# EXPLORING PUBLIC-PRIVATE-PARTNERSHIP PRACTICES OF THE NORTH-WEST NGUNI CATTLE PROJECT

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## DECLARATION

I, Boipelo David Gaobepe, declare that:

1. The information on this research is my own work and any other persons work used in this study have been properly referenced, except where otherwise stated otherwise.
2. This is my first submission of the research study for the degree of MBA and/or examination, the study has never been submitted for these purpose to any other university except the NWU Business school
3. The research study excludes personal information of respondents, or any material, unless where acknowledgment has been obtained through referencing.
4. I received the consent and authorisation from the relevant party to conduct this study.
5. The content of this study was not copied from other sources unless otherwise stated and properly referenced.

Signed by:

**Boipelo David Gaobepe,** **Date:..............................**

**Student Number: 16417240**

## ABSTRACT

The study aimed at exploring the management practices of a Public-Private Partnership, (which henceforth will be called PPP) with respect to the North-West Nguni Cattle Project, (which henceforth will be called NWNCP) in the North-West Province of South Africa. Public-Private-Partnerships (PPPs) has emerge as an established strategy to for effective service delivery. The intricacy of Public-Private-Partnership and risks involved in the implementation of partnership projects are challenging. The present study took place in the North West province of South Africa. The study focused on exploring the successful implementation of the North-West Nguni Cattle Project (NWNCP) which was a PPP project. The approach used was summative and cross-sectional survey's data obtained from stakeholders. The study uses project management principles a five point Likert-scale type questionnaires develop to collect primary data from the Board of Trustees, Technical Committee, and Project Managers as well as four beneficiaries per District. Statistical Package for Social Sciences (SPSS) was used to analyse the data. The study explored theoretical frameworks used by researchers who have done work similar or related to this study. The study developed a conceptual framework based on scope and nature of the project, management practices, relationship management practices, finance management practices, resource management practices, and political management practices with regard to the NWNCP to deliver to its mandate. The research is intended to fulfil the requirements for the award of the degree on Masters in Business Administration.

The key findings were that the risk factors on the scope and nature of project management was known to the participants, including the beneficiaries, relationship management was well managed among the three participating sector as they were equally important and shared the challenges and successes, finance management was managed as per the determinants of the project, the required resources were allocated to the participants, and the political issues were dealt successfully by the BoT. The findings were supported by literature, and they are aligned to the objectives of the study as mentioned on the above paragraph.

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The result would not have been what it is if the ever committed statisticians were not in charge.

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# CHAPTER ONE: INTRODUCTION

## 1.1 INTRODUCTION

. Chapter one focuses on the background to the study, problem statement, research question, objectives of the study, motivation of the study, scope and delimitation of the study and provides a chapter summary.

## 1.2 BACKGROUND TO THE STUDY

The study aimed at exploring the management practices of a Public-Private Partnership, (further referred to as PPP) with respect to the North-West Nguni Cattle Project, (further referred to as NWNCP) in the North-West Province of South Africa. The NWNCP was launched in February 2006 as a tripartite partnership between the North-West Department of Agriculture and Rural Development (DARD), currently called Department of Rural, Environmental and Agricultural Development (READ), Industrial Development Corporation (IDC) and the North-West University (NWU), Mahikeng Campus (Antwi & Oladele, 2013:2; Cwaile *et al.*, 2012:1575). The IDC approached the READ and the NWU to participate in implementing the NWNCP, following similar projects in the Limpopo and Eastern Cape. The Industrial Development Corporation invested R 1 000 000.00, as a loan, for the purchasing of eleven pregnant Nguni breed heifers and young Nguni breed bull per beneficiary and the Project Manager's remuneration. Rural Environment and Agricultural Development invested R 1 000 000.00, which was granted for the purchasing of an additional twelve pregnant Nguni breed heifers per beneficiary, to be utilised for matters related to animal health, extension and veterinary personnel, as well as the provision of infrastructures. The North-West University's main contribution was to provide staff for the management of the livestock and veterinary services and to conduct research. The beneficiaries were to return eleven pregnant Nguni breed heifers and a young bull at the end of the fifth year of the project, as payment to the loan and had to keep the remaining livestock and their progeny (Cwaile *et al.* (2012:1576).

Since the initiation of the project in 2006, one hundred and twenty-one (121) beneficiaries who were emerging farmers have benefited as individuals or cooperatives from the four districts of the North-West Province (Ngaka Modiri Molema, Bojanala, Dr. Ruth Segomotsi Mompati and Dr. Kenneth Kaunda). The preliminary selection was carried out at the Local Development Centres (LDC) from the four districts.

The Local Development Centres (LDC) selected the applicants and recommended candidates to the NWNCP Board of Trustees (BoT) through the Project Manager. The Technical Committee (TC) was made up of livestock specialists from the READ and the NWU, after screening the applications, following specific selection criteria and making a recommendation to the Board of Trustees. The successful candidates signed individual contracts with the BoT to manage the twenty-four cattle on behalf of the Board of Trustees. The Board of Trustees remained the owner of the Nguni cattle until the loan component (eleven pregnant Nguni heifers and a young bull) had been paid. The NWNCP was a tripartite partnership between the READ as a Public Institution, the IDC and the NWU as Private Institutions.

Public-Private-Partnership is defined differently in different countries and by different authors (Prüssing, 2015:1). Albertus (2016:87); Nyagwachi (2008:17); Tang *et al.* (2010:284) all agree that the main component of PPP expresses partnering towards development in public infrastructures by bringing their complementary skills and sharing risks and resources. Chetty (2011:17) defines PPP as "a contract between a public sector or municipality and a private party, in which the private party assumes substantial financial, technical and operational risks of a project" (Chetty, 2011:15). South Africa introduced PPPs legislation in the 1990s (Nyagwachi, 2008:1), due to the slow pace of service delivery, which resulted in protests across the country. Public-Private-Partnership was deemed a solution to accelerate service delivery (Nyagwachi, 2008:1).

Although some PPPs have been successful in the management and implementation of partnership projects, studies have also revealed that this is not always the case (Chou & Pramudawardhani, 2015:1136). Studies conducted by Akintoye *et al.* (2008:6); Zou *et al.* (2014:265) indicate that the implementation of projects through PPP's is intricate, complex and costly due to the involvement of several parties, the length of the period from start to completion and the scope. The failure to identify and allocate risk as well as uncertainty among the participating partners may have a negative impact on the PPP's and their success rate (Tang *et al.*, 2010:690). Further research revealed that the absence of appropriate experience and expertise exposes PPP vulnerabilities to dangers. The challenges which result in issues of disappointments in infrastructure provisions ultimately led to huge investment losses and failures in most PPP projects (Ameyaw & Chan, 2015:3 & 4). Studies have also identified political interference, poor contract design, pricing and tariffs as major risks related to PPPs project (Ameyaw & Chan, 2015:15).

Despite the vulnerability of PPPs projects in aspects of proper planning, better risk allocation and cooperative relationships among the partners, there still are success stories of PPPs in some areas of South Africa (Akintoye *et al.*, 2008:9; Engel *et al.*, 2013:2; Ke *et al.*, 2010:481; Zou *et al.*, 2014:265) and the NWNCP is one such project. The success of NWNCP has led to the focus on construction management which introduced relationship management in the PPP domain (RM) (Zou *et al.*, 2014:266) and has gained attention from practitioners and researchers. According to Zou *et al.* (2014:266), relation management is defined as "a set of comprehensive strategies and processes of partnering with selected counterparties, and the project stakeholders, to create superior value for the PPP project through developing sustainable relationships". Zou *et al.* (2014:266) further state that choosing the correct partnership is viewed as a basis for PPPs success, while gathering manageable relationships and working cooperatively with a partnership are essential. The improvement of relationships is an intuitive and developmental learning process (Zou *et al.*, 2014:266).

Public-Private-Partnership that fails to appropriately identify and allocate risk and uncertainty among the participating sectors has negatively affected the success rate of PPPs (Tang *et al.*, 2010:690). According to De Wet (2017:1), there are institutional factors considered to be critical success factors for PPPs which "included a stable political environment, political support and a commitment to the PPP projects". The financing choices accessible to PPPs in the South African money related market are constrained and only a few of the traditional financing solutions (commercial bank) are accessible to project developers (Prüssing, 2015:1). As a result, the South African budgetary market is crucial in the achievement of PPP ventures, since they have expertise in the resources and monitoring performance of projects (Prüssing, 2015:2).

This study argues that the failures of PPP projects may also result from administration and management failures, limited research framework, relationship breakdowns and absence of support for implementation (Albertus, 2016:8; Van Der Merwe, 2011). Albertus (2016:8); Van Der Merwe (2011) used Gautrain as an example of a major successful PPP in South Africa because proper partnership, management, allocation of risk and resources, as well as cooperation relationships among the stakeholders were prioritised, although challenges in terms of time and costs did exist (Albertus, 2016:83). Antwi and Oladele (2013:1) state that the success of any PPP project involves identifying the success factors and learning from the failure of similar projects in a country.

The study further revealed that PPPs have been successful in countries such as Hong Kong, India, South Korea, United Kingdom and China, but not in Thailand due to poor risk management, mistrust between public and private sectors and failure to agree on change in increments and policy (Chou & Pramudawardhani, 2015:1137). The implementation of PPP projects experienced management challenges related to the public and private partnership, which led to the collapse and/or total closure of the projects (Zou *et al.*, 2014:265). The challenges resulted in the projects being renegotiated and redesigning the scope and extension at a substantial cost.

## 1.3 PROBLEM STATEMENT

A study by Chou and Pramudawardhani (2015:1137) states that PPP projects are intricate and complex if risks on the proper allocation of resources and relationship are not transparent and properly managed. In South Africa, PPPs successes are minimal and failures are attributed to lack of proper partnership management, risk allocation associated with resources and cooperative relationship among stakeholders. Such failures may result in the termination of partnerships at very high costs.

The tripartite partnership of the NWNCP was made up of the READ as the public sector (political), the IDC and the NWU as private sectors (political semi-autonomous). Research was conducted on 73 beneficiaries of the NWNCP launched in 2006 and it was found that there were risks associated with management, resource allocation and cooperative relationships among the partners of the project (Antwi & Oladele, 2013:1; Cwaile *et al.*, 2012:1575). Despite these challenges associated with the PPPs, NWNCP, as a PPP proved to be a success as all 121 beneficiaries of the project from 2006 to 2011 had successfully repaid their loans and were successful farmers by the close of phase in 2011. The NWNCP had a positive impact on the lives of beneficiaries and it delivered to its mandate (Antwi & Oladele, 2013:1; Cwaile *et al.*, 2012:1575). This study focused on the extent to which various risks associated with the project during the implementation were managed. The study therefore also investigated how the scope and nature, resource allocation, cooperative relationship management practices, management of finance as well as political risk factors were managed to lead to the positive impact of the project to the beneficiaries.

## 1.4 RESEARCH OBJECTIVES

From the problem statement and research questions, the main objective of the study was to explore the management practices of the North-West Nguni Cattle Project as a success story of Public-Private-Partnership. The main objective was achieved through the following sub-objectives:

1. To explore the management practices on the scope and nature of the NWNCP.
2. To analyse the resource allocation management practices that led to a successful NWNCP.
3. To explore the cooperative management practices relating to finance that led to the success of the project.
4. To explore the financial resources allocation practices that led to the success of the project.
5. To explore the management political interference that led to the success of the NWNCP.

## 1.5 RESEARCH QUESTIONS

This study aimed at exploring the management practices of a successful Public-Private-Partnership's success story, in managing the risk factors, in the North-West Province of South Africa. From the problem statement, the following research questions were postulated:

1. What was the scope and nature of the NWNCP?
2. How was resource allocation managed among partners that led to the success of the project?
3. How was cooperative relationship managed among partners that led to the success of the NWNCP?
4. How was the financial resources allocated and managed among stakeholders that led to the success of the NWNCP?
5. How political interference was managed leading to the successful implementation of the NWNCP?

## 1.6 MOTIVATION FOR THE STUDY

The study was motivated by the successful implementation of the NWNCP, as a PPP project, against the difficulties encountered to deliver services and the successful implementation of PPP projects across South Africa. The study was further motivated by the 121 beneficiaries incubated by the study as successful emerging farmers, who were able to repay their loans within the first phase of the project.

The study sought to understand the practical management of risks relating to scope and nature, resource allocation, financial management, relation management and political management associated with Public-Private-Partnership projects. Literature on the successes of PPPs projects does exist on national level in South Africa and mostly focuses on mega infrastructure projects to the neglect of small scale projects, especially in the agricultural sector. This study aimed to relate to some extent to the management practices that led to the success of a PPP project at a local level.

The study contributes to project management literature with a focus on the agricultural sector and thus provides new insights to the management practices associated with the implementation of a PPP project in the agricultural sector at a local level in South Africa.

Most Public-Private-Partnership projects where the public and private sectors collaborated had difficulties which normally hampered the successful implementation of such projects. Nevertheless, the NWNCP, through a tripartite partnership (PPP), managed to succeed against these challenges. The reason for the success of the NWNCP have not been researched or documented as mentioned in the problem statement.

## 1.7 SCOPE AND DELIMITATION OF THE STUDY

The study was limited to the NWNCP of the North-West Province in South Africa. The conceptualisation was based on similar projects pioneered by IDC and executed in partnership with the Provincial Department of Agriculture and Universities in the Limpopo Province and Eastern Cape Provinces of South Africa. However, given the difficulty of the distribution of the farming communities and their geographical location in such provinces where similar projects were implemented, the study's focus was only on the beneficiaries of the NWNCP from 2006 to 2011.

The study collected primary data from the members of the Board of Trustees, Technical Committee, the Project Manager and the beneficiaries for the period from 2006 to 2011.

However, some limitations to the study did arise such as the reliability of the records kept by respondents. There was no other source to verify the accuracy of such records. Nonetheless, 16 beneficiaries were interviewed to triangulate and compare records in order to confirm the correctness of the data from the Management of the project. A limitation also originated from the availability of some of the members of the Board of Trustees and the Technical Committee project since some of them must had died or relocated.

## 1.8 SIGNIFICANCE OF THE STUDY

South Africa is seen as a leader in the formulation of laws, policies and systems that guide public-private parties to regulate PPP projects for the entire Government and give clarity for their implementation (Chetty, 2011:16).

The success of a PPP depends on the scope and nature of the project, identifying and allocating risks and uncertainty and managing the relationship. The distinguishing of these risk factors can help with the implementation of proper management practices required to successfully initiate, monitor, harmonise and control a PPP (Albertus, 2016:5).

This study explored how the NWNCP managed risk factors such as the scope and nature, cooperative relationship, financial management, relationship management, resources allocation risks and political interference to deliver the NWNCP project to its mandate. Although South Africa has guidelines on how to implement PPP projects, a study by (De Wet, 2017:29) reveals that approximately 20 PPP projects were closed between 2001 to 2013 due to the poor management of risks associated with such projects.

The outcome of this study can be used as a roadmap for the implementation of projects with similar magnitude and scale in the agricultural sector across South Africa, Africa as well as globally. The study serves as a blueprint for the replication of PPP projects in the agricultural sector. The findings from the study are beneficial to academics and project management practitioners to develop the best management practices that can lead to the successful completion of projects in the agricultural sector. Findings from the study can benefit policymakers and be used as an enabler to develop policies that deliver successful PPPs, despite challenges associated with such type of projects.

## 1.9 RESEARCH DESIGN AND METHODOLOGY

The research approach was summative based on the intricate nature of the research problem and intended to use a cross-sectional survey's sample (Bryman & Bell, 2014:31; Taylor *et al.*, 2015:4). The study focused on the application of project management principles to achieve successes and hence data and records were sourced from the Board of Trustees, Technical Committee and Project Manager of the project. However, samples were also drawn from beneficiaries to triangulate data from management teams and to eliminate biases (Saunders & Lewis, 2009:210). Bryman and Bell (2014); Taylor *et al.* (2015:4) explain a summative approach as inductive in nature and a Likert-scale type of questionnaire was used to collect primary data from the Board of Trustees, Technical Committee, Project Manager as well as four beneficiaries per district. Questionnaires for the Board of Trustees, Technical Committee and Project manager were sent by e-mail, while the researcher personally administered questionnaires to beneficiaries. The Statistical Package for Social Sciences (SPSS) was used to analyse data from the questionnaires and variances were tested using a T-test.

## 1.10 THEORETICAL FRAMEWORK

The study undertook an extensive literature review to assess the project management practices of PPPs. The focus was mainly on exploring the PPP practices of the North-West Nguni Cattle Project as a successful public-private-partnership project in the agricultural sector in South Africa. The study further explored theoretical frameworks used by other researchers to analyse the successful implementation of these projects. The following researchers' work were focused on:

- (Rose, 2013), which intergrade, scope, time cost, quality, human resources, communications, risks, procurement and stakeholder management,
- Chetty (2011) who focused on Public-Private-Partnership between the Durban Metropolitan Police Service and the Vululeka-TMT Consortium.
- Antwi and Oladele (2013), who focused on the strategy, operation and effects of the Nguni Cattle Project in the North-West Province.

- Akintoye *et al.* (2008), who focused on Public-Private-Partnerships managing risks and opportunities.
- Albertus (2016), who focused on Public-Private-Partnership contract management failure in information technology service delivery - a qualitative inquiry into the South African Department of Labour ERP implementation project.
- Ameyaw and Chan (2015), who focused on risk ranking and analysis in PPP water infrastructure projects – an international server of industry experts.

The study was designed with the intention to explore the PPP practices in the successful implementation of the projects in the agricultural sector using sound project management principles.

## 1.11 DEFINITION OF KEY CONCEPTS

### Public-Private-Partnership

The Canadian Council for PPPs defines PPP as "a cooperative venture between the public and private sectors, built on the expertise of each partner that best meets clearly defined public needs through the appropriate allocation of resources, risks, and rewards" (Yuan *et al.*, 2009). It is further stated that PPPs are contractual associations between the public and private sector to develop infrastructure. The definition of PPPs is further elaborated in Section 2.2.

### Project management

A project is "a temporary endeavour undertaken to create a unique product, service, or result" (Rose, 2013:2). Rose (2013:2) further stated that a project begins and ends at a definite period. The end is reached when the project's goals have been accomplished or when it is terminated because its targets will no longer or cannot be met or when there is no need for the undertaking or when the client terminates the project. Temporary does not imply that the product, service and end result of the project is short-lived (Rose, 2013:2). Rose (2013:4) further stated that "Project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements".

### Management practices

It is the methods and innovations used by managers to effectively transform the working systems of the organisation, such as on staff empowering, training, quality and introducing different types of new technology. Management practices allude to the working techniques and advancements that the managers use to enhance the viability of work frameworks.

Ng (2011:94) identified orientation in management as to look broadly, a sense of curiosity and imagination, the ability to be observant, to pay attention to detail, being visible to employees and customers, enthusiasm, disaster management skills, openness, exemplary, good delegation and communication skills and being able to teach and mentor. Grønholdt and Martensen (2009:48) also mentioned strategy, execution, performance-orientation culture, building and maintaining a fast flexible structure, keeping talented employees, innovative transforming of the organisation, committed leaders to business and employees, pursuing growth through mergers and partnerships as the eight good management practices. The first four are primary management practices and are crucial to the success of the organisation. Implementing management practices removes the obstacles to good performance and informs the employees about what the organisation expects as they have the resources required to accomplish the anticipations (Medlin *et al.*, 2016:1044).

### Risk management

Risk occurs when there is a likelihood of danger, injury or any potential, life threatening or undesirable consequences (Boshoff, 2010:16). Boshoff (2010:16) further stated that it is used with words like susceptibility, danger, loss, bad luck, adversary, threat, peril, damage, injury, threats or other adverse consequences, which refer to uncertainty. Boshoff (2010:16) further said the uncertainty could lead to positive and negative aftermaths. Boshoff (2010:16) quoted Vertzberger (1998:22) definition of risk as "likelihood that validity predictable direct and indirect consequences with the potential adverse values will materialise. Arising from particular events, behaviour, environmental constraints, or the reaction of the third party". Boshoff (2010:16) continues to state that it has indeterminate results that have to happen.

The success of a project depends on how effective risk is managed (Trangkanont & Charoenngam, 2014:69). Trangkanont and Charoenngam (2014:69) found risk identification, categorisation, analysis, mitigation, control and monitoring as part of the process of risks management. Trangkanont and Charoenngam (2014:69) further stated that risk management focuses on risk identification, classification and allocation. Risk can be divided into macro risks (country factors), meso risks (project specific factors) and micro risks (relationship among the stakeholders of the project) (Trangkanont & Charoenngam, 2014:69).

**Scope and nature of project management**

Project management is the management of the company as a whole (Burke, 2013:7). It is important to understand what is meant by the project if one want to understand project management (Marchewka, 2014:8). Marchewka (2014:8) defines project as "a temporary endeavour undertaken to create a unique product, service, or result. Projects, unlike operations which are work done to sustain the business, end after reaching the objectives, or when terminated" (Marchewka, 2014:8). Marchewka (2014:8) further defines project management as "the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements." Marchewka (2014:8) states that project managers must not attempt to meet the "specific scope, time, cost, and quality requirements of projects", but should enable the process to meet the people's needs and expectations involved or affected by the project.

**Relationship management**

Zou *et al.* (2014:266) define relationship management as "asset of comprehensive strategies and processes of partnering with selected counterparties, and the project stakeholders, to create superior value for the PPP project through developing sustainable relationships".

**Finance management**

Financial management is mainly concerned with working capital, credit management, cash flow management and the values of bookkeeping (Marembo, 2013:9). It is concerned with long-term investment, how to manage long-term investment and making decisions on the working capital of the firm (Marembo, 2013:7). It also involves the administration of money-related matters such as the acquisition of assets and their utilisation when needed, management of assets, management of liabilities and management of cash.

**Resource management**

Resource management is the thorough process of restructuring the organisation's assets portfolio, packaging the assets to build capacities, to leverage those abilities with the intention of creating and maintaining value for the customers and proprietors and to realise a competitive advantage (Sirmon *et al.*, 2008:922; Sirmon *et al.*, 2007:273). Sirmon *et al.* (2007:273) explain that structuring the resource portfolio require acquiring and accumulating the resources that the organisation will use to bundle and leverage, where bundling is integrating the resources to create abilities, and leveraging is how to exploit capabilities to exploit market opportunities. Resource management is the practice of how the tangible resources (equipment, materials and finance) and intangible resources (personnel and time) of an organisation are managed effectively and efficiently. It comprises the planning of resources, scheduling and budgeting.

**Political management**

Political risk is defined differently because of the different perspectives and varying regulations in several countries. Political risk is experienced when political changes negatively affect the performance of a business, because of changes in politics and/or legislatures (Ke *et al.*, 2010:486). It includes any occurrences that can destabilise the political stability of a region or country. Political risk is when the officials of the partnership prioritise the achievement of their careers as well as the immediate or individual benefits, resulting in poor decisions made (Ke *et al.*, 2010:486).

## 1.12 CHAPTER SUMMARY

This chapter explained the concept of public-private-partnership. The background focused on the explaining the PPPs, difficulties in managing such projects and the challenges thereof in the delivering of a successful PPP project. The study argues that the failure rate of PPP projects is high in South Africa, however, the NWNCP project was a success factor at local level. Proper management of the risk factors such as the nature and scope, relationship, resources, finance and political interferences are critical for successful implementation of a PPP project. South Africa has legislative frameworks for the implementation and governance of PPPs but most PPP projects fail to meet the completion lines, overrun costs and some even collapse. The chapter also established the research problem and stated clearly why the research had to be conducted. The research questions, research objectives, motivation of the study, scope and delimitation as well as significance of the study were further discussed. Finally, the research design and methodology, theoretical framework and the definition of key concepts were provided.

# CHAPTER TWO: LITERATURE REVIEW

## 2.1 INTRODUCTION

Based on the problem statement, research questions and objective of the study discussed in Chapter one, the literature review in this chapter focuses on the definition of PPPs in Africa and South Africa in particular, the management of NWNCP and the risks associated with PPPs, such as risk management, nature and scope, relationship management, finance management, resources management, political management, theoretical management and contextualisation and a chapter summary.

## 2.2 DEFINITION OF PUBLIC-PRIVATE-PARTNERSHIP

Public-Private-Partnership, according to the South African PPP Manual (2004), is defined as "a contract between a public sector institution/municipality and a private party, in which the private party assumes substantial financial, technical and operational risk in the design, financing, building, and operation of a project" (Chetty, 2011:17; Sobuza, 2010:37). De Wet (2017:3) stated that PPP is used in the developing countries to improve the economy through minimising and allocating risk and utilising profit orientation and resources of the private sector who assumes substantial financial, technical and operational risks of a project. Nyagwachi (2008:16) opined that PPP is not privatisation where everything is transferred to the private sector, but it brings the public and private sectors together for the effective and efficient provision of services. According to Arendse (2012:42), Public-Private-Partnership provides a commercial approach to service delivery and apportions financing to the private sector in the form of grants, contributions and other financial assistance (Prüssing, 2015:9). Although a PPP project is often confused with privatisation, it shares some commonality with privatisation, introduces the expertise of private administration and/or ownership of what historically was the role of government and is an institutional and contractual partnership association between Government and private sectors to deliver accurate service to the public, with distinctive elements (Akintoye & Beck, 2009:82).

Public-Private-Partnership is an effective means of delivering value-for-money to public infrastructures or services by joining the advantages of competitive tendering and flexible negotiation and allocates the risk between the public and private sector (Ke *et al.*, 2010:482). In a study conducted by Hwang *et al.* (2013:425), it was found that the implementation of PPPs in Singapore empowered people in public sectors to improve their esteem for executing public services, furnished the private sector with more business chances to enhance and offer production for the public services and joined the expertise of public and private sectors to address the needs of the population successfully and effectively. Hwang *et al.* (2013:425) further stated that, for Government to guarantee that the private sector adheres to the public sector's needs effectively, there should be accountability and people who can be contacted in the case of queries and feedback, public security and confidentially in information handling. The National Council for Public-Private-Partnership in the United States of America defines PPP as a "contractual arrangement between a public sector agency and a for-profit private sector developer, whereby resources and risks are shared for the purpose of delivery of a public service or development of public infrastructure" (Tang *et al.*, 2010:6). Tang *et al.* (2010:6) further mentioned the following definitions from other countries:



- In Canada, PPP is defined as a "cooperative venture between the public and private sectors, built on the expertise of each partner, which best meets clearly defined public needs through the appropriate allocation of resources, risks, and rewards".
- The efficiency Unit in Hong Kong defines PPP as "arrangements where the public and private sectors both bring their complementary skills to a project, with varying level of involvement and responsibility, for the purpose of providing services or projects". Six types of PPPs were identified by the Unit, namely Creating Wider Markets, Private Finance Initiatives, Joint Venture, Partnerships Companies, Partnership Investment and Franchises.
- The National Council for Public-Private-Partnership in the US defines PPP as a "contractual arrangement between a public sector agency and a for-profit private sector developer, whereby resources and risks are shared for the purpose of delivery of a public service or development of public infrastructure".
- In the UK, the United Nations Development Programme (2007) stated that, when planning PPPs for the Urban Environment, the definition of PPPs has to be vast such that even the casual dialogues between government officials and local community-based organisations, which are perceived to be an integral part of profitable PPPs, ought to be protected.

- In the US, the National Council for Public-Private-Partnership defines PPP as a "contractual arrangement between a public sector agency and a for-profit private sector developer, whereby resources and risks are shared for the purpose of delivery of a public service or development of public infrastructure".

The public experiences problems in choosing the relevant funding model for investment (Wojewnik-Filipkowska & Trojanowski, 2013:330). Wojewnik-Filipkowska and Trojanowski (2013:330) further stated that infrastructure investment used to be the responsibility of the public sector, which was challenged by the constraints of the budget. Such constraints were allocated to the private sector because the private sector has access to capital and optimal financial structure, can accelerate delivery, manage properly, has funds to invest and has inflexible policies. Infrastructure development in the developing countries is geared towards increased private sector participation and PPPs are increasing globally because governments cannot finance all the essential investments (Wojewnik-Filipkowska & Trojanowski, 2013:330). Wojewnik-Filipkowska and Trojanowski (2013:330) further stated that the Government has to play an administrative role, has to create new opportunities and condition such as enabling law for the private sector. Public-Private-Partnership combines private capital, private execution and the delivery of services and/or facilities to maximise investment effectiveness and in essence, the combination of social and commercial objectives (Wojewnik-Filipkowska & Trojanowski, 2013:332). Wojewnik-Filipkowska and Trojanowski (2013:332) further stated that PPPs are investment models with great development potential, which include benefits such as combination of capabilities with effective financing, best practice, fair and transparent cooperation principles, allocation of risks, better quality of public property management, reduction of political influence, diversification of sources of public financing, and implementation of long-term projects objectives.

Public-Private-Partnership projects involve planning, tendering, construction and operational stages that are part of the lifecycle of project management (Osei-Kyei & Chan, 2017:22). Osei-Kyei and Chan (2017:22) stated that the implementation of PPPs in the United Kingdom had found public sector considering economical procurement process, good governance, and political support as critical success factors (CSFs), while the private sector considers strong private syndicate, appropriate risk allocation and sharing, and pledge of project parties. Osei-Kyei and Chan (2017:22) further stated that the academics viewed "good relationship with government, political stability, sound financial analysis and long-term demand as the most important CSFs" for PPP projects implementation, while the industrial public and private sectors considered "concession agreement, abilities to deal with fluctuation, government support, sound financial analysis and long-term demand" as the most important CSFs.

While PPPs had some fruitful results and successes, there were some failures that drove researchers to express concern in their adoption (Ameyaw & Chan, 2015:15). Procurement procedures should be based on a public and private win-win principle that creates a conducive environment and provides policies necessary for the private sector to participate and to create effective processes to ensure that projects are delivered at public acceptable standards and quality (Mathonsi, 2013:21). Public-Private-Partnership (PPP) offers a long-term, sustainable method to encourage the public sector to provide a delivery and social infrastructure, bettering the value of public assets and making better use of taxpayers' money (Mathonsi, 2013:10).

## 2.3 PUBLIC-PRIVATE-PARTNERSHIP GLOBALLY

The challenges faced with regard to infrastructure development worldwide have resulted in countries inviting private sectors to partner with Government in the delivery of infrastructures to citizens (Chou & Pramudawardhani, 2015:1136). Chou and Pramudawardhani (2015:1136) state that the aim of the partnership is to address the challenges with the implementation of infrastructure procurements. Public-Private-Partnership has gradually replaced the public sector in the provision of infrastructures such as highways, water sewerage, bridges, seaports, hospitals, jails and schools (Engel *et al.*, 2013:2).

Engel *et al.* (2013:2) are of the opinion that PPPs have been recognised as an effective means of delivering bulk services. According to Nyagwachi (2008:2), PPPs bring the public and private sectors together and improve public service delivery of infrastructure and services. Such partnerships lead to the promotion of competition and transparency by supplying experience and skill. Public-Private-Partnership shifts the provision of resources for core service delivery from the public sector to the private sector. Tang *et al.* (2010:685) also stated that the investment in partnership started in the European countries in the 18th century, with the supply of drinking water to Perish. This is one of the earliest documented contracts, which was followed by the Suez Canal, Trans-Siberian railway in Europe and other contracts in America and Asia (Tang *et al.*, 2010:685). Public-

Private-Partnerships have also been applied successfully in developed countries such as Australia, Canada and the United Kingdom, though there were some challenges (Thabane, 2015:3). Thabane (2015:3) further stated that such countries adopted PPPs to deliver infrastructure projects aimed at spurring economic growth and contributing to social responsibilities.

In China, the private partner in PPPs are mainly foreign firms and financing institutions and Laibin Power Station was one of the successful PPP projects in China (Tang *et al.*, 2010:683). (Ke *et al.*, 2010:482) stated that China has increased the amount of PPP projects for the development and operation of infrastructure, which requires a delicate balance among private sector capacity, government regulatory function and public satisfaction. Hwang *et al.* (2013:425) mentioned that eight critical success factors for PPPs were identified in China, namely "appropriate project identification; stable political and economic situation; attractive financial package; acceptable toll/traffic levels; reasonable risk allocation; selection of suitable subcontractors; management control; and technology transfer".

Public-Private-Partnership projects were used in England in 1997 to assist with developing facilities that included designing, construction, ownership and delivery of public sector services (Tang *et al.*, 2010:683). Public-Private-Partnership in Poland is based on the Municipality Management Act, the Public-Private-Partnership Law and the Concession Law which offer public-private cooperation (Wojewnik-Filipkowska & Trojanowski, 2013:331). The advantages of the partnerships are risk transfer, flexibility in private partner selection, the possibility of transfer of assets ownership to the private partner and taxation preferences (Wojewnik-Filipkowska & Trojanowski, 2013:331). Wojewnik-Filipkowska and Trojanowski (2013:331) stated that the PPP investment in Poland is poorly developed because public officials do not have any interest to partner with private sectors, they do not know the nature of the PPPs, they do not know the benefits and projections offered by PPPs, they lack experience to partner with the private sector, they are an insecurity to the partner, and the positive successes of the PPPs are negligible. The PPP Act provides guidelines on the establishment and enforcement of partnerships in Poland, which is in line with the Investment Support of 2010 (Wojewnik-Filipkowska & Trojanowski, 2013:334).

In Sri Lanka, the Joint Apparel Association Forum (JAAF), the Education and Training Institution (represented by the University) and the National Government, Education, Commerce, and Industry (represented Government) partnered to work on human resource development for the newly restructured apparel and textile industry (Bruce, 2013:153). According to Bruce (2013:154), this announcement led to the formation of JAAF, which was an improvement in organisational methods that changed how firms interact with each other, voice and promote the industry interest. The National Ministry of Textile and Industry financed JAAF to complete the Human Resource Development plan in order to establish the College of Apparel and Textile (COAT) (Bruce (2013:154). Bruce (2013:154) further stated that COAT was intended to be a consortium of the private sector for training and academic educational organisations and the public sector to emphasise and develop training, education and technology innovation. Funds were budgeted to build COAT to function as a college in order to allow Sri Lanka citizens the opportunity to advance their human resources to contribute to the growing competitive global apparel and textile industry (Bruce, 2013:154).

The Private Finance Initiative (PFI) encouraged governments globally to adopt PPPs (Mathonsi, 2013:14). Mathonsi (2013:14) further mentioned that Australia (for social infrastructures), Malaysia (public transport, roads, waste management facilities and water and wastewater services), Netherland (transport, housing and urban development), Central Europe and the United States of America use PPPs. Public-Private-Partnerships were negatively affected by a problem in policy formulation and implementation, corruption, supervision, access to capital investment, political accountability and risk management (Mathonsi, 2013:14).

In Pakistan, PPP is a key strategy for accelerating efficiency, creating resources, improving the Government and delivering quality social services, particularly in education and for the underdeveloped communities (Akintoye & Beck, 2009:82). In Hong Kong, the PPP government handbook specifies factors such as partnership attitude and selecting the partnership that will work well throughout the life of the project (Akintoye & Beck, 2009:150). Akintoye and Beck (2009:150) state that there is a general reluctance to implement PPP procurements even though their advantages are spread through conferences and very few of them reach planning stage. In a study by the same researcher, one was even terminated after planning due to fear of losses of the job by the public sector. The West Kowloon Cultural District (WKCD) project was also one of those terminated, while Asia World-Expo (AWE) was successful (Akintoye & Beck, 2009:150). Akintoye and Beck (2009:364) further state that Turkey established Law No: 3096 in 1984 as one of the first contracts globally to organise the private sector to participate in infrastructure investments. This led to the establishment of the Build Operate Transfer (BOT) legislation and it delivered 21 highway service stations.

## 2.4 PUBLIC-PRIVATE-PARTNERSHIP IN AFRICA

The infrastructure requirement for Nigeria is huge and the Government cannot develop the backlog alone, hence it needs the assistance of the private sector to deliver the infrastructure (Olusola Babatunde *et al.*, 2012:213). Olusola Babatunde *et al.* (2012:213) state that infrastructure projects that are underway on both State and Federal level are delivered by PPPs. Nigeria spends approximately N10billion in infrastructure development through PPP projects (Olusola Babatunde *et al.*, 2012:13).

The Federal Government is increasingly using PPPs and this necessitates the need to formulate policies and laws to regulate the PPP projects to generate power, management of waste disposal, highways and street cleaning, maintenance and other services (Olusola Babatunde *et al.*, 2012:213). Olusola Babatunde *et al.* (2012:213) further state that the partnership is between public sector organisations and private sector investors and business for the designing, financing, construction, infrastructure operating, facilities and/or services and they use the experience of each partner to meet defined needs and benefit through the proper allocation of resources, risks and rewards.

The South African and Mozambique Government signed a 30-year concession in 1996 for a private consortium called Trans African Concessions (TRAC), to construct and operate the N4 toll road from Witbank to Maputo (Akintoye & Beck, 2009:86). The project was financed by TRAC while South Africa and Mozambique provided a guarantee for the debt.

## 2.5 PUBLIC-PRIVATE-PARTNERSHIP IN SOUTH AFRICA

Public-Private-Partnerships in South Africa have emerged as an exceptional model compared to other countries in Africa that want to supply infrastructure services to the communities they serve (Thabane, 2015:iii). Thabane (2015:iii) states that Public-Private-Partnerships provide the public sector with resource to deliver their infrastructure and services. The South African Cabinet established a task team in 1997 to promulgate legislation and to formulate policies and institutional reforms for the proper implementation of PPPs (Akintoye & Beck, 2009:82; Chetty, 2011:12). This was the beginning of the restructuring of the state-owned company through PPP (Akintoye & Beck, 2009:82). This resulted from the slow pace of service as stated by (Nyagwachi, 2008:1). According to Albertus (2016:8); Chetty (2011:11), the PPP process was started between 1997 and 2000 by the South Africa Road Agency, the Department of Public Works, the Correctional Service and the South Africa National Parks. Albertus (2016:1) further mentions that 22 PPPs were started in the same period. This led to Cabinet endorsing a strategic framework for the PPP in December 1999 (Chetty, 2011:15). The regulation administering the PPPs was implemented in April 2004 in accordance with the Municipal Finance Management Act (Act 53 of 2003) (Akintoye & Beck, 2009:82; Chetty, 2011:15). Akintoye and Beck (2009:82); Chetty (2011:15) further state that this Act led to the promulgation of Treasury Regulation 16 of 2004 under the Public Finance Management Act of 1989. The Act of 1989 governs the development and execution of PPPs and prescribes the stages for their approval by National and Provincial Treasuries (Chetty, 2011:15). Chetty (2011:15) further states that, although South Africa established a developmental system, some challenges existed that led to the cancellation of some of the projects before procurement, while others never reached procurement stage and many more were closed financially. At national and provincial levels, two PPPs were executed from 1997 and they increased to six in 2006-7. The reason for the slow pace was a lack of skilled staff for the delivery of PPPs and implementing the project management lifecycle (Akintoye & Beck, 2009:82). In 2000, 16 PPP projects were signed and another 50 were to be signed. Akintoye and Beck (2009:82) further state that, out of 45 PPP projects, which were on the pipeline, 11 of the 14 projects signed in 2006 were delivered successfully, while the remaining projects never reached conclusion stage and were terminated. Thabane (2015:iii) also agrees that the implementation of PPPs in South Africa has its unique challenges that have to be addressed for the procurement to be a success. Thabane (2015:iii) further says that South Africa adopted excellent PPP procurement guidelines, which are outlined in the National Treasury's PPP manual and Standardised PPP Provisions. PPP is part of the project life-cycle and ensures that the outcomes are met, affordable, value-for-money and allocates risk to the participating sectors (Thabane, 2015:iii). The Government specifies the obligation of the partnering private sector through a tender and the end product is transferred to the Government for staffing, maintenance and operation (Thabane, 2015:2). Thabane (2015:2) states that The National Treasury Unit (2007:6) specifies how to conduct an assessment to determine if a traditional or PPP procurement will be cost effective to deliver a service or infrastructure required. Public-Private-Partnership shows the efforts made by the public and private sectors to partner and to take advantage of each other's strengths to effect tangible change by delivering infrastructure projects with the budgetary provisions (Thabane, 2015:2). Akintoye and Beck (2009:399); Thabane (2015:2) state that the objective of the PPP is to "harness private sector management expertise and the market disciplines associated with private ownership and finance, for the provision of public services". Akintoye *et al.* (2008:399); Thabane (2015:2) further state that the private sector has to come up with operational efficiencies used in private sectors and they are reimbursed for the delivery of services. Thabane (2015:2) further mentions the deficits on the budget, dilapidated and poor infrastructure and demand on public services as the drivers for PPPs.

Mathonsi (2013:6) states that the poor South African education, rated as the worst in the world and in the Southern African region and the whole of Africa, despite the superior resources available, demanded a quality, affordable and accessible education system. The only way to meet the demand was through the involvement of the private sector to partner with the Government to improve the quality, affordability and accessibility of the educational system in South Africa (Mathonsi, 2013:6). Public-Private-Partnership was regarded as the most appropriate way to address the South African educational system, the rationale being to maximise the potential for expanding equitable access to schooling and improving the outcomes in education, especially for the marginalised communities (Mathonsi, 2013:7). Mathonsi (2013:7) further mentions that Public-Private-Partnership projects in educational projects partner to provide services normally provided by the government, with the private sector agreeing to deliver the services as per the contract. Mathonsi (2013:7) is also of the opinion that the obligation is to deliver an excellent education for the underprivileged children who cannot pay tuition fees charged by private schools (Mathonsi, 2013:7).

Public-Private-Partnership addresses the need to fast-track the expansion of education and enhancement investment and introduces different models to improve the quality of education (Mathonsi, 2013:7). The attractiveness of PPP in schools is the efficient assembling of resources by optimising the use of the private sector's financial and management skills and expertise and risks are delegated to the party best capable to manage. South Arica also signed a BOT concession with Nature's Group to outsource 11 restaurants, two shops and three picnic sites in the Kruger National Game Reserve (Mathonsi, 2013:27). The Gautrain Rail Link (Gautrain) was established in 2006 after the Gauteng Provincial Government and Bombela Concession Company signed a contract to build, part finances and operate the Gautrain Rapid Rail Link (Mathonsi, 2013:27). It was the biggest PPP project in Africa and the largest rapid rail link infrastructure project in Africa, costing R 25 billion (Mathonsi, 2013:27).

Public-Private-Partnership projects refocused their concentration from the project such as transport to build and manage affordable housing, which includes accredited social housing projects for "low-income residents in restructuring areas" (Mathonsi, 2013:11). Social housing is emerging in developing countries and its success depends on the strength of the economy and the political environment (Sobuza, 2010:53). Sobuza (2010:53) also states that there has been a policy shift in the provision of infrastructures approach by enabling these projects to be undertaken by private sectors because of the limited scale of production achieved, the Government's financial constraint and the Government's lack of a sound financial base due to the way in which the subsidies were implemented and failure to recover costs. Sobuza (2010:53) further states that the enabling approach's main objective was to improve the efficiency of the housing sector by the private sector by eliminating these constraints.

Certain challenges were encountered with the provision of social housing, which included financial constraint, capacity constraint, unsupportive policies and the cost and access to land (Mathonsi, 2013:32). Sobuza (2010:55) added the conflicting commercial and social focus of different parties, credit rating profile of social housing and transaction costs of developing and monitoring PPP contracts as the challenges and complexity of delivering the social housing. Thabane (2015:5) also added the lack of political will, which led to a lack of commitment, resulting in more time spent on decision-making and an increase in the cost of bidding for the bidder and the Government.

De Wet (2017:29) states that South Africa, with a well-developed PPP project implementation legislature, has achieved a financial closure to 22 PPP projects from 2001 to 2013 and this shows the experience it has in developing and delivering PPP projects. There has been an increase in the PPP projects undertaken since 2013, with approximately 28 PPP projects being on the pipeline in 2015 alone (De Wet, 2017:29). The NWNCP is one of the PPP projects which was completed successfully recently. Exploring a PPP practice of the NWNCP, would focus on the risk factor of management practices associated with the nature and scope of the project, relation management, financial management, relation management and political management.

## 2.6 MANAGEMENT PRACTICES

### 2.6.1 Risk management

The risk is the probability of hostile consequences taking place, is regarded as negative occurrences and usually focuses on the possible loss though it may produce good benefits (Van Vuuren, 2006:13). According to Van Vuuren (2006:13), other authors define risk as "the uncertainty of future outcomes". (Derrocks, 2010:8) also states that other authors define risk management as "anything that gets in the way of an organisation achieving its objectives and management thereof". Rose (2013:310) concurs and adds that "if it occurs, has a positive or negative effect on one or more project objectives such as scope, schedule, cost, and quality".

Khalili and Maleki (2011:2113) define risk management as "the systematic process of managing an organisation's risk exposure to achieve its objectives in a manner consistent with public interest, human safety, environmental factors, and the law". The same principle, as stated by Khalili and Maleki (2011:2113), applies to project risk management which comprises of planning, organising, leading, coordinating and controlling activities aimed at mitigating the adverse impact on the resources, earnings and cash flow. Khalili and Maleki (2011:2113) have identified two stages of project risk management that should have equal attention, namely risk assessment and risk control. Project risk management is the assessment of risk management planning, identification analysis, response planning and controlling risk, aimed at increasing the impact of positive events and decreasing the impact of negative events (Rose, 2013:309). It includes planning risk management, identifying risks, performing qualitative risk analysis, performing quantitative risk analysis, planning risk resources and controlling risks (Rose, 2013:309).

Risk management is the process of perceiving risk, gaining access to risk and taking the necessary steps to reduce risk to an ideal level (Rose, 2013:309). Risk permits adding stability between operations and economic prices of protection measures that guide a business (Rose, 2013:309). The identified risk allocation reduces the time and cost of contract negotiation by assisting the public and private sectors to attain a balance between the distribution of responsibilities and risks (Ke *et al.*, 2010:491). To identify risk is critical in the project management process (Hwang *et al.*, 2013:425). Risk allocation in PPPs can be used to measure how the public and private sectors manage their participation and the associated risk in the project (Hwang *et al.*, 2013:426).

It is difficult to deal with risk as it requires a proper management framework (Ke *et al.*, 2010:483). When the Government procures under PPPs, it states its preference on how the risk of the project should be shared (Ke *et al.*, 2010:483). The private sector will then propose a bidding price based on their capability to take these risks and the contract will be concluded by sharing the risk. It will also be determined which risk should be allocated to the sector that can best manage it at the least cost (Ke *et al.*, 2010:483). The main objective of allocating risk is to minimise public and private cost to undertake the project.

Derrocks (2010:iii) states that "the role of risk management in enterprises is evolving into an integrated, enterprise-wide risk management function that can be utilised as a source of competitive advantage, from both a funding perspective for Banks and a business perspective for business owners". It will be sustainable and profitable for the business and banking if they can use risk management function as a competitive advantage (Derrocks, 2010:iii). Derrocks (2010:1) further states that, for the business to remain relevant, it should strategise and adapt the robust and continuous changes of the business environment. The risk is intrinsic and cannot be avoided if the optimum balance between risk and return is to be attained (Derrocks, 2010:8). Notwithstanding the size, corporate structure or core business, companies will experience risk and it should plan for such risks if it wants to be sustainable, grow and survive (Derrocks, 2010:8).

According to (Derrocks, 2010:8), risk management should be included in the company's corporate strategy and daily operations. The approach led to the process of Enterprise Risk Management (ERM) that addresses the financial and managerial risks, including the analysis on the development of performance measures, critical success factors and efficient systems (Derrocks, 2010:8). Enterprise Risk Management comprises the management of business continuity, project risk, sustainable risk, operational risk, credit risk and credit risk tools (Van Antwerp, 2010:36). Risk management is starting to gain interest among the project managers, general business and organisational management

(Khalili & Maleki, 2011:2113). Khalili and Maleki (2011:2113) state that proper risk management could help the project managers to mitigate against the anticipated and unanticipated risks on projects and if risk management is not effectively performed, it could lead to exceeding the budget, falling behind schedule and missing performance targets. It is critical to analyse risks in project management to guard against the unforeseen disastrous conditions that can deter the firms from achieving better and reliable outcomes (Khalili & Maleki, 2011:2113).

It is destructive to the overall performance of the business if there are no risk control and risk management measures in place, and risk management strategy is the responsibility of the whole organisation (Van Antwerp, 2010:i). Van Antwerp (2010:ii) states that risk management strategy should encourage open communication within the project, with clearly assigned roles and accountability, should enforce a system to monitor and evaluate risk and should drive risk awareness throughout the project.

Ke *et al.* (2010:482) emphasise that attention should be directed to the agreed procurement process by both public and private sectors to distribute risks equitably between themselves. Risks are inbuilt in all projects and failure to manage risk effectively and properly will lead to the project being in a state of constant catastrophes. These failures are characterised by incompetence to decide "what to do, when to do it, and whether enough has been done" (Khalili & Maleki, 2011:2114).

Van Vuuren (2006:18) states that King II emphasises the importance of the Board of Directors to take responsibility for internal risk management within the organisations, because it is an integral operational function and the Board of Directors should ensure that disclosure of risk management is included in their annual reports and that risk management is monitored regularly. The report should include "the estimate changes of occurrences, where possible, as well as the quantification of the probable impact and comparison to available benchmarks" (Van Vuuren, 2006:20). Van Vuuren (2006:22) recommended the following risk management process:

- To establish the strategy, organisational and risk management context.
- To identify what, why and how things can arise.
- To analyse risks determining the existing controls and analysing risks in terms of likelihood and consequence in the context of those controls.

- To assess and prioritise risks.
- To treat risks.
- To monitor and review the performance of the risk management system and change which might affect it.

Van Vuuren (2006:13) states that risk is generally associated with negative perspectives and it leads to probable losses, though there are opportunities of which benefits can be gained, there is insecurity about whether the event will occur or not or if the result will be realised. Van Vuuren (2006:14) further states that the concept of risk has negative undertones due to the expected worse results from the normal and emphasises the importance of managing risk at a level that is between the upper and lower levels because, if it is not controlled effectively, it will lead to failure. Risk cannot be avoided as this will lead to missing some of the opportunities and risk should only be taken if the rewards are more than the penalty associated with risk (Van Vuuren, 2006:14). Van Vuuren (2006:22), using the definition of King II Report on Corporate Governance, defines risk management as "the identification and evaluation of actual and potential risk areas as they pertain to the company as a total entity, followed by a process of either termination, transfer, acceptance or mitigation of each risk". The risk management process involves planning, arranging and controlling activities and resources to reduce the negative consequences on the acceptable level by those identified as relevant to the operations of the company (Van Vuuren, 2006:22). Risk administration is the capability to not only identify the correct opportunities but also to keep discipline in fulfilling them. Good risk administration practices imply that management has the self-discipline not to be concerned with opportunities that do not support the strategic targets of the organisation and which require strong assessment of risks in the competitive environment (Van Vuuren, 2006:22).

### 2.6.2 Scope and nature of project management

Rose (2013:5) defines project management as the "application of knowledge, skills, tools, and techniques to project activities to meet the project requirements". It includes the appropriate application and incorporation of management processes categorised into initiating, planning, execution, monitoring and controlling and closing (Rose, 2013:5). Rose (2013:5) further states that managing a project involves, among others, detecting requirements, addressing several stakeholders' needs, concerns and expectations, communicating effectively and efficiently among the stakeholders, particularly during the planning and execution stages, managing stakeholders to deliver the project and balancing the competing project constraints, which includes among others scope, quality, schedule, budget, resources and risk. The changes that may be experienced make the project management an interactive activity as demonstrated throughout the lifecycle of the project (Rose, 2013:5).

Many project companies comply with the renowned project execution context via selecting development of project execution related processes as a foremost objective for project-oriented enterprise development (Burke, 2013:6). Development of venture execution and task administration is frequently justified as the development of core methods for manufacturing the concrete remaining deliverable that is consequently handed to the customer (Burke, 2013:6).The project is inhibited in several ways and most of the project managers pay more attention to the scope, time and cost constraints and they should be balanced for the successful delivery of projects (Marchewka, 2014:9). Marchewka (2014:9) explains these restraints as follows:

- Scope: "What will be done as part of the project"? What unique product, service, or result does the customer or sponsor expect from the project"?
- Time: "How long should it take to complete the project"? What is the project's schedule"?
- Cost: "What should it cost to complete the project"? What is the project's budget"? What resources are needed"?

Quality was added as the fourth constraint, which is explained as "How good does the quality of the products or services need to be"? What do we need to do to satisfy the customer"?

Project management scope is the processes needed to ensure that the project includes the entire work required to complete the project successfully (Rose, 2013). It includes planning scope, collecting requirements, defining scope, creating work breakdown structure (WBS), validating scope and controlling scope (Rose, 2013:105). Planning Scope Management is making scope management arrange records on how the task will be characterised, approved and controlled (Rose, 2013:107). The key advantage of this procedure is that it gives direction and bears on how the extension will be administered all through the endeavour. The scope is a detailed description of the project and product, and it describes the project, services, or the boundaries. It also states the requirements that will be included or excluded on the project scope (Rose, 2013:107). Risk and resources have also been added to the constraints as stated by (Rose, 2013:8). Marchewka (2014:10) further states that project managers should integrate scope, time, cost, quality, human resources, communication, risk, procurement and stakeholder management to deliver the success of the projects. It is challenging to meet some of the projects' scope, time and cost as they have a higher degree of uncertainty. It is therefore important to keep on developing the knowledge and skills in managing projects and to learn from the mistakes and successes of others (Marchewka, 2014:11).

### 2.6.3 Relation management

The relationship between the public and private sectors is perceived to be integral to the success of PPP projects due to the fact that a poor relationship would lead to misunderstanding and warfare (Tang *et al.*, 2010:19). Furthermore, researchers have established that relationships in PPP tasks are determined through the nature of relational contracting and relationship administration (Tang *et al.*, 2010:19). The selection of the contractor should determine the type of relationship between the public and private sectors and choosing a suitable contractor is best. This is defined by innovative contractors' selection that emphasises good relation quality as a key principle (Tang *et al.*, 2010:20). Relation management is enabled by well-detailed contract agreement, with effective contractual language and the contractual clause that adapt international practices, though conflicts and arguments about the contractual term do exist (Tang *et al.*, 2010:28). There should be more assessment conducted to explore the factors that will negatively affect how the sectors behave when managing the relationship and such assessment should include contract terms as they are key factors that are perceived to have a greater impact on relationship performance (Tang *et al.*, 2010:28).

It is vital to have a working relationship between the owner (government), contractor and engineer (private) and it can be facilitated through better communication, identifying the shared goals and objectives, being aware that there will be problems and to agree on how to solve such problems (Chan *et al.*, 2003:526). Chan *et al.* (2003:526) further state that the relationship between the owner and contractor is stressful and counterproductive and PPP projects aim to reduce the negative impact of this relationship by paying attention to mutual goals and benefits if such relationship is managed for the benefit of the project.

### 2.6.4 Financial management

Financial management is the workmanship and art of managing finances and it includes the administration of finances, purchasing of assets, storage and their effective usage (Moles, 2013:2). Other activities of financial management include, but are not limited to, the management of assets, liabilities, cash, budgeting, *etc.* Finances are crucial to the performance of any business. Financial management is the function of monitoring financial risks and how to minimise their impact, is part of the function of an organisation and reflects the changing nature of this function from time to time (Moles, 2013:2). This function was initially regarded as financial reporting and control, but is presently regarded in terms of financial policy and fiscal decision-making and includes the company's operational, business and economic risks (Moles, 2013:2).

According to Van Antwerp (2010:4), financial management is one of the necessary parts of complete management, which is associated with a range of functional departments like personnel, advertising and marketing and production and covers a wide range of topics with a multidimensional approach. Marembo (2013:7) states that financial management answers three basic questions, namely long-term investment of the firm, how the firm obtains and manages the long-term financing that supports the long-term investment and the working capital decision of a firm. Financial risk is the losses associated with the operation of a business and they include currency risks, interest rate risks, credit risks, liquidity risks, cash flow risks and financial risks Their importance varies among organisations (Woods & Dowd, 2008:4). Woods and Dowd (2008:4) emphasise having a clear risk management under good corporate governance and this has led to formulations of codes such as Combine Code in the United Kingdom, Sarbanes Oxley in the United States of America and the King Report in South Africa to enforce risk management. Risk management is not a concern with a downside, but also measures the upside (Woods & Dowd, 2008:5). Woods and Dowd (2008:5) state that the upside concerns manipulate the prospects that might arise in uncertain conditions. Financial risk creates the possibility of losses resulting from the failure to obtain a financial goal (Woods & Dowd, 2008:5).

Moles (2013:2) defines financial risk management as the undertaking of monitoring risk and taking the essential steps to minimise their effect. It is also the implementation of recent financial theory and practice. Financial risks, inclusive of "availability of finance", "financial enchantment of project to investors", and "high finance cost" have to be regarded for the detailed feasibility of the study by the private consortium, who should furnish public choices efficiently (Marembo, 2013:7). Hwang *et al.* (2013:431) state that financial risks have been assigned to the private sector in the United Kingdom and China.



### 2.6.5 Resource management

Organisations can be seen as bundles of resources that managers pool and install to create value and to generate income (Othman & Sheehan, 2011:8; Sirmon *et al.*, 2007:273). Othman and Sheehan (2011:8); Sirmon *et al.* (2007:273) further state that, for the firm to have a competitive advantage, it must have resources and capabilities that are valuable, rare, inimitable and sustainable. According to (Othman & Sheehan, 2011:8), resources have been defined by other authors as "production factors owned or controlled by a firm, such as physical assets, human capital and financial capital, and for the firm to succeed it should synchronise resources and capabilities within their activities". Such resources can create a competitive advantage if managers evaluate, manipulate and deploy them (Sirmon *et al.*, 2007:273).

The main objective of a business is to create and maintain value (Sirmon *et al.*, 2007:273). Sirmon *et al.* (2007:273) state that a resource-based view (RBV) drives value creation through the improvement of competitive advantage, by using valuable, rare and inimitable resources and to substitute these resources (tangible and intangible). This creates value and accumulation. Sirmon *et al.* (2008:919) state that the resource-based view indicates that competitive advantages occur when resources are valuable, rare, costly to imitate and do not have a substitute. Value creation is synchronising the process of resource management so that the difference between the cost and price paid is optimised and the environment in which the firm operates affects how to manage resources. Although tangible resources are crucial in resources management in a dynamic and competitive environment, intangible resources such as human capital play an important role in managing the total available resources for the firm to realise its objective (Sirmon *et al.*, 2008:921). Othman and Sheehan (2011:8); Sirmon *et al.* (2007:273) state that the resource management framework has been developed to transform the resources in the value creation process. The value creation process includes resource structuring which in turn includes acquiring, accumulating and divesting resource bundling, e.g. the forming of capabilities such as resource stabilising, enriching, or pioneering and resource leveraging (using the resources and capabilities to create and/or enhance competitive advantage, i.e. mobilising, coordinating, and deploying the resources) (Sirmon *et al.*, 2008:274).

Resource management is crucial in creating value and using the resources is equally important to possess or to own them (Sirmon *et al.*, 2007:275). Sirmon *et al.* (2007:275) state that different firms could produce outcomes that are different with the same resources under the same environmental conditions but under different resource management and the heterogeneity in outcome is a product of choices made in the structuring, bundling and leveraging of resources. Sirmon *et al.* (2007:275) further state that resource management is dynamic because it adapts to changes from environmental possibilities and exploits opportunities created by these contingencies.

### 2.6.6 Political management

There is no generally recognised definition for political risk and political instability and policy uncertainty are the characteristics that are considered when defining it (Ekpenyong & Umoren, 2010:27). Ekpenyong and Umoren (2010:27) state that political instability results from the changes in Government due to "war, revolution, death of political leaders, social unrest, or other influential events" and is mostly thought of after "coups, civil unrest and moments of major political changes, for example nationalisation". Ekpenyong and Umoren (2010:30) have picked political risk to be driving the vitality of foreign investment because it discourages the willingness to invest in the developing countries, as politics play an important part in allocating reliefs.

Ekpenyong and Umoren (2010:30) state that organisations should continuously assess the conditions that may cause political risks and have identified the following measures to predict it:

- Analysing the patterns of political activities of the previous years.
- Use of "analysis framework where various categories of political conditions are rated over different time frames".

- Instability assessment technique that established risk models built on instability measurements.

The unstable Government is regarded as the fifth most critical factor in PPP projects, as any change in government policies can result in additional risks and increased costs (Hwang *et al.*, 2013:429). The political risks from the public sector include "unstable government, strong political interference, nationalisation/expropriation, lack of support from the government, change in tax regulation, inconsistence legal regulatory framework, lack of legal/regulatory framework, and site availability" (Hwang *et al.*, 2013:430). Tang *et al.* (2010:10) state that political hindrance disturbs using PPP projects for infrastructure delivery and some of the government agencies may resist change because of adopting a new delivery or financing approach and because of misunderstanding the methods of development through PPP projects. Generally, it is known that political and social instability are the potential risks that negatively affect the delivery of goods and services through PPP projects (Derrocks, 2010:69). The opposition of stakeholders and public sector contribute to the failure of PPP projects and to mitigate these failures, PPP policies, approaches and political strategies should be tailored to the specific characteristic of each project (Sobuza, 2010:51). This could lead to high cost and delays of projects.

Political risk is associated with the influence of political investment or investor (Boshoff, 2010:19). Boshoff (2010:19) states that, analysing political risk variables include politics, culture, law, economics and international relation are required. Political risk can result from factors that can cause losses by investors internationally, or the Government nationalising and confiscating assets, abandonment of contracts, or loss of business rights (Boshoff, 2010:22).

## 2.7 MANAGEMENT OF NWNCP

The objective of the NWNCP was to contribute to alleviating poverty, job creation, empowering emerging livestock farmers with livestock farming skills, developing entrepreneurship and reintroducing Nguni breed cattle in the North-West Province (Antwi & Oladele, 2013:1; Cwaile *et al.*, 2012:1575). The initiative was a project and it was delivered according to the project management structure. It was initiated by Industrial Development Cooperation, which partnered with the then Department of Agriculture and Rural Development and the North-West University, Mahikeng Campus (Antwi & Oladele, 2013:2; Cwaile *et al.*, 2012:1575).

Since there was an interest across the province, including the politicians, the Board of Trustee for the NWNCP developed the "beneficiaries selection criteria" which assisted the partnering institutions to respond to queries from the stakeholders and the shareholders. The criteria as explained by (Antwi & Oladele, 2013:5) are as follows:

The "land area must be able to accommodate the number of animals at recommended stocking rate; animals must be managed in a controlled area (perimeter fence, camps, water reticulation); contribute maximum of 15 females of breeding age; Proof that daily supervision of livestock will be ensured; the owner's livestock must be certified free of TB and CA prior to the arrival of the project animals; and applicants are expected to participate in a selection process (completion of an application form, short listing, interviews and an on-site visit to verify information provided)" (Antwi & Oladele, 2013:5). The selection criteria excluded "personnel from any of the participating institutions (DARD, NWU and the IDC); all public servants and communities/people benefited from any other projects originating from DARD, NWU and IDC. The successful applicants were required to "identify all animals individually and apply for a registered brand mark; keep comprehensive records of livestock, i.e. supplements, mating, weaning, treatments, vaccines, inoculations, injuries; avail their livestock and livestock records for on-going inspection; participate in prescribed training programmes" (Antwi & Oladele, 2013:5).

The following is the application process as stated by Antwi and Oladele (2013:5): "application forms are properly filled and forwarded to the Project Manager's office; application window is from the 1st of April – 30 June each year (until 2010). All applications are noted in a district register; the applications are then forwarded to the Project Manager's office and noted in an official project application register after 30th of June. The Technical Committee, in collaboration with the Project Manager scrutinises all applications; the applicants are short-listed, and visited by the selected team made up of District Rep., Livestock and Pasture Specialist, Project Manager and Extension Officer; the District Representatives writes a report to the Technical Committee; Technical Committee recommends applicants to the Board of Trustees; the Board of Trustees approves, pending an interview with the relevant applicants. After the Board of Trustees interview of the applicant the approved applicant signs a contract with the Board of Trustees; livestock packs are made available; and training is then provided to the beneficiary".

The North-West Nguni Cattle Project was a project as implied by the name. It consisted of the initiating phase, planning phase, execution phase, monitoring, control phase and the closing phase as the project management processes (Rose, 2013:27). Rose (2013:6) states that a project should identify the requirements, addressed the various stakeholders needs, concerns and expectation, it communicated with the stakeholders, manage stakeholders, which was done by NWNCP, to meet the objectives and balancing the competing project constraints, such as:

- Scope: NWNCP's scope was to re-introduce the Nguni cattle breed, to contribute to poverty alleviation, job creation, empowering farmers with livestock production skills and to develop their entrepreneurship (Antwi & Oladele, 2013:1; Cwaile *et al.*, 2012:1576).
- Quality: The quality of the resources used was good and it made the purchases of the livestock from auctions under the Nguni Breeders Association, or from the Nguni Cattle Stud Breeder.
- Schedule: The project was scheduled to start in 2006 and to be completed in 2011.
- Budget: The IDC and DARD/READ financially budgeted for the project.
- Resources: NWNCP used resources such as human capital from DARD/READ and NWU, purchase resources such as livestock, infrastructure, equipment and other inputs.
- Risks: It was risky to undertake the initiative against the failure of government implemented projects. It was the PPP project in agriculture. The project addressed the impact of the risk factors.

The NWNCP stakeholders included sponsors (IDC & DARD/READ sponsored 1 million Rands each), customers (beneficiaries), sellers and business partners (suppliers of inputs, including auctions and Nguni Cattle Stud Breeder), organisational groups (Nguni Cattle Association, individual Nguni Cattle Stud Breeders, Red Meat Producers Association, etc.) and functional management (Board of Trustees, Technical Committee, and Project Manager and beneficiaries). The project management processes were performed mainly by the Project Manager, assisted by the Technical Committee and Local Development Centres. Project Manager used the labour policies of DARD/READ, but reported to the Board of Trustees, managed the project on behalf of the Board of Trustees. The NWNCP was a project and it was managed as a project.

## 2.8 THEORETICAL FRAMEWORK AND CONTEXTUALISATION

The theoretical and contextualisation of the PPP, developed by the researcher, is presented on the following Figure 2.1:

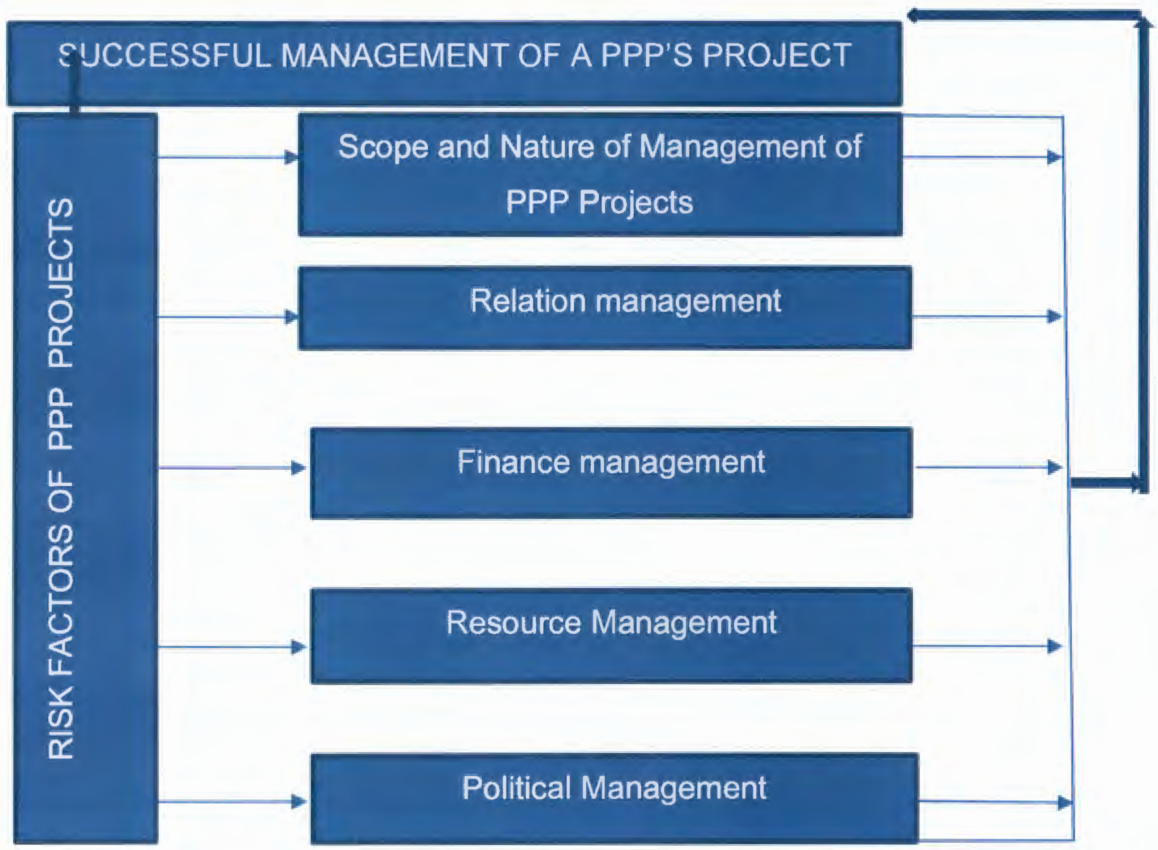


**Figure 2. 1: The theoretical framework and contextualisation of the PPP**

Contextualisation is the process of building a picture of context (Bunn *et al.*, 2015:26). Bunn *et al.* (2015:26) further stated that it refers to interpreting the study relating it to the broader literature.

The PPP projects are an effective way to rescue the public sector to deliver the required good and services to meet the population's needs and desires (Mathonsi, 2013:32). The private sector does not have the expertise, capacity, relevant experience, supportive policies, and financial capabilities to deliver huge infrastructure developments such as schools, highways, hospitals, bridges, jails, water infrastructures, etc. (Mathonsi, 2013:32; Tang *et al.*, 2010).

Although the PPP projects were identified as the effective way of delivering services that were the competency of the public sector (government), and they were successful, there were challenges that led to some of the PPP projects failing, and ultimately abandoning the project at high costs (Akintoye *et al.*, 2008:6; Chou & Pramudawardhani, 2015:1136; Zou *et al.*, 2014:265). The contributory factors to failure were the inability to identify and allocate risks associated with expertise in project management, finance management, relation management, resource management, and political management, and such risks should be allocated appropriately to the participating sector best suited to manage it for the success of the project.

The Public-Private-Partnership project was implemented globally and in Africa, including South Africa, to speed service delivery by the public sector to address the needs of the communities. Most of them experienced similar challenges and the way they responded resulted in either the success or failure. They were failures where risks were not identified and allocated accordingly, though there was a success where the opposite was implemented. Managing the relationship, trust and confidentiality also made the difference.

Public-Private-Partnership is a project because their implementation includes processes such as initiating, planning, execution, monitoring and controlling, and closing (Rose, 2013:5). They are implemented within a determined time frame; i.e. they have starting and ending. Public-Private-Partnership uses schedule, budget, scope, resources, risk, and quality to meet the project requirements (Rose, 2013:5).

The North-West Nguni Cattle Project was a partnership of three institutions with the aim of contributing towards poverty alleviation, job creation, empowering emerging farmers, developing management practices and introducing the Nguni breed (Antwi & Oladele, 2013:1; Cwaile *et al.*, 2012:1576). Public-Private Partnership (PPP) gives a "long-term, sustainable technique to enhancing public company delivery and social infrastructure, bettering the price of the public property and making better use of taxpayers" cash (Mathonsi, 2013:10).

## 2.9 CHAPTER SUMMARY

Provision of infrastructures and service delivery by the public sector failed to produce the desirable outcomes. The failures were mainly caused by constraints faced by the public sector in lack of appropriate expertise, resources (finance) and knowledge in managing projects of such magnitude. The public sector identified the private sector to partner to deliver such service because the latter has the resources, e.g. finances, expertise and experience and can successfully manage risks associated with the projects. Public-Private-Partnership was entered in to accelerate the delivery of huge infrastructures. They also experienced challenges such as appropriately identifying and allocating risks to the competent partner. The risks that adversely affected completion of the project as per schedule were nature and scope project management, financial management, resources management, relationship management and political management. The PPP projects that failed or delayed did not identify and allocate the mentioned risks.

Public-Private-Partnership is effective to address the challenges faced by the public sector and has yielded successful results through the management of the risks. However, there have also been failures that have led to the delay in incompletion, suspension and/or termination of projects at substantial costs and as mentioned, the contributory factor has been the inability/failure to identify and manage risks.

Public-Private-Partnership is a global phenomenon and the reasoning for its use is more or less similar. It is used mainly to deliver capital-intensive infrastructures that require a sizeable investment. Though PPPs have been established long ago (in the $18^{th}$ century in Perish), the intricacy and complexity associated with it because of identifying and managing risks have not made it possible to master its implementation without experiencing challenges that may delay completion or suspend or terminate the project financially.

Public-Private-Partnership implements the project lifecycle. The reason for the establishment of PPP was to deliver satisfactory services to the target group with the available resources, within a specified period and within a set budget. It is managed by a Project Manager, who comes from the private sector because of their experience and competency, within the framework stipulated by the PPP, although the NWNCP Project Manager was from READ and managed by the Board of Trustees.

A similar principle applied to the NWNCP, as it was a project, its outcomes were meant to assist the identified farmers to use the budgeted resources at a stipulated period. The MWNCP used the selection criteria to minimise the political risk from the farmers, political formations, aspiring community, public servants and employees from the collaborated parties and politicians.

# CHAPTER THREE: RESEARCH METHDOLOGY

## 3.1 INTRODUCTION

The methodology applied during research, is the theory of how the research is conducted and it includes assumptions of theoretical and philosophical basis on which a research should be based (Saunders & Lewis, 2009:595). Based on the research problem revealed in Chapter one, a detailed literature reviewed was conducted and elaborated in Chapter two and a theoretical framework was established. Chapter three now outlines the methodology used in this study. This chapter describes and explains the design, methodology and techniques used in the research (Musisi, 2016:42).

## 3.2 RESEARCH PARADIGM AND DESIGN

The study aimed to explore a Public-Private-Partnership success story in the field of agriculture at a local level. Minnie (2011:514) is of the opinion that a research that explores, starts with an uncertain notion of what makes a partnership work, but the literature review reduces the uncertainty. The research explains the challenges encountered in a PPP project and the mitigating intervention to manage and/or eliminate the risks associated with PPP projects. The success of PPP projects is usually realised after achieving the goals of the project and when the public's needs are satisfied (Minnie, 2011:520). It was important to review the existing literature to familiarise with methodologies used to answer research questions. The methodology indicates the procedures to use and the problems encountered and builds confidence to select the appropriate methodology for the research (Kumar, 2011:47). According to Musisi (2016:42), the research methodology is a method used by a researcher to collect, analyse and interpret data in order to address the research objectives. The research methodology also includes the paradigm and design processes for data collection and analysis.

Bryman and Bell (2014:19) define paradigm as "a cluster of beliefs and dictates which for scientists in a particular discipline influence what should be studied, how the research should be done, [and] how results should be interpreted". The paradigm embedded in the physical sciences is called the "systematic, scientific or positivist approach", while the other paradigms that do not conform to these, are called "qualitative, ethnographic, ecological or naturalistic" paradigms (Kumar, 2011:33). Kumar (2011:33) opinionated that positivist paradigms impact both qualitative and quantitative research without substantiating the position and this statement is contradicted by Bryman and Bell (2014:31), who state that the qualitative approach rejects the practice and norms of positivism. The purpose of research determines the mode of inquiry, therefore the paradigm and both methods cannot be used indiscriminately (Kumar, 2011:33). Kumar (2011:33) identified two dissimilarities of a qualitative approach, namely qualitative data as that which focuses more on the measurement of variables and qualitative research that uses methodology.

There is an assumption that paradigm contains objectivist and subjectivist~~,~~ and both can either be regulatory (describing the functioning of the organisation and suggesting some changes) and radical (judging the functioning of the organisation). They are further subdivided into functionalist, interpretative, radical humanist and radical structuralist paradigms (Bryman & Bell, 2014:19). This study adopted the functionalist paradigm, because it is orientated to solve problems of the organisation resulting in logically explaining them (Bryman & Bell, 2014:20).

A research approach is a general orientation on how to do a business research and the approach selected for this research was summative, which explains sampling analysis through data collection and analysis that emphasises words, as stated by Bryman and Bell (2014:41); Taylor *et al.* (2015:4). These authors further stated that a qualitative researchers emphasis inductive that is informed by constructionism and interpretivism, which is generating instead of providing theories, and it rejects natural scientific model and positivism, which emphasise how individuals interpret the social world and regard social reality as constantly shifting and emerging. Bryman and Bell (2014:41) identified naturalism (pursues to understand social truth), ethnomethodology (seeks to understand how dialog and collaboration can create social order), emotionalism (anxious with the subjectivity and attaining access to inside experience) and postmodernism (sensitive to how to construct social reality) as the four traditions of a qualitative approach.

A qualitative research primarily describes a situation, a phenomenon, a problem or event if the information collected by variables measured on nominal or ordinal scale, is conducted to find the variation in the situation, phenomenon or problem without quantifying it, and the depiction of the circumstances of the community (Kumar, 2011:32). Kumar (2011:41) states that the research should use appropriate methods and involve "systematic, controlled, valid and rigours exploration and description of what is not known, and the establishment of associations and causation that permit the accurate prediction of outcomes under a given set of conditions" (Kumar, 2011:41). Kumar (2011:41) further states that research detects gaps in knowledge, verification of what is already famous and identifies past mistakes and restrictions. The research design explains how to answer the research question and should include the study design, logistical arrangements, measuring procedures, sampling strategy, analysis structure and timeframe (Kumar, 2011:41).

Research design is a plan used to conduct research with the aim to achieve the research objectives. It guides the researcher on how to collect, analyse and interpret research data, shows the different parts of work that collectively try to address the research objective and describes the procedure to be implemented (Bryman & Bell, 2014:100; Musisi, 2016:44). Kumar (2011:102) added that it explains in detail the plan to be implemented so that if someone intends to follow the process, it should be repeated in the exact same way. A research design offers a plan that directs the research method to be used as well as the analysis of the data (Bryman & Bell, 2014:100). The design includes, but is not limited to, identifying the study population, determining if it is a sample or not, how to reach the study population, the content of the study, the method of collecting data and the confidentiality of information (Kumar, 2011:206). Musisi (2016:44) further states that the main purpose of the design is to develop the effective and correct answers to the research question. The research design chosen is phenomenological as it is "researching the world through the eyes of those with direct life experiences and make sense of their world" and the researcher, though trying to limit his preconceptions, is part of the interviewing process (Bryman & Bell, 2014:42).

The research design was qualitative in nature as it was based on an inductive rather than a deductive approach and the study adheres to the respondents' concordance concept at which researcher pursue the respondents to agree with the interpretation, presentation, experience, perceptions, and conclusions (Kumar, 2011:104). Bryman and Bell (2014:31) also stated that it is qualitative because it is interpretivist and constructionist, reject the natural scientific model and of positivism, and view social as constantly shifting and emergent.

There are researchers who criticise a qualitative approach, stating that it is too subjective, difficult to replicate, has a problem of generalisation and it lacks transparency, though it is the most appropriate approach to follow in understanding the social reality through the social processes (Bryman & Bell, 2014:50). Kumar (2011:33) attests to this and states that both qualitative and quantitative approaches have their strengths and weaknesses, advantages and disadvantages and neither one is better than the other. Kumar (2011:103) further states that, focusing mainly on a qualitative research approach is to "understand, explain, explore, discover and clarify situation, feelings, perceptions, attitudes, values, beliefs and experiences of other group of people, and is more suitable to explore the variation and uniformity in aspect of social life".

Kumar (2011:122) furthermore identifies several commonly used designs applied in a qualitative approach, which include a case study, oral history, groups/group interviews, participants' observation, holistic research, community discussion forums and a reflective journal log. Musisi (2016:43) refers to research methodology as the method, technique and procedure used in the process of executing the research design.

The current study used an unstructured approach, which is qualitative as stated, because it allows flexibility in objectives, design, sample and the research questions and it explores nature, i.e. variation or diversity in a phenomenon as well as the attitude or problem towards an issue (Kumar, 2011:31). According to Kumar (2011:31), the description of a perceived situation, the historical enumeration of events, an account of the opinions that people have about an issue and a depiction of the dwelling prerequisites of a community are examples of a qualitative approach.

## 3.3 POPULATION AND SAMPLE

The interview for primary data collection included 16 beneficiaries, randomly selected from the four districts, six members of the Board of Trustees, eight members of the Technical Committee and 1 Project Manager. Bryman and Bell (2014:172) state that the random sample provides the research population with the same probability of inclusion.

### Participants

The research was conducted on the NWNCP Board of Trustees, Technical Committee, Project Manager and beneficiaries from the four districts of the North-West Province for the project lifecycle from 2006 to 2011. The stratified sampling used categorised respondents into three homogeneous sub-groups to check the commonalities or differences of their views (Sobuza, 2010:74). Sobuza (2010:74) states that the reason for a range of viewpoints is to achieve insights from the perspective of the private sector and the public sector.

**Sampling procedure (Stratified random sample)**

Collecting information from the population through sampling has advantages and disadvantages. It saves time, finances and human capital and it makes an estimate of the entire population. Bryman and Bell (2014:172); Kumar (2011:178) furthermore explain random or probability sampling as a sampling techniques where each member of the population has an equal and independent chance for selection and it is not influenced by personal preference and other considerations. Therefore, biases are drastically reduced.

In stratified random sampling, the accuracy of the estimate mostly depends on the extent of the variability or heterogeneity of the populace with respect to the traits that have a study correlation with what the researcher is trying to verify and the heterogeneity in the population is reduced if the estimate attains greater truthfulness (Bryman & Bell, 2014:177; Kumar, 2011:185). Bryman and Bell (2014:173); Kumar (2011:185) state that random sampling enables the researcher to stratify the population as homogeneous in a stratum on characteristics based on the stratified, which are clearly distinguishable, and the stratification should relate to the main variable to be explored. Bryman and Bell (2014:174) state that stratified sampling is conducted when it is not difficult to identify and allocate units to strata and a minimum number per each stratum should be selected.

**Sampling methods**

In stratified random sampling, the population is divided into not less than two applicable and important strata, according to attributes that are more than one (Saunders & Lewis, 2009:228). Saunders and Lewis (2009:228) state that stratified random sampling has similar advantages and disadvantages with simple or systematic random sampling and it is a representative of the population for the research because it ensures that all strata are proportionally represented within the sample. It also enables awareness and easy identification of the strata.

Stratified random sampling was used to collect data from the sixteen beneficiaries of the four districts. Quota sampling was used for collecting data from the Board of Trustees, the Technical Committee and the Project Manager and the research aimed to reach all of these members.

**Research instrument – Likert scale questionnaires measures**

A research instrument or research tool is what is used to gather information for the research such as observations, interviews and questionnaires (Kumar, 2011:41). Questionnaires were designed according to a series of questions as on 3.5 and were used as instruments to collect data (Marembo, 2013:12). The questionnaires designed to collect the primary data were divided into six sections, namely demographics, scope and nature of the project, relation management, finance management, resources management and political management for close questions and one open question on their perceived success of the project and recommendations for improvements on future PPP projects.

The formulation of questions was made considering the research question, what is required and how the questions were answered. They should also not be ambiguous, long, double-barrelled, very general, leading, asking two questions, avoiding jargon, acronyms and slang (Bryman & Bell, 2014:204).

The supposition of the summated rating scale, generally known as the Likert scale and each item on the scale have equal attitudinal value, importance or value which reflect an arrogance to the research question. The number of points or categories also depends on the intensity of the attitude and the aptitude of the population to make differences (Kumar, 2011:160). In this research, Likert scale questionnaires, categorised as on the attached research questionnaire, were utilised.

## 3.4 DATA COLLECTION

Data collection is the gathering of information from the interviewees or research published (Musisi, 2016:34). The principle of consent requires to inform the population that they would be interviewed, in their language, because it is unethical to collect information without their knowledge or them being informed about the aims, implication, type of information to be collected, how they would participate and how it would be affected by the research (Bryman & Bell, 2014:124; Kumar, 2011:220).



Data collection for qualitative research emphasises meaning and experience related to the phenomena (Algozzine & Hancock, 2016:51). The data collection for this study was done by the researcher and/or somebody delegated and primary data was collected through interviews using questionnaires (Algozzine & Hancock, 2016:52; Musisi, 2016:46). The instruments used to accumulate information covered structured questionnaires for an interview as well as a structured self-administered questionnaire. The process starts with viewing and analysing the current documents related and applicable to the study of PPP projects, which provides the basis for the research question (Musisi, 2016:47).

A request was written to the Chairperson of the NWNCP Board of Trustees to seek consent to conduct the research on the Board of Trustees, the Technical Committee, the Project Manager and beneficiaries, for the period from 2006 to 2011 (Bickman & Rog, 2008:29). A structured questionnaire was used to gather the required data from the participants (Cwaile *et al.*, 2012:1576).

## 3.5 PROCEDURE

The participants were informed of the objectives of the research and the confidentiality of the information provided or recorded (Cwaile *et al.*, 2012:4), although it was stated on the questionnaires. An interview is a common method used to collect data from respondents. The researcher and the NWNCP Project Manager used questionnaires to interview and collect primary data from the sixteen beneficiaries. Self-administered questionnaires for the Board of Trustees, the Project Manager and the Technical Committee were e-mail to them for completion (Musisi, 2016:49), but for those who were in Mahikeng and nearby areas, questionnaires were hand delivered by the researcher or the Project Manager. (Kumar, 2011:48) states the importance of knowledge of the subject area and the research question to set the parameter of aneffective literature review. This was obtained from records, data, books, published journals and the internet (Kumar, 2011:48).

## 3.6 DATA QUALITY CHECK

The instrument used to collect data in social, health and epidemiological research is the survey base questionnaire. This instrument varies on how respondents are contacted and how the questionnaires are delivered, both of which can be done through visits, telephone, post or e-mails (Bowling, 2005:281). They can have effects that are not similar with respect to accuracy and the quality of data obtained, which can be caused by changes in wording questionnaires, the questions' order or the format of the response as well as how the type of response differ (Bowling, 2005:281). Bowling (2005:281) made mention of the growing replacement of paper and pencil methods with tools used in the market and public opinion research, such as "computer-assisted face-to-face interviewing, computer-assisted telephone interviewing, self-administered computer methods, audio computer-assisted self-administered interviewing, and interactive voice response telephone methods". The use of these technologies was not considered for this study because the majority of the beneficiaries could not access them.

The respondents are burdened with comprehending the question, remembering the information, assessing the connection between the information recovered and what has been asked and communication of the responses and the channel of presenting questionnaires affects the cognitive problem of the respondents (Bowling, 2005:281). Bowling (2005:281) identifies personal, face to face interviews as the most problematic because the respondent should either speak the same language as used for the questionnaire, or it is translated to the respondent and the respondent should have the basic verbal and listening skills.

Data quality is vague and there is no accepted method to evaluate it, because it can be defined on the rates of a survey response, response rate of the items of the questionnaire, the response accuracy, absence of bias and the comprehensiveness of the data obtained (Bowling, 2005:284; De Leeuw, 1988). Data quality was checked by interviewing three different grouping who participated on the project.

## 3.7 DATA ANALYSIS AND INTERPRETATION

The gathering of data depends on the type of information, which is either descriptive, quantitative, qualitative or attitudinal and the way in which the results are communicated (Kumar, 2011:43). Data analysis is the process of searching and arranging the interview transcripts, observation and other non-materials which the researcher has collected to understand the phenomenon (Wong, 2008). The data was coded in a format that the researcher could interpret and represent with no obstacles, as supported by Bryman and Bell (2014:336). Coding as stated by Bryman and Bell (2014:336) is to condense large volumes of data to analyse it qualitatively. In data analyses, key components that underly a particular phenomenon are measured to provide a clear understanding, grouping and reducing into manageable portions, identifying significant pertains to allow clear interpretation, abstract of conclusions and drawing meaning to build a logical chain of evidence (Sobuza, 2010:78; Wong, 2008).

The data was collected and grouped into the Board of Trustees, the Technical Committee, the Project Manager and beneficiaries, from whom the analysis, interpretation and reaching logical conclusions were made. A total number of 31 questionnaires, comprising of six member of the Board of Trustees, eight members of the Technical Committee, 1 Project Manager and 16 beneficiaries were distributed to the participants of the NWNCP operating in the North-West Province. Out of the 31 questionnaires distributed, 28, comprising of five Board of Trustees members, six Technical Committee members, 1 Project Manager and 16 beneficiaries were completed and returned. Therefore, the response rate by the employees was 90.32%.

The data was analysed following a summative approach with the aid of the Statistical Package for Social Sciences (SPSS) as a tool. A statistician was engaged to assist with the analytical interpretation and presentation of the results. A correlation test was performed to establish the relationship as well as the mean, mode, median, frequency and standard deviations (Cwaile *et al.*, 2012:4; Marembo, 2013:12).

## 3.8 DESCRIPTIVE ANALYSIS

The main purpose of the qualitative descriptive analysis was to summarise the experience of the respondents that are captured through the questionnaires (Lambert & Lambert, 2012:225). Lambert and Lambert (2012:225) state that there are researchers who accept the qualitative descriptive approach as the relevant qualitative research design, as it has the epistemological credibility. Qualitative descriptive studies are naturalistic because it studies something in its natural condition, there is no manipulation or prior commitment of variables and it examines the data by using constant comparative analysis (Lambert & Lambert, 2012:225). Lambert and Lambert (2012:225) further state that qualitative descriptive analysis allows using any sampling technique and is effective in getting the answers to the research question.

The collection of data is more focused on ascertaining the nature of the population under research, which involves a less to moderate structured, open-ended individual or a group for the study, but observations, studying of records, reports, photographs and documents may be used (Lambert & Lambert, 2012:225).

## 3.9 UNIVARIATE ANALYSIS

Univariate analysis refers to an analysis where one variable is measured at a time and it uses frequency tables, diagrams, a measure of central tendency and a measure of dispersion to analyse the data (Bryman & Bell, 2014:318). All the mentioned univariate analyses are used but the final selection depends on the statistician.

## 3.10 BIVARIATE ANALYSIS

Bivariate refers to an analysis of two variables at a time to find either side of the mean and is divided into a relationship of causality, contingency tables, Pearson's correlation coefficient *r*, spearman's rho (p) and The Phi coefficient and Cramer's V (Bryman & Bell, 2014:320). Bivariate analysis was not used because the response was to one variable.

## 3.11 MULTIVARIATE

Multivariate analysis uses statistical analysis to "explore the structure of the simultaneous relationship between three or more variables" and it can be used if the relationship has been spurious, if there was an intervening variable and if the third variable moderated the relationship (Bryman & Bell, 2014:328). The researcher did not use multivariate analysis in this instance.

## 3.12 CORRELATION COEFFICIENT

Correlation coefficient examines the strength of the linear relationship between two variables (Bryman & Bell, 2014:322). The statistical significance of the correlation coefficient based on a random sample "provide(s) the likelihood that the coefficient was found in the population" and the statistical significance is affected by the size of the computed coefficient and of the sample (Bryman & Bell, 2014:327). The Statistical

Package for Social Sciences which produces statistical significant information (Bryman & Bell, 2014:27), was used.

## 3.13 FACTOR ANALYSIS EXPLORATORY

Factor analysis offers facts about reliability and item quality, assembles validity and generally aims to apprehend whether or not and to what extent objects from a scale may additionally replicate an underlying hypothetical assemble or constructs, known as factors (Suhr, 2006:2).

The exploratory factor analysis was developed by psychologists who were searching for "the neat and tidy human intellectual abilities lead to the development of factor analytic methods" and is an orderly basic measure that is interconnected (Suhr, 2006:2). It was used customarily to explore the probable underlying structures of an asset of interconnected variables without imposing predetermined structure on the results and the hypothesis and fundamental factor structures should be known (Suhr, 2006:2). Suhr (2006:2) states that the exploratory factor analysis was "to help an investigator determine the number of latent constructs underlying a set of items (variables), to provide a means of explaining variation among variables (items) using a few newly created variables (factors), e.g., condensing information, and to define the content or meaning of factors"

Suhr (2006:2) stated the following characteristics of the exploratory factor analysis:

- It is a technique that identifies the number of latent constructs and the underlying factor structure of a set of variables.
- It hypothesises an underlying construct, a variable not measured directly.
- It estimates factors which influence responses on observed variables.
- It allows you to describe and identify the number of latent constructs (factors).
- It includes unique factors and error due to unreliability in measurement.
- It traditionally has been used to explore the possible underlying factor structure of a set of measured variables without imposing any preconceived structure on the outcome.

Goals of the exploratory factor analysis according to Suhr (2006:2) are:

- to help an investigator determine the number of latent constructs underlying a set of items (variables);
- to provide a means of explaining variation among variables (items) using a few newly created variables (factors), e.g. condensing information; and
- to define the content or meaning of factors, e.g. latent constructs.

Suhr (2006:2) stated the assumptions underlying the exploratory factor analysis as:

- Interval or ratio level of measurement
- Random sampling
- The relationship between observed variables is linear
- A normal distribution (each observed variable)
- A bivariate normal distribution (each pair of observed variables)
- Multivariate normality

Exploratory factor analysis was not used for this research. It is one of the analytical proceedure that is suitable for this type of research. It is stated as researchers may consider to use it for their study.

### 3.14 ANALYSIS OF VARIANCE TEST (ANOVA)

Deviant (2011) stated that it is used to analyse the differences that exist among more than two groups. It is used to find out the existing differences in the perceived fairness and how the assessment system between different ages, departments and positions performed. Hence the analytical tool was used for this study.

### 3.15 VALIDITY AND RELIABILITY

Bryman and Bell (2014:43) stated that research validity, reliability and generalisability measure the quality rigour and wider potential for research. Bryman and Bell (2014:44) and other researchers further propose that validity and reliability can be external and internal. Applying validity and reliability in qualitative research presumes that the research is feasible and that absolute truth can be revealed about the social world and that the research should be credible, transferable, dependable and confirmable (Bryman & Bell, 2014:44). Though interviews are exploratory and therefore conducted under a qualitative approach, they are also descriptive and require objectivity, accuracy, inclusiveness and the ascertainment that recordings reflect what the respondents have said (Thabane, 2015:112).

Kumar (2011:166) defines validity as “the degree to which the researcher has measured what he has set out to measure”. Furthermore, validity is the integrity of the conclusion generated from research (Bryman & Bell, 2014:24). In a qualitative research approach, validity is the accuracy and precision of the data to the research question and reduces the researcher’s bias because of personal perceptions, assumptions and interpretation (Sobuza, 2010:79).

Validity and reliability measure the degree to which there may be errors (Thabane, 2015:110). Reliability is the repeatability of the data collection techniques and analytical procedures repeated and/or replicated on other occurrences to obtain the research results (Bryman & Bell, 2014:24; Thabane, 2015:110). Thabane (2015:110) further states that reliability measures the uniformity of the research variables to what it intended to measure. It is the possibility of another ethnographer arriving at the same finding if the research was repeated (Thabane, 2015:112).

With a qualitative research approach, the possibility of the researcher being biased because of personal perceptions, assumptions and interpretation, do exist. Such biases are eliminated by the validity of the research (Sobuza, 2010:80). With the particular study, the researcher had to do his best to eliminate biases as he was a member of the Technical Committee and care was exercised to use beneficiary language, to record the perspective of the respondents when interviewing and to limit the interviewer’s interpretation of the respondents' comments, as supported by Sobuza (2010:80). The interviewers differentiate what the respondents say and what they do (Thabane, 2015:111).

The reliability results of the study, measured by means of Cronbach’s Alpha, are presented in Table 1.1.

**Table 1. 1: Reliability test using Cronbach's Alpha**

| Data | Cronbach's Alpha | Items | Comments |
|---|---|---|---|
| NWNCP in the North-West Province | 0.928 | 50 | Excellent and consistent |

The reliability analysis revealed that the study has a Cronbach's alpha value of 0.928, which is greater than the cut-off point of 0.7. Therefore, it is concluded that approximately 93% of all statements are excellent and a consistent measure of the research objectives.

## 3.16 CHAPTER SUMMARY

This chapter introduced the scope and explained the methodology used for the research. Furthermore, the research paradigm and design, population and sample, data collection, data analysis and interpretation, validity and reliability and summary of Chapter Three were provided. The type of research was qualitative and utilised a summative approach to analyse data. The questionnaires were used for collecting primary data. There were certain measures in place to verify the accuracy, validity and reliability of the data.

## CHAPTER FOUR: DATA ANALYSIS AND INTERPRETATION OF RESULTS

### 4.1 INTRODUCTION

This chapter presents findings from the analysis of data and interprets the results. The data was collected from the members of the Board of Trustees, the Technical Team, the Project Manager and beneficiaries for the period 2006 to 2011. The data from the questionnaire was captured and analysed in order to address the research objectives.

### 4.2 DEMOGRAPHIC DETAILS OF PARTICIPANTS

This section presents results on personal characteristics of the respondents relating to the NWNCP. The focus was on the role played in the project, the age of participants, the level of education, work experience and location in terms of district. All these characteristics of the participants in one way or another had direct bearing on the success of the project.

#### 4.2.1 Role of participant in NWNCP

This finding is consistent with the work of Chetty (2011:17) who argues that PPP is "a contract between a public sector or municipality and a private party, in which the private party assumes substantial financial, technical and operational risks of a project", It is also supported by (Nyagwachi, 2008:1), who noted that South Africa introduced PPPs legislation in the 1990s due to the slow pace of services delivery, which resulted in protests across the country. Public-Private-Partnership was therefore deemed a solution to accelerate service delivery and impact skills to citizens. These statements support the participating institurions who delivered a successful project. Their role was to minimise the risks associated with implementing the projects.

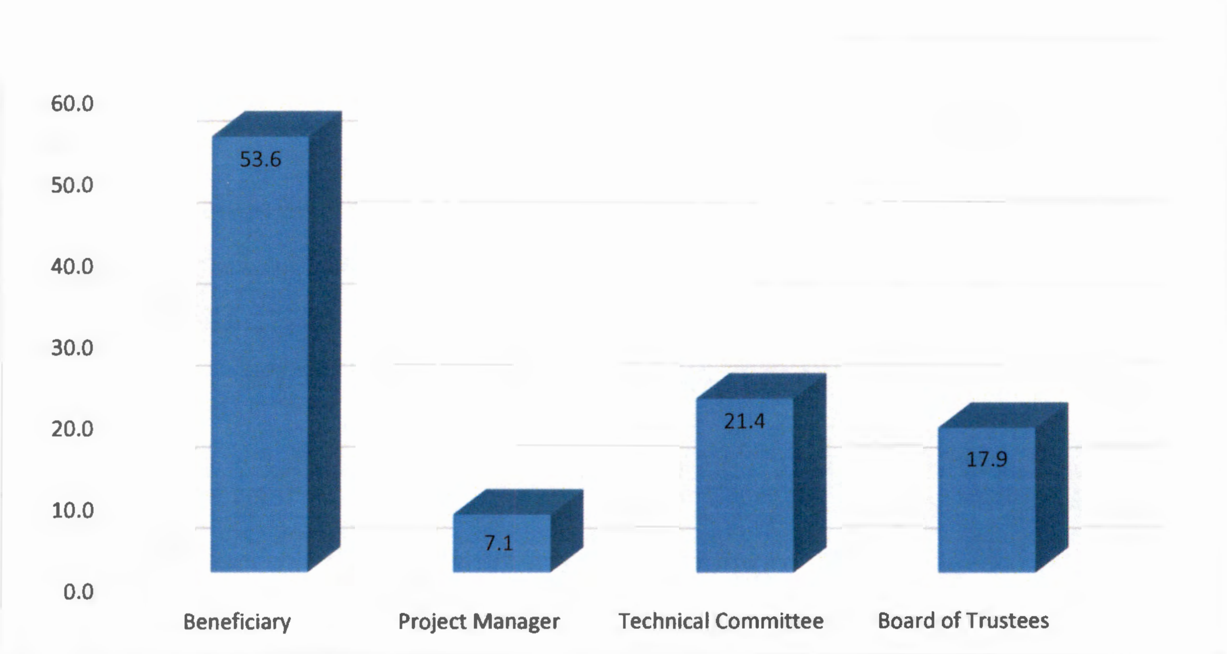


**Figure 4. 1: Role played in the NWNCP**

An analysis from Figure 4.1 shows that the beneficiary (53.6%) carried most of the role and the least (7.1%) were Project Managers. The NWNC project was dominated by the beneficiaries and skills were transferred, leading to the success rate of all beneficiaries of the project from 2006-2011.

### 4.2.2 Age distribution of participants by group

The majority of the participants, namely 67%, was from the age category 50-years old and above. These findings are consistent with Cwaile *et al.* (2012:1577) who found that the majority of old people was involved in agricultural production as compared to the youth, namely 25%.

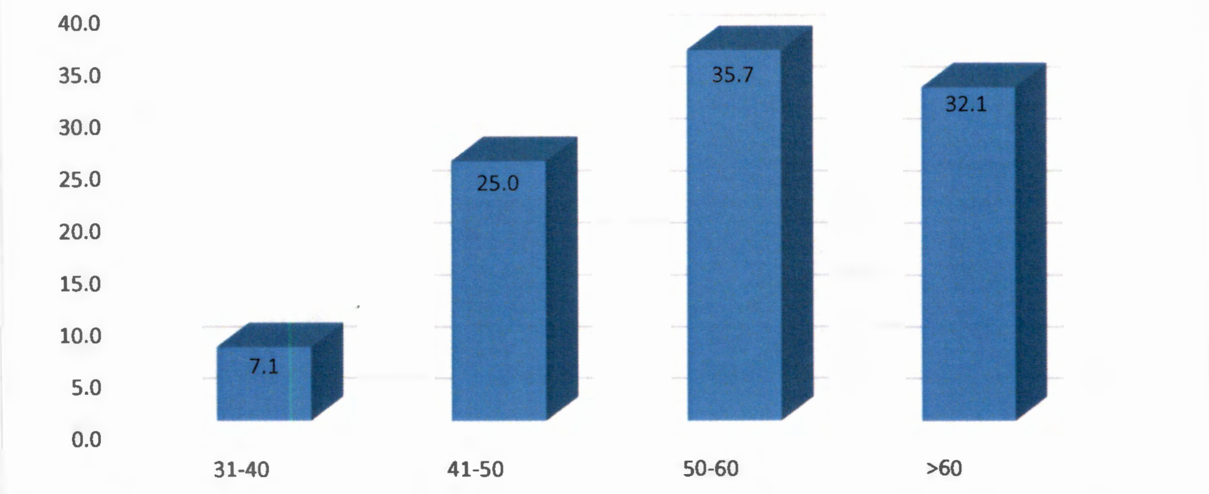


**Figure 4. 2: Age group**

Figure 4.2 depicts that the majority (67.8%) of the respondents falls in the age group 50 years and above, followed by 41–50 years with 25%. The least respondents fall between the age group of 30–40, namely 7.1%. This clearly shows that the age group 50-years and above dominates the age category.

### 4.2.3. Educational level of the NWCP participants

The 85.7% (14.3+10.7+10.7+14.3=35.7) of the respondents in Figure 4.3 has education above primary. The level of education for the study was raised by the Board of Trustees, the Technical committee and the Project Manager who all have tertiary qualifications.

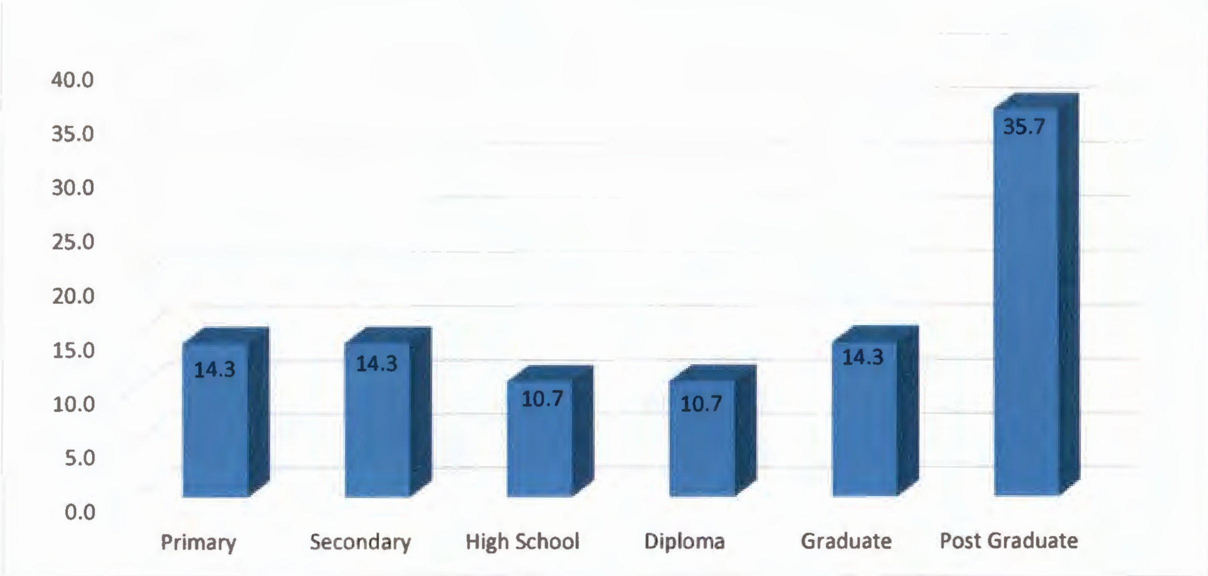


**Figure 4. 3: Level of education**

Figure 4.3 above depicts that the majority (60.7%) of the respondents has some form of a tertiary qualification and the difference (39.3%) has some schooling between primary and high school proficiency. The finding is supported by Cwaile *et al.* (2012:1577) who also found that about 62% of the respondents had some form of primary education.

### 4.2.4. Work experience of the NWNCP participants

The majority of the respondents, namely 88.9%, has experience with the NWNCP of more than seven years. These findings are supported by Cwaile *et al.* (2012:1577) who depicted 100% of respondents who had experience in agriculture.

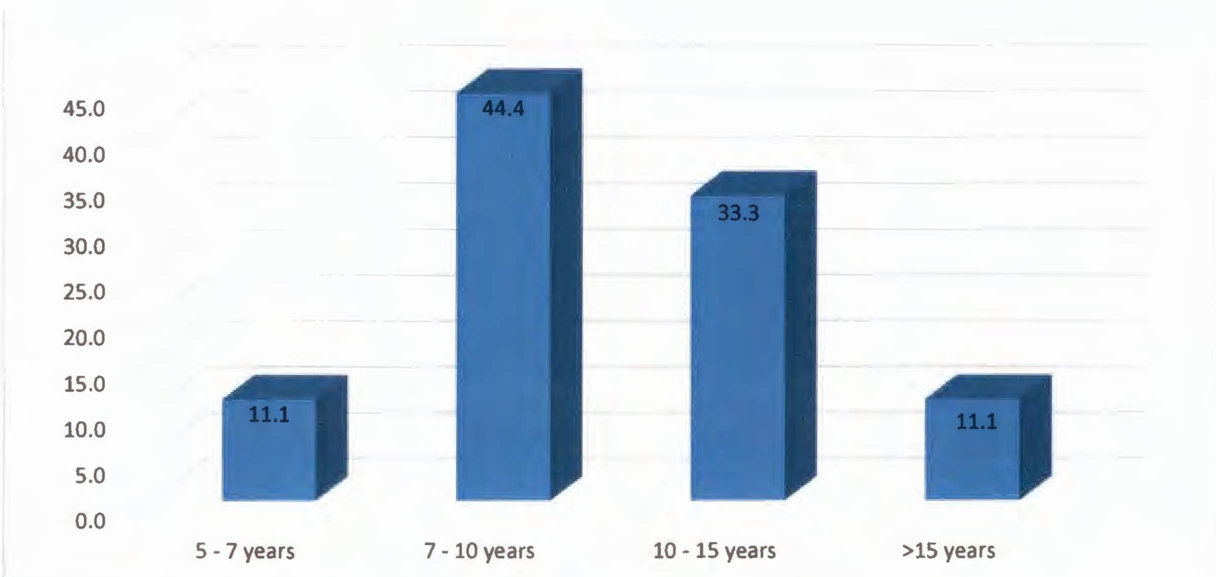


**Figure 4. 4: Work experience with the NWNCP**

Figure 4.4 above shows that the majority (77.7%) of respondents has work experience with NWNCP of between 7 years and 15 years.

### 4.2.5 District and institution of NWNCP participants

The most represented districts are Ngaka Modiri Molema and Dr Kenneth Kaunda with a total of 51.8%, followed by Dr Ruth Segomotsi Mompati with 18.5%. This is an indication of how the participants were spread out in the North-West Province.

The distribution of participants per institution is 85.2% for READ, followed by NWU with 11.1% and IDC with 3.7%. The skewed distribution per institution was brought about by the beneficiaries and the members of the Technical Committee.

## 4.3 CORRELATION ANALYSIS ON NWNCP

The Pearson correlation technique was used to establish if any form of association amongst the six different constructs (scope and nature of the project, relationship management practices, financial management practices, resource allocation, and political allocation) existed. The results from the analysis are presented in Table 4.1.

**Table 4. 1: Pearson correlation analysis**

| | | Scope and nature of the project | Relationship management practices | Financial management practices | Resource allocation | Political allocation |
|---|---|---|---|---|---|---|
| Scope and nature of the project | Pearson Correlation | 1 | 0,285 | 0,097 | 0,258 | 0,207 |
| Relationship management practices | Pearson Correlation | 0,285 | 1 | 0,650** | 0,238 | 0,191 |
| Financial management practices | Pearson Correlation | 0,097 | 0,650** | 1 | 0,185 | 0,148 |
| Resource allocation | Pearson Correlation | 0,258 | 0,238 | 0,185 | 1 | 0,352 |
| Political allocation | Pearson Correlation | 0,207 | 0,191 | 0,148 | 0,352 | 1 |

**Correlation is significant at the 0.01 level (2-tailed)

The results reflect a pairwise correlation between the scope and nature of the project, the relationship management practices, the financial management practices, resource allocation and political allocation. Findings revealed that the correlation coefficient ranges between 0.097 and 0.650 indicating a weak positive but significant association between the scope and nature of the project and relationship management practices, financial management practices, resource allocation and political management.

The analysis also found a weak positive but significant association between relationship management practices, resource allocation and political allocation. There was also a weak but significant association between financial management practices, resource allocation and political interference. A weak but significant association was also found between resource allocation and political risk. Furthermore, a significant but positive moderate association was found to exist between relationship management practices and financial management practices. All the associations among the constructs were found to be significant at 1% level of significance.

The implication of the findings is that the risk factors between the scope and nature of the project and relationship management practices, financial management practices, resource allocation and political management have an impact on the success of the implementation of PPP projects and such success will be realised by identifying and appropriately allocating them to the sector with the capacity and capability to manage them.

The findings answer the research objectives of determining the between the scope and nature of the project and relationship management practices, financial management practices, resource allocation and political management that led to the success of the NWNCP.

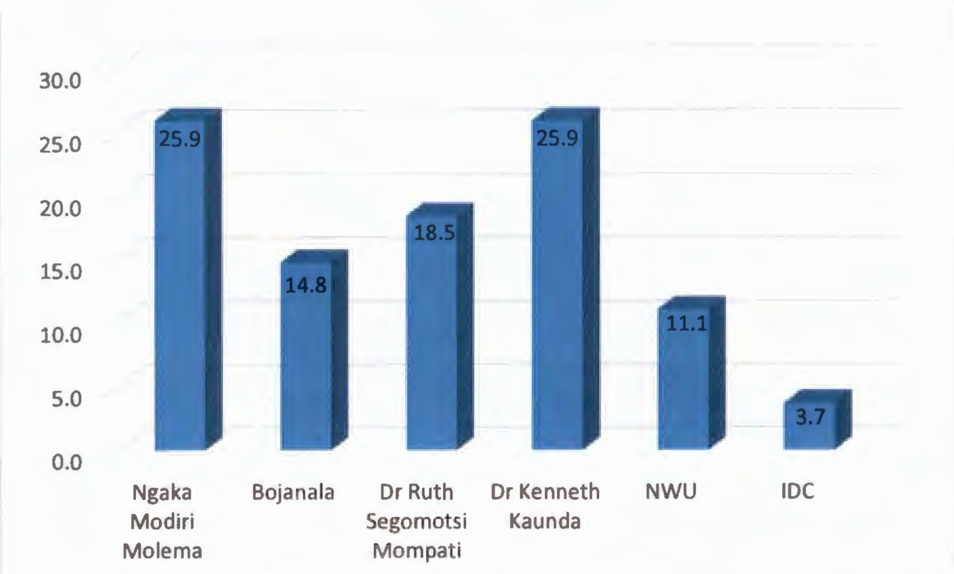


**Figure 4. 5: Participants per District or Institution**

Figure 4.5 above shows the distribution of participants per district where they were surveyed from and it also depicts that Dr. Kenneth Kaunda and Ngaka Modiri Molema Districts have 25.9% of the respondents respectively, which constitutes to 51% of the respondents.

## 4.4 ANALYSIS ON SCOPE AND NATURE OF NWNCP

Ten statements were made which explored the scope and nature of the NWNCP and participants were required to either strongly disagree, disagree, stay neutral, strongly agree or agree. The statements and results from the analysis are presented in Table 4.2 in percentages.

**Table 4. 2: Scope and nature of the project**

| Statements | Strongly Disagree | Disagree | Agree | Strongly Agree | Total |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | |
| The NWNC project objective is clearly defined | 0(0.0%) | 0(0.0%) | 16(57.1%) | 12(42.9%) | 28(100%) |
| The stakeholders managing the project were outlined. | 0(0.0%) | 0(0.0%) | 12(42.9%) | 16(57.1%) | 28(100%) |
| A realistic schedule was developed | 0(0.0%) | 0(0.0%) | 21(77.8%) | 6(22.2%) | 27(100%) |
| Beneficiaries were determined in the project initiation phase | 0(0.0%) | 0(0.0%) | 15(53.6%) | 13(46.4%) | 28(100%) |
| The business environment is known | 0(0.0%) | 3(10.7%) | 19(67.9%) | 6(21.4%) | 28(100%) |
| Beneficiaries expectations are determined | 0(0.0%) | 1(3.5%) | 19(67.9%) | 8(28.6%) | 28(100%) |
| The business plan is known | 1(3.6%) | 2(7.1%) | 20(71.4%) | 5(17.9%) | 28(100%) |
| The role of the participating sector was defined and known | 0(0.0%) | 0(0.0%) | 20(71.4%) | 8(28.6%) | 28(100%) |
| The contractual obligations are documented and known | 0(0.0%) | 0(0.0%) | 13(46.4%) | 15(53.6%) | 28(100%) |
| The beneficiaries understood their contractual obligations | 0(0.0%) | 0(0.0%) | 16(57.1%) | 12(42.9%) | 28(100%) |

With regard to an analysis of the responses to statements relating to the scope and nature of the project management practices that led to the success of the NWNCP, respondents were requested to respond to the ten statements and were asked to rate each item on a scale of 1 to 4 (1=strongly agree; 2=agree; 3=disagree and 4= strongly disagree).

The results on the **Nature and scope of the project are** as follow:

- 100% of the respondents indicated that the NWNC project objective is clearly defined; agree that the stakeholders managing the project are outlined; concur that a realistic schedule has been developed; agree that the business environment is known and lastly that the beneficiaries are determined in the project initiation phase.
- The majority, namely 89.2% (67.9% agree and 21.4% strongly agree respectively), concurs that the business environment is known.
- 96.5% (67.9% agree & 28.6% strongly agree respectively) of the respondents agree that beneficiaries' expectations are determined.
- 89.3% (71.4% agree & 17.9% strongly agree respectively) agree that the business plan is known.
- 100% of the respondents agree that the role of the participating sector has been defined and is known, that the contractual obligations have been documented and are known and that the beneficiaries understand their contractual obligations.

A contract is one of the mechanisms of managing the engagement of the stakeholders to increase the success of the project and how the BoT ensures that the Nguni allocated are managed according to the stipulations of the project. Antwi and Oladele (2013:5) state that successful applicants signed " a contract with the Board of Trustees". The experience of failed projects due to a lack of commitment and/or using the project for intentions other than the project objectives, led to the signing of the contract to ensure that the beneficiaries hold to the livestock for the BoT.

## 4.5 ANALYSIS ON RELATIONSHIP MANAGEMENT PRACTICES OF NWNCP

This section of the study presents the findings relating to the relationship management practices. The results are summarised in Table 4.3 below.

**Table 4. 3: Relationship management practices**

| Statements | Strongly Disagree | Disagree | Agree | Strongly Agree | Total |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | |
| There is a continuous communication with the stakeholders | 0(0.0%) | 1(3.6%) | 18(64.3%) | 9(32.1%) | 28(100%) |
| There was a good working relationship among the participating sectors | 0(0.0%) | 0(0.0%) | 12(42.9%) | 16(57.1%) | 28(100%) |
| The changes for all stages were well communicated to the relevant parties | 0(0.0%) | 1(3.6%) | 22(78.6%) | 5(17.6%) | 28(100%) |
| The partnership among READ, IDC, and NWU harmonious for success | 0(0.0%) | 0(0.0%) | 12(42.9%) | 16(57.1%) | 28(100%) |
| There was transparency among the role players | 0(0.0%) | 1(3.6%) | 15(53.6%) | 12(42.9%) | 28(100%) |
| The contractual obligation of the participating sectors was clear | 0(0.0%) | 0(0.0%) | 15(53.6%) | 13(46.4%) | 28(100%) |
| The individual stakeholder's expectations of the project were expressed at initiation phase | 1(3.6%) | 2(7.1%) | 17(60.7%) | 8(28.6%) | 28(100%) |
| All the risks were identified and treatment plans set aside to mitigate them | 1(3.6%) | 3(10.7%) | 21(75.0%) | 3(10.7%) | 28(100%) |
| Risks progress reports were communicated to all stakeholders on continuous basis | 2(7.1%) | 2(7.1%) | 21(75.0%) | 3(10.7%) | 28(100%) |
| The disagreements among the participating sectors' officials handle well | 1(3.6%) | 2(7.1%) | 20(71.4%) | 5(17.9%) | 28(100%) |

In Table 4.3, the responses to the questions relating to the relationship management practices that led to the success of the NWNCP are presented. The respondents were requested to respond to ten statements and to rate each item on a scale of 1 to 4 (1=strongly agree; 2=agree; 3=disagree and 4= strongly disagree).

The results on the **Relationship Management Practices** are as follow:

- 96.4% (64.3% & 32.1%) of the respondents indicated that there was a continuous communication with the stakeholders.
- 100% concurred that there was a good working relationship among the participating sectors.
- 96.2% (78.6% agree & 17.6% strongly agree respectively) agreed that the changes for all stages were well communicated to the relevant parties.
- 100% agreed that the partnership among READ, IDC and NWU was harmonious for success.
- 96.5% (53.6% agree & 42.9% strongly agree respectively) agreed that there was transparency among the role players.
- 100% of the respondents concurred that the contractual obligation of the participating sectors was clear,
- 89.3% (60.7% agree & 28.6% strongly agree respectively) concurred that the individual stakeholder's expectations of the project were expressed at the initiation phase,
- 85.7% (75% agree & 10.7% strongly agree respectively) agreed that all the risks were identified and treatment plans set aside to mitigate them.
- 85.7% (75% agree & 10.7% strongly agree respectively) agreed that risk progress reports were communicated to all stakeholders on a continuous basis.
- 89.3% (71.4% agree & 17.9% strongly agree respectively) agreed that the disagreements among the participating sectors' officials were handled well. If a relationship is not handled properly, it will lead to misunderstanding among the participating parties (Tang *et al.*, 2010:19). Chan *et al.* (2003:526) identified the use of better communication to establish common goals and objectives to improve working relationships and further emphasised the possibility of problems that might arise and the agreement on how to solve these problems.

## 4.6 ANALYSIS ON FINANCIAL MANAGEMENT PRACTICES OF THE NWNCP

This section of the study presents the findings relating to the financial management practices. The results are summarised in Table 4.4 below.

**Table 4. 4: Financial management practices**

| Statements | Strongly Disagree | Disagree | Agree | Strongly Agree | Total |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | |
| The approved project budget was known | 2(7.1%) | 1(3.6%) | 19(67.9%) | 6(21.4%) | 28(100%) |
| The budget was used for sole execution of the project | 2(7.1%) | 0(0.0%) | 12(42.9%) | 14(50.0%) | 28(100%) |
| Strict adherence to the planned targets had a significant impact on the project success | 1(3.6%) | 1(3.6%) | 16(57.1%) | 10(35.7%) | 28(100%) |
| Project performance was improved with regular oversight and accountability | 0(0.0%) | 0(0.0%) | 9(32.1%) | 19(67.9%) | 28(100%) |
| Constant and consistent monitoring of the finances enhanced the project. | 2(7.1%) | 1(3.6%) | 16(57.1%) | 9(32.1%) | 28(100%) |
| Stakeholders were aware of their financial management responsibilities. | 2(7.1%) | 1(3.6%) | 22(78.6%) | 3(10.7%) | 28(100%) |
| There were no delaying red-tapes when accessing funds | 2(7.1%) | 6(21.4%) | 17(60.7%) | 3(10.7%) | 28(100%) |
| There was transparency amongst all the role players on the uses of funds | 2(7.1%) | 0(0.0%) | 20(71.4%) | 6(21.4%) | 28(100%) |
| Controls were put in place to monitor the correct use of the available funds | 2(7.1%) | 2(7.1%) | 16(57.1%) | 8(28.6%) | 28(100%) |
| There were steps taken to improve the financial performance if not in line with the set targets | 2(7.1%) | 3(10.7%) | 18(64.3%) | 5(17.9%) | 28(100%) |

In Table 4.4, the responses to the questions relating to financial management strategies that led to the success of the NWNCP are presented. The respondents were requested to respond to ten statements and were asked to rate each item on a scale of 1 to 4 (1=strongly agree; 2=agree; 3=disagree and 4=-strongly disagree).

The results of the **Financial Management Practices are as follows:**

- 89.3% (67.9% agree & 21.4% strongly agree respectively) of the respondents agreed that the approved project budget was known.

- 92.9% (42.9% agree & 50% strongly agree respectively) concurred that the budget was used for the sole execution of the project.
- 92.8% (57.1% agree & 35.7% strongly agree respectively) agreed that strict adherence to the planned targets had a significant impact on the project success.
- 100% of the respondents were of the view that project performance was improved with regular oversight and accountability.
- 89.2% (57.1% agree & 32.1% strongly agree respectively) agreed that constant and consistent monitoring of the finances enhanced the project.
- 89.3% (78.6% agree & 10.7% strongly agree respectively) concurred that stakeholders were aware of their financial management responsibilities.
- 71.4% (60.7% agree & 10.7% strongly agree respectively) were of the view that there were no delaying red-tapes when accessing funds.
- 92.8% (71.4% agree & 21.4% strongly agree respectively) concurred that there was transparency amongst all the role players on the uses of funds.
- 85.7% (57.1% agree & 28.6% strongly agree respectively) were of the view that controls were put in place to monitor the correct use of the available funds.
- 82.2% (64.3% agree & 17.9% strongly agree respectively) agreed that there were steps taken to improve financial performance if not in line with the set targets. Efforts were taken to implement the project within the approved budget. There was a regular reports on the utilisation of the budget.

## 4.7 ANALYSIS ON RESOURCE ALLOCATION PRACTICES OF THE NWNCP

This section of the study presents the findings relating to the resource allocation. The results are summarised in Table 4.5 below.

**Table 4. 5: Resource allocation**

| Statements | Strongly Disagree | Disagree | Agree | Strongly Agree | Total |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | |
| There was required human resource skills | 0(0.0%) | 0(0.0%) | 20(71.4%) | 8(28.6%) | 28(100%) |
| Livestock was distributed in time and in good condition | 0(0.0%) | 1(3.6%) | 19(67.9%) | 8(28.6%) | 28(100%) |
| Handling facilities were distributed within a reasonable period | 0(0.0%) | 3(10.7%) | 17(60.7%) | 8(28.6%) | 28(100%) |

| | | | | | |
|---|---|---|---|---|---|
| Machinery and equipment to care for the livestock were provided | 0(0.0%) | 5(17.9%) | 17(60.7%) | 6(21.4%) | 28(100%) |
| There is lack of infrastructure and facilities | 3(10.7%) | 16(57.1%) | 7(25.0%) | 2(7.1%) | 28(100%) |
| There is access to veterinary services | 0(0.0%) | 2(7.1%) | 21(75.0%) | 5(17.9%) | 28(100%) |
| Feed and supplements were provided | 6(21.4%) | 17(60.7%) | 5(17.9%) | 0(0.0%) | 28(100%) |
| The technical advices from READ and NWU officials were conflicting | 7(25.0%) | 16(57.1%) | 3(10.7%) | 2(7.1%) | 28(100%) |
| Beneficiaries were trained on livestock management practices and confusing | 2(7.1%) | 15(53.6%) | 6(21.4%) | 5(17.9%) | 28(100%) |
| Beneficiaries kept records of the resources received | 1(3.6%) | 0(0.0%) | 20(71.4%) | 7(25.0%) | 28(100%) |

In Table 4.5, the responses to the questions relating to resource allocation strategies that led to the success of the NWNCP are presented. The respondents were requested to respond to ten statements and were asked to rate each item on a scale of 1 to 4 (1=strongly agree; 2=agree; 3=disagree and 4= strongly disagree).

The results for the **Resource Allocation** are as follow:

- 100% of the respondents agreed that there was required human resource skills,
- 96.5% (67.9% agree & 28.6% strongly agree respectively) concur that livestock was distributed in time and in good condition.
- 89.3% (60.7% agree & 28.6% strongly agree respectively) agreed that handling facilities were distributed within a reasonable period.
- 82.1% (60.7% agree & 21.4% strongly agree respectively) were of the view that machinery and equipment to care for the livestock were provided.
- 67.8% (10.7% agree & 57.1% strongly agree respectively) disagreed that there was a lack of infrastructure and facilities.
- 92.9% (75% agree & 17.9% strongly agree respectively) of the respondents agreed that there was access to veterinary services.
- 82.1% (21.4% agree & 60.7% strongly agree respectively) were not of the view that feed and supplements were provided.

- 82.1% (25% agree & 57.1% strongly agree respectively) agree that the technical advice from READ and NWU officials were conflicting,
- 60.7% (7.1% & 53.6%) disagreed that beneficiaries were trained on livestock management practices and confusing.
- 96.4% (71.4% agree & 25% strongly agree respectively) concurred that beneficiaries kept records of the resources received. The purpose of the project was to teach the beneficiaries to keep records on activities of the project. The resources received was used to teach recordkeeping.

## 4.8 ANALYSIS ON POLITICAL MANAGEMENT PRACTICES OF NWNCP

This section of the study presents the statements relating to the resource allocation. The results are summarised in Table 4.6 below.

**Table 4. 6: Political management**

| Statements | Strongly Disagree | Disagree | Agree | Strongly Agree | Total |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | |
| The political environment was stable | 0(0.0%) | 3(11.1%) | 20(74.1%) | 4(14.8%) | 27(100%) |
| There was no political interference in the implementation of the project | 1(3.7%) | 2(7.4%) | 20(74.1%) | 4(14.8%) | 27(100%) |
| The change of political heads affected the project negatively | 5(18.5%) | 18(66.7%) | 2(7.4%) | 2(7.4%) | 27(100%) |
| There was institutional interference | 6(22.2%) | 17(63.0%) | 4(14.8%) | 0(0.0%) | 27(100%) |
| Political policies had no negative impact on the project | 1(3.7%) | 2(7.4%) | 20(74.1%) | 4(14.8%) | 27(100%) |
| The Government supported the project | 1(3.7%) | 1(3.7%) | 13(48.1%) | 12(44.4%) | 27(100%) |
| The project had a legal framework | 1(3.6%) | 0(0.0%) | 17(60.7%) | 10(35.7%) | 28(100%) |
| There was no disrupting influence by either of participating sectors | 7(25.0%) | 17(60.7%) | 3(10.7%) | 1(3.6%) | 28(100%) |
| There were complains with selection criteria | 4(14.3%) | 16(57.1%) | 6(21.4%) | 2(7.1%) | 28(100%) |
| Nguni cattle was ideal for beef improvement in North West | 3(10.7%) | 3(10.7%) | 15(53.6%) | 7(25.0%) | 28(100%) |

In Table 4.6, the responses to the questions relating to political management strategies that led to the success of the NWNCP are presented. The respondents were requested to respond to ten statements and were asked to rate each item on a scale of 1 to 4 (1=strongly agree; 2=agree; 3=disagree and 4= strongly disagree).

The results for the **Political Management** are as follow:

- 88.9% (74.1% agree & 14.8% strongly agree respectively) of the respondents agreed that the political environment was stable.
- 88.9% (74.1% agree & 14.8% strongly agree respectively) agreed that there was no political interference in the implementation of the project.
- 85.2% (18.5% agree & 66.7% strongly agree respectively) disagreed that the change of political heads affected the project negatively.
- 85.2% (22.2% agree & 63% strongly agree respectively) were against the view that there was institutional interference.
- 88.9% (74.1% agree & 14.8% strongly agree respectively) were of the view that political policies had no negative impact on the project.
- 92.5% (48.1% agree & 44.4% strongly agree respectively) agreed that the Government supported the project.
- 96.4% (60.7% agree & 35.7% strongly agree respectively) were opposed to the issue that the project had a legal framework.
- 85.7% (25% agree & 60.7% strongly agree respectively) disagreed that there was no disrupting influence by either of participating sectors.
- 71.4% (53.6% & 25%) were against the view that there were complains about selection criteria.
- 78.6% (53.6% agree & 25% strongly agree respectively) agreed that the Nguni cattle breed was ideal for beef improvement in North West. Nguni cattle breed is suitable for the semi-arid of the North-West Province. The results was based on their performance as observed by the participants.

## 4.9 COMPARING MEAN SCORES, AGE GROUP, EDUCATIONAL LEVEL AND THE DIFFERENT CONSTRUCTS

In order to determine the difference in respondents' age group and education level together with the mean scores of scope and nature of the project, relationship management practices, financial management practices, resource allocation and political allocation, analysis of variance test (ANOVA) were computed. The results are presented in the tables to follow.

### 4.9.1 Comparing mean scores, age group to all six constructs

The survey instrument had five categories of measurements of the age group of which category 1 had no responses. The age group categories were collapsed into four categories: (2) Post levels 31 – 40 years; (3) 41 – 50; (4) 51 – 60; and (5) >60. Tukey's post hoc multiple comparison procedures were computed to identify specific groups among the four, which were significantly different in each of the four scales of age category. There was a significant difference between category 2 (mean = 2.50) and category 4 (mean = 3.70) and between category 2 (mean = 2.50) and category 5 (mean = 4.00).

**Table 4. 7: Comparing age group and mean score of all six constructs**

| | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| Scope and nature of the project | Between Groups | 0,900 | 3 | 0,300 | 1,302 | 0,297 |
| | Within Groups | 5,529 | 24 | 0,230 | | |
| | Total | 6,429 | 27 | | | |
| Relationship management practices | Between Groups | 1,237 | 3 | 0,412 | 2,033 | 0,136 |
| | Within Groups | 4,870 | 24 | 0,203 | | |
| | Total | 6,107 | 27 | | | |
| Financial management practices | Between Groups | 3,793 | 3 | 1,264 | 4,805 | 0,009 |
| | Within Groups | 6,314 | 24 | 0,263 | | |
| | Total | 10,107 | 27 | | | |
| Resource allocation | Between Groups | 0,679 | 3 | 0,226 | 2,714 | 0,067 |
| | Within Groups | 2,000 | 24 | 0,083 | | |
| | Total | 2,679 | 27 | | | |
| Political allocation | Between Groups | 0,068 | 3 | 0,023 | 0,305 | 0,821 |
| | Within Groups | 1,789 | 24 | 0,075 | | |
| | Total | 1,857 | 27 | | | |

The results presented in Table 4.7 reveal that there was a statistically significant difference between the age group of the respondents and the financial management practices at 5% level of significance. Therefore, the age group of the respondent had a bearing on their financial management practices. The results further reveal that there was a statistically insignificant difference between the age group of the respondents and the scope and nature of the project, relationship management practices, resource allocation and political allocation. Therefore, the age group of the respondents did not have a bearing on the scope and nature of the project, relationship management practices, resource allocation and political allocation. Mwangi and Kariuki (2015:221) citing Mauceri *et al.* (2005:18) states that age has been found to have a negative relation with the adoption technology as old farmers fear to take risks to adopt new technology, but he contradicts this by citing (Mignouna *et al.*, 2011) who stated that age determines the adoption of technology because young farmers are not afraid to take risks. It is important to note that age was not a determinant to select the participants, but their involvement with the project was.

### 4.9.2 Comparing mean scores, level of education to all six constructs

Mwangi and Kariuki (2015:221) state that education seems to have a positive relationship with the adoption of technology because better and higher education facilitates the attitude and thought to take a rational decision, though there is no conclusive determination.

The level of education was not considered in the selection of the participants as well as the beneficiaries. The participants were selected on the basis of their involvement with the project as BoT, Technical Committee and Beneficiaries

**Table 4. 8: Compariing levels of education and mean score to all six constructs**

| | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| Scope and nature of the project | Between Groups | 1,445 | 5 | 0,289 | 1,276 | 0,309 |
| | Within Groups | 4,983 | 22 | 0,227 | | |
| | Total | 6,429 | 27 | | | |
| Relationship management practices | Between Groups | 0,624 | 5 | 0,125 | 0,501 | 0,772 |
| | Within Groups | 5,483 | 22 | 0,249 | | |
| | Total | 6,107 | 27 | | | |
| Financial management practices | Between Groups | 1,840 | 5 | 0,368 | 0,980 | 0,452 |
| | Within Groups | 8,267 | 22 | 0,376 | | |
| | Total | 10,107 | 27 | | | |
| Resource allocation | Between Groups | 0,779 | 5 | 0,156 | 1,803 | 0,154 |
| | Within Groups | 1,900 | 22 | 0,086 | | |
| | Total | 2,679 | 27 | | | |
| Political allocation | Between Groups | 0,207 | 5 | 0,041 | 0,552 | 0,735 |
| | Within Groups | 1,650 | 22 | 0,075 | | |
| | Total | 1,857 | 27 | | | |

The results presented in Table 4.8 reveal that there was a statistically insignificant difference found between level of education and the mean score of scope and nature of the project, relationship management practices, financial management practices, resource allocation and political allocation. Therefore, it can be concluded that the level of education of the respondents did not have a bearing on how they responded to the score of scope and nature of the project, relationship management practices, financial management practices, resource allocation and political allocation.

## 4.10 THE FINDINGS TO THE OPEN-ENDED QUESTION

Respondents were asked if they could confirm that the project was a success.

All the respondents on the NWNC project believed that the project was a great success because it improved the living standard of the participants. One of the respondents alluded to the fact that "this is the only project/programme in the entire province which has positive bearings in the lives of the people of North West Province". Respondents also recommended that other agricultural projects should follow along the lines of the NWNC project. One of the respondents also recommended that the scope for the next projects should cover other cattle breeds. It was highlighted that stakeholder (PPP) engagement was key in the success of projects of this nature.

## 4.11 CHAPTER FOUR SUMMARY

In this chapter, findings from the data analysis and interpretation of results were presented. The data was analysed using the SPSS (Statistical Packaging for Social Science) system and the SPSS output was is set out in graphs and tables.

The key findings from the research objectives are that the respondents agreed that the scope and nature of the project were defined and known to the participants, the relationship was well managed, finances were managed well and according to the budget, resources were allocated as arranged. Politics did not have a negative impact on the delivery of the project. The findings also show a positive relationship between management of the risk factor of the score of scope and nature of the project, relationship management practices, financial management practices, resource allocation and political allocation as well as the success implementation of the NWNCP.

## CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### 5.1 INTRODUCTION

The purpose of the study was to explore Public-Private-Partnership practices of the North-West Nguni Cattle project. The main objective and sub-objectives were to explore the management practices on the scope and nature of the NWNCP, to analyse the resource allocation management practices that had led to a successful NWNCP, to explore the cooperative management practices relating to finance that had led to the success of the project, to explore the financial resources allocation practices that had led to the success of the project and to explore the management political interference that had led to the success of the NWNCP. The discussion is based on the results obtained on each of the research objectives presented in Chapter one and a management implication of these findings. Based on the discussions, conclusions and recommendations are developed and possible areas that need further research are proposed.

### 5.2 DISCUSSION OF KEY FINDINGS

#### 5.2.1 Research objective 1: To analyse the scope and nature of project management that led to the success of the NWNCP

The results from the analysis reveals that the NWNC project objective was clearly defined, that the stakeholders managing the project were outlined, that a realistic schedule was developed, that the business environment was known and lastly, that there was agreement on the fact that beneficiaries were determined in the project initiation phase. It was also drawn from the data that the majority of the respondents believed that the business environment was known, that beneficiaries' expectations were determined, that the business plan was known, that the role of the participating sector was defined and known, that the contractual obligations were documented and known and that the beneficiaries understood their contractual obligations.

**The following is the literature review that supports the research findings on the scope and nature of project management**

Rose (2013:5) states that, when managing a project, it is important to identify requirements, to address the needs of the stakeholders, to communicate properly with stakeholders, to manage stakeholders and to balance the competing constraints of the project such as scope, quality, schedule, budget, resources and risk. Furthermore, It is also important to pay attention to the scope, time and cost constraints for the success of the project.

(Marchewka, 2014:9) depends on these three key pillars, namely the scope, time and cost constraints. Scope planning involves collecting the requirements, defining the scope, creating a work breakdown, making the scope valid and managing it (Rose, 2013:105). The literature review supports the research findings which highlighted the scope and nature of the project to be clearly defined during the planning period and the associated aspects such as contracts, budget, resources, time, *etc.* to be well-communicated to the beneficiaries.

A project scope is a detailed description of what the project intends to deliver and it describes the project, services and the requirements that are essential for the project (Anon, 2013:120). A project scope is delivered through a scope management plan that aims to develop, monitor and control the project scope (Anon, 2013:119). Anon (2013:120) states that the project scope plan requires a project scope statement that is essential for the success of the project and it includes the deliverables, assumptions and constraints of the project. The project statement describes the scope of the project, deliverables, assumptions and constraints and it includes the description of the product scope, the criteria to be accepted and how the project will be executed (Anon, 2013:123). The literature review is in agreement with the results of the findings that showed the importance of delivering the project as per the scope and nature.

### 5.2.2 Research objective 2: To analyse the relationship management strategies that led to the success of the NWNCP

Stakeholders were of the view that there was a continuous communication with them, that there was a good working relationship among the participating sectors, that the changes for all stages were well-communicated to the relevant parties and that the partnership among READ, IDC and NWU was harmonious for success.

They (stakeholders) acknowledged that:

- there was transparency among the role players,
- the contractual obligation of the participating sectors was clear,

- the individual stakeholder's expectations of the project were expressed at the initiation phase,
- all the risks were identified and treatment plans set aside to mitigate them,
- risks progress reports were communicated to all stakeholder on continuous, basis, and
- the disagreements among the participating sector's officials were handled well.

The literature review that supports the research findings on **Relationship Management Strategies** is as follow:

Chan *et al.* (2003:526); Tang *et al.* (2010:19) state that the relationship between the sectors participating in PPP projects is important for the success of the PPP project, as a poor relationship will result in misunderstandings and disagreements and ultimately to the failure of the project. The improvement of the relationship among the participating parties led to the substantial benefits arising from the PPP projects (Tang *et al.*, 2010:19). Researchers have related to the relationship problem with contractors selection which emphasis innovative contractor selection approaches (Tang *et al.*, 2010:20). Chan *et al.* (2003:526); Tang *et al.* (2010:20) discovered that improved relationship and communication among the participants of projects had the most considerably paybacks achieved from the implementation of PPP projects. Deciding on the appropriate contractors emphasises 'innovative' contractor decision approaches to be used via massive public clients, in which relationship is continually considered as a key criterion (Tang *et al.*, 2010:20; Zhang, 2004:242). The literature review supports the finding with regard to transparency, contracts and the general handling of any issue that may negatively affect the relationship of the participating sectors.

### 5.2.3 Research objective 3: To explore the finance management strategies that led to the success of the NWNCP

Members of the project team were of the view that:

- the approved project budget was known,
- the budget was used for the sole execution of the project,
- strict adherence to the planned targets had a significant impact on the project success,
- project performance was improved with regular oversight and accountability, and

- constant and consistent monitoring of the finances enhanced the project.

They also believed that:

- stakeholders were aware of their financial management responsibilities,
- there were no delaying red-tapes when accessing funds,
- there was transparency amongst all the role players on the uses of funds,
- controls were put in place to monitor the correct use of the available funds, and
- there were steps taken to improve the financial performance if not in line with the set targets.

The literature review that supports the research finding on **Finance Management Strategies** is discussed next:

Firms can benefit from financial risk by protecting its ability to attend to its core business and to realise its strategic objectives. Risk management policies motivate investors in equity, creditors, managers and workers as well as the customers to be dedicated to the project (Woods & Dowd, 2008:7). It is not possible to isolate the financial risk management effects from the undertakings of the project and it is imperative for all participating parties to recognise and understand how to manage financial risks (Woods & Dowd, 2008:7).

Moles (2013:2) states that financial management refers to how financial risks are monitored and how to minimise its impact and is one of the core functions of an organisation. It is one of the essential responsibilities of complete management and it is associated with the departments of the organisation such as Human Resource, Advertising and Marketing and Production (Van Antwerpen, 2012:4). Marembo (2013:7) states that financial management responds to the question of long-term investment of the firm, the manner in which the firm obtained and managed its long-term financing and making decisions about the firm's working capital. The finding showed the proper handling of financial matters such as budget.

#### 5.2.4 Research objective 4: To analyse resource allocation strategies that led to the success of the NWNCP

Respondents were of the view that there was a required human resource skill, that livestock was distributed in time and in good condition, that the handling facilities were distributed within a reasonable period and that machinery and equipment to care for the livestock were provided, but disagreed that there was a lack of infrastructure and facilities.

Members concurred that there was access to veterinary services, but disagreed that feed and supplements were provided. They further concurred that the technical advice from READ and NWU officials was not conflicting, and agreed that beneficiaries were trained on livestock management practices. Lastly, they concurred that beneficiaries kept records of the resources received.

The literature review that supports the research finding **Resource Allocation Strategies** is as follow:

The functioning of the organisation is to pool and install several resources to create value and to generate income and the firm should deliver resources that are valuable, rare, inimitable and sustainable (Othman and Sheehan (2011:8); Sirmon *et al.* (2007:273). The resource-based review improved competitive advantage (Sirmon *et al.*, 2007:273). The resource management was developed to change the resources in the value creation process, as stated by Othman and Sheehan (2011:8); Sirmon *et al.* (2007:273). Resource management is essential for creating value for the project, as indicated by Sirmon *et al.* (2007:275). The study's literature review is in agreement with the research findings that the resources were allocated well as per plans and that the human skill was appropriate and available at the correct moment.

### 5.2.5 Research objective 5: To explore political management strategies that led to the success of the NWNCP

The stakeholders believed that the political environment was stable and that there was no political interference in the implementation of the project, but disagreed that the change of political heads affected the project negatively. They were against the view that there was institutional interference and were in agreement that political policies had no negatively impact the project.

It came out clear that the Government supported the NWNC project, that the project had no legal framework, that there was no disrupting influence by either of the participating sectors, that there were no complains about selection criteria and that the Nguni cattle was ideal for beef improvement in the North West.

The literature review that supports the research finding on the **Political Management Strategies** is as follow:

The changes on the political and administrative leaders of Government may lead to an unstable Government that will negatively affect the deliveries of goods and services and such unstableness is the fifth most critical factor in PPP projects (Hwang *et al.*, 2013:429). De Wet (2017:13); Solutions (2015), on the other hand, stated that political uncertainty ranked tenth place in 2013, fifteenth place in 2015 and it was expected to move to ninth place in the 2016-2019 period. The unstable Government, the meddling of politicians, the nationalisation and/or the expropriation, the lack of support from the Government, changing the regulations of tax, the inconsistent of deficient legal regulatory framework and site availability lead to political risks (Hwang *et al.*, 2013:430).

The hindrance of politicians has a negative impact on the infrastructure deliveries through the PPP projects (Tang *et al.*, 2010:10). Derrocks (2010:69) states that political instability is a potential factor that has a negative impact on the performance of PPP projects. Sobuza (2010:51) states that the introduction of political strategies will make the delivery of goods and services through PPP projects possible. Boshoff (2010:19) has mentioned that political risks are the influence of politicians on investments or investors and has highlighted the importance of analysing it through politics, culture, law, economics and international requirement. (Benáček *et al.*, 2014:629); De Wet (2017:12) have stated that the developing countries experience a degree of political risk and have characterised it as the "uncertainty associated with the impact on investment by socio-political institutions and governance". The findings indicate that political influence or disruptions were not encountered and that the Government supported the project, as can also be seen in the mentioned literature review.

## 5.3 MANAGERIAL IMPLICATIONS

Public-Private-Partnership projects are complicated by the inability to identify and allocate risk factors. The allocation of risk to the capable participating sector is challenging and it requires proper communication and management. The management improves the utilisation of other inputs such as labour, equipment and finance and enhances the ability of the manager to pay attention to allocate resources in an appropriate manner in order to improve production (Mocumi, 2015:4).

Project management uses the managerial philosophy to apply the resources to produce goods and services. This study helps to understand the use of management to mediate the negative impact of risk factors in the implementation of PPP projects. Risk management involves identifying the appropriate opportunities and to be disciplined to realise the objectives of the organisation (Van Vuuren, 2006:22). Allocation of scarce resources is one of the processes of management. Therefore, the study demonstrates the use of some of the managerial principles in the success implementation of the PPP projects.

## 5.4 CONCLUSION OF THE STUDY

Public-Private-Partnership projects are challenging due to the participation of the public sector and the private sector both of which have conflicting ways of utilising resources to produce goods and service. There are risk factors associated with the implementation of PPP projects that should be identified, allocated to the best capable sector to handle and managed properly to ensure the successful delivery of the project. The risk factors that were identified through the literature review are the score of scope and nature of the project, relationship management practices, financial management practices, resource allocation and political allocation.

The North-West Nguni Cattle Project was successful because the these risk factors were identified, they were allocated to the best capable sector and they were well managed. The NWNCP had a well-defined implementation plan, which had the deliverables and the balances were checked to attain the objective.

It is evident that the success of the NWNCP was due to the significant association and proper implementation of the management practices associated with PPP projects. The study established the impact that the project outcome had on the participants through human and social capital development as well as natural, physical and financial capital development. The findings attest to the successful implementation of the NWNCP and the realisation of its intended objective. The literature identified the NWNCP as one of the success projects implemented by the North-West Province and one respondent even stated that it was the only project delivered successfully by the North-West Province. The objectives, in answering the research question, aimed to investigate what exactly made the NWNCP successful.

The research outcome and findings of the results show a positive relationship with the objectives of the study. The study depicted the missing link to the factors that led to the success of the NWNCP which was not identified in previous studies.

## 5.5 RECOMMENDATIONS

The following are recommendations that emerged from the study to address the research problem statement and literature gap that the study intended to identify and address:

- Workshops, awareness campaigns, training and continuous education should be encouraged within the scope of the projects.
- The implementation of any project, including PPPs, should be based on the management practices within the project management lifecycle framework.
- Risk factors of implementing the project that include the nature and scope of the project, financial management, relationship management, resources management and political management should be identified, managed and mitigated for the success of any project, but more so for PPPs that have high risks.
- The study recommends that the necessary legal framework needs to be developed and properly communicated to the beneficiaries prior to the resumption of the next project.
- The study further recommends that, for the success of any project, it is essential to maintain transparency among the participating sectors and the beneficiaries throughout the project period.
- A similar study should be considered to investigate the impact of the risk factors of the nature and scope of the project, financial management, relationship management, resources management and political management to mitigate their negative impact to the envisage projects.
- Public-Private-Partnership should be used to address the backlog of delivery of services in agriculture and NWU should be considered to be one of the participating private sectors, due to its semi-autonomous nature.

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