different priorities, values and ways of working. According to McManus and Tennyson (2008), challenges are often reflected in all aspects of communication - both within and outside the partnership. In view of that, the study also looked at some of the communication challenges that were experienced by the LBDC partnership.

The study found that communication strategies and efficiency varied between different project teams. This is not surprising because according to the OECD (2006) variations in the level of interaction and communication between partners are standard, with some partners maintaining relatively intense communication, while others only have a loose interaction.

Respondents had more mixed views in terms of their assessments of to what extent internal or external communication had been effective. Some felt that communication among projects was weak whilst some expressed scepticism about the effectiveness of communication among those from different disciplines and/or institutions.

In most project teams, (L1, L2, L3 and L5) communication was effected well and no major problems were highlighted. However, in L4, communication seemed to be a big challenge especially at the beginning of the project. The communication challenges in L4 were revealed during the reflection meetings. According to some respondents during the reflection meetings, it always seemed like members of the L4 project did not know what other team members were doing. Commenting on this one respondent said:

‘I think in L4 the communication was not good. I will tell you why, because we did not have within L4 a workshop or a meeting where we could meet as L4. It was never provided for, it was only when we came for a reflection workshop or forum and that is when we began to talk to each other and sometimes it was late and it was also very embarrassing’.

The need to communicate with partners, both within and outside the project, through workshops and meetings, was identified as a major challenge not just, for the L4 project, but for other projects as well. This challenge was attributed to limited funds. Some respondents suggested that funding some of more project events could have improved communication.

Most respondents agreed that generally communication within their projects was done reasonably well. However, they were dissatisfied with the level of communication across projects. They highlighted that they mainly knew what was happening in their own project and knew less about the others. One respondent who raised the issues highlighted that:

‘.....cross project interaction in the initial stages was quite minimal although it had been planned for in the project design, but somehow I think because of different contractual timing and so on it really did not come out very well’.

The kind of interaction and integration that the programme had promised at the beginning did not happen. The different project teams were quick to run back into their traditional silos resulting in minimal cross project interaction and communication. This challenge could be attributed to the five-project structure, which to some degree limited the different partners to their projects especially given the fact that some projects began a little later than others.

All respondents generally agreed that communication between project partners and the CPWF left a lot to be desired especially concerning the CPWF communicating changes. One case of poor communication on the CPWF part cited by most respondents is about communication of budget cuts. In March 2012, mid-way through the project the CPWF announced a mandated 21percentage budget cut for all BDCs, which called for scaling down of project activities.

Furthermore, there were also some uncertainties about the future of the programme beyond 2012 as it was also in the process of restructuring and finding ways of prioritizing project activities. Partners wanted to engage directly with the CPMT to discuss the budget cuts, but the CPMT was inaccessible. According to one respondent, ‘...communication from CPWF leadership was not particularly helpful’. This lack of information, transparency and communication fostered mistrust and suspicion from the project partners, as they believed that the CPMT was not being honest about their motives.

Another communication related challenge mentioned by the respondents is poor internet connectivity. According to the respondents, unpredictable and often poor communication facilities and connectivity in some parts of the basin countries limited communication opportunities between project team members based in Africa and elsewhere. This limited the use of technologies such as Skype which otherwise could have been efficient for organising team meetings to update project partners of progress.

One respondent also highlighted the challenge of multiple demands for information from different sources. It was the understanding of the project partners that L5 would coordinate basin wide communication and any required information would be channelled through L5. However, in the course of the project, the CPWF communications team contacted project leaders directly asking for information, which sometimes was not readily available and consequently required the project leaders’ time to compose it.

Some respondents further highlighted that, after a year and a half of programme implementation, there was tremendous pressure from the CPWF communications team to get information on basin level activities. The study found that the CPWF encouraged the publication of both intermediary and final research results in order to demonstrate its achievements to donors, policy makers, and other researchers.

One respondent noted that communications people are generally more concerned with generating attractive outputs than following the science and targeting outputs to particular audiences, or meeting evidence needs. However, in R4D communications alone is not enough, as it must be linked strategically to knowledge management. Stand-alone communications can disseminate findings and results. However, in order to get real return on investment,

communication must be designed, developed and rolled out in conjunction with well thought out and relevant knowledge management.

Lastly, the study noted that a number of communication strategies for packaging and disseminating research results that were mentioned in the project proposals were never used. For instance, the L5 project in its proposal had undertaken to explore the use of innovative tools such as community radio and theatre as a means of conveying BDC research messages at the community level to a wider range of users. This never happened, demonstrating that when it comes to project implementation people may have grand ideas but reality on the ground dictates different.

5.4. Conclusion

The chapter has shown undoubtedly that knowledge management and communication both have an internal and external role in any research partnership by presenting different approaches used by the LBDC to communicate internally and externally. The CPWF invested considerable resources in communication and knowledge management. This was evident in the various communication and knowledge management tactics employed by the CPWF and its partners. The information and communication strategy provided the overall framework for internal and external communication within the CPWF, basins and projects.

In order for R4D to be meaningful and effective, it must communicate its insights and results at many different levels. The challenge is how to manage the information in such a way that it is made available in a timely fashion when required by stakeholders. Whilst publishing research findings in scientific journals is necessary, the chapter has also shown that it is not sufficient. The chapter has shown that communication has to be specifically targeted for different actors outside the research community.

CHAPTER 6: THE CONTRIBUTION OF THE LIMPOPO BASIN DEVELOPMENT CHALLENGE (LBDC) PROGRAMME PARTNERSHIP TO RESEARCH AND DEVELOPMENT

6.1. Introduction

Partnerships are considered one of the most participatory and effective mechanisms for delivering sustainable development outcomes and enhancing international cooperation (Maselli *et al.*, 2006). High level development commitments such as the Paris Declaration on Aid Effectiveness of 2005, the Accra Agenda for Action of 2008 and the Busan Partnership for Effective Development Co-operation of 2011 call on their signatories to build stronger, more effective partnerships to assist developing countries in addressing development challenges (O’Flynn, 2010).

However, according to Sanginga (2006), little is known about the impact of partnerships on the communities, which their work is supposed to improve. Not much has been done to address the nature of partnerships and their effect on those who are either directly involved in them or the intended beneficiaries (Rein *et al.*, 2009). Yet donors now require NGOs, civil society organisations and research organisations working in the development sector to report on how their investment are helping developing countries achieve development goals (O’Flynn, 2010).

Overall, development organisations are now making much greater efforts to demonstrate their own effectiveness, as well as that of their partners. According to O’Flynn (2010), there is an urgent drive amongst development organisations to identify the difference their efforts (and funds) make in impoverished and most vulnerable communities as well as to demonstrate that these efforts are effective in bringing about positive change.

Strategic planning, monitoring and evaluation (M&E) are key components for assessing a successful partnership (OECD, 2006). While planning helps to identify the objectives to be reached and the work to be done from the outset, a good M&E process helps to assess the relevance and the effectiveness of project activities, and to gauge the partnership’s true impact (OECD, 2006).

Given the complex character of the relationship between research partnerships and development outcomes, a major challenge of this study was how to evaluate the success of partnerships in terms of development impact and synthesise the lessons learned for development practice.

In order to assess and understand the contribution of R4D partnerships to development practices and in particular, poverty reduction the chapter first presents an analysis of the processes that were in place to review and measure the outputs and outcomes of the LBDC partnership. It then goes on to analyse how successful the LBDC partners were in achieving their objectives before presenting an analysis of the level of engagement and participation of different community partners and stakeholders.

6.2. LBDC Monitoring and Evaluation Framework

M&E plays an important part in partnerships, without which partners cannot assess their impact on the ground. According to Caplan and Jones (2002), if development actors are to record impact from the projects they are implementing, they need to have an M&E system that is linked to overall project operations, as well as with outputs and outcomes. M&E tools include but are not limited to the use of logical frameworks and the development of a set of indicators that can be monitored over the course of a project (Caplan and Jones, 2002).

In terms of M&E in the CPWF, the idea of adaptive management was a guiding concept. Adaptive management according to Hossain (2012:5) is a tool that has evolved to be used not only to change a system, but also to learn about the system. It is a learning process, and improves long-run management outcomes”. Therefore, M&E in the CPWF was about documenting project results, processes and experiences as part of a learning process that informed decision-making. The CPWF focused on implementing a complete M&E system, particularly focused on R4D processes of learning, and reflection.

The study found that the M&E system of the LBDC was built on the Participatory Impact Pathways Analysis (PIPA) model. PIPA is a practical planning, and monitoring and evaluation approach developed for use in complex R4D projects. According to Douthwaite *et al.*, (2008:1), “PIPA begins with a participatory workshop where stakeholders make explicit their assumptions about how their project will make an impact”. When using the PIPA model, the

outcomes logic model is used to spell out the project's medium term objectives and the expected change. It is important to note that the outcome logic model allows for the adjustment of overall; targets and milestones during the course of the project (Douthwaite *et al.*, 2008).

The PIPA M&E approach is a relatively new and experimental approach developed to meet some of the multiple evaluation and management needs of complex R4D projects and programmes. It is in line with calls for participatory M&E systems in development projects as it helps to build stakeholders' understanding of the project and create a learning environment.

From the interviews, it was clear that the use of PIPA for monitoring and evaluation was an appreciated approach as one respondent highlighted that:

‘One of the high points in the project design is this Participatory Impact Pathway Analysis (PIPA). The idea was that you map your path right up front and then you have to peg your milestones that will tell you if you are on track to be able to have the impact that will happen on the ground to me that was a fantastic design’.

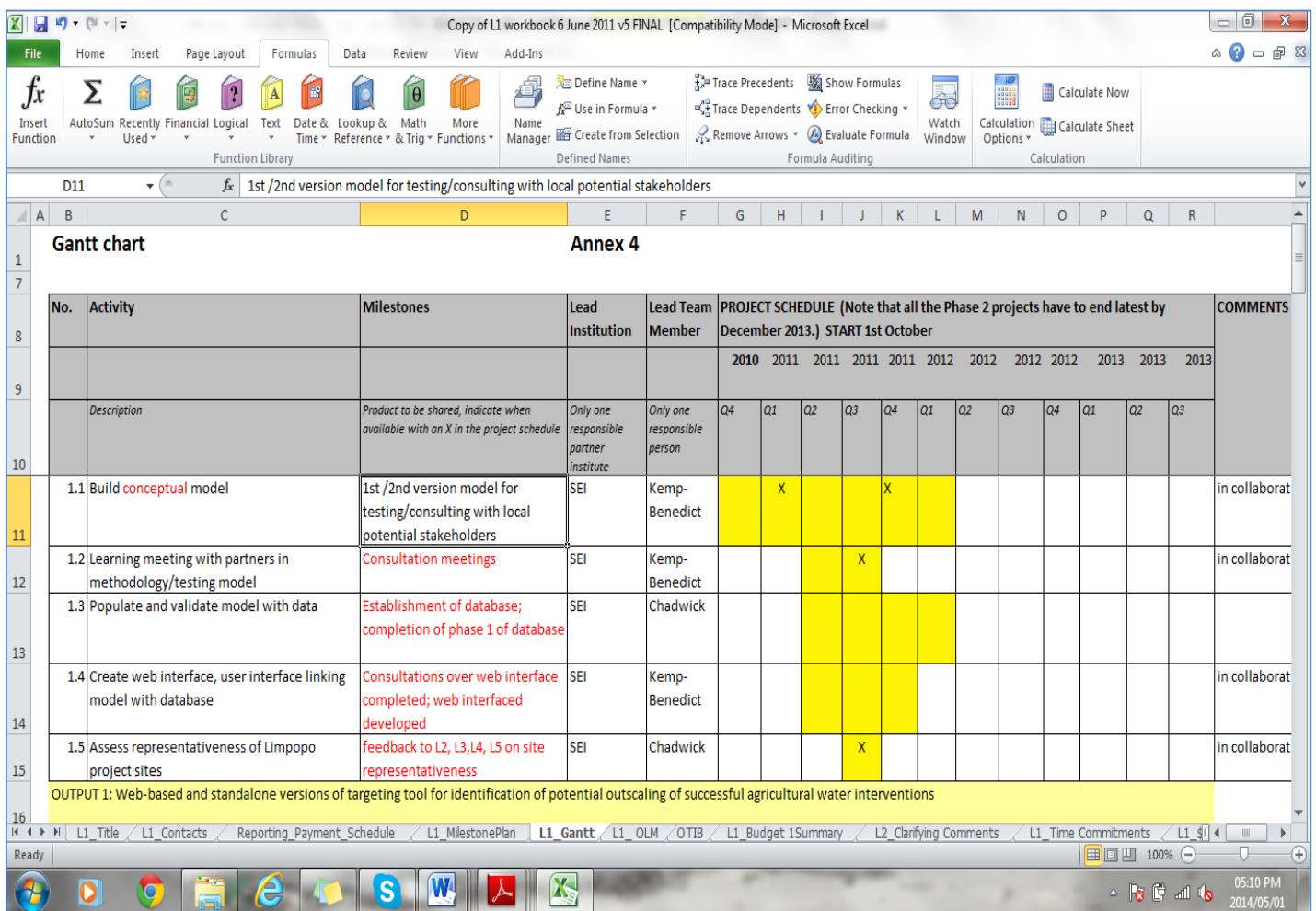
According to the UNDP (2009:), high levels of engagement of users, clients and stakeholders in monitoring and evaluation can increase support and enlist engagement of those who are not yet engaged. It can further mobilize additional resources to fill resource gaps and ensure effective use of lessons learned in future decision-making (UNDP, 2009). Furthermore, stakeholder participation throughout the programming cycle ensures ownership, learning and sustainability of results.

All project partners in the LBDC were in one way or another involved in the M&E of the individual projects as well as the bigger programme. Four key M&E tools and methods, namely project workbook, reflection, most significant change stories, and BDC-level monitoring system were used by the CPMT to assess whether individual projects were playing their part in delivering research outputs and learning towards the achievement of development outcomes.

6.2.1. Project Workbooks

The project workbook is one key contractual document against which projects were monitored and evaluated by the CPWF. All five LBDC projects had project workbooks, which were essentially; excel spreadsheets consisting of several worksheets (see Figure 10 below). The worksheets contained information on the individual projects’ outcome logic model with clear outcome targets, indicator and baseline plans, milestone plans, project Gantt charts and a number of budget worksheets. Project workbooks were updated regularly and submitted to the CPMT, together with monthly and annual reports.

Figure 10: A Screenshot of a project workbook



According to McLaughlin and Jordan (1999) outcome logic, evaluators have used models for over twenty years. They present a plausible and sensible model of how the programme will work under certain conditions to solve identified problems. Furthermore, they are useful in programme design or improvement, identifying projects that are critical to goal attainment, or have inconsistent or unlikely linkages among programme elements.

6.2.2. Reflection Workshops

Reflection was a very important component of the LBDC M&E. Periodically CPWF staff, LBDC partners and key stakeholders reflected on how the programme was functioning and re-examined basic assumptions. Annual reflection meetings amongst basin teams allowed projects to review their theories of change and update their work plans. These reflection meetings helped the project partners to assess their progress in relation to what was planned and allowed for partners to agree collectively on changes to steer the project into the right course. Projects were allowed to redirect outputs and plans based on this reflection (not only compliance).

Moon (2004:82) explains that ‘reflection is a form of mental processing based on the further processing of knowledge and understanding that we already possess’. Reflection is closely related to the notion of learning. It is applied to gain a better understanding of relatively complicated or unstructured ideas and is largely based on the reprocessing of knowledge, understanding and possibly emotions that we already possess (Moon, 2004:82).

Specifically, some respondents stressed that the inception workshop in 2011 provided clarity on the substantive contribution of each project to the BDC and strengthened relationships within, between and across LBDC project teams. Evidently, this is something that could not have been done via e-mails but needed face-to-face conversations.

According to IFAD (2009: 3), “reflection in a project is about interpreting experiences and data to create new insights and agreement on actions. Without critical reflection, a project’s M&E data is not useful in managing impact. Active discussions during team meetings and in meetings with primary stakeholders are vital if M&E information is to be shared, analysed and acted upon”.

The study found that three LBDC reflection workshops were held (Inception workshop in 2011, Reflection workshops in 2012 and 2013). Furthermore individual projects held several small workshops throughout the life of the project, which served to strengthen relationships within, between, across LBDC project teams, and strengthen linkages between LBDC and CPWF teams to magnify learning. The workshops also helped to clarify the BDC theory of change as well as the substantive contribution of each project to the BDC and overall BDC theory of change.

The reflections were complemented by periodic project and BDC self-evaluations, which happened as part of annual meetings organized by the Project Leaders, the Basin Leader and the L5 project. Feedback from stakeholders, experience and new knowledge, all fed into the reflections thereby helping projects to refine their outcome targets. The ultimate vision however never changed, only the impact narratives.

The reflection process proved very useful and valuable to LBDC programme partners as highlighted by some respondents:

‘In the generalities of partnerships the other thing that has been so good is that we have also attempted to have this so-called reflection workshops where you get to know what the other Ls are doing and where they are and see where you can work together and what outputs they have so that you can use and so on. So that I think was also kind of unique’.

‘The idea with the reflection workshops was that they were an internal mechanism for projects to self-evaluate and reflect on what they had done up until that stage where they were having that reflection’.

6.2.3. Most Significant Change Stories

The CPWF also made use of the Most Significant Change (MSC) tool to monitor and evaluate the LBDC’s progress. “MSC is a qualitative and participatory technique where by project partners collect stories of significant change emanating from the field level on an ongoing basis. Project stories are then put through a systematic selection process by panels of designated stakeholders or staff (Davies and Dart, 2005:6).

The MSC goes beyond merely capturing and documenting participants’ stories of impact, to offering a means of engaging in effective dialogue. The stories which, are reviewed and discussed, are highly influenced by the narrators’ understanding of what the impact is. According to Davies and Dart (2005), the MSC process offers an opportunity for a diverse range of stakeholders to enter into a dialogue about programme intention, impact and ultimately future direction.

For the LBDC three rounds of MSC, stories were collected in September 2011, 2012 and 2013 as part of CPWF six-monthly reporting. Stories were collected in three domains namely (i) changes in key stakeholder knowledge, attitude, skills and/or practice; (ii) change in research approach, progress and breakthroughs and (iii) lessons learnt. A sample of an MSC story collected by the L5 project is available as Annex 5.

According to Davies and Dart (2005) a wide range of organisations have found the MSC approach useful because compared to other monitoring approaches, it requires no special professional skills and it is easy to communicate across cultures. Furthermore, MSC is a good means of identifying unexpected changes, and it can be used to monitor and evaluate bottom-up initiatives that do not have predefined outcomes against which to evaluate (Davies and Dart, 2005).

6.2.4. Periodic Technical Reports

Part of the LBDC monitoring system also included periodic technical reports. Six key reports were submitted to the CPWF, these were namely; inception reports, six-monthly reports, annual reports, peer-assist evaluation of annual reports, financial reporting, and completion reports. According to Upadhyay (2013), report writing is a key component of implementing development projects. Periodic technical reports serve as a means to inform the donor of the activities that have been undertaken over a certain period.

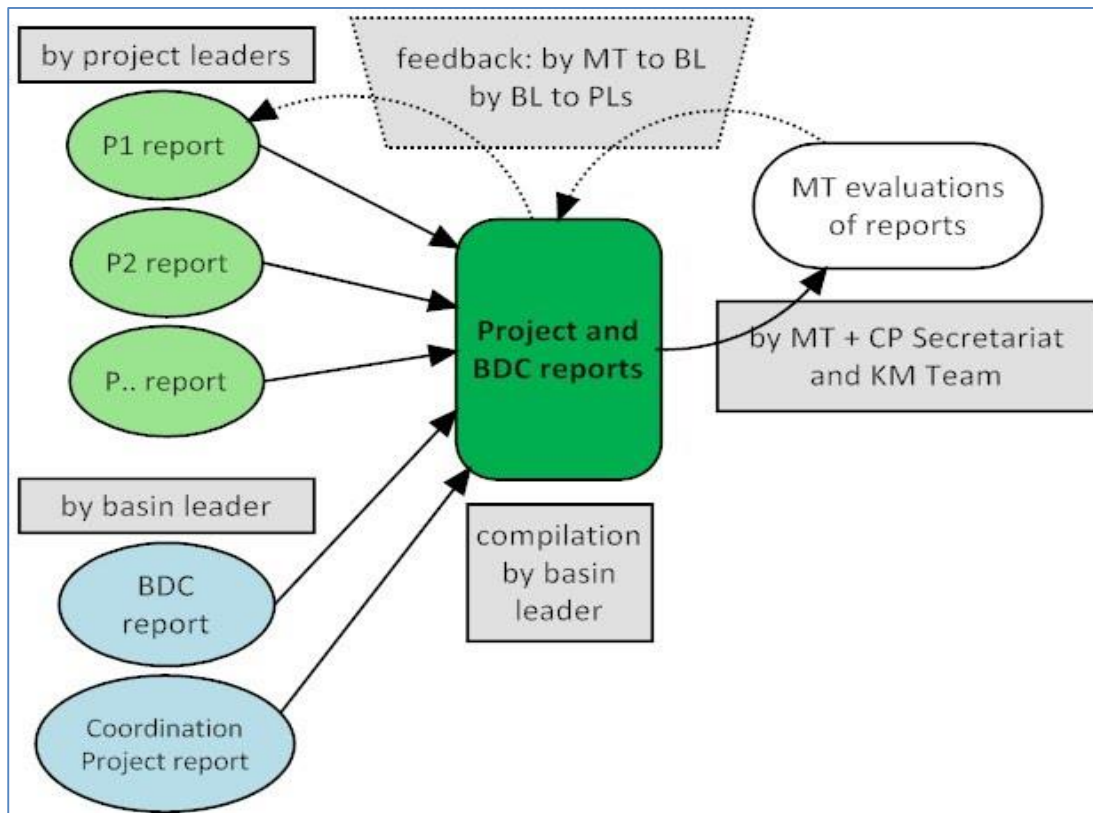
The study found that six months after all projects were launched LBDC projects compiled and submitted Inception Reports to the Basin Leader. The reports detailed progress made during project inception, compliance with contracting requirements, expected support from the CPWF, financial management and annexes of updated project documents. After receiving the project Inception Reports, the Basin Leader then prepared and submitted to the CPMT the LBDC Inception Report. The report detailed overall progress made during BDC inception, support required from the CPWF, and presented an evaluation of the Project Reports, which were provided, as annexes.

Once the LBDC programme was underway, projects annually compiled and submitted to the Basin Leader six-monthly reports. The reports detailed significant change stories from the projects, progress made on the project and responses to previous requests to make changes.

They further reported progress in delivery of milestones and provided an update on financial management.

The Basin Leader was then responsible for compiling and submitting the six-monthly BDC report to the CPMT member responsible for the basin who in turn added his evaluation and commentary to the reports. The reports detailed Basin Leader's selection of the MSC stories from amongst those received from the projects. They also contained the Basin Leader and CPMT evaluation of BDC projects. The project six-monthly reports were attached as annexes. The diagram below presents an overview of the CPWF reporting system.

Figure 11: Overview of CPWF Reporting System



Source: <http://monitoring.cpwf.info/reporting/projects-and-bdcs/rep/yearly-reports>

Additionally LBDC projects compiled and submitted to the Basin Leader an annual report every year. The Annual Project Report detailed project achievements in 12 months as well as implications for future action and an update on financial Management. The Basin Leader was then responsible for synthesizing the five annual project reports into an annual LBDC programme report, which was submitted to the CPMT member responsible for the Limpopo basin. The annual BDC report submitted by the Basin Leader to the CPMT included an

evaluation of the programme based on a set of key evaluation questions (see figure 11 below). The CPMT was then responsible for reviewing the report and writing the CPMT Evaluation Report as part of a peer-assist report.

Annually the CPMT together with the six Basin Leaders, the Knowledge Management and Research Teams met to carry out a 'peer-assist' evaluation of each BDC. Project and BDC annual reports, and collective 'intelligence' on how projects and BDCs were doing based on field trips, and other reports informed the evaluation process. The main outputs of the meetings were CPMT Annual Evaluation Reports. The box below presents some of the evaluation questions, which the Basin Leader had to address in preparing their annual report.

Figure 12: Key Evaluation Questions for Basin Leaders

KEY EVALUATION QUESTIONS FOR BASIN LEADERS

1. Is project research becoming more precise in the research questions it is asking?
2. Are research 'best bets' evolving based on interaction with potential users?
3. Has project research been of appropriate rigor?
4. Has the project met its milestone obligations, in particular done what other projects expect of it?
5. Is the project's milestone plan for the next year acceptable?
6. Is the project working with suitable partners to meet research and outcome objectives?
7. Is the project striving to achieve developmental outcomes?
8. Is the project seeking evidence of early outcomes?
9. Has the project updated its theory of change in the light of what it is learning?
10. Is the project financially well-managed?

Source: CPWF BDC report template

In terms of the requirements for financial reporting, each six-monthly and annual report had a financial report, which was signed by the Chief Financial Officer of the project lead organization. The financial reports were submitted together with six-monthly statement of receipts and expenditures and invoices for payment. Annual and semi-annual reporting was focused on having projects reflect on lessons and improve planning for the coming year.

Although the majority of the respondents found the M&E system efficient and easy to navigate, some respondents did not fully embrace the approach. Some respondents found the reporting process burdensome and challenging. As one respondent put it:

‘Because it is not like business we were used to doing it, there are other requirements. There is normal project management and reporting but you also had to do this learning and making sure that you are on track for this impacts and outcomes and that requires a new set of tools from a management perspective and those tools were not in place’.

This comment is not surprising because according to INTRAC (2011:2), “development organisations are placing a greater emphasis on measuring for results, on looking for evidence of impact, on justifying their effectiveness and on responding to a growing demand for accountability”. However, not much is being done to enhance the capacity of development actors to use new M&E tools for international learning and management purposes. The CPWF should have invested in training partners on using the new M&E tools.

6.3. Effectiveness of the Partnership

Partnerships play an important role in development work. They are set up to address specific development challenges based on the belief that organisations working together can accomplish more than by working alone. Bringing people from different fields together to work towards a commonly defined project is easier said than done. This is because different players have very different objectives and working styles and typically respond to very different incentives (Caplan and Jones, 2002).

When looking at partnerships for development it is important to distinguish clearly between the effectiveness of the partnerships and their development impact. This is because according to Weigel and Waldburger (2004), partnerships are a means to an end, rather than an end in themselves. Although the two are related, the relationship between effective partnerships and development impact is not necessarily causal or linear, and therefore it was not straightforward to determine cause and effect in terms of development outcomes (Weigel and Waldburger, 2004).

Measuring the effectiveness of partnerships is not as easy as measuring project impacts. Different interested and affected groups will measure the success of the initiative according to different sets of criteria. Partnership elicits qualitative values such as trust; responsiveness and flexibility that are more likely to be ‘measured’ by gut reactions rather than by more mechanical means (Caplan and Jones, 2002).

According to Stuart *et al.* (2011), the perceptions of partners or any stakeholders affected in one way or the other by the partnership’s activities are important and should be considered as part of a comprehensive evaluation. Stuart *et al.* (2011) however, do note that perceptions are subjective by definition, but many studies that seem to examine effectiveness in fact examine stakeholders’ perceptions of effectiveness.

For this study, the respondents were asked whether they believe the LBDC partnership was successful on a number of dimensions. The researcher was well aware that as informative as perception-based insights into partnership effectiveness can be, impressions of effectiveness are likely to be biased by stakeholders’ roles and investment in the partnerships. The researcher therefore also reviewed the project closure reports, which reported achievements *vis-a-vis* targets that had been set at the beginning of the project.

Respondents differed in their assessments of to what extent the partnership had been as effective as it might have been in delivering on its objectives. The majority of the interview respondents indicated that largely the LBDC partnership has been successful in delivering on its objectives. As far as they were concerned, the programme was able to raise awareness among strategic decision makers and change agents of the most up to date available research evidence on agricultural water management and its relevance to their planning and management. As one respondent put it:

‘When you look at the different projects, I think they have come up with some interventions or some recommendations or evidence that can be used to make recommendations of how to efficiently manage rain water in order to increase or improve productivity’.

Respondents attributed the effectiveness of the partnership to a number of factors such as prior working relationships among partners and the fact that the partnership was made up of mostly organisations with roots in the basin:

‘Some of the critical success factors are that this partnership doesn’t seem to be built on this one particular project. Most of the partners have been working together prior to this project...’

‘I think the critical things that have led to the success of the partnership here is that it was predominately local partners so then they were addressing real local challenges’.

From the above statements, it is safe to conclude that the partnerships that function most effectively and where partners complement each other are those with a significant shared history prior to the partnership. Shared histories allow projects to build on pre-existing trust and ways of doing things, and allow access to localized and specialized knowledge.

Some respondents felt that the partnership had for the most part deliverables on its objectives but that it was important to highlight that some challenges had been experienced in the process of implementation. This is reflected in comments below made by some of the respondents:

‘I think we have delivered. The only small regret is that our deliveries have been a little behind schedule and that again is because of actually doing things on the ground’.

‘When the project ends we will definitely have certain tangibles but then we have definitely experienced some failures in other parts it’s not going to achieve 100 percent’.

Respondents, who felt that the partnership had not been effective, alluded to the fact that the R4D approach is sometimes over optimistic in the sense that it promises a lot that cannot be achieved within the life of a three or four year project. For these respondents, the programme’s success is measured against what was promised and they feel that impossible things were promised.

Some of the respondents also attributed failure to achieve all project objectives to the budget cuts that happened halfway through the project. As one respondent put it:

‘We are not going to deliver on all our outputs (what we promised) because of the significant budget cuts. It reduced freedom to respond to new opportunities. We also lost the opportunity to have cross-basin learning, so we did not maximize the learning with the other Basins, which had similar programmes’.

In terms of project objectives, the L1 project on “Targeting and scaling out” was set up to develop an evidence and knowledge-based tool to assess and map the likelihood that a given intervention will be successful in given locations (CPWF, 2012). The study found that despite changes in the research content and process, the L1 project team managed to deliver successfully one of its key outputs. This was a decision support tool called Targeting Agricultural Water Management Interventions (TAGMI) that facilitates targeting and scaling-out of three different Agricultural Water Management (AWM) technologies in the Limpopo Basin (CPWF, 2014).

However, given that the leading organisation in L1 was the only far out of basin lead organisation that had no work experience in the basin, it was expected that they would rely on its consortium partners to establish strategic linkages in the basin focal countries in order to carry out the necessary work. This did not work. L1 failed to establish adequate partnerships with institutions in Botswana and Mozambique and as a result, no fieldwork (i.e. participatory GIS) was done in the two countries.

Furthermore, despite early recognition for need to strengthen social science skills within the L1 project, no additional partners were brought into the partnership. This is because the project was already set in terms of task and resource allocation, and there was little opportunity for allocating funds without seriously jeopardizing the L1 partnership and contractual delivery. As SEI did not find the right partners, they ended up doing the work themselves. Hence, although the partnerships were not ideal, they were effective.

The L2 project was aimed at diagnosing limitations and failures of small water infrastructure in order to develop guidelines for better establishment, rehabilitation and operation of small water infrastructure, including rainwater harvesting (CPWF, 2012). The L2 team achieved this by running a detailed participatory study on selected sites with dysfunctional SWIs.

Rehabilitation guidelines were produced and alternative design approaches of new SWIs that could support multiple use systems to improve the livelihood of the rural community were developed (CPWF, 2014).

The study found that despite meeting the main objective of the L2 project, the team did not do so well in terms of working together. Different multi-disciplinary research teams, which were supposed to work closely, did not do this. Project partners kept to their comfort zones and consequently, teams found it difficult to bring together their outputs at the end of the L2 project.

The core objective of the L3 project was to define the interplay between market access, crop and livestock technologies, and investment risks in water- and market-scarce environments that lead to technology adoption by farm families, enabling them to enhance food security and incomes through more efficient water use (CPWF, 2012). This was done through the establishment of innovation platforms, which dealt specifically with the interface of farm level production, input supply and access to output markets. Through a participatory approach, constraints and opportunities were highlighted at innovation platforms, and management practices were developed, tested on-station and also on-farm and results shared with stakeholders (CPWF, 2014).

In terms of the partnership, the L3 partnership was the most diverse, the L3 project team was composed of NGOs, National Research Institutes, private enterprises and rural district councils. Surprisingly L3 is the project that did not experience major challenges as far as the partnership is concerned. According to the closure report, the inclusion of the right mix of partners ensured the successful achievement of the project's main objectives.

The L3 partnership was very close and effective at both institutional and personal levels. It may have helped that ICRISAT, the lead institution, had previously worked with each of the partners in different capacities, reflecting a partnership with roots pre-dating the LBDC. This facilitated smoother management of the project.

L4 on the other hand, concentrated on access and control of water/land, and the associated management and governance mechanisms (CPWF, 2012). The project managed successfully to theorise water governance in the management of water for food. The study found that the project also went beyond expectations in terms of how research is linked to development

through establishing synergies and close ties with policy makers (CPWF, 2014). According to the project closure report, L4's research is informing the Zimbabwe Irrigation Policy which is currently under review. In South Africa, the report states that there has been serious engagement with the Limpopo Department of Agriculture and research outputs are informing policy and practice on the ground.

In terms of design, the L4 project had notable structural challenges. The L4 project was organised into work packages, which were supposed to feed into each other and link into other projects (L1, L2, L3 and L5). This did not work well because once work began, work packages failed to engaging each other. Whilst there was, the general acceptance by the researchers in the different projects that they needed to work across the different projects, when it came to the data collection there was a tendency to fall back into the comfort zone of known disciplines, which meant that valuable linkages with other projects and other disciplines were lost.

The L5 project was set up to ensure that research undertaken within the LBDC would meet real needs of key stakeholders within the basin (CPWF, 2012). To achieve this, the project facilitated engagements between researchers and next users, end users and policy makers. The study found that the project not only met its objectives within the lifespan of the LBDC, but it also went further to lay the groundwork for broader regional buy in and uptake of its R4D approach (CPWF, 2014).

According to the project's closure report, the SADC Water Sector and LIMCOM, and other key stakeholders, have endorsed the R4D approach and the outputs it has generated. SADC Water has offered to roll out the most relevant outputs, via its own structures, to all 15-member states. LIMCOM claimed ownership of the process and outputs and suggested the LBDC approach to R4D as a model to be used in the future (FANRPAN, 2013).

L5's investment in a regionally based process of R4D has laid the groundwork for getting from outputs to outcomes and impact. Decision makers across the basin, and beyond, are now more willing to engage local researchers as a source of expertise in answering critical questions. Many researchers are now more willing and able to engage decision makers in designing relevant research to address critical issues in the region (FANRPAN, 2013).

It should be noted that despite the Basin Leader's best efforts, it was quite a challenge to bring together all five separate projects of the LBDC as a coherent integrated programme. This is probably largely due to the design of the CPWF's call for proposals. However, the project leaders and Basin Leader managed the problem reasonably well as in the end the level of fragmentation and 'silo' thinking was minimized in efforts to achieve a higher level of integration.

The study found that the LBDC met its targets in terms of outputs and it made documented progress toward outcomes, which has set a solid foundation for impact if properly supported. Evidence exists of significant outcomes at the level of CPWF management, BDC partners and researchers in terms of changes in practice and behaviour (FANRPAN, 2013). The programme, reported increased awareness of roles and responsibilities of researchers who are now using a more reflective approach to research.

Furthermore, the programme noted improved communication within and between research teams and researchers are more willing to engage end users that is community members earlier in their research (CPWF, 2014). Similar evidence exists of outcomes (behavioural change) in select decision makers, development and investment agents, NGOs, CBOs, CSO, water managers, and commercial market actors.

Through L1 and L3 efforts, decision makers are now willing and skilled to receive and apply evidence-based information and targeting tools. NGOs, CBOs and CSOs have expanded distribution networks and marketing strategies to better service smallholder farmers (SEI, 2013; ICRISAT, 2013).

The LBDC has generated evidence of very specific outcomes at the level of extension, local government and traditional leaders. Extension agents, Local governments, Traditional leaders have a better understanding of and skills to use various design and operations options of SWIs developed by the L2 project. They also have a better understanding of how climate and market risks influence decision-making and technology choices and they are more aware about water/land access and control of farmers. More outcomes expected as outputs from L2 and L3 reach more audiences (ARC, 2013; ICRISAT, 2013).

The L3 and L2 to lesser degree have documented evidence of outcomes at farmer level. Changes in practice and behaviour have been observed at that level in the short term. Follow up would be needed to assess the degree of outcomes from work done with farmers by these two projects but given the processes behind the knowledge generated; the likelihood of continued outcomes is high (ARC, 2013; ICRISAT, 2013).

Outcomes at the level of policy-makers and investors at national and regional scales seem very likely if not already recognized. LIMCOM and SADC publicly endorsed the LBDC approach. They are expected to make use of LBDC outputs such as databases and models data. The LBDC exceeded expectations in two specific ways. Primarily, the group of researchers and institutions engaged in the process came to understand the need for R4D. While this was a goal of the L5 OLM, actually reaching the target was a great accomplishment (FANRPAN, 2013).

The second aspect of exceeded expectations was the response by individuals from LIMCOM and the SADC Water Sector to the approach used within the LBDC and their willingness to promote and use the outputs of the programme. The approach and outputs have developed considerable interest and momentum from other development actors across the basin and the wider region. There is every reason to expect that the groundwork laid during the LBDC will persist and pay dividends long into the future (FANRPAN, 2013).

There is clear evidence that the LBDC programme has been able to improve integrated management of rainwater to enhance smallholder productivity and livelihoods and reduce risks, mainly the risk associated with climate change. While the challenge is definitely relevant to smallholder farmers in the basin, as articulated, there was little real chance of addressing significant parts of that challenge within a three-year span. The remaining challenge associated with the LBDC will be to follow the actors and outputs to measure outcomes for long-term impact. Central to this would be following the young professionals and boundary partners who gained invaluable experience from this programme.

6.4. Stakeholders' Engagement and Participation

Poor stakeholder involvement is one of the most common reasons programmes and projects fail (UNDP, 2009). Apparently, the need for stakeholder engagement becomes increasingly apparent the larger and more complex a project becomes (Gray, 2004). Engaging stakeholders

can help project teams to identify and prioritize community development needs and opportunities. A deliberate effort should be made to encourage broad and active stakeholder engagement in the planning, monitoring and evaluation processes of development projects.

According to Gray (2004), stakeholder engagement should be at the heart of any ‘sustainable development’ agenda. Without engaging stakeholders, there can be no common enduring agreement, ownership or support for a particular project. A venture is more likely to succeed, especially in the long term, if it takes into consideration the environment in which it operates and endeavours to meet the needs of the stakeholders affected by it.

Stakeholder engagement could be viewed as a form of risk management. Many projects, but not necessarily all, will need to engage with a wide range of stakeholder groups, each with their own concerns, needs, conflicts of interest and levels of influence. In order for the pieces of the project plan to be effective, planners and project managers need to understand who the stakeholder groups are, what their issues are, and what motivates them (Gray, 2004).

The study found that stakeholder engagement and participation was a key component of the LBDC programme. Engaging with stakeholders, especially with those whose actions had the potential to influence the work of the LBDC was of critical importance. Stakeholder participation in the LBDC took two distinct forms, consultations (information-sharing, and learning and joint assessment) and meaningful engagement (shared decision-making, collaboration and, finally, empowerment) (FANRPAN, 2013).

The majority of respondents agreed that, broadly speaking, stakeholder engagement has been very successful in the LBDC. From the beginning of the programme, there were deliberate efforts to reach out to a wide set of stakeholders. In November 2009 prior to the launch of the programme, the CPWF convened a stakeholder workshop in Pretoria, South Africa (FANRPAN, 2013).

The purpose of the workshop was to consult key stakeholders who were knowledgeable about the proposed Limpopo BDC on how research can best contribute to tackling the BDC. Invited stakeholders were able to provide advice on how the CPWF should design a research programme to tackle the challenge. The process used elements of the PIPA M&E approach and

incorporated lessons learned in conducting similar consultations in other basins (FANRPAN, 2013).

The study found evidence of clear stakeholder engagement during programme implementation specifically in L1, L2, L3 and L5 projects. Different types of stakeholders were engaged by the different projects. For instance, L2 and L3 worked closely at community level whilst L5 worked closely with policy makers and decision makers. The following sections present a picture of stakeholder engagement in the different projects (SEI, 2013; ICRISAT, 2013; ARC, 2013; FANRPAN, 2013).

In the L1 project, stakeholders from the private sector, universities, researchers, local farmers, water catchment councils, non-governmental organizations, and water and agriculture ministries in the four basin countries participated in consultation workshops. The workshops were followed by comprehensive data collection of successful AWM interventions at community level through one-day focus group workshops. Each workshop involved a maximum of fifteen farmers who had experiences with AWM interventions (SEI, 2013).

In the L2 project, the study found two interesting cases of how sometimes stakeholder participation does not always work in favour of a development project. In the first case, following recommended principles of stakeholder engagement the project team began work in Lambani district in South Africa by introducing the project to the Chief of the area. Together with the Chief and his community, it was agreed that to address the community's pressing challenges a dam would be constructed through the project (ARC, 2013).

However, in 2012 following, budget cuts by the CPWF and review of deliverables, the project team decided that construction of the dam would not be feasible. This was not well received by the Chief and the community, the trust that had been established was broken because the community felt that the project team had made empty promises (ARC, 2013).

In the second case, the L2 project team identified the Botswana Ministry of Agriculture as key stakeholders in the implementation of the project. The ministry was engaged and it was agreed that the project would focus on ex-field rainwater harvesting techniques. However, in the course of project implementation, the Ministry decided that homestead gardens would be the 'focus area' for the Ministry and that the project should focus on homestead gardens. This

brought about confusion and delayed the implementation of the rainwater harvesting trials (ARC, 2013).

In the L3 project three distinct groups of stakeholders participated in the project. Farmers in selected communities were involved in innovation platforms, on-farm experiments, field days and farmer exchange visits. Extension officers were trained during the setup of on-farm experiments on how to monitor experiments and assist farmers in record keeping. They also assisted in preparing for field days, attended farmer exchange visits, trainings and, innovation platforms meetings. The last group of stakeholders, the market actors such as local agro-dealers were trained concerning farmer-preferred inputs and in business management, general storage of different inputs and record keeping (ICRISAT, 2013).

Lastly, L5's stakeholder participation approach focused on engaging organizations and individuals with the mandate and legitimacy to act on research outputs. L5 engaged with stakeholders responsible for planning, decision-making and implementation of agricultural water management interventions such as SADC Water, LIMCOM, Limpopo Department of Water Affairs and ZINWA thus grounding LBDC work within policy environments. This was possible because the partners within L5 had already established sufficient social capital with these stakeholders to get them to engage in the programme. The successful engagements facilitated by L5 were due to two related factors; networks and trust (FANRPAN, 2013).

In October 2013 as the project was ending, the L5 project partners convened a Science Roll out meeting. The objective of the meeting was to roll out select findings and science outputs from the LBDC to strategic partners and stakeholders for feedback. The goal was to get research into the hands of next and end users eventually getting from outputs to outcomes. A key result of the meeting was the offer by SADC Water to roll out the most relevant outputs, via its own structures, to all 15-member states. This is the first step toward regional uptake of outputs—a precursor to outcomes and impact (FANRPAN, 2013).

It is clear that stakeholder engagement in the LBDC programme generally went well as clear mechanisms such as innovation platforms were in place to facilitate this. However, one key issue that has been noted for consideration in future programmes is the extent to which the LBDC over-promised in the beginning, and then lost some credibility as it failed to fulfil all those promises. Respondents who were involved in community level activities highlighted that

the LBDC project made promises and raised high expectations among the communities that were not fulfilled. This will certainly affect future dealings with the communities as a key element of trust has been formed and broken.

6.5. Conclusion

The chapter has looked at the success of the LBDC programme in achieving its objectives and its contribution to development and presented an analysis of the level of engagement and participation of different community partners and stakeholders. Mostly the LBDC partnership has been successful in delivering on its objectives. The programme had a comprehensive M&E system, which was in line with modern thinking of participatory M&E. The system was designed in a way that all partners made substantive contributions to the evaluation and management of the programme. Results point to some clear areas of the LBDC partnership's functional success and failure worthy of examination in future partnership studies that also include objective measures of effectiveness.

CHAPTER 7: CONCLUSIONS AND RECOMMENDATIONS

7.1. Introduction

Although partnerships are considered a powerful tool for contributing to knowledge generation, little is known about their impact on the communities, which their research is supposed to improve (Caplan et al., 2007). As the partnership development paradigm grows in scale and importance, material that shares lessons about the processes involved in such collaboration is required by practitioners, planners and policy makers so that both its reach and capacity are improved (Rein et al., 2009).

The complexity of the partnership development process, and the different mechanisms by which partners come together and interface with local communities and external stakeholders in order to implement development programmes, make the search for hard evidence of effectiveness a formidable task (Tennyson and Bowman 2003). This challenge, however, presents an opportunity for further research into the effectiveness of partnerships as an approach for implementing development programmes. Case studies have real potential to fill gaps in our knowledge about how partnerships function and ensure that an understanding of what works, and what does not, is disseminated more widely.

In examining the nature and effectiveness of research for development partnerships, the researcher made use of the LBDC programme as a case study. The diverse range of partners in the LBDC evident in the range of disciplines and sectors represented in the partnership presented an excellent case study into how different organizations with undoubtedly different mandates come together to work on R4D projects. The study looked at what each partner brought to the programme and how different mandates, skills and expertise were united to achieve the ultimate objective of the LBDC.

7.2. Main research findings

The results present a number of overarching principles and considerations for creating successful partnerships in research for development, which answer the first research question. The research findings support existing knowledge on partnerships and they confirm many of the observations and claims made by established commentators in this field regarding good practice in partnerships.

Results indicate that the establishment of a research partnership is a process that has to be well thought out. Time and resources need to be factored into establishing a partnership especially one that brings together a diverse group of stakeholders. This was demonstrated by the detailed four step commissioning process of the CPWF Phase which entailed: (i) identifying the BDC; (ii) identifying opportunities for which proposed research would contribute to; (iii) designing a coherent BDC research programme and; (iv) contracting and implementing the BDC programme (CPWF, 2009).

In addition, a clear mechanism or structure for the coordination of activities within a partnership is critical for its success. Management arrangements and oversight of any activities involving several partners need to be established properly to ensure the partnership's accountability for programme activities, results and the use of resources.

Also equally important is clearly defining the roles and responsibilities of the different partners as this guides how partners relate to each other and the contributions they make to achieve the overall objectives of the partnership. The LBDC three tier management structures and the clear definition of the roles and responsibilities of different individuals (from the CPMT to the Basin Leader and the Project Leaders) contributed to the successful functioning of the partnership.

Results further indicate that communication has both an internal and external role in any research partnership. The study revealed that for R4D to be meaningful and effective it must communicate its insights and results at many different levels. Whilst publishing research findings in scientific journals is necessary, on its own it is not enough. A number of tools can be used to communicate development programme outcomes to different audiences.

To facilitate internal communication, the LBDC partners used several electronic mediums as well as shared planning meetings, annual stakeholder meetings and inception meetings. Four key approaches were used for external communication, which included policy advocacy communication, community level communication, scientific communication, and corporate communication or programme branding.

Measuring the effectiveness of partnerships is not as easy as measuring project impacts. In terms of M&E, the LBDC had a comprehensive M&E system and a clear set of goals, which

were defined at an early stage of the programme. This made the evaluation and measurement of the programme's outcomes manageable.

Results indicate that largely the LBDC partnership was successful in delivering on its objectives, as the programme was able to raise awareness of the most up to date available research evidence on agricultural water management and its relevance to their planning and management to strategic decision makers and change agents.

Furthermore, results indicate that partnerships that function most effectively and where partners complement each other are those with a significant shared history. Shared histories allow projects to build on pre-existing trust and ways of doing things, and allow access to localized and specialized knowledge. Lastly, the study revealed that stakeholder engagement and participation in development programme are crucial.

Engaging with stakeholders, especially with those whose actions have the potential to influence the work of the programme can assist in identifying and prioritizing community development needs and opportunities. Therefore, a deliberate effort should be made to encourage broad and active stakeholder engagement in the planning, monitoring and evaluation processes of development programmes.

On the second research question, key lessons that can be learned and transferred to other development programmes, the study will elaborate in more detail in the following sub-section. Suffice to mention here that the lessons include developing a culture of sharing and learning as well as making sure that partnership programme processes are inclusive of all relevant stakeholders. Furthermore, time bound development programmes should be designed to produce 'quick win' results, which can be seen during the life span of the programme.

Another lesson is on the importance of planning for programme M&E and ensuring that all partners are committed to making it work. In addition, development programmes have to be careful of overpromising and under delivering. Lastly, communication and knowledge management should be integrated from the beginning into the programme design, as it will help to track progress and synthesize feedback on the project life cycle.

The researcher is aware that whilst many of the insights resulting from this study may be broadly useful, they cannot be applied universally.. The researcher is confident that this study has contributed to spreading knowledge of the effectiveness and impact of R4D partnerships in delivering development outcomes. There is huge potential in the R4D approach and partnerships resulting from this approach. As interest in the approach continues to grow, there is no doubt that there will be many studies in future focusing on this topic.

7.3. Lessons learnt

The capture of lessons learnt from project experiences and application of this learning is an area of interest and debate amongst many development actors (Bresnen *et al.*, 2005; Carrillo, 2005). Over the past decade evaluators have increased their focus on ‘lessons learned’ when conducting programme evaluations. The new trend with evaluations is to go beyond merely generating findings about specific programmes to generating knowledge (Spilsbury *et al.*, 2007).

Available literature on ‘lessons learned’ mostly focuses on conveying knowledge gained through experience in a specific field of study or action, as a means to enhance future performance. For the purposes of this research, ‘lesson learned’ is “defined as knowledge or understanding gained by experience. The lesson may be one of successes or failures but it is significant in that it identifies a specific design, process, or decision that reduces the potential for failures or reinforces successes that can be replicated in future programmes (Spilsbury *et al.*, 2007:4).

Learning from both mistakes and successes helps prevent future projects from repeating the same mistakes and allows them to repeat and maximise the successes (Marlin, 2008). Anbari *et al.* (2008:635) remark that regular collection of lessons learnt in projects, and their careful and meaningful utilization in subsequent projects are critical elements of project success, support this line of thinking.

The fundamental lessons learned during this research which can also be seen as processes and mechanisms for achieving impacts can be classified into four categories, namely: (a) programme design and implementation, (b) planning for impact: monitoring and evaluation (c)

promotion of stakeholder engagement and participation, (d) better documentation, reporting and communication.

7.1.1. Programme Design and Implementation

The five-project design of the programme to some degree led to teams working in institutional and disciplinary silos with insufficient collaboration and communication across projects. Whilst structure is necessary in collaborative research projects, it is important that extra effort be dedicated to a culture of sharing and learning between structures. This may require a framework that uncovers potential linkages and synergies, contributing more effectively to the overall objectives.

It is important to note that the LBDC like the other five BDCs used an innovative approach to research known as R4D. This approach differs considerably from applied research or research intended to support development. According to Merry *et al.*, (2013:7), the R4D approach used by the CPWF “addresses complex development problems identified by stakeholders through a process that emphasizes partnerships, participation, communication, and a collective reflexive learning process”. Hall (2013) notes that there is a growing interest in this approach to research. The experiences of LBDC partners are therefore potentially valuable to those contemplating or already involved in implementing this new R4D approach.

The LBDC programme processes and results show that while the R4D approach is a novel approach to achieving development outcomes, it requires considerable time to produce definitive results. The LBDC was ambitious in expecting results of the programme impact within three to four years of programme implementation. A key lesson here is to ensure that time bound development programmes are designed to produce some “quick win” results, which can be seen during the life span of the programme, which is usually between three to four years for donor funded development programmes.

7.1.2. Monitoring and evaluation

Another key lesson emerging from the study is the importance of having a robust M&E system. The LBDC like all other CPWF BDCs was designed with a fairly elaborate set of M&E tools which proved effective in providing periodic feedback on the extent to which the five projects were in achieving their goals. According to Boydell (2007), an appropriate M&E system is essential in development programmes or projects especially those involving numerous stakeholders.

Bamberger and Hewitt, (1986) also highlight that organisations are now more mindful of the relationship between beneficiary participation in design and implementation which creates a sense of ‘ownership’ of project objectives and results in the sustainability of project benefits. M&E in projects/programmes not only allows for assessment of work in progress but it can be a valuable process for building trust across diverse stakeholder groups. However, there must be a strong commitment to make proper use of the M&E tools by all concerned.

Important to note is that a good M&E system can only be in place if it is well planned and given the same level of attention than the programme/project objectives. The LBDC experience shows that planning for programme/project M&E is crucial. Project/programme designers should always consider whether appropriate funds and staff time is allocated to M&E.

7.1.3. Promotion of Stakeholder Engagement and Participation

Stakeholder engagement and participation is an integral part of any programme aimed at achieving development outcomes. The success of the R4D approach lies in its ability to bring together different stakeholders across disciplines and at different levels to work together in achieving positive development outcomes (Hurni *et al.*, 2004; Probst *et al.*, 2003).

The LBDC was largely designed by the CPMT, based on consultations with a small selected group of stakeholders and emerging results from Phase 1 research. Real engagement with the stakeholders and partners who were the target audience for R4D began only after the programme was designed. A more inclusive and effective process from the early stages might have led to a different programme focus and design.

Future programmes might be more responsive to demand and have more impact if they are designed with the full participation of basin level research, policy, civil society and other stakeholders from the inception phase. Early engagement and participation of local authorities (traditional and government) is crucial for successful implementation of this type of programme. Leaders are able to support and encourage community members to participate to their fullest, and are able to relay community priorities and needs to researchers in an open and honest exchange.

Another important lesson about stakeholder engagement and participation has to do with the fact that development programmes have to be careful in what they promise communities. When the LBDC projects were launched in the communities, some like the L2 project over-promised in terms of what they would deliver, and then lost some credibility as they failed to fulfil all promises given the budget cuts that occurred mid-way through programme implementation. Over-promising and under-delivering can be damaging and can result in communities not trusting development organisations, thereby barring access to the communities and blocking any future programmes.

7.1.4. Knowledge management and communication

One issue that had mixed reviews from the respondents is the issue of knowledge management and communication. Overall, all respondents thought that the LBDC had done a good job in communication, but they differed in their assessments of to what extent internal or external communication had been as effective as it might have been. Whilst it was clear that the L5 programme was responsible for overall coordination of the programme, the mechanisms for communication and knowledge management amongst the projects were not clear.

Future similar projects can benefit from developing clear communication and knowledge management mechanisms to ensure that research outputs translate to outcomes. Communication and knowledge management should be integrated from the beginning into the programme design to help researchers define clear messages and design impact pathways. Furthermore, having a strong communications and knowledge management system in place can help serve as a useful M&E tool by tracking the reach of research products disseminated in various ways. This will help to track progress and synthesize feedback on the project life cycle.

Another point to note is that communication and knowledge management often represents major cultural change especially for researchers who are traditionally known as ‘poor’ communicators to audiences outside of their disciplines especially to non-research audiences. It is therefore important in R4D projects that different stakeholders be trained on the value of new communication and knowledge management processes.

The study also noted that LBDC communication efforts were mostly in the form of community-based events, high-level policy dialogues, meetings, conferences and technical workshops. This is because of the importance of oral traditions in the region. An important lesson here is the importance of drawing on context specific cultures or traditions to enhance a development programme’s approach. Where possible a mix of communication tools should be used to communicate with different stakeholders at different levels.

The process of capturing, sharing, and effectively using lessons learnt is crucial for success of development programmes, especially those involving a number of stakeholders across disciplines and borders. The ability to utilize previous knowledge is especially useful to the development community in which the projects are similar in nature to one another, where this process of learning from past mistakes and past successes can help save resources, boost efficiency and mitigate risks.

7.2. Recommendations for future research

R4D partnerships are at an early stage of development, and little is known about their scope and impact. However, the potential of such partnerships is substantial. Based on the findings summarized above, as well as the theoretical assumptions from which this study was approached, the following areas have been identified for further research:

- Co-ordination and management mechanisms of effective partnerships.
- Capacity building requirements of development actors to enhance their performance when working in partnership
- Establishment of strong performance management, monitoring and evaluation systems to measure and assess the contribution of partnerships to development
- Longitudinal studies that follow R4D partnerships from inception to conclusion in order to better understand the ongoing dynamics within these partnerships.

- A comparative analysis between partnerships in different countries or sectors to see if there are variation in the motivations, dynamics and characteristics of partnerships.

ANNEXES

Annex 1: Informed Consent Letter



FACULTY OF HUMANITIES

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17 May 2013

Title of study: The impact of research for development partnerships on community development projects: A case study of the Limpopo Basin Development Challenge Programme

Researcher: Sithembile N Mwamakamba (Student Number; 27428771)
Mobile: +27 82 799 1382
Email: sithembilengwenya@gmail.com

Dear Participant,

Thank you for your willingness to participate in this research study. The purpose of the study is to examine the nature and effectiveness of partnerships in development practice, with particular emphasis on partnerships in the field of research for development (R4D). The study focuses specifically on partnerships of the Limpopo Basin Development Challenge Project.

This research will involve your participation in a 30 – 45 minute interview. If necessary, follow-up interviews will also be conducted to seek further clarification or additional information. With your express permission, both sessions will be tape recorded to help me accurately capture your insights in your own words.

You are being invited to take part in this research because I believe that your experience as an implementing partner in the LBDC project will contribute much to my understanding and knowledge of what works and what doesn't work in partnerships.

To the best of my knowledge there is no risk or benefits that might result from your participation in this study. Participation is completely voluntary. If you decide not to participate there will be no negative consequences. Please be aware that if you decide to participate, you may stop participating at any time and you may decide not to answer any specific question.

All information you supply during the research will be held in confidence and unless you specifically indicate your consent, your name will not appear in any report or publication of the research.

If you have any further questions you may contact me by telephone +27 82 799 1382 or by email: sithembilengwenya@gmail.com.

Participant's Consent Declaration

I.....agree to participate in Sithembile's research study. The purpose and nature of the study has been explained to me in writing. I am participating voluntarily. I give permission for my interview with Sithembile to be tape-recorded. I understand that I can withdraw from the study, without repercussions, at any time, whether before it starts or while I am participating.

I understand that anonymity will be ensured in the write-up by disguising my identity. I understand that disguised extracts from my interview may be quoted in the thesis and any subsequent publications if I give permission below:

(Please tick one box)

I agree to quotation/publication of extracts from my interview

I do not agree to quotation/publication of extracts from my interview



Participant's Signature: _____

Date: _____

Annex 2: Interview Schedule Guide for LBDC Programme Partners

1. Introduction and welcome:
 - Researcher introduces herself and gives a brief overview of the of the project and interview and confirms the interviewee's willingness to participate in the project
2. Opening questions
 - What project do you work in?
 - What is your position within the LBDC?
 - How long have you been involved with the work of the LBDC
 - How much of your work / paid time do you spend working on the LBDC project
3. Key Themes
 - Describe the partnership within the project, who constitutes the partnerships and how the partnership was formed
 - How were partners' roles assigned
 - How does your project relate/contribute to other projects in the LBDC?
 - What is the level of community involvement in the project
 - What has been the most significant technical development/advance made by your project / theme / basin since the start?
 - Is the partnership necessary to achieve the results?
 - What has been the most significant partnership change (significant in terms of making scientific progress and/or developmental impact more likely)
4. Probing Techniques:
 - Why is the partnership significant?
 - What were the critical factors that led to the success or failure of the partnership?
 - What were the constraints?
5. Closing Request: Provide an opportunity for the key informant to give any additional information or comments. Also ask the key informants for their recommendations or solutions in addressing the problem.

6. Summary: If time allows, the researcher will quickly summarize the major points noted during the interview and ask interviewee if all the major points have been covered. The researcher will also ask the interviewee if there is anything else they would like to add - any information that would enrich the project. The researcher will end by thanking the interviewee.

Annex 3: Evaluation Criteria and Scoring

Evaluation criteria

1. Each proposal will be assessed independently against five criteria:
2. Research quality – the scientific quality of the proposed project
3. Implementation – the quality and feasibility of the project execution
4. Impact – the potential impact the project will have over the longer term
5. Consortium – the composition, qualification and experience of the consortium members
6. Budget – the adequacy of requested funds and fairness of fund allocation

Each criterion has been given a weight, indicating its relative importance overall in the proposal. The maximum total score a proposal can receive is 80.

Use the guiding questions below to assist in evaluating the five criteria.

1. Research quality (weight 4)

Guiding questions:

- To what extent does the proposal address needs as described in the invitation for an EOI?
- Does the proposal take appropriate account of existing studies?
- Is the background literature appropriate and adequate?
- Are approach and methods suitable to achieve the stated outcome logic?
- How is the quality of the proposed methodology?

2. Implementation (weight 4)

Guiding questions:

- How feasible and suitable is the implementation plan?
- Are the timelines realistic?
- Are outputs verifiable?
- Is the project aligned with CPWF core principles (including addressing gender concerns)?
- Have risks been adequately identified and acknowledged?
- Is the communications plan suitable to maintain links with important stakeholders?

3. Outcomes and Impact (weight 3)

Guiding questions:

- Is the logic of the outcome pathways coherent and plausible?
- Are outcomes realistic and non-trivial?
- Is the project impact narrative coherent and plausible?
- Are expected impacts realistic and relevant (e.g. related to food security, poverty, health, environment and gender equity?)

4. Consortium (weight 3)

Guiding questions:

- Does the team leader have the necessary expertise, experience, commitment (i.e., time on the project) and management capacity to implement the project?
- Is there appropriate diversity and interdisciplinary within the team and is the role of all partner institutions clear?
- Is there appropriate gender balance in the project team?
- Do all partners have the necessary research, technical, management and leadership capability to implement the project?
- Looking at the people responsible for producing the outputs, do these teams contain the requisite skill and is the team size appropriate?
- Is the project proactive in encouraging stakeholder participation?
- Does the consortium have adequate mechanisms in place for conflict resolution?

5. Budget (weight 2)

Guiding questions:

- Are costs reasonable for the work described?
- Are the potential outputs of sufficient value to justify research costs, and is budget matched to outputs?
- Is there a suitable level of budget devoted to national institutions and partners? Does at least 35percentage of the budget go to in-basin organizations?

Scoring

Each criterion will be awarded points out of 5. Please use the all range, use of half marks is recommended. The points indicate the following with respect to the criterion under examination:

- 0 – The proposal fails to address the criterion under examination or cannot be judged due to missing or incomplete information.
- 1– Poor. The criterion is addressed in an inadequate manner, or there are significant weaknesses.
- 2– Fair. While the proposal broadly addresses the criterion, there are significant weaknesses.
- 3– Good. The proposal addresses the criterion well, although improvements would be necessary.
- 4– Very Good. The proposal addresses the criterion very well, although certain improvements are still possible.
- 5– Excellent. The proposal successfully addresses all relevant aspects of the criterion in question. Any shortcomings are minor.

Annex 4: TOR for Basin Leaders

The Basin Leader (BL) is an innovative, energetic, visionary individual who oversees and coordinates the implementation of a set of CPWF research projects in a basin aimed at addressing a well-defined Basin Development Challenge or BDC for that basin. The BL has management, coordination, networking and research responsibilities.

Management and coordination

The BL is responsible for maintaining the coherence, integration and focus of a set of CPWF projects aimed at addressing a well-defined BDC. The BL has the following responsibilities. The BL has the following responsibilities, supported by the coordination project, and in consultation with the CPMT.

- Lead the BDC coordination project and, through that, coordinate the projects of the BDC
- Foster and update an overall BDC vision
- Maintain BDC research agenda coherence across projects
- Promote an evaluative culture in the BDC research programme
- Develop and update impact pathways for BDC projects, and use them in coordinating M&E and impact assessment and in developing communications strategies
- Conduct regular BDC reflection and learning workshops
- Provide direct supervision for BDC Project Leaders
- Re-orient BDC projects moving in appropriate directions (as determined by the MT)
- Identify opportunities, threats, and unexpected consequences for BDC projects
- Adjust research plans in light of opportunities, threats and consequences
- Encourage capacity-building, and coordinate BDC project investments, in M&E, communications, participatory research, and gender analysis
- Ensure compliance on information sharing among BDC projects
- Ensure compliance with CPWF and donor reporting requirements
- Encourage gender equity in the staffing of BDC projects, and by encouraging projects to find ways to mitigate potential negative impacts of BDC research on women

Networking

The Basin Leader is responsible for networking with people, initiatives and organizations who are also working to address the BDC. The purpose of this networking is to learn what others are doing, make others aware of progress being made in CPWF BDC research, improve the complementarity of CPWF BDC research, and motivate a social process of innovation. Specific duties include:

- “Weave” networks that link research entities to decision-makers, and thereby foster a more inclusive social process to address the BDC. (“Research entities” include all those working to tackle the BDC, and are not limited to those receiving direct CPWF support.)
- Build, strengthen and maintain multi-stakeholder platforms relevant to BDC goals
- Use BDC research results to inform dialogue in multi-stakeholder platforms
- Foster information sharing between BDC projects and the other stakeholders
- Oversee the development and implementation of a BDC communications strategy, linked to regularly updated BDC impact pathways
- Contribute scientific, impact and networking experiences and lessons to relevant Topic Working Groups
- Participate in Topic Working Group Meetings
- Engage in high level representation of the CPWF within the region to promote actions to address the BDC and, more broadly, to help attain the wider global objectives of CPWF
- Foster the uptake and use of CPWF Phase I outputs (not limited to those with direct relevance to the BDC)

Research

The Basin Leader is also expected to coordinate the design and implementation of ‘innovation research’ to better understand how and when research can lead to developmental outcomes and impact, and the role of partnerships, networks and platforms in this process.

- Based on regular revisiting and adapting BDC impact pathways, and ensuring good process documentation, analyze how different types of research outputs and knowledge do (or do not) alter next user and final user knowledge, attitudes, skills and practice.
- With support from the CPWF Innovation and Impact team, monitor and analyze what types of network and platforms are required to achieve developmental outcomes and impacts which result in poverty alleviation.
- Carrying out other innovation research, the findings of which are likely to inform and improve practice within the BDC projects.

An organization can be said to have an evaluative culture when it engages in self-reflection and self-examination, seeks evidence, makes time to learn and encourages experimentation and change.

Annex 5: Sample Most Significant Change (MSC) Story

Title of story:	Engaging next users and end users in research design
Authors:	Amy Sullivan & Ruth Beukman Project / BDC: L5/LBDC
Domain:	Outcome and research

The Story: The LBDC has committed to engaging new and different partners in the early stages of research design. In particular, regional partners such as SADC and LIMCOM have been asked to contribute to and give feedback on the LBDC approach, targets and pathways.

The change is the meaningful engagement of these stakeholders, as partners, in the research for development impact process in the basin. The change is that these stakeholders have come to the foreground as active participants—and hopefully—eager recipients of the agricultural water management research being done within the basin.

The change is significant because it reverses one of the greatest barriers to change, in the research 4 development continuum. The change is significant because it reflects a new way of doing business in the region and have opened eyes, all along the stakeholder continuum, to possibilities that emerge from broader communication.

The change started to happen by engaging new and different partners in the agenda setting and research design processes. The change started when previously side-lined stakeholder groups were given a voice, at the time in the process when their voice made a difference. The CPWF moved away from traditional research institutions and took a chance on existing and emerging networks.

FANRPAN, GWP-SA and WaterNet are all networks with coverage in the Limpopo Basin. Between the three networks, they give the LBDC/CPWF very strong linkages to COMESA, SADC, LIMCOM, GWP Global, and a wide range of other decision making bodies previously left out of the process in the Limpopo Basin.

The change likely began with a rethink, by CPWF, of the hosting organization for the Phase II Coordination and Change project. The change is happening within and around the Limpopo Basin, with wider ripples. In the short term, the entire BDC is benefiting from the change in that their research is relevant to regional, basin, national and provincial priorities. End users,

be they farmers or policy makers will eventually benefit from this change as research is designed with them and their needs in mind.

The change was envisioned within the L5 OLM. The change reflects a new way of doing business for the wide range of stakeholders implicated in the BDC, not just end users or researchers. The change contributes directly to ensuring relevant research, and also preparing researchers to consider the broader audience in setting the agenda and research design. The change may also help the CPMT see regional, national and provincial level decision makers more clearly, and prioritize their engagement in programme activities.

An unexpected element of the change is how easy it has been to facilitate, once the enabling environment is in place. This consists mainly of the right contacts within the right organizations who can use the proper channels and follow the protocol, necessary for success in this part of the world. The sale of this approach has been rather easy so far, once decision makers understand the rationale behind the programme—they usually forgive having been left out of previous processes.

The major constraints that have been overcome are breaking the language barrier(s) that exist between various groups of professionals. Another aspect to be overcome is the attitude and power differentials assumed by different actors at high levels. Researchers are not used to defending their choice of research topic, methods or sites—especially to ‘non-peers’ or politicians. On the other hand, decision makers are not always comfortable with a group of unknowns running around their communities, asking sensitive questions that will reflect upon them and their performance. To some degree these constraints and suspicions still exist but are slowly being surmounted.

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