The challenges of financing municipalities’ water and sanitation infrastructure by a Development Finance Institution

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ABSTRACT

The purpose of the research is to investigate whether there are capacity challenges within the municipalities that essentially affect the bridging finance for the water and sanitation infrastructure by the Development Finance Institution (DFI).

An extensive literature review has been conducted in order to get information regarding a variety of research work done in the areas of capacity constraints within the municipalities, in particular the municipalities in the North West Province and the funding from the Development Finance Institution, more important whether the two are linked.

The research provides an investigation into how the DFI can link the funding with the project implementation capacity in pursuit of achieving strategic objectives. To collect the relevant information for the study, the researcher used a quantitative method, with a questionnaire that was distributed to potential respondents within the selected beneficiary municipalities, the DFI namely the DBSA, the Provincial Government (Department of Infrastructure), and community structures. A satisfactory response rate has been achieved, indicating reliability of the results.

The data has been analyzed by using the statistical methodologies, and the results were interpreted to verify if they confirm or disapprove the research objectives.

Key findings of the study are discussed and conclusions drawn based on the results. The results indicate that there are no capacity constraints and therefore the funding of the DFI is not necessarily affected. They disprove the hypothesis that the bridging finance is affected by capacity (project implementation) constraints within the beneficiary municipalities - it did not necessarily disprove it, but the literature supports the argument.
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ABBREVIATIONS

COGTA  Cooperative Governance & Traditional Affairs
DBSA  Development Bank of Southern Africa
DDLG&H  Department of Development Local Government & Housing
DF  Development Financier
DLG&TA  Department of Local Government & Traditional Affairs
DPLG  Department of Provincial & Local Government
DTI  Department of Trade and Industry
DWA  Department of Water Affairs
ECSA  Engineering Council of South Africa
IMESA  Institute for Municipal Engineers of South Africa
MFMA  Municipal Finance Management Act
MIG  Municipal Infrastructure Grant
MTAS  Municipal Turn-Around Strategy
PIG  Provincial Infrastructure Grant
SAACE  South African Association of Civil Engineers
SABTACO  South African Black Technical Alliance Careers Organisation
SAICE  South African Institute of Civil Engineers
SALGA  South African Local Government Association
SM  Siyenza Manje
WSA  Water Service Authority
WSP  Water Service Provider
CHAPTER 1: NATURE AND SCOPE OF THE STUDY

Idasa mentioned that the National Government has failed to devise a sustainable strategy for supporting municipalities that are inherently different from metro’s councils and confronting the unique problems that are linked to their location in a distorted spatial economy (Idasa, 2010:3).

It also perceived that the other factor that undermines the performance of municipalities is the availability and shortage of the required skills. The State of Local Government in South Africa Report (2009:66), points that skills deficit within the municipalities remains a challenge.

According to Idasa, a significant number of municipalities do not have adequate managerial, administrative, financial, technical and institutional capacity to meet the rising needs of local people. As a result, these municipalities cannot meet the required performance standards, and hence this impacts adversely on the service delivery (Idasa, 2010:5).

The non-delivery of services to deserving communities in rural municipalities is regarded as a problem that requires extensive evaluation, as it mostly affects impoverished rural based municipalities with a low revenue base that rely on bridging finance from the DBSA for the water and sanitation infrastructure in the North West Province, to assist them to perform their function adequately amid fiscal distress. These municipalities do not have extensive powers to raise their own revenues through property taxes, business taxes and imposed fees for services.

Furthermore such municipalities are overburdened to deliver and they largely depend on municipal grants and equitable shares from National Government. It is therefore difficult for these municipalities to fulfil their mandate with weak revenue. Such allocations are insufficient to ensure universal access to adequate services and will not enable the poor and small municipalities to eradicate the backlogs (Idasa, Local Governance Unit: 22 January 2010).

It is against the backdrop of the abovementioned municipal constraints that the researcher asserts that the development financier’s funding intervention towards the six selected
municipalities have failed to impact significantly on the eradication of the water and sanitation backlogs and service delivery. Although the funding model (DBSA, 2011:7) acknowledges and takes into account the institutional and financial risks and constraints of the municipalities, the researcher is of the view that it is has not taken into account certain capacity challenges and has somehow failed to mitigate these risks and to ensure that the delivery of the projects is seamless.

According to the COGTA report (2007), the targets set to provide basic services to all, particularly with respect to water supply, seem to be ambitious and require rapid increases in capital expenditure and organizational capacity. It could be argued that in order to afford this program, increases in the revenue available to municipalities are also required. This report affirms that a large number of municipalities experience severe infrastructural backlogs and have limited capacity to implement these backlogs (DPLG, 2007:23).

It is for this reason that the North West Provincial Government and the DBSA formed a partnership in 2006 to jointly eradicate backlogs, starting with the bucket system which was to be eradicated by December 2007. Although the Phase 1 and Phase 2 of the project was completed in 2008 and 2010, while part of Phase 3 was supposed to has been completed by 2011, the funds committed were not entirely used (DBSA, Development Planning, 2011:7). The rationale behind the partnership was to address systematic challenges in relation to the flow of infrastructure grants (Provincial Infrastructure Grant (PIG), and Municipal Infrastructure Grant (MIG) to the municipalities, through bridging finance and capacity building in relation to implementation of program. This was in response to the target set by National Government to eradicate sanitation backlogs which were prevalent in formal settlements before 1994, by December 2007.

The program targets rural municipalities in the North West Province. The municipalities are according to Water Service Authority (WSA) responsible for providing water and sanitation services to the communities in terms of the Municipal Structures Act of 1998. (DPLG, 2007:16). The process of providing these services is guided by the Municipalities’ Integrated Development Plan (IDP). The IDP of the municipalities identified water infrastructure as priority number one in their needs analysis, followed by sanitation, roads and electricity. Through the public participation process of the IDP, the communities are the areas that will be targeted (DPLG, 2007:13).
To give effect to this partnership, the DBSA and the Department of Development Local Government & Housing (DDLG&H), now called Department of Local Government & Traditional Affairs (DLG&TA), proposed a funding solution to address these water and sanitation backlogs. The program is designed to achieve the following:

- To eradicate the water and sanitation backlogs, thereby promoting a safe and healthy environment;
- To provide affordable funding to poor municipalities, thereby enabling them to fulfill their constitutional mandates;
- To enhance the institutional capacity of the municipalities identified through the deployment of qualified and experienced Siyenza Manje technical experts - Siyenza Manje is an official government program that provides expert capacity to municipalities to address the capacity constraints.

1.2 PROBLEM STATEMENT

This research seeks to investigate intricate capacity, management and process challenges confronting the financier and municipalities in the rollout of water and sanitation infrastructure projects in the North West Province. It will also dissect whether the required level of disbursement on DBSA’s loan have been achieved, and whereon funds were spent, and if requisite developmental impact was achieved or not (DBSA, 2011:7). Although the funded projects were identified, prioritised and prepared by the applicant municipalities following the legislative process as described in point 2.2.2, it appears that certain capacity constraints that exists in the municipalities’ project and program management, e.g. Project Management Unit (PMU) and the Supply Chain Management (SCM) were not taken into account in the DBSA’s funding processes. This includes managerial and technical skills, as well as systems and resources to implement the projects funded through bridging finance by the DBSA. The research will seek to confirm or disprove of the much reported constraints and challenges in relation to bridging funding extended by the DFI to the municipalities without unduly broadening the areas of focus.
1.3 RESEARCH OBJECTIVE AND QUESTIONS

The objective of this research is to evaluate whether the bridging finance and capacity development interventions extended to the municipalities were sufficient and utilised in an effective and efficient manner to roll out the earmarked infrastructure projects, given the persistent capacity constraints in the municipalities.

In order to determine the effectiveness of the financier’s funding and capacity development interventions in assisting the six selected North West municipalities to implement Water and Sanitation Infrastructure projects, the researcher will dissect:

- inherent problems in the institutional design and structure of governance as well as the implementation of policy; and a lack of social capital within the identified municipalities;
- the extent to which operational constraints within the municipalities impact on the delivery of intended infrastructure and social services within the financier’s program;
- the extent to which the municipalities employ the DBSA funding efficiently, effectively and economically; and
- the extent of significant impact made to communities as a result of funding and capacity development interventions from DBSA.

The aim of the research therefore is specifically to narrow down on fundamental factors that compromised quality of prioritised projects that were earmarked for implementation by these municipalities under the DBSA funding program in the North West Province.

The following secondary questions can be formulated based on the above-mentioned description of the research problem:

- Given the fact that these municipalities are rural and impoverished, the question is whether they are financially viable and whether they can perform their function;
- Did the bridging funding from the Financier make a significant development impact on the communities?
- Did the municipalities use the bridging funding efficiently, effectively and economically?
- Did the municipalities manage to eradicate water and sanitation infrastructure backlogs in their areas and what were the potential leakages experienced?
- To what extent do the operational constraints within the municipalities’ impact on the delivery of intended infrastructure and social services within the DBSA program.
- Measure how much of the financier’s fund actually reaches water and sanitation infrastructure projects for the poor.

1.4 Hypothesis

The hypothesis of the research is that the municipalities continue to lack capacity and have ineffective operations and therefore the bridging finance interventions from DBSA to the municipalities have failed to eradicate the water and sanitation backlogs and thereby impact significantly service delivery due to these challenges in the municipalities.

1.5 Research Delimitations

The focus of this study relies heavily on the data collated from the DBSA. Permission was granted by the DBSA to use data on condition that views, opinions and information generated from this study will not be regarded as the official opinion of the DBSA. It is incumbent on the researcher to make sure that the confidential information about the DBSA and clients is not disclosed.

The study aims to deal with the degree of effectiveness of the DBSA’s intervention in six elected municipalities in the North West Province. It will not claim to cover all areas that pertain to municipal planning, service, budget, etc., but it will cover the two district municipalities and four local municipalities with specific focus on the 42 projects funded by the DBSA’s bridging finance. The research will cover the period 2008 and 2011 respectively in order to have a comprehensive review of the projects for that period and it will not consider activities prior to the signing of the agreement between the DBSA and the North West Province. On a limited scale, some views of the affected representatives of the communities, particularly organized groupings, will be interviewed. This information would not have substantive impact on the research, as the focal point is on efficacy of the DBSA’s facility and municipalities. It is yet very important in the exploratory stages of the
research - the views and impressions of community groupings, which is the direct recipient of inputs concerned.

Qualitative research will be used to acquire information from the market, as the method would allow for flexibility and is cost-effective. In-depth interviews will be used and where possible telephonic interviews will also be conducted to complement interviews held. A questionnaire will be designed to ensure that all the researched questions are captured sequential and uniform. Due to time constraints, qualitative research would allow for fewer respondents thus reducing costs. The turnaround time will thus be reduced. The research process will entail a brief exploratory research and also an extensive descriptive research in an attempt to secure data sought.

1.6. RESEARCH METHOD

This research falls within the boundaries of the Operations and Supply Management Sciences (OSM) and more specifically the Service Delivery Process (Jacobs, 2009:10).

This research will attempt to evaluate the design and application of the project implementation processes within the six selected municipalities in the North West Province and whether the DBSA funding was effectively and efficiently utilised Jacobs et al. (2009:6) further defined efficiency as doing something at the lowest possible cost, and effectiveness as doing the right things to create the most value for the company or organization (Jacobs et al., 2009:6). The purpose of the dissertation is to investigate and propose improvements in the way the current processes are designed and applied in practice within both the DBSA and municipal clients. Slack et al. (2006:414) define improvement as the activity of closing the gap between the current and the desired performance of an operation of a process. The way organisational processes are designed, is critical to its success in delivering products and services and thereby meeting the needs of its customers and stakeholders.

A quantitative research method was adopted for this research. Documents, publications, journals and previous research work were sourced and evaluated, including, but not limited to, other national trends and specifically the local government sphere. A questionnaire was
designed and tailored to ensure consistency in the collection and coding of data and information that was collected.

The respondents were sent questionnaires to complete which was pursued by telephonic follow-up. A larger part of the information and data was secondary information recorded in various journals, documents and publications. The information was collected over a month (October, 2011), using a standard questionnaire. Appointments were made with municipal managers or technical managers and DBSA divisions responsible for the bridging finance in local government.

Questionnaires were dispatched to all the targeted segments listed in the limitations of the study in the first week. Respondents were selected on the basis of being part of the water and sanitation infrastructure program. Those individuals, interested groups/ individuals and government entities that have had some form of contact or interaction with the program activities in the last two months, were considered for inclusion in the study. The approach adopted for this study was an eclectic approach that sought to understand the various views of the key actors in the operations of the municipalities. The aim was to explore and analyze their views and perceptions, not only on funding of the financiers’ and municipalities, but also on how effective the funding program contributed towards the delivery of services.
CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

According to the Municipal Finance Management Act (Circular 51), promulgated by National Treasury in February 2010, a municipality is allowed to pledging of conditional grant transfers (including the Municipal Infrastructure Grants), to secure a loan or any other form of financial or other support from that institution. (National Treasury, 2010:10). The objective is to “facilitate the implementation of capital projects financed by conditional transfers by allowing municipalities to use their indicative conditional allocations set out in the 2010/11 Medium-Term Expenditure Framework as security for bridging finance”. The DBSA is now leveraging on this circular and has embarked on preparing water and sanitation programs for the bridging finance packages in most provinces (National) (DBSA, 2011:07).

Furthermore, for municipalities to obtain bridging finance, the Municipal Finance Management Act (Circular 51) requires prior approval by the National Treasury; the bridging finance pledge is limited to 40% of project costs; the amount pledged for each of 2011/12 and 2012/13 is limited to 75% of the Conditional Grant Transfers for both years; indicative pricing and quantitative and qualitative benefits of pledging the Conditional Grant Transfer should be demonstrated (National Treasury, 2010:10). If the municipality is already experiencing serious cash-flow problems, this will automatically disqualify it from pledging future conditional transfers as security for borrowing, as there is a risk of the credit facility to be abused. The provision does not allow a municipality to commit Conditional Grant Transfers beyond 30 June 2013, which means that Conditional Grant Transfers cannot be pledged as security for long-term borrowings. The application must demonstrate that in post-2012/13 the municipality will be in a position to borrow for capital projects on its own balance sheet, as the municipalities cannot pledge their Conditional Grant Transfers as security beyond 30 June 2012/13 (National Treasury, 2010:10).

More recently the DBSA’s e-digest (1st ed., June 2011) asserts that “the DBSA's investment in South Africa’s water and sanitation sectors between 1994 and 2010 has contributed to the increase in access to these services nationally - water from 59% to 93%,
and sanitation from 48% to 79% (DBSA, 2011:5). The investments in infrastructure development for bulk water resources have also increased the country’s water security however the DWA has indicated that challenges remain, with 3.63 million people and 2.67 million households without access to basic water supply and sanitation, respectively. This problem is further exacerbated by the lack of adequate asset management in municipalities.” Although the submission by DWA illustrates significant progress at national level, progress is likely to be less significant and fraught with constraints at municipal level, notwithstanding the stringent provisions outlined in the Circular 51 (DBSA, 2011:5).

The e-digest (1st ed., June 2011) states that the DBSA is working with municipalities with high water and sanitation backlogs. Most of them have serious cash-flow problems and no debt absorption capacity. Such municipalities will find it difficult to fully comply with the requirements of Circular 51. Most of the municipalities targeted for DBSA funding in some of the provincial water and sanitation programs under consideration, have serious cash-flow problems, and will most likely not be in a position to borrow funds on the strength of their balance sheets of post-30 June 2012/13.

The North West Water and Sanitation funding model entails the provision of a bridging finance facility to 6 municipalities, 2 District Municipalities and 4 Local Municipalities, in the North West Province (DBSA, 2011:7). The finance was meant to enable the municipalities to accelerate the implementation of water and sanitation infrastructure projects and eradicate backlogs such as connections, upgrading of existing bulk and reticulations systems. It also enables municipalities to fulfill their constitutional mandate, and enhance their capacity through the deployment of qualified and experienced Siyenza Manje technical experts to expedite rollout of waterborne sanitation facilities, resulting in a safe and healthy environment (DBSA, 2011:7).

As municipalities’ capacity constraints have been the subject of much debate by stakeholders in South Africa in the recent years, the department of Cooperative Governance & Traditional Affairs COGTA has recently raised issues in relation to lack of capacity within the beneficiary municipalities. (Idasa Report, 2010:6). In view of the above
facts, it is not a coincidence that water and sanitation backlogs continue to persist in the municipalities; it is plausible that some of the causes may have been overlooked and or lumped as capacity without further interrogation (DPLG, 2007:23).

2.2 Literature study: defining the concepts

At this point it is necessary to provide some conceptual clarity on the different components that are central to this study. This includes an in-depth discussion on operational capacity - managerial and technical capacity, an explanation of what the operational capacity is and its intended application, as well as an evaluation of how successful the operational capacity processes and efforts have been internationally and in South-Africa to date. In addition, several popular debates that often surface whenever the topic of managerial and technical capacity within municipalities are discussed, will be presented, which is believed to greatly influence one’s overall stance on managerial capacity within the municipalities in general - these include the poor service delivery debate, the cadre deployment debate, the process of change in municipalities’ debate, the lack of professionalization debate, skills debate, and nepotism debate.

Finally, an overview of the managerial and technical capacity theory and relational development funding/service delivery impact theory was looked at. These was presented within the context of a water and sanitation program case study in the North West Province and will be used to make an argument regarding how the municipality reacted to implementation of the projects within the program, clear.

2.2.1 Operational Capacity

Operations and supply strategies are viewed as part of a planning process that coordinates operational goals with those of the larger organization. Since the goals of the larger organization will change overtime, the operations strategy must be designed to anticipate future needs. An organization’s operational capabilities can be viewed as a portfolio best suited to adapt to the changing service needs of the organization’s customers (Jacobs et al., 2009:20).
Capacity is a relative term - in an operations management context, it may be defined as the amount of resource inputs available relative to output requirements over a particular period of time. This definition however makes no distinction between efficient and inefficient use of capacity. It may also imply that the output attained beyond the set time and with high cost-inefficient labour or facilities would be good for the organization (Jacobs et al., 2009:123).

Operations and supply management are defined as a functional field of business with clear line management responsibilities (field of management) and is frequently confused with industrial engineering (engineering discipline). It is also defined as the design, operation, and improvement of the systems that create and deliver the firms primary products and services (Jacobs et al., 2009:7).

Capacity building is widely recognised as an issue in meeting the challenges for delivering municipal services. According to the municipal infrastructure investment fund (2005), capacity is a key criterion to be used in making decisions related to devolution of powers and functions for municipal service delivery and is specifically mentioned in the Constitution (DPLG, 2007:14), however, there are many views of what ‘capacity’ means and this is addressed in the National Capacity Building Framework, developed by DPLG (2007). This framework refers to three ‘types’ of capacity:

- **Individual capacity**: The potential and competency of individuals within organisations;
- **Institutional capacity**: the aggregate potential and competency found within an organisation; and
- **Environmental capacity**: the external factors which impact on the capacity of the organisation.

The framework affirms the indications that the drive towards infrastructure investment, including water and sanitation infrastructure provision and service delivery, might be seriously constraint by a lack of capacity in technical, financial, planning and management needs (DPLG: 2007,14).
2.2.2 Institutional Framework of Municipality

According to DPLG (2007), the roles and responsibilities of sector departments and municipalities for infrastructure and service delivery, are derived from the requirements of the Inter-Governmental Relations Framework Act of 2005 (Act 13, 2005) as embedded in the Constitution of the Republic of South Africa 1996 (Act 108, 1996). The central feature for the successful infrastructure support to municipalities is the alignment of roles, responsibilities and functions within and between the spheres of Government. Certain National Departments, including their provincial counterparts (for example DWA), have core roles and responsibilities to support municipalities and are expected to directly contribute and add value to municipal infrastructure and service delivery (DPLG, 2007:14).

2.2.3 Local Sphere (Municipalities)

There are different functional levels of responsibility that impact on municipal infrastructure within the local sphere. The researcher only focuses on the relevant ones.

2.2.3.1 Sectorial Infrastructure Planning

The sectorial infrastructure planning and municipal services delivery are taking place at local level. The sectorial planning includes decisions on the most appropriate service technology, levels of services and providers to operate and maintain the municipal infrastructure, for example, water services development planning and the provision of water services are taking place at a local level. (DPLG, 2007:13).

These plans are developed from different technical departments in municipalities or by the external technical service providers contracted to the municipalities. The plans are integrated into one plan referred to as comprehensive municipal infrastructure plan, which will form part of the Integrated Development Plan of a municipality. The comprehensive infrastructure plan is relevant in guiding the symmetrical implementation of infrastructure projects. It should reflect the current backlogs, as well as expected future growth in each municipality. Opportunities to bolster local economic development should be explored and supported (DPLG, 2007:13).
2.2.3.2 Project and Program Management

The project level activities include all activities that directly relate to the planning and implementation of projects, from pre-feasibility studies through to construction, commissioning and ultimately operation and maintenance of the project infrastructure. The municipalities should establish a function to co-ordinate project level activities. This function should reside within a municipality and institutionalized in the project management unit. This function should not replace the different technical units in the municipalities where they are available. The advantage of this function should be to develop and manage the implementation of the comprehensive infrastructure plans. Although it might not be possible to have all the required technical and management skills to operationalise the functions in all the municipalities, they should always take shared services and outsourcing into consideration (DPLG, 2007:13).

2.2.3.3 Universal service obligation

Services authorities have a responsibility to ensure that all people living within their jurisdiction are progressively provided with at least basic services, including people living on private land, for example farm dwellers. This also entails ensuring that there are sufficient resources to invest in the assets, as well as to operate and maintain the assets.

2.2.3.4 Community Participation

Community participation is central to the successful implementation and ownership of infrastructure and basic service delivery. Sector departments should ensure that communities are informed about different service levels, sectorial standards and norms, so that the communities could make informed decisions when participating in the Integrated Development Planning processes. This approach should enhance community ownership of infrastructure assets to be delivered and should ensure payments for services. Communities should also play a direct role in monitoring the implementation of infrastructure projects and the provision of free basic services. (DPLG, 2007:14).

However, not only government institutions and communities play supporting roles to municipalities, other stakeholders also play supporting roles, namely, *inter alia*:
• Development and commercial banks;
• Civil society;
• Statutory bodies such as the Council for Built Environment (CBE), professional bodies such as the Construction Industry Development Board (CiDB) and the Engineering Council of South Africa (ECSA);
• Professional associations such as the South African Institute of Civil Engineers (SAICE), South African Association of Civil Engineers (SAACE), the South African Black Technical Alliance Careers Organisation (SABTACO), the Institute for Municipal Financial Officers (IMFO), the Institute for Municipal Engineers of South Africa (IMESA);

In the subsequent sections the trends of capacity failures is discussed globally and then brought nationally (South Africa). The context of this study focuses on South African municipalities. As discussed, the overarching aim of this study is to investigate the managerial and technical failures of municipalities in the North West Province in South Africa. The trend in managerial and technical failures in municipalities is briefly discussed below.

2.2.4 Global Trend

Wellington (2010) mentioned that the effective implementation of planning and urban infrastructure outcomes rely on being able to access a full range of appropriate tools and assess which is best for the job in specific circumstances. The full range of tools covers a spectrum, including the use of plans to implement national objectives and standards, provision of information, using incentives and regulatory tools. The use, flexibility and effectiveness of tools should complement the broader planning system, allowing the achievement of broader objectives, such as economic growth, integrated urban and infrastructure development, value for money from investment, and well-designed urban environments that create value. Three broad potential barriers to effective implementation have been identified, namely: inconsistent plan structure and format, cost and time associated with preparing and changing plans, and potential problems with tools in practice (Wellington, 2010).
Literature gives a plethora of support to the studies conducted by Luwaga (2009:01); Quainoo & Harry Akyen (2003:5); McCutcheon and Croswell (2005); Egbeonu (2004); Mintzberg (1994); Powel and Dison (2005); as quoted by Quainoo et al. (2003:5-7) on barriers to effective implementation of the infrastructure projects in various sectors across the municipalities or organisations and Thorne & du Toit (2009:677) on the effectiveness of development finance. The public sectors globally have endured the malpractises emanating from unscrupulous conduct and lack of adherence to regulatory tools from people who wield power in these organizations.

Thorne et al. (2009:77) argue that the Government needs to be informed by an objective framework to avoid a repeat of the earlier DFI’s (banks) failures to achieve development as well as the successes of these banks. The framework addresses six dimensions of these banks namely the following: enabling environment, mandate, regulation and supervision, governance and management, financial sustainability and performance assessment. Thorne asserts that the development banking remains a risky initiative but, managed appropriately, and using this framework, it can help to achieve development.

According to the article written by Quainoo et al. (2003:5), conclusion regarding achievements and shortcomings of projects implementation reached, was that the success of employment-intensive infrastructure development programs depends to a large extent on fundamental factors such as - appropriate and implementable policy, government commitment, adequate and sustainable funding, adequate capacity and good preparation. In particular, for program extension and decentralization, due regard must be given to training and capability building and available resources.

Lessons derived bridge the knowledge gap between the large-scale programs embarked upon in the sub-Saharan countries in the mid-1980s and the year 2007 - these lessons should be applied to future endeavours in South Africa to generate significant employment per unit of expenditure and contribute to poverty alleviation (Quainoo & Harry Akyen, 2003:152). The constraints or barriers to implementation continue to be an ongoing subject of the debate internationally.
According to McCutcheon and Marshall as quoted by Quainoo et al. (2003:6), the below-named negative factors are parallel to most failed infrastructure programs undertaken both in South Africa and elsewhere:

- ill-defined scope;
- poor management;
- poor planning;
- breakdown in communication between engineering and construction;
- unrealistic scope, schedules and budgets;
- many changes at various stages of progress; and
- a lack of good project control.

2.2.5 South African Trend

The impact of capacity constraints to implementation has been contentious subjects in various research disciplines over the years. To curb the malpractices and uphold the standards, South Africa, like other countries, has adopted an “integrated development planning” as a method to plan future development in its areas. The purpose of IDP is to foster more appropriate service delivery by providing the framework for economic and social development within the municipality (DPLG, 2007:14).

According to DPLG, the White Paper on Local Government (1998) requires municipalities to embark on integrated development planning, focusing on community-based goals. IDPs involve a process in which municipalities assess and prioritise community needs, set goals, devise and implement development projects, budget and monitor progress. Section 35(1) of the Municipal Systems Act (Act 32 of 2000) refers to IDPs as municipalities’ ‘principal strategic planning instrument’. Section 26 of the Act lists items that must be included in the IDP, including a developmental vision, development priorities and objectives, and key performance indicators and targets. Chapter 4 of the Act deals with community involvement and participation, not only in the IDP process but also in all aspects of local government. The IDP process especially, provides an opportunity for learning and the sharing of ideas that has the potential to bring people together to work towards a shared vision of development, especially in poor, rural municipalities (DPLG, 2007:14).
According to the Municipal Finance Management Act (Act No.56 of 2003), municipalities are required to “take reasonable steps to ensure that the resources of the municipality are used effectively, efficiently and economically”. Good financial management is the key to local delivery. It is quite disturbing to note that most municipalities are generally associated with the worst form of financial management. Corruption, financial mismanagement and non-compliance with financial legislation, are common in most municipalities. Consequently, this result in poor performance thus the delivery of social services is compromised (Idasa, 2010:5).

According to Quainoo et al. (2003:6), several large-scale infrastructure programs have been implemented in South Africa before 1994 after 1994 when an all-inclusive Government was formed. The overriding goal was to improve the living conditions of the poor by generating employment opportunities, providing access to basic infrastructure and employable skills (McCord, 2003:6-8; Department of Transport, 2005:97). However, performance was substantially mixed (Rogerson, 2004:781-782), and in many instances projects either failed to achieve the intended objectives (Holicki & Tladinyane, 2000:23), or to reach the targeted beneficiaries. To conclude, both past and present projects undertaken have in general failed to alleviate the socio-economic problems highlighted above (Public Service Commission, 2007:25-29).

The outbreak of project implementation failures within South Africa, resulting from poor or lack of Institutional Capacity Development and Knowledge Management, were manifested by collapse of apprenticeship culture, as well as loss of skills to foreign companies. The municipalities underwent institutional reforms between 1995 and 2000 and these reforms were aimed at rationalising the local government sphere and turning municipalities into effective and efficient service-oriented entities, however, these changes also resulted in increased constitutional responsibilities for the new geographically integrated municipal authorities. They came to serve much larger populations and communities with overwhelming services backlogs (Khumalo et al., 2010:01). According to this report the municipalities are faced with the task of improving, not only the quantity, but also the quality of basic services being delivered to citizens in South Africa.
According to a report published in the Financial Mail (Anon, 2007), artisan training (for example) has progressively reduced to less than 5% (approximately three decades after 1975). Equally, the collapse of South Africa’s apprenticeship culture (Financial Mail, Anon, 2007) and the ESKOM’s recent difficulty in attracting individuals with the right capacity and know-how to resolve the country’s load-shedding problem, make it worthwhile to attach significant importance to capacity building and management of knowledge in the public sector.

From the corporate world, economic reasons have triggered downsizing or retrenchments which according to Davenport and Prusak (1998) in Quainoo et al. (2003:5), lead to loss of best practices and vital information. In addition retirements, high employee turnover, greater use of casual workers, all contribute to knowledge loss (Beazley, Boenisch and Harden, 2002, as quoted by Quainoo, 2003:5). Other factors contributing to the capacity problem are:

- Lack of commitment from decision makers and program implementers;
- Young people find years of apprenticeship burdensome though that is the traditional route for transfer of knowledge;
- Lack of incentives to encourage the succession process in the public sector.

In his findings on characteristics of Mega-Industrial Projects, Fawcett (1985:366-367) in Quainoo et al. (2003:6), refers to arguments that lack of strong, competent leadership and commitment contributes significantly to the failure of most large-scale infrastructure programs. He also states that good leadership is required in development programs to maintain program vision and effectively manage stakeholders.

Research by McCutcheon (as quoted by Quainoo, 2003:5) clearly shows that pre- and post-1994 attempts to implement large-scale programs such as the National Public Works Program (which had an integrated Community Based Public Works Program as a precursor to the actual implementation), in South Africa all yielded mixed results (McCutcheon, 1995) in Quainoo et al. (2003:3). The Expanded Public Works Program with an over R30 billion infrastructure budget has also not performed as expected. Several reasons account for the non-delivery: lack of engineers and managing contractors (Dison,
insufficient planning and overly political interference to the exclusion of objectivity in program planning and sound management.

Moreover, performance of the small-contractor development programs to outsource work, has been unsatisfactory: only 1.4% of contractors trained survive the first five years McCutcheon and Croswell (2005) and Egbeonu (2004) as quoted by Quainoo et al. (2003:5). As indicated by Mintzberg (1994) in Quainoo (2003:5), every failure to implementation is by definition also a failure of formulation - poor implementation results from weak strategy formulation. Nevertheless, in accordance with arguments for and against force-account systems of infrastructure program delivery versus outsourcing or contracting (Friedman, 1948 in Quainoo et al., 2003:5), one of Mintzberg’s main conclusions was that “formal staffs can simply create political games” - outsourcing is arguably a more appealing option. Why then the high failure rate and poor quality of delivery amongst emerging contractors?

According to Quainoo et al. (2003:6), the underlying root causes for the poor performance of large-scale projects/programs implemented so far, are that the technical objectives (specification and quality) are equally as important as the socio-economic goals, however, poor quality of work is widespread amongst emerging contractors. The immediate question is: do they have the requisite skills and track record to perform?; does the non-performance stem from project nature or lack of skills and technical know-how?

Although several forms of contracts for delivery of public infrastructure exist in South Africa, the most commonly used is based on the three-party system, namely legal agreement between the client (who is employer), the consultant (client’s representative), and the contractor (Dison, 2005 as quoted by Quainoo et al., 2003:6). The triangular system requires that the client pays; the consultant plans and designs; while the contractor constructs the intended infrastructure. It is argued that these systemic inadequacies question the readiness of South Africa in particular, and developing countries in general, to successfully implement small-contractor development programs to alleviate unemployment and develop capacity within the construction industry (Dison, as quoted by Quainoo et al., 2003:6).

As long as central government policies are not coordinated sufficiently and then implemented carefully through the administrative apparatus down to the local government
level, the current crop of problems will emerge and entrench themselves. These problems range from incompetent administrators, to non-responsive decision-makers, to corrupt officialdom (Makgetla et al., 2007). Even in well-functioning municipalities there are signs that corrosive developments are taking place and need to be addressed with some urgency. One of the recent Transparency International Reports on South Africa notes that it only dealt with corruption at the national and provincial levels of government, but indicates that the level of corruption at the local level exceeds that of the two tiers above (Transparency International, 2005:116) in Makgetla et al. (2007:01).

Makgetla et al. (2007:01) argues that besides the lack of funding, municipalities can only perform as well as the administrators in charge. They determined that in those municipalities where there was a lack of managerial capacity, the local authorities found it difficult to actually spend correctly, and account for the money that they have spent. Not only does such a situation lend itself to abuse, particularly in impoverished communities where the position of a councilor or municipal manager opens up the possibility of creating patronage networks, it encourages unaccountability and non-transparent decision-making where citizens are ignored by small political elites whose sole purpose quickly becomes to establish means of self-enrichment.

According to the Salga Report (2011:3) in the acknowledged that the 2011 budget provides important support for local governments to sustain service delivery, as the economy continues to expand over the next three years, however SALGA raised concerns around the following issues:

- There should be a systematic review of baselines to ensure that revenue allocations to local government as a whole are congruent with its full range of developmental and service delivery responsibilities and its vertical share;
- This should be coupled with efforts to build the capacity of weaker municipalities to spend efficiently and effectively;
- Allocations to local government are not based on proper studies into the true long term costs of municipal service delivery, which can vary substantially across municipalities in different service delivery contexts.
According to Luwaga (2009:1) although local government legislation and reforms have freed municipalities from many impediments to improve delivery, the huge service backlog, infrastructure neglect, lack of integration with other spheres of government, lack of capacity, the impact of HIV/AIDS and the culture of non-payment, are still eroding that ability, especially in rural areas. In addition, rural areas have even greater levels of underdevelopment, poverty and service backlogs and consequently municipal structures in deep rural areas carry less legitimacy.

In relation to the North West Province, COGTA’s State of Local Government in South Africa Report (2009) indicates the following:

- The province emerges as one of the provinces that have experienced a significant amount of service delivery protests; fraud and corruption; nepotism; political infighting; capacity related problems; and a host of other issues. According to the Report, of the protests that occurred between January and July 2009, the North West Province had the second largest percentage of 17%, following Gauteng which claimed 30% of the protests;
- The Report further highlighted the widespread corruption that has brought the local government in the North West Province to the brink of a collapse. Further concern is that most of the allegations of fraud and corruption involve key officials, e.g. Municipal Managers, Chief Financial Officers, and other directors, and political leadership especially around procurement processes;
- The Report also emphasizes the complexity of the political situation in the province. In this case, issues of politics within these two spheres of government are interlinked to the extent that issues in local and Provincial Government should be viewed in the same context.

Subsequent to this Report, there have been concerted efforts by the Provincial Government to respond to these challenges and thereby improve the dire state of local government in the province. Amongst these efforts are the following:

- In accordance with Section 106 of the Municipal Systems Act, during the course of 2009 the North West Provincial Government in collaboration with the Minister of COGTA conducted assessments on all municipalities in the province to ascertain the
key problems and also establish the root causes of poor performance and distress in municipalities. The outcome of this process corroborated the findings of the report;

- Also during 2010, Public Hearings by the Parliamentary Ad Hoc Committee on Service Delivery were held in the province. The process accorded opportunities to meet with all the stakeholders, including the communities, about the issues that needed urgent attention of the Provincial Government;
- Districts and local municipalities’ turnaround strategic sessions were also held early in 2010. Primarily, the MTAS seeks to accelerate service delivery and ensure the functionality and effectiveness of municipalities;
- In a newspaper article of Finweek (26 March 2009) the rate payers’ association was reported to have used its savings to do the repairs and maintenance of water infrastructure, after the municipality had failed to address these issues (Finweek, 26 March 2009:29).

According to the report, the overall positive progress and success of the local government system in South Africa, is increasingly being plagued by a range of factors and negative practices both internal and external to municipalities. These factors apply not only to poor governance, service delivery failures, their capacity and performance, but also to the unique challenges experienced in the varying spatial locations of municipalities, for example there are differing challenges in relation to rural and urban environments, availability of human resource capacity, degree of economic activity and overall institutional strength.

According to the DBSA (2010), there are challenges with regard to the use of DBSA’s loan by the municipalities, and the implementation of the prioritised projects by the municipalities. It is on this basis that the researcher is interested to test whether the financiers fund to assist the rural municipalities in the North West Province has achieved effective results in developing services with water and sanitation, given the dynamics and negative practices both internal and external to the municipalities.
CHAPTER 3: EMPIRICAL STUDY

3.1 Population
The research sample population was 30 industry players inclusive of municipal representatives, PMU’s, established industry players, DDGL&TA, Unions, the DBSA’s analysts and affected stakeholders such as contractors, financial and developmental institutions. To delineate the population, the research categorised respondents were also categorized by the respective profession such as civil engineers, architects, contractors, and size of municipality as defined in the DPLG and constitution of the republic (DPLG, 2007:7).

3.2 Method of Data gathering
Data was gathered by using a questionnaire which was sent by post as well as email to the various stakeholders listed above. The language medium used for the questionnaire is English and includes close questions. The questions are structured on a scale of 1-4 whereupon a candidate simply scores the preferred number. Such an approach was used in order to quantify those in agreement or disagreement in percentage terms. It also ensured that the level of agreement or disagreement of the response is measured. In view of the population size and sample, field workers were commissioned to dispatch the questionnaire. This enabled and facilitated speedy and objective collection of data and also made it easier for some participants who may otherwise have been reluctant to partake in the research.

3.3 Data analysis
The SPSS Version-18 was used to measure the Design and Application of the project implementation processes within the six selected municipalities in the North West Province and whether the DBSA funding was effectively and efficiently utilised. The dimension of the SPSS included the intrinsic and extrinsic factors. It had to be noted that the constructs were taken from literature due to sample size, and subsequently the factor analysis could not be conducted.

The Project Implementation Processes inventory (PIPI) had been developed for the purposes of this study, to measure challenges in the municipal implementation process in relation to projects funded by the DBSA. The PIPI consisted of 71 items. Various capacity factors in the municipal management and project implementation process were identified
and measured on a 4-point scale ranging from 1 (strongly disagree) to 4 (strongly agree). The dimensions of PIPI included level of capacity within Leadership and Management, PMU and SCM departments. The factors considered in these departments ranged from operational strategy, systems, compliance to legislation, training skills and staff competency.

The DFI’s Funding Contribution Inventory (DFCI) has been developed for the purpose of this study to measure a contribution of funding to the municipalities in accelerating the implementation of projects. The DFIC consists of 8 items. The funding package was identified and measured on a 4 point scale ranging from 1 (strongly disagree) to 4 (strongly agree).

The Development Beneficiaries Inventory (DBI) has been developed for the purposes of this study to measure the benefits derived by communities in accelerating the implementation of projects though DBSA’S funding. The DFIC consists of 4 items. The funding package was identified and measured on a 4 point scale ranging from 1 (strongly disagree) to 4 (strongly agree).

These percentiles and statistics were used to interpret the results, and thus make recommendations.

3.4 Validity and Reliability

3.4.1 Validity

To confirm the validity of the data collected the researcher used the content validity instrument. According to Leedy et al. (2009:92), content validity is an extent to which a measurement instrument is a representative sample of the content area (domain) being measured. Content is often a consideration when a researcher wants to assess people’s achievement in some area - for example the results gained in the implementation of BBBEE and the knowledge gained as a result. Leedy et al. (2009:92) asserts that a measurement instrument has high content validity if its items or questions reflect the various parts of the content domain in appropriate pro-portions and if it requires the particular behaviours and skills that are central to that domain. In this context, the
researcher looked at whether the skills, the systems at the PMU’s, municipality officials and contractors, and respective DBSA staff’s ability to effectively rollout service delivery in selected municipalities through the bridging finance.

The criterion validity was used to ensure data validity of the research Leedy et al. (2009:92) defines criterion validity as the extent to which the results of an assessment instrument correlate with another, presumably related measure, the latter being the criterion. A measure designed to measure the effectiveness of performance on infrastructure development and impact thereof, should correlate with the number of municipalities’ year or period under review. This is further explained in the next chapter where the correlation results analysis is discussed.

3.4.2 Reliability

Leedy et al. (2009:93) defines reliability as the extent to which the measurement instrument yields consistent results when the characteristic being measured has not changed. The researcher used the internal consistency reliability instrument to ensure that all items within a single instrument yield similar results. In this context, a questionnaire was used in the research and interviewees answered the same questions through emailed questionnaires for self completion by respondents. The researcher enhanced the reliability of the research questionnaire by ensuring that it was used consistently by standardising the questionnaire for all respondents. Also, to the extent that subjective judgements are required, specific criteria have been established that dictate the kinds of judgements the researcher makes. The researcher ensured that the research assistants using the instrument to do field work have been well trained to ensure that they obtain similar results. Paul Leedy et al. (2009, 9th ed.:93), asserts that something can be measured accurately only when it can also be measured consistently. Therefore, in order to have validity, the researcher must also have reliability, so as to draw appropriate conclusions from the data collected and thus solve a research problem in a credible way. The findings and discussions in chapter 4 demonstrate whether the validity and reliability principles were applied to arrive at the conclusions.
3.5 Ethical consideration

The research was conducted in a respectable and professional manner to all participants, and they were treated fairly and without bias or favour. The questionnaire had an option to all participants to opt out from partaking in completing the questionnaire. Confidentiality and individual privacy were protected at all times and as such, no names of institutions or individuals were placed in the research report. For ease of reference and computation, different codes were allocated to delineate local and district municipalities, civic, unions, professionals, and contractors including private and public sector participants.

3.6 Research constraints

The research touched on the challenges surrounding bridging finance for water and sanitation infrastructure conceptualization at high level, the need thereof, implementation and some limited comparisons with other key sectors in the economy. Due to the vastness and broadness of the water and sanitation infrastructure program and its application in South Africa, the research concentrated on the 6 municipalities as mentioned earlier. The research also targeted mainly the bridging finance, PMU’s role and impact, skills development, service delivery impact and project management control elements. It did not seek to rewrite the water and sanitation program and or give new interpretation of the bridging finance requirements, but evaluated and interrogated the effectiveness or and challenges experienced since inception in the province.
CHAPTER 4: FINDINGS AND DISCUSSION

4.1 Introduction

The empirical study is discussed in this chapter, by focusing on the demographics, the different measuring instruments used, statistical analysis and research hypothesis.

4.2 Demographics

Frequencies

The study population includes 43 participants from a larger sample of (N = 150) of employees of municipalities, PMU’s, DDGL&TA, Unions, and the DBSA’s community structures. The questionnaires were completed in October 2011. The research categorized respondents by the respective municipalities that they service or fall under.

Table 1: Sample of the municipalities

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ngaka Modiri Molema District</td>
<td>14%</td>
</tr>
<tr>
<td>Dr Ruth Segomotsi Mopati District</td>
<td>18.6%</td>
</tr>
<tr>
<td>Maquass Hill Local</td>
<td>9.3%</td>
</tr>
<tr>
<td>Madibeng Local Municipality</td>
<td>7%</td>
</tr>
<tr>
<td>Kgetlengrevier Local Municipality</td>
<td>1%</td>
</tr>
<tr>
<td>Moretele Local Municipality</td>
<td>8%</td>
</tr>
</tbody>
</table>

A total of 18.6% of the sample indicates that the highest number of respondents are based at/or service Ngaka Modiri Molema District Municipality, with Dr Ruth Segomotsi Mopati District Municipality the second most. It should also be noted that 18.6% of the sample
indicated that they service all municipalities (e.g. DBSA and Provincial Government respondents).

**Table 2: Sample Gender indications**

![Pie chart showing gender distribution]

The percentage of male respondents was 62% while female was 23.3%.

**Table 3: Sample of the Occupation indications**

![Pie chart showing occupation distribution]

The highest frequency percentage of 41.9% indicates that the highest number of respondents are DBSA officials servicing the municipalities, followed by the community
representative, municipal officials and Provincial Government officials at 20,9%, 18,6% and 7,0% respectively.

4.3 FINDINGS

4.3.1 Reliability

The measurement of reliability is based on the Cronbach instrument and Means Inter Item. The total Cronbach calculation across the constructs, is above 0,7 and the mean inter item 0,15 & 0,5, which indicates that the measuring instrument is consistent (for further information consult the Tables and analysis below).

It must be noted that the researcher could not do the factor analysis as a result of the sample size. The constructs from the literature was used for the analysis.

4.3.2 Different Constructs

It must first be noted that a scale of 1 to 4 (Strongly Disagree to Strongly Agree) was used as measurement across all the constructs, and the expected mean calculated is $x = 2.50$.

Table A: The responsiveness to a changing water & sanitation service delivery.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>N</th>
<th>Mean</th>
<th>St dev</th>
<th>Cronbach Alpha</th>
<th>Inter Mean</th>
<th>item</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-1 Super Ordinate goal</td>
<td>43</td>
<td>2.69</td>
<td>0.46.</td>
<td>0.696</td>
<td>0.276</td>
<td></td>
</tr>
<tr>
<td>A-2 Operational strategy</td>
<td>43</td>
<td>2.58</td>
<td>0.46.</td>
<td>0.748</td>
<td>0.198</td>
<td></td>
</tr>
<tr>
<td>A-3 Staff Competency</td>
<td>43</td>
<td>2.52</td>
<td>0.49</td>
<td>0.831</td>
<td>0.309</td>
<td></td>
</tr>
<tr>
<td>Constructs</td>
<td>N</td>
<td>Mean</td>
<td>St dev</td>
<td>Cronbach Alpha</td>
<td>Inter item Mean</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>----</td>
<td>------</td>
<td>--------</td>
<td>----------------</td>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td>A-4 Organisational system (e.g. project management)</td>
<td>43</td>
<td>2.36</td>
<td>0.465.</td>
<td>0.670</td>
<td>0.225</td>
<td></td>
</tr>
<tr>
<td>A-5 Dfi Funding contribution (e.g. Bridging finance)</td>
<td>43</td>
<td>2.88</td>
<td>0.447.</td>
<td>0.661</td>
<td>0.218</td>
<td></td>
</tr>
</tbody>
</table>

### 4.3.2.1 Analysis of the Results

A high mean of $\overline{x} = 2.88$ has been calculated for the *DFI funding contribution*. This result indicates that the participants have a relatively low level of agreement with the construct, i.e. there is an indication that the DFI funding contribution is responding to water and sanitation service delivery. The same accounts for the rest of the constructs except *Organisational system*: The *Superordinate goals* of the municipalities are geared for water and sanitation delivery ($\overline{x} = 2.69$), the *Operational strategy* assists the municipalities in delivering water and sanitation service ($\overline{x} = 2.58$) and *Staff Competency* within the municipalities assists in responding to water and sanitation ($\overline{x} = 198$). The low mean of 2.36 indicates that there is a low level of disagreement with the construct, i.e. *Project management systems* in the municipalities are essential in responding to water & sanitation service delivery. ($\overline{x} = 2.36$).

The Cronbach calculation for the Superordinate Skills constructs, etc., is above 0.7 and the inter item mean fall between 0.15 and 0.5. This indicates that the measuring instrument is consistent.
Table B: Level of satisfaction encountered in interacting with PMU’S in the municipalities of NW Province.

<table>
<thead>
<tr>
<th>Name</th>
<th>N</th>
<th>Mean</th>
<th>St dev</th>
<th>Cronbach Alpha</th>
<th>Inter item Mean</th>
<th>item</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-1 Skills</td>
<td>43</td>
<td>2,59</td>
<td>0,380</td>
<td>0,829</td>
<td>0,327</td>
<td></td>
</tr>
<tr>
<td>B-2 Operational Strategy</td>
<td>43</td>
<td>2,38</td>
<td>0,586</td>
<td>0,851</td>
<td>0,322</td>
<td></td>
</tr>
<tr>
<td>B-3 Superordinate Goals(governance, policy etc)</td>
<td>43</td>
<td>2,66</td>
<td>0,505</td>
<td>0,829</td>
<td>0,327</td>
<td></td>
</tr>
<tr>
<td>B-4 Systems (project management etc)</td>
<td>43</td>
<td>2,58</td>
<td>0,74</td>
<td>0,851</td>
<td>0,327</td>
<td></td>
</tr>
</tbody>
</table>

A high mean of $x^\bar{} = 2,66$ has been calculated for Superordinate Goals. This result indicates that the participants have a low level of agreement with the construct, i.e. there is an indication that Superordinate goals (composition of committees, due process, etc.) offer a high level of satisfaction in dealing with PMUs in the municipalities.

The same accounts for the rest of the constructs except Operational strategy: the Skills of the PMUs within the municipalities assist in responding to the water and sanitation service delivery ($x^\bar{} = 2,59$) and systems ($X = 2,58$). The low mean of 2.36 indicates that low level of disagreement with the construct, i.e. Operational strategy are not in place; PMU in the municipalities are adding value to implementation of water & sanitation projects or service delivery ($x^\bar{} = 2,36$).

The Cronbach calculations for the System and Superordinate Skills constructs, etc., are all above 0.7, and fall between the calculated inter item mean of 0.15 and 0.50. This indicates that the measuring instrument is consistent.
Table C: Level of satisfaction encountered with Supply Chain Management when procuring goods and services in the municipalities of NW Province.

<table>
<thead>
<tr>
<th>Name</th>
<th>N</th>
<th>Mean</th>
<th>St dev</th>
<th>Cronbach</th>
<th>Inter item Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systems</td>
<td>43</td>
<td>2.53</td>
<td>0.66</td>
<td>0.865</td>
<td>0.561</td>
</tr>
<tr>
<td>Superordinate goals.</td>
<td>43</td>
<td>2.55</td>
<td>0.69</td>
<td>0.886</td>
<td>0.526</td>
</tr>
<tr>
<td>Skills</td>
<td>43</td>
<td>2.25</td>
<td>0.63</td>
<td></td>
<td>0.526</td>
</tr>
</tbody>
</table>

A high mean of $\bar{x} = 2.55$ has been calculated for Superordinate Goals. These results indicate that the participants have a low level of agreement with the construct, i.e. there is an indication that Superordinate goals (composition of committees, due process, etc.) construct offers a high level of satisfaction in dealing with SCM in the municipalities.

The same accounts for the rest of the constructs except the Skills construct. The Systems mean is $(X = 2.53)$, while a low mean of 2.36 is calculated for Skills construct. This indicates the low level of disagreement with the construct, i.e. Skills capacity is not adequate in the SCM departments within the municipalities.

The Cronbach calculations for the System and Superordinate Skills constructs’, $X = 0.865$ and 0.886 respectively are above 0.7 and fall between the calculated inter item mean of 0.15 and 0.50. This indicates that there is a strong internal consistency.
Table D: The financial challenges encountered with bridging finance intervention and the impact on effective elimination of infrastructure backlogs.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>N</th>
<th>Mean</th>
<th>St dev</th>
<th>Cronbach Alpha</th>
<th>Inter item Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-1 Operational strategy</td>
<td>43</td>
<td>2,89</td>
<td>0,74</td>
<td>0,886</td>
<td>0,435</td>
</tr>
<tr>
<td>D-2 Systems</td>
<td>43</td>
<td>2,71</td>
<td>0,65</td>
<td>0,865</td>
<td>0,477</td>
</tr>
<tr>
<td>D-3 Superordinate goals</td>
<td>43</td>
<td>2,67</td>
<td>0,62</td>
<td>0,070</td>
<td>0,369</td>
</tr>
</tbody>
</table>

A high mean of $\bar{x} = 2,89$ was calculated for Operational strategy challenge construct. This result indicates that the participants have a high level of agreement with the construct i.e. there is an indication that Operational strategy challenge (capacity, finance/budget and skills capacity) has a high effect on inhibiting the eradication of backlogs.

The same accounts for the rest of the constructs. The systems mean is ($x = 2,71$) and Superordinate goals ($x = 2,67$).

The Cronbach calculations for the three constructs - operational strategy, system and superordinate goals: $x = 0,865$ and $0,886, 0,070$ are equal and above 0,70 and fall between the calculated inter item mean of 0,15 and 0,50. This indicates that there is a strong consistency.

Table E: The developments derived from the water & sanitation bridging finance from the DFI.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>N</th>
<th>Mean</th>
<th>St dev</th>
<th>Cronbach Alpha based on standardized item</th>
<th>Inter item Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-1 System</td>
<td>43</td>
<td>2,83</td>
<td>0,594</td>
<td>0,717</td>
<td>0,388</td>
</tr>
</tbody>
</table>
A high mean of $x^* = 283$ was calculated for the DFI Bridging finance contribution. This result indicates that the participants have a high level of agreement with the construct, i.e. there is an indication that there is a high level of satisfaction in benefits derived from the DFI funding contribution towards the water and sanitation service delivery. The Cronbach calculation for the construct is 0,717 and is above 0,70. This indicates that there is a strong consistency and reliability in the construct.

**Table F: Correlation results and analysis**

<table>
<thead>
<tr>
<th>Constructs</th>
<th>B-1 Skills</th>
<th>B-2 Operational Strategy</th>
<th>B-3 Superordinate Goals</th>
<th>B-4 Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>DFI Funding Contribution</td>
<td>0.413</td>
<td>0.574</td>
<td>0.369</td>
<td>0.427</td>
</tr>
<tr>
<td>C-1 Systems</td>
<td>C-2 Superordinate</td>
<td>C-3 Skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DFI Funding Contribution</td>
<td>0.427</td>
<td>0.539</td>
<td>0.269</td>
<td></td>
</tr>
<tr>
<td>D-1 Operational strategy</td>
<td>D-2 System</td>
<td>D-3 Superordinate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DFI Funding Contribution</td>
<td>-0.291</td>
<td>-0.422</td>
<td>-0.176</td>
<td></td>
</tr>
<tr>
<td>E-1 System</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DFI Funding Contribution</td>
<td>0.427</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The correlations calculated between A-5 & B-2, B-3 and B-4 are positive and less than the p-value of 0,05. This indicates that there is significance in the relationship between the compared constructs. It means that there is some level of agreement among the participants that the PMU’s operational strategy, systems and superordinate goals may have influence on the utilisation of the DFI funding towards water & sanitation projects or vice-versa. It must also be noted that there is no significant level of relationship between A-
5 and B-1 (Skills construct), which means that the skills has no influence whatsoever on utilisation of the DFI funding, according to the participants.

The correlations calculated between A-5 & C-1, and C-2 are also positive and less than 0,05 (p-value). This denotes that there is a significant relationship between the compared constructs. It suggests that there is some level of agreement among the participants that the SCM's procurement *systems and the superordinate goals influences* the utilisation of the DFI funding towards water & sanitation projects. There is an insignificant p-value for A-5 and C-3 (Skills) since it is higher than 0,05 and thus means that the Skills level within SCM are not critical for utilisation of the DFI bridging funding.

The correlations calculated between A-5 & D-1, D-2 and D-3 are positive and higher than 0,05 (p-value). This indicates a level of insignificance in the relationship between the two constructs. The results suggest that there is a level of disagreement among the participants that the Financial Challenges-operational strategy (e.g. financial and managerial/technical capacity), system (e.g. project management), and superordinate goals, influence or impact on effective elimination of backlogs in the DFI's bridging funding intervention to the municipalities.

In the calculation for A-5 & E-1, the correlation coefficient is positive and less than 0,05 (p-value). This indicates that there is a level of significance in the relationship between the compared constructs. The results suggest that there is a high level of agreement among the participants that the development benefits has been derived from DFI's bridging finance, and the organisational systems are critical for the implementation capacity.
Table G: The summary of Correlations with Significant levels.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>B-4 System in PMU</th>
<th>C1 System in SCM</th>
<th>C-1 System PMU</th>
<th>C-2 Superordinate goal</th>
<th>C-3 Skills</th>
<th>B-3 Superordinate goals</th>
<th>0.719</th>
<th>0.963</th>
<th>0.521</th>
<th>B-4 System (PMU)</th>
<th>0.561</th>
<th>D-2 System</th>
<th>D-3 Superordinate goals</th>
<th>0.595</th>
<th>0.658</th>
</tr>
</thead>
</table>

The correlations calculated between B-2 & B-4 and C1 are positive and less than the p-value of 0.05. The results indicate that there is a level of significance in the relationship between the compared constructs. This suggests that the improvement in PMU’s operational strategy will lead to an improvement in the Systems in both the PMU and SCM operations.

The correlations calculated between B-3 & C-1, C-2 and C3 are positive, and less than the p-value of 0.05. This indicates that there is a level of significance in the relationship between the compared constructs. This suggests that the improvement in Superordinate goals will positively affect the SCM’s adequate Skills.
The correlations calculated between B-4 & C-1 are positive and less than p-value of 0.05. The result indicates that there is a level of significance in the relationship between the compared constructs. This indicates that that the improvement in *PMU’s systems* will lead to improvement on SCM’s systems.

The correlations calculated between D-1 & D-2 and D3 are positive and less than p-value of 0.05. This indicates that there is a level of significance in the relationship between the compared constructs. These results indicate that an improvement in the *Operational strategy* will lead to an improvement in the *Systems of (SCM & PMU)* and *Superordinate goals*.

**Regression Analysis**

A regression analysis has been conducted to determine the proportion of variance in the dependent variable (*Project Implementation Processes*) that is predicted by the independent variables (*DFI’s Funding Contribution*). A second stepwise multiple regression analysis has been conducted to determine the proportion of variance in the dependent variable (*Development Benefits, i.e. eradication of backlogs*) that is predicted by the independent variables (*DFI’s Funding Contribution* and *Projects Implementation Capacity/Processes*). The effect size, in the case of regressions, is given by the following formula (Steyn, 1999) - the following parameter has been used: large effect has been set for the significance of $R > 0.3$ to determine the best prediction.
Table H: DFI Funding Contribution predictions on the project implementation processes. Please note SECTIONS denotes departmental levels within the Municipality.

<table>
<thead>
<tr>
<th>Regression results</th>
<th>Municipal Departments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A -2 Operational</td>
</tr>
<tr>
<td></td>
<td>strategy</td>
</tr>
<tr>
<td>DFI Funding</td>
<td>0.441</td>
</tr>
<tr>
<td>Contribution</td>
<td>0.391</td>
</tr>
<tr>
<td></td>
<td>A-3 staff Competency</td>
</tr>
<tr>
<td></td>
<td>Section A Management</td>
</tr>
<tr>
<td></td>
<td>&amp; Leadership</td>
</tr>
<tr>
<td></td>
<td>B-1 Skills</td>
</tr>
<tr>
<td>DFI Funding</td>
<td>0.413</td>
</tr>
<tr>
<td>Contribution</td>
<td>0.574</td>
</tr>
<tr>
<td></td>
<td>B-2 Operational</td>
</tr>
<tr>
<td></td>
<td>Strategy</td>
</tr>
<tr>
<td></td>
<td>C-1 Systems</td>
</tr>
<tr>
<td>DFI Funding</td>
<td>0.427</td>
</tr>
<tr>
<td>Contribution</td>
<td>0.539</td>
</tr>
<tr>
<td></td>
<td>C-2 Superordinate Goals</td>
</tr>
<tr>
<td></td>
<td>Section C SCM</td>
</tr>
<tr>
<td></td>
<td>D-2 Systems (in relation</td>
</tr>
<tr>
<td></td>
<td>financial challenges)</td>
</tr>
<tr>
<td>DFI Funding</td>
<td>0.422</td>
</tr>
<tr>
<td>Contribution</td>
<td>Across the organisation</td>
</tr>
<tr>
<td></td>
<td>E-1 System</td>
</tr>
<tr>
<td>DFI Funding</td>
<td>0.427</td>
</tr>
<tr>
<td>Contribution</td>
<td>Section E Community</td>
</tr>
<tr>
<td></td>
<td>benefits</td>
</tr>
</tbody>
</table>
In the summary the regression results in the Table means the following operational factors are the best predictors of DFI Funding contribution (DBSA Bridging Finance)

- Operational Strategy and Staff competency of the municipality;
- The Skills and Operational Strategy within the Municipal PMU;
- Systems and Superordinate Goals within the Municipal SCM;
- Systems (in relation to financial challenges);
- Systems (in relation to community development benefits).

4.4 The Discussion of the empirical results

According to the results in Table A, the respondents are of the view that the project management systems in the municipalities are not essential in responding to water & sanitation service delivery (backlogs eradication), and therefore the skills of incumbents in the PMU are not construed as capacity factor. The respondents, however regards DFI funding contribution and other instruments as critical for their organisations to deliver on water & sanitation infrastructure.

Table D's results suggest that the operational strategy is the main limiting factor in achieving the desired results of the water & sanitation infrastructure with bridging finance. The finding is corroborated by the findings from Quainoo’s study on negative factors that have been attributed to failed infrastructure problems undertaken in South Africa and elsewhere. These factors include poor management, poor planning, breakdown in communication between engeneering, construction, unrealistic scope, schedules and budgets, many changes at various stages of progress, and all of these factors constitute an operational strategy according to the definition of Jacobs et al. (2009:20). Quainoo et al. (2003:5) in his findings on failure of most large scale projects infrastructure programs assert that lack of strong, competent leadership and commitment significantly contribute to failure of most large scale infrastructure programs, and the research tends to agree with his argument.

Furthermore the results of Table B, suggest that superordinate goals within the PMU are outstanding in terms of determining project implementation capacity in relation to the water and sanitation service delivery. Contrary the skills within this department are not
considered as critical towards delivery of water and sanitation projects funded through the bridging finance. This to some extent is confirmed by the findings of the COGTA’S State of Local Government in SA (2009) which indicated that there is a lack of requisite skills in the technical department of most of the municipalities in the North West Province. The research by McCutheon on The Expanded Public Works Program with over R30 billion infrastructure budget, has also not performed as expected, and several reasons account for the non-delivery: lack of engineers and managing contractors (Dison, 2008), insufficient planning and overly political interference to the exclusion of objectivity in program planning and sound management. This somehow explains why the political leaders in some of the participant municipalities, probably do not see any need of employing skilled people (engineers, etc.) in the technical department.

In Table C, the findings also indicate that superordinate goals within the SCM is outstanding in terms of procurement of goods and services through supply chain processes in relation to the water and sanitation service delivery. Similarly, the skills within this department are considered as critical towards delivery of water & sanitation projects funded through the bridging finance. Nevertheless, in accordance with arguments for and against force-account systems of infrastructure program delivery versus outsourcing or contracting (Friedman, 1948), one of Mintzberg’s (in Quainoo, et al., 2003:5) main conclusions was that “formal staffs can simply create political games”; outsourcing is arguably a more appealing option. The question asked is why there is a high failure rate and poor quality of delivery amongst emerging contractors. This is probably better explained by the following finding in relation to the North West Province in 2009, which highlighted the widespread corruption that has brought the local government in the North West Province to the brink of a collapse. Further concern is that most of the allegations of fraud and corruption involve key officials, e.g. Municipal Managers, Chief Financial Officers, and other directors, and political leadership especially around procurement processes.

Finally, the results suggest that overall the bridging finance is the main contributor in delivering the water and sanitation infrastructure through the bridging finance. Ironically, according to the DBSA (2011:07), performance results over the period under review, significant funds were committed by the DBSA through the bridging finance to the
participating municipalities in the North West Province, however only a fraction was disbursed, and this points to the fact that in as much as the municipalities could have accepted the bridging loan facility from the financier, the expenditure on the facility was quite minimal (DBSA, 2008 & 2011). The assertion or argument is also supported by the findings from the Provincial and National COGTA performance report on MIG expenditure. The average performance of the participant municipalities in MIG expenditure, which is significantly below the required levels and capacity constraints, is *inter alia* attributed to the poor performance.

In conclusion, clearly from the results of the empirical study throughout the categories of the constructs, is that the participants seem to have a level of agreement with the statement that says that the DFI bridging finance is responding to the water and sanitation service delivery within the province. The findings seem to suggest that the sound management and adequate operational resources are in place within these rural municipalities.

Although the results of the study disprove the hypothesis of the research which insinuate that lack of capacity and ineffective operations in the municipalities, poses challenges in the DBSA’s bridging finance interventions and subsequently leads to failure in eradication of the water and sanitation backlogs; it should be noted that the research also sought to demonstrate the impact of some of the reported constraints and challenges on the bridging finance from the DBSA.

In as much as the researcher agrees with the findings of the study, he is of the view that the concept of bridging finance was either not interpreted correctly or it is not clearly understood, given the complexity of the questions asked in the questionnaire. The municipal respondents probably do not have an in-depth understanding of the intricacies of the bridging concept and therefore failed to link it to the operational capacity and legislative requirements of the municipal governance. The other respondents, on the other hand, maybe unaware of certain reported constraints and malpractices in the North West Province around the period under review, and according to the researcher this could also have impacted their perception on the interventions. It is in this light that the researcher feels these limitations could have influenced the results, and therefore would need to be investigated thoroughly in the future.
CHAPTER 5: CONCLUSION AND RECOMMENDATION

5.1 Introduction

The purpose of the research was to confirm or disprove of the much reported constraints and challenges without unduly broadening the areas of focus. Furthermore it was seeking to demonstrate the link of the reported municipal constraints and challenges on the bridging finance from the DBSA.

5.2 Conclusion

Clearly from the results of the empirical study, the participants have a level of agreement with the statement that says that the DFI bridging finance is responding to the water and sanitation service delivery within the province, despite the assertions made in the literature regarding the capacity constraint levels and corruption in the province. The findings suggest that the following sound management practises and key operational resources are in place within the municipalities, and therefore critical for ensuring the effective implementation of the funded projects and subsequently the utilisation of the bridging finance.

According to Idasa (2010), in general, the affected municipalities experience serious human and financial capacity constraints. Collectively, these constraints have contributed to the violent service delivery protests and low levels of payment for services by communities, therefore, these municipalities are also grappling with the huge challenge of poor council-community relationships (Idasa, 2010:6).

Although the problem identification stage in the research did not reveal any contributory parameters to the failure to implement the bridging finance towards the municipalities in the North West Province, the researcher supports the notion that the underlying cause for this lack of success in the bridging finance intervention is due to several inter-related, complex and dynamic environmental and operational factors: from planning an implementation strategy through acute skills shortage to provincial politics.
Lack of adequate planning, implementation failure, technical and control management failures, and absence of commitment from program planners and implementers characterise most of the programs at international level as well as in South Africa, according to Quainoo and other researchers. This phenomenon is also prevalent in the North West Province municipalities and it may have negatively affected the bridging finance to the 11 municipalities, and it will continue to pose serious challenges if it not addressed.

The researcher’s assumptions with regards to the root causes of failure in financing the water and sanitation infrastructure, was that lack of capacity and ineffective operations within the municipalities are the major causes of project implementation failure: it is on the basis this insinuation that the researcher felt that the bridging finance interventions from DFI (DBSA) to the municipalities have somewhat failed to achieve the intended results - eradicate the water and sanitation backlogs and thereby impact service delivery significantly. One of the key factors contributing to capacity problems in public sectors according to Beazely et al. (2002) as quoted by Quainoo et al. (2003:8) is a lack of commitment from the decision makers and program implementers. Quainoo et al. (2003:6) argues that lack of strong, competent leadership and commitment to contribute significantly to the failure of most of large scale infrastructure programs (Fawcett, 1985: 366-367). He argues that good leadership is required in developing programs to maintain program vision and effectively manage stakeholders. The COGTA’s State of Local Government in South Africa Report (2009) indicates the widespread corruption that has brought the local government in the North West Province to the brink of a collapse, and the concern is that most of the allegations of fraud and corruption involve key officials, e.g. Municipal Managers, Chief Financial Officers, and other directors, and political leadership, especially around procurement processes.

Ironically the respondents in the study feel that the bridging finance extended by the DFI to the same municipalities in the North West Province within the period under review, was successful despite all the negative factors prevailing in these municipalities, and therefore it means the funding intervention was never affected by the challenges around capacity constraint and ineffective operations within the municipalities. These findings therefore disprove the researcher’s view that the capacity constraints and ineffective operations are
the root causes of the failures in implementing the water and sanitation program and subsequently limiting the financing of this sector.

In conclusion, although the empirical study indicates that there are no implementation factors that hinder the implementation of priority projects in the bridging finance program, previous literature also seems to indicate that municipalities are riddled with political infighting at the council, corruption, nepotism, capacity constraints and most importantly lack of political will to implement the project, and this phenomenon determines capacity within the municipality in the end.

5.3 RECOMMENDATIONS

Although the literature did not necessarily come up with the best practice in terms of bridging finance towards development of water and sanitation by the municipalities, it has however highlighted the negative factors that contribute to the failure in implementation of the development programs in the public sector, and provides suggestions on how these factors might be mitigated.

From the literature research the following issues stand out:

Management and Operational Capacity

- The question is whether the municipalities’ leadership and managements’ superordinate goals, implementation strategy and operations are flexible enough and in line with the principles of operational management, to adjust to the growing demands of the communities Jacobs et al. (2009:121) argues that if there is flexibility in the operations of organization, it will allow the organization to deal with and adjust its operations according to the output required by its customers. The bridging finance therefore need to take cognizance of operational planning and readiness of the municipality, before extending the funding;

- According to the National Capacity Building Framework developed by the DPLG (2007:14), capacity is defined as three ‘types’, namely:
  
  - *Individual capacity*: The potential and competency of individuals within organizations; this refers to the skills of incumbents within the key functions that are responsible for the implementation of funded projects;
- **Institutional capacity**: the aggregate potential and competency found within an organization; this refers to the governing policies, relevant legislation, systems and general competency within the municipalities;

- **Environmental capacity**: the external factors which impact on the capacity of the organisation.

The framework affirms the indications that the drive towards infrastructure investment, including water and sanitation infrastructure provision and service delivery, might be seriously constrained by a lack of capacity in technical, financial, planning and management needs (DPLG, 2007:14). Although the study did not look at qualifications and experience, previous researches indicate that there is a serious lack of adequate skills at all levels, particularly at the individual capacity level, which is identified as one of the key factors in poor implementation of projects;

- Previous research on the project implementation failures also indicates that the public sectors globally have endured the malpractises emanating from unscrupulous conduct and lack of adherence to regulatory tools from people who wield power in these organizations (Mc Cuthheon, Hayken, and Powel Dison, as quoted by Quainoo et al., 2003:6). The reported incidents of inadequate capacity, nepotism, and corruption in the North West Province during the time in which the bridging finance was provided to the municipalities within the province, make one wonder if this has had any impact on the intervention.

- Quainoo et al. (2003:8) argues that lack of strong, competent leadership and commitment contributes significantly to the failure of most of large scale infrastructure programs (Fawcett, 1985:366-367). He also argues that good leadership is required in development programs to maintain program vision, and effectively managed by stakeholders. The researcher questions if these findings are exhibited in the participant municipalities in the North West Province.
Technical Capacity challenges

According to McCutcheon and Marshall as quoted by Quainoo et al. (2003:6), the negative factors that can be attributed to failed infrastructure programs undertaken both in South Africa and elsewhere are as follows:

- ill-defined scope;
- poor management;
- poor planning;
- breakdown in communication between engineering and construction;
- unrealistic scope, schedules and budgets;
- many changes at various stages of progress;
- lack of good project control.

The researcher questions if these were not prevalent in the bridging finance program or intervention within the North West Province.

Financial Management (SCM)

- Although the Municipal Finance Management Act (Act No.56: 2003) requires municipalities to “take reasonable steps to ensure that the resources of the municipality are used effectively, efficiently and economically”, It is quite disturbing to note that most municipalities are generally associated with the worst form of financial management. Corruption, financial mismanagement and non-compliance with financial legislation are common in most municipalities. Consequently, this result to poor performance, thus the delivery of social services is compromised (Idasa, 2010: 6). The researcher questions if these are exhibited in the participant municipalities in the North West Province. The researcher questions if these are not prevalent in the bridging finance program or intervention within the North West Province;

- McCutcheon and Croswell (2005), Egbeonu (2004) and Mintzberg (1994) as quoted by Quainoo (2003:5), argues that every failure to implementation, is by definition, also a failure of formulation: poor implementation results from weak strategy formulation. Nevertheless, in accordance with arguments for and against force-account systems of the infrastructure program, delivery versus outsourcing or
contracting (Friedman, 1948), one of Mintzberg’s main conclusions was that “formal staffs can simply create political games”; outsourcing is arguably a more appealing option. Why then the high failure rate and poor quality of delivery amongst emerging contractors? The researcher questions if these are not prevalent in the bridging finance program or intervention within the North West Province.

In relation to the North West Province, COGTA’s State of Local Government in South Africa Report (2009) indicates the following:

- The province emerges as one of the provinces that have experienced a significant amount of service delivery protests; fraud and corruption; nepotism; political infighting; capacity related problems; and a host of other issues. According to the report, of the protests that occurred between January and July 2009, the North West Province had the second highest percentage of 17%, following Gauteng which claimed 30% of the protests;
- The report further highlighted the widespread corruption that has brought the local government in the North West Province to the brink of a collapse. Further concern is that most of the allegations of fraud and corruption involve key officials, e.g. Municipal Managers, Chief Financial Officers, and other directors, and political leadership especially around procurement processes;

The report also emphasizes the complexity of the political situation in the province. In this case, issues of politics within these two spheres of government are interlinked to the extent that issues in local and Provincial Government should be viewed in the same context.

From the empirical research the following issues stand out:

**Management and Operational**

The results indicate that the participants have a relatively low level of agreement with the construct, i.e. there is an indication that the DFI funding contribution is responding to the water and sanitation service delivery. The same accounts for the rest of the constructs, except *Organisational system*: The *Superordinate goals* of the municipalities are geared for water and sanitation delivery ($x^-$ = 2.69), the *Operational strategy* assists the municipalities
in delivering water and sanitation service (\(x^- = 2.58\)), and Staff Competency within the municipalities assist in responding to water and sanitation (\(x^- = 198\)). The low mean of 2.36 indicates a low level of disagreement with the construct, i.e. Project management systems in the municipalities are essential in responding to water and sanitation service delivery (\(x^- = 2.36\)). This result indicates that the participants have a low level of agreement with the construct, i.e. there is an indication that Superordinate goals (composition of committees, due process etc.), offers a high level of satisfaction in dealing with PMUs in the municipalities.

Technical Management (PMU)

- The same accounts for the rest of the constructs, except Operational strategy: the skills that the PMUs within the municipalities assist in responding to the water and sanitation service delivery (\(x^- = 2.59\)) and systems (\(x = 2.58\)).

- The low mean of 2.36 indicates a low level of disagreement with the construct, i.e. Operational strategy are not in place PMU in the municipalities are adding value to implementation of water & sanitation projects or service delivery (\(x^- = 2.36\)).

Financial management (SCM)

- The results indicate that the participants have a low level of agreement with the construct, i.e. there is an indication that Superordinate goals (composition of committees, due process, etc.) construct, offers a high level of satisfaction in dealing with SCM in the municipalities. The same accounts for the rest of the other constructs, except the Skills construct. The Systems mean is (\(x = 2.53\)) while a low mean of 2.36 is calculated for Skills construct. This indicates the low level of disagreement with the construct, i.e. Skills capacity is not adequate in the SCM departments within the municipalities.

- A high mean of \(x^- = 2.89\) was calculated for the operational strategy challenge construct. This result indicates that the participants have a high level of agreement with the construct, i.e. there is an indication that the operational strategy challenge (capacity, finance/budget and skills capacity) has a high effect in inhibiting the
eradication of backlogs. The same accounts for the rest of the other constructs. The systems mean is \( x = 2.71 \) and Superordinate goals \( x = 2.67 \).

**Developments Benefits (Communities)**

- A high mean of \( x^- = 283 \) was calculated for DFI Bridging finance contribution. This result indicates that the participants have a high level of agreement with the construct, i.e. there is an indication that there is a high level of satisfaction in benefits derived from DFI funding contribution towards the water and sanitation service delivery.

Combining the evidence and from literature and the empirical research, the following recommendations can be made:

The DBSA’s involvement before and during the canvassing of the intervention is of strategic importance. The results of the provided opportunity for the DBSA North West Unit to:

- To facilitate provincial workshops/seminars on bridging finance to the municipalities;
- To provide the necessary capacity building through Vulindlela Training Academy, e.g. the training of officials from the planning, finance (SCM) and PMU departments on relevant planning, financial, and operational capacity courses;
- Canvassing of the bridging finance should be done during the budget planning and budget review in the municipalities;
- A sound implementation strategy must be a requirement in bridge-financing of the conditional grants from the National Government to the municipality;
- To reconfigure the Siyenza Manje deployment to service delivery to augment capacity constraints and educate the clients on it - deployed to be allowed to assist in critical levels in the municipality;
- Take into account the constraints/risk posed by the legal framework with regards to water service delivery into consideration.
REFERENCE


Internal DBSA Sources


Annexure 1 (Questionnaire)

QUESTIONNAIRE:

The challenges of financing municipalities’ water and sanitation infrastructure by a Development Finance Institution

The questionnaire is for completion by the following stakeholders: selected beneficiary municipalities of the DBSA bridging finance (e.g. municipal officials, political office bearers), DBSA staff members who are interacting with the municipalities with regards to the intervention, Provincial Government (e.g. Infrastructure Department), community structures (e.g. Project steering committee, Community liaison officers and Integrated development plan (IDP) representative forum and Union).

By participating in this research, you could provide valuable input to assist us to make professional recommendations to improve the quality of service and effectiveness of bridging finance in your respective municipality and the province. The initiative will also assist the researcher in fulfilling the dissertation for the degree of Master of Business Administration.

Some of the questions in this questionnaire might be seen as sensitive and I would like to ensure you that the information will be treated confidentially and none of your individual details or that of your organization will be recorded.

1. Please answer the questions as objectively and honestly as possible
2. Place a cross (x) in the space provided at each question which reflects your answer most accurately.
3. Please answer all the questions, as this provides more information to the researcher.
DEMOGRAPHICS

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
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<tbody>
<tr>
<td>1</td>
<td>Gender</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>2</td>
<td>Occupation</td>
<td>Municipal official</td>
<td>DBSA official</td>
</tr>
<tr>
<td>3</td>
<td>Which Municipality do you service, work for or fall under.</td>
<td>Dr Ruth Segomotsi Mompati DM</td>
<td>Ngaka Modiri Molema DM</td>
</tr>
</tbody>
</table>

SECTION A Distribution Channels of Development (Service delivery Institution e.g. Municipality)

In the first section I would like you to indicate the way you feel about your organization’s responsiveness to a changing water & sanitation service delivery in North West Province. Please indicate your feelings about your organization by stating whether you agree/disagree with the following statements. **We will use 4-point scale where 4 would indicate STRONGLY AGREE and 1 would indicate DO NOT AGREE AT ALL. You may also indicate any number in between to indicate how you feel about the statement.**

**Distribution Channels of Development**

<p>| | | | | | |</p>
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<tbody>
<tr>
<td>1. People throughout the organization are committed to the Country’s constitution and laws</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2. Our organization is properly structured from Council to operations</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>3. Our organization is financially viable</td>
<td>1</td>
<td>2</td>
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<td>4. Our organization can perform its functions</td>
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<td>5. The organization has a communication strategy to service its constituency</td>
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<td>6. The organization’s services are reaching the target stakeholders</td>
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<td>7. Our organization prioritizes bridging finance over regular capital projects</td>
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<td>8. Water &amp; Sanitation (Service delivery) backlogs are successfully resolved in our organization</td>
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<td>9.</td>
<td>Our organization makes use of bridging finance as a result of service delivery protests</td>
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<td>10.</td>
<td>Our organization use bridging finance because of huge water/sanitation backlogs</td>
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<tr>
<td>11.</td>
<td>Management is very strict on corrupt practices</td>
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<td>2</td>
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<tr>
<td>12.</td>
<td>Our organization spends resources in poorest areas in line with approved strategy</td>
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<td>2</td>
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<tr>
<td>13.</td>
<td>Our organization spend bridging resources towards approved operational costs</td>
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<tr>
<td>14.</td>
<td>There are adequate checks and balances in the disbursement of bridging finance</td>
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<tr>
<td>15.</td>
<td>Risks are clearly identified, quantified and mitigated in advance of financial disbursements</td>
<td>1</td>
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<tr>
<td>16.</td>
<td>Effectiveness and efficiency is highly considered in the program rollout</td>
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<tr>
<td>17.</td>
<td>Lack of financial security negatively affects the relationship of the organization with communities</td>
<td>1</td>
<td>2</td>
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<tr>
<td>18.</td>
<td>The organization’s current strategy is valuable to the organization</td>
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<td>19.</td>
<td>Leaders in our organisation are heavily involved in new projects/programs aimed at water service delivery</td>
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<td>20.</td>
<td>Leaders know how to manage bridging finance for water service delivery</td>
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<td>21.</td>
<td>Management know how to manage bridging finance for water service delivery</td>
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<tr>
<td>22.</td>
<td>Management in our organisation aggressively drives quality service to residents</td>
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<td>23.</td>
<td>Management puts significant resources into identifying community needs</td>
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<td>24.</td>
<td>The staff profile of the organisation is representative of South Africa at all levels</td>
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<td>25.</td>
<td>The staff is adequately skilled in all critical levels</td>
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<td>26.</td>
<td>Our personnel gained significant experience to manage bridging finance over the years</td>
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<td>27.</td>
<td>The staff is dedicated to good service delivery</td>
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<td>28. All staff levels are familiar with the system of operation in the organisation</td>
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<td>29. All staff at all levels have been trained to partake in water service delivery</td>
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<td>30. Programs are canvassed transparently with stakeholders</td>
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<tr>
<td>31. The organisation’s strategy to reduce infrastructure backlogs is easily accessible to stakeholders</td>
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<tr>
<td>32. The organisation has a workable and effective system to manage infrastructure</td>
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<td>33. The organisation has an efficient system that tracks progress and highlight problems timeously</td>
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<td>34. Communities have access to information about bridging finance (e.g. community structure)</td>
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<td>35. The organisation’s infrastructure bridging finance is achieving the intended objectives</td>
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<td>36. The organisation’s capacity is positively enhanced by bridging finance</td>
<td>1</td>
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<tr>
<td><strong>DEVELOPMENT CONTRIBUTIONS (DFI)</strong></td>
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<td>37. Technical intervention by Development Finance Institution DFI (e.g. DBSA) is positively accepted municipalities</td>
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<td>38. DFI’s bridging finance is ring fenced and used in eradication of backlogs only</td>
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<td>39. Technical support from DFI is seamlessly integrated in the organisation.</td>
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<td>40. The DBSA capacitate client to implement and take ownership of the infrastructure</td>
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<td>41. The DBSA contribution in bridging finance maximise its investment returns as opposed to social return</td>
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<td>42. The DBSA fully understand the external and internal institutional capacities of the client municipality</td>
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<td>43. The DBSA appraisal ensures that appraisal processes (e.g borrower) are not merely for compliance but are used to intervene effectively to identify mitigate risks</td>
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Section B
Please indicate how you would rate the levels of satisfaction you are encountering when interacting with PMU’s in the municipalities of North West Province. Please rate your satisfaction on a 4-point scale where 4 = Completely Satisfied, partially satisfied and 1=Not Satisfied at all. You may also use any number in between to indicate your level of satisfaction.

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<tbody>
<tr>
<td>1.</td>
<td>Development of projects designs specifications??</td>
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<td>2.</td>
<td>Are the Skills adequate</td>
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<td>3.</td>
<td>Is the operational capacity adequate</td>
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<td>4.</td>
<td>Working relationship with Committees</td>
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<td>5.</td>
<td>Cost effective and efficient  projects</td>
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<td>6.</td>
<td>Communication to stakeholders</td>
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<td>7.</td>
<td>Transparent business dealings</td>
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<td>8.</td>
<td>Respect for due process</td>
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<td>9.</td>
<td>Composition and representation in the committees</td>
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<td>10.</td>
<td>Relationship with organization’s leaders</td>
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<td>11.</td>
<td>Ethical conduct</td>
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<td>12.</td>
<td>Is the municipality with a PMU within the Technical Service effective in projects implementation (e.g water &amp; sanitation priority projects)</td>
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Section C
Please indicate how you would rate the levels of satisfaction you’re encountering with Supply Chain Management (SCM) when goods and services are procured in the municipalities. Please rate your satisfaction on a 4-point scale where 4 = Completely Satisfied and 1=Not Satisfied at all. You may also use any number in between to indicate your level of satisfaction.
1. Consistent projects designs specifications | 1 | 2 | 3 | 4
2. Transparent procurement process by Committees | 1 | 2 | 3 | 4
3. Cost effective projects selection | 1 | 2 | 3 | 4
4. Efficient projects selection | 1 | 2 | 3 | 4
5. Composition and representativity of committees | 1 | 2 | 3 | 4
6. Appointment of suitably qualified suppliers | 1 | 2 | 3 | 4
7. Performance monitoring and evaluation | 1 | 2 | 3 | 4
8. Respect for due process | 1 | 2 | 3 | 4
9. Relationship with organization’s leaders | 1 | 2 | 3 | 4
10. Ethical conduct and corruption prevention | 1 | 2 | 3 | 4
11. Are the Skills adequate | 1 | 2 | 3 | 4
12. Is there adequate capacity | 1 | 2 | 3 | 4

SECTION D

Various financial challenges could be encountered with deployment of bridging finance towards the rollout of water and sanitation infrastructure. Please indicate how you would rate the level of each challenge inhibiting effective elimination of infrastructure backlogs. Use a 4 point scale where 4= Extremely High effect and 1 = No Effect at all. You may also use any number in between to indicate your rating.

1. Capacity | 1 | 2 | 3 | 4
2. Finance | 1 | 2 | 3 | 4
3. Skills | 1 | 2 | 3 | 4
4. Fraud | 1 | 2 | 3 | 4
5. Unqualified suppliers | 1 | 2 | 3 | 4
6. Compliance to legislation | 1 | 2 | 3 | 4
7. Theft | 1 | 2 | 3 | 4
8. Relationship with organization’s leaders | 1 | 2 | 3 | 4
9. Ethical conduct and corruption prevention | 1 | 2 | 3 | 4
10. Low levels of payment for Services | 1 | 2 | 3 | 4
11. Political will from the leaders | 1 | 2 | 3 | 4

**Section E**

In this section we would like you to indicate the way you feel about the development benefits derived from the water and sanitation service delivery provided through the bridging finance. Please indicate your feelings about your organization by stating whether you agree/disagree with the following statements. **We will use 4-point scale where 4 would indicate STRONGLY AGREE and 1 would indicate DO NOT AGREE AT ALL. You may also indicate any number in between to indicate how you feel about the statement.**

**Development Beneficiaries**

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<td>1.</td>
<td>Do the community understand the development benefits</td>
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<td>2.</td>
<td>Does the community understand how the development intervention is prioritised?</td>
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<td>3.</td>
<td>Did the program assist in delivering the water and sanitation infrastructure to the households</td>
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<td>4.</td>
<td>Did the community have access to water supply and sanitation infrastructure as a result of the intervention (e.g. toilets, communal standpipes etc).</td>
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