



**Assessment of Effectiveness of Emerging Construction Contractor Development Programmes in Ngaka Modiri Molema.**

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in the Faculty of Management and Commerce  
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## **DECLARATION**

I, TAWEDZEGWA MUDHENGGE, the undersigned, hereby declare that this dissertation is my own unaided work. It is being submitted in partial fulfillment of the requirements for the degree of Master of Business Administration at the North-west University. It has not been previously submitted for any degree or any examination at any other University or Institute.

**Signed:**.....

**Date: 20 November 2018**

## **ACKNOWLEDGEMENTS**

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Special thanks go to the CDP contractors and consultants who were part of this research. My family at large, Father and Mother Mudhenge, my wife Ethel, my children, Ruth, Felicia and Reward Tanatswa.

Lastly but not least I would like to thank North-West University staff for their support. This research would not be possible without their support.

Our glorious God be with you!

## **DEDICATION**

I dedicate this work to:

- My Children, Ruth, Felicia, and Reward Tanatswa Mudhenge, not forgetting their mother Ethel, who are so supportive, and
- My late sister, Emely. You occupy a special place in my heart until we meet again in the Heavenly Kingdom. May your souls rest in peace, till God make us meet again?

And to:

- My dear Mom and Dad, whose love and care gave me strength to complete this project.
- My dear brother in Christ, Crynos Mademe who inspired me to do this course and gave me strength to complete this project.

## **ABSTRACT**

The study investigated the effectiveness of Contractor Development Programmes among the entrepreneurs in the Ngaka Modiri Molema District Municipality in the North West Province of South Africa. The intentions were to identify whether the programme is effective or not and if not effective identify challenges, and propose solutions for the obstacles. The investigation is conducted through an evaluation of Contractors in the North West province using construction project implemented by government organisations in the North West Province in South Africa. This research considers the following factors in determining the effectiveness of the CDP: technical, financial and managerial training that the contractors received through the programme, the provision of relevant work experience for the duration of the programme as well as an increase in the contractor's CIDB grading after exiting the programme.

The research adopted both a qualitative and quantitative research design, and in-depth interviews were used to gather data from the participants, SMMEs owners and managers in the Ngaka Modiri Molema, who were the target population. Emerging construction contractors contribute to the backbone of the South African economy, because of their importance in employment creation and value reorientation. The objective of this study will be to establish a benchmark to identify whether government policies to implement Contractor Development Programmes of SMMEs in South Africa are effective or need to be developed. The extensive literature review compiled from various articles and the field survey conducted on various SMMEs were used as the methodology. Questionnaires and random sampling were used as field survey instruments. It was found from literature that there are various obstacles in the implementation of Emerging Contractors. Among the list of the challenges are lack of finance, training and business skills, and unethical conduct amongst some of the stakeholders; these were indicated in the literature review and confirmed by field survey.

The results will make contribution for developments to the problems faced by emerging construction companies in South Africa. That will give an indication to the government for in-depth research into departmental weaknesses and policy issues regarding

implementation of the policy in South Africa. The findings imply that, to improve the growth and competitiveness of SMMEs, the obstacles named above have to be resolved. The research has contributed to the enhancement of understanding the programme to empower black people by establishing the core issues affecting the operations of SMMEs in South Africa.

The North West Government, through its sister department, the Department of Public Works and the IDT has embarked on a positive programme for training Emerging Contractors that would make their development very effective and turn them into sustainable business enterprises. The programme will be assessed to measure its effectiveness in grooming Emerging Contractors into established contractors in the construction industry.

The study further analyses the overall approach followed in implementing CDPs and emphasises some key considerations relating to the implementation approach. More importantly, the study highlights that the lack of emphasis on technical competence in terms of qualification and experience is one of the underlying shortcomings of CDPs. In conclusion, the research found that there is a need to review policies and procedures relating to CDPs.

**Key words:** *SMME, CIDB, training and mentorship, small contractor development, contractor development programme (CDP)*

## **DEFINITIONS OF KEY CONCEPTS**

**CIDB:** Construction Industry Development Board (CIDB) which registers and grades contractors

**Contractor Incubator Programme (CIP):** is used as a vehicle to develop emerging contractors. (SMMEs challenges & Department of Public Works)

**ECDP:** (Emerging Contractor Development Programme) - aims solely at contracting entities. (SMMEs challenges)

**Emerging:** The term 'emerging contractor' in South Africa refers to SMMEs owned and managed by HDIs (Department of Public Works,).

**EPWP:** Extended Public Works Programme, which aims at providing job opportunities to unskilled people (Department of Public Works). Part of the EPWP is the Contractor learnership programme, named Vuku'phile (Department of Public Works)

**SMMEs:** means Small, Medium or Micro Enterprises that are referred to as emerging contractors in the South African context (SMMEs challenges).

**Sustainability:** means adapting to the ways we all live and work towards "meeting needs, while minimizing the impacts of consumption, providing for people of today and not endangering the generations of tomorrow"<sup>1</sup>. (SMMEs challenges).

## **ABBREVIATIONS**

<b>BBBEE -</b>	Broad-Based Black Economic Empowerment
<b>BEE</b>	Black Economic Empowerment
<b>CDC</b>	Commonwealth Development Corporation
<b>CDM</b>	Contractor Development Models
<b>CDP:</b>	Contractor Development Programme
<b>CIDB -</b>	Construction Industry Development Boards (CIDB)
<b>CIP</b>	Contractor Incubator Programme
<b>ECDP</b>	Emerging Contractor Development Programme
<b>EPWP</b>	Extended Public Works Programme
<b>HDI</b>	Historically Disadvantaged Individual
<b>IDT</b>	Independent Development Trust
<b>ILO</b>	International Labour Organization
<b>JV</b>	Joint Venture
<b>NDPW</b>	National Department of Public Works
<b>NWPG</b>	North West Provincial Government
<b>PMBOK</b>	Project Management Body of Knowledge
<b>PPPFA -</b>	Public Preferential Procurement Framework Act
<b>SAFCEC -</b>	South African Federation of Civil Engineering Contractors
<b>SMME -</b>	Small, Medium or Micro- Enterprise
<b>SPSS</b>	Statistical Package for Social Sciences
<b>USAID</b>	United States Agency for International Development

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# **CHAPTER ONE: INTRODUCTION**

## **1.1 Introduction**

The South African government aims to implement a sustainable programme that gives a firm platform to Emerging Contractors so as to increase their capability in order to render services to the people, as documented in various reports. The need to empower Emerging Contractors to contribute to employment creation and economic growth is greatly recognized through Contractor Development Programmes. 'Sustainability' is becoming a central concern for most people, as it calls for commitment among individuals in order to effectively implement management change within organizations toward sustainability.

The NWPG, in collaboration with its sister department, the DPW and IDT, has embarked on a positive programme for training and mentoring Emerging Contractors that would make their development more effective and turn them into sustainable business enterprises. The programme will be assessed to measure its effectiveness in grooming Emerging Contractors, so as to allow them to become the big players in the construction industry. The capability of small and medium construction businesses is recognized by their contribution to employment creation and economic growth. However, since available opportunities have no structured training models in place, Emerging Contractors remain weak and unsuitable.

## **1.2 Background of the Study**

The North West Provincial Government (NWPG), through its sister Department, the Department of Public Works, and IDT, has embarked on a positive programme for developing small businesses, which would make the development of Emerging Contractors very effective and turn them into established firms. In terms of these initiatives, the CIDB has proposed development programmes, driven by government institutions for selected construction contracts. In 2011, the CIDB, alongside the

Department of Public Works, developed a new framework, the National Contractor Development Programme (NCDP), to alleviate the problems and lack of experience, capacity and business knowledge in order to assist and develop HDIs and emerging contractors in South Africa (CIDB 2011c). Subsequently, various provincial governments and other stakeholders established CDPs with objectives which were aligned with those of the NCDP (CIDB 2011a). It will be assessed to measure its effectiveness in grooming Emerging Contractors into established players in the construction industry.

The South African construction industry, by nature, has many ups and downs, coupled with stringent requirements (Ofori, 2009; Cobra 2010). It has been affected by many problems and among them are poor construction costing skills, poor project management skills, late payments to contractors, and difficulties in accessing finance. The global economic recession has brought major challenges to the world's economy and South Africa is no exception.

The problem of fostering growth among SMEs is however not a new one, and research into challenges faced by Emerging Contractors in the construction contracting sector can be found dating back to the 1990s (Hinze and Tracey, 1994). This picture can then be further enriched through an update on current issues Emerging Contractors are facing. An analysis of the challenges and the success of governmental interventions is offered.

The impact of the programme can be measured by the assessment of its overall effectiveness in developing Emerging Contractors (SMMEs) into established construction contractors to industry in South Africa. The factors listed above amount to the problem statement, as will be mentioned later.

### **1.3 Statement of the problem**

The South African government and other professional bodies in the construction industry have developed policies and programmes to develop contractors through structured developmental programmes. The rationale of CDPs is to provide a facilitated approach to the development of contractors through various programmes, often implemented by government departments such as the Department of Public Works in the development of infrastructure. Various research exercises have reported on the notable failures of CDPs (CIDB 2009, 2011a; Dapaah and Musonda 2014; Dlungwana and Rwelamila 2004). Previous studies report on the failures of CDPs from a programme/institutional perspective, but do not necessarily divulge information on the performance and development of contractors enrolled in the programme. This research acknowledges that there is existing research which evaluates the successes and failures of these development programmes. However, there is limited research which studies whether the programme has contributed sustainably to the development of the small contractors.

The CIDB has reported on some of the causes of failure of CDPs (CIDB 2011a, also refer to the citation on page 4 of this document). The CIDB further stated that, as a result of the shortcomings of CDPs, the initiatives can easily result in being piecemeal only; i.e. job creation attempts which do not contribute sustainably to the development of the contractors (CIDB) 2011a).

The statement of the problem under research will be how to develop a model towards intensive skills transfer for construction contractors, through development of a framework that can be controlled through qualitative, quantitative and quantifiable consequences. Moreover, little is known about how and why key individuals develop a deep and lasting commitment to sustainability, although from evidence it has been suggested that pivotal-type experience sometimes results in commitment to sustainability. The aim of this research is to review the triggers and contexts for key individuals' pivotal experiences in the construction industry that will relate to sustainability.

The major problem facing South Africa, like most countries in Southern Africa, is inequality between different racial groups. The situation is worsened by the global economic crisis characterized by service delivery protests, retrenchments, high levels of labour unrest, mismanagement of tender allocations and negative economic growth. Many companies are closing down or fighting for survival such that the high rate of unemployment will be added to. The National Department of Public Works (NDPW) developed a policy that put in place programmes that give capacity and capability to Emerging Contractors that will deliver provincial infrastructure and alleviate poverty for the previously disadvantaged South Africans. These programmes should therefore ensure that they make contractors' businesses grow into sustainable construction companies, and not deceiving them. It has been identified that small and medium construction businesses have the potential to contribute significantly to employment creation and economic growth when well managed and developed.

Emerging Contractors remained under-developed, due to lack of structured development techniques in the current opportunities. Current strategies for their development are failing to empower them because they lack well-defined skills transfer frameworks. These are based on instruments such as targeted procurement, and the National Department of Public Works' incubator programme, which are controlled by the Emerging Contractor Development Programme Unit (ECDP).

Furthermore, this has contributed to a lack of confidence within the construction clients and suppliers, who consider Emerging Contractors as a high risk business area, thereby erecting further barriers to the effectiveness of Contractor Development. However, government lacks clear policy techniques to monitor and assess the effectiveness of contractor support programmes. In addition to that, most current support initiatives lose out on integrated programme strategy.

The research recognizes and assesses the achievements and hindrances experienced in the implementation of the Contractor Development Programme in Ngaka Modiri Molema District Municipality, thereby measuring its effectiveness and recommends improvements to support the programme. The development programme was introduced to provide empowerment, learnership and skills development to ensure that

contractors delivered quality service in infrastructure provision within the jurisdiction of the Ngaka Modiri Molema District Municipality. This research seeks to analyze the programme's successes and deficiencies, and problems encountered, and then propose solutions.

#### **1.4 Purpose of the study**

The main purpose of this research is identifying factors impacting on the implementation of the Emerging Contractor Development Programme in the North West Province so as to determine how any adverse impacts on the programme can be mitigated. The research will extensively review literature on the Contractor Development Programme with a view to identifying factors or systems that impact on the programme's effectiveness. Then an attempt will be made to assess the extent to which these systems can be improved. It will proceed on the assumption that perceptions of contractors, mentors and government will vary in regard to most Contractor Development Models and an effort will be made to determine whether this is true in the construction industry of the North West province. In response to these findings, strong recommendations will be developed to monitor the nature and extent of improvements required.

## **1.5 Research questions**

### **1.5.1 Main research question**

The research questions for this study aim to reveal whether the triggers and experiences of key individuals in their adoption of CDP's effectiveness as an ideology are achievable as an attempt by the government. To what extent the implementation of the Contactor Development Programme is effective in the Ngaka Modiri Molema District. The question under investigation by this study is, 'How effective are the development and monitoring techniques towards intensive skills transfer for Emerging Construction Contractors'? it is expanded under the following questions.

The research answers the following questions:

- How was small contractor development implemented on the project implemented by the North West government?
- Have the contractor's managed to progress and increase their CIDB grading since exiting the project?

Another question is "why and how strategic people become deeply committed?" "What are the key individuals' attitudes towards the current elements as well as individual pivotal experiences, for their implementation of sustainability, and their perspective on government's organizational change? " The government through implementation of the programme should consider professional and technical people with key qualifications to team up with Emerging Construction Contractors to make the programme achievable.

### **1.5.2 Sub-problems**

The main challenge faced by decision-makers in the government these days is the need for a construction development framework model that comprehensively reveals the challenges faced during the delivery of infrastructure projects through the Black Economic Empowerment Policy (BEE)

During study of the effectiveness of the programme, several pivotal questions will be raised, and will be dealt with as sub-problems. The below sub-questions are set out to ensure detailed research so that the main problem can be solved.

**Sub-problem 1:** Which mechanisms of quality assurance does the government need to create in order to promote the effectiveness of the contractor development programme making the Government's objectives satisfactorily achieved?

**Sub- problem 2:** Project management skills is a prerequisite to run a construction project, is it a requirement for the successful implementation of the Emerging Contractor Development Model?

**Sub-problem 3:** Are there any experiences of key individuals and government change as regarding sustainability?

## **1.6 Research objectives**

The objectives of the study are to:

- ❖ Determine how Emerging Contractors can team up with other interventions to create employment.
- ❖ Determine the challenges and shortcomings facing Emerging Contractors on the process
- ❖ Explore the ways in which Emerging Contractors can be sustainable and be major players in the economy for the benefit of the employees, the organization and the community at large
- ❖ Assess and evaluate the effectiveness of Contractor development programmes in use in various departments in the province.

## **1.7 Scope of the study**

The research study will be conducted on Contractors within the jurisdiction of Ngaka Modiri Molema. Due to time and resource constraints it will be difficult to conduct the research in all companies. The research study will consider a representative sample of the employees, as will be indicated in the targeted population study, since it will be difficult to conduct research on the entire workforce.

## **1.8. Justification or importance of the study**

This research seeks to contribute to the efforts made by various institutions to integrate small contractor development into the implementation structure of infrastructure projects. It seeks to assist infrastructure project implementers, such as NDPW, to maximise social and economic development targets in infrastructure projects. The significance of this study is that it will lead to knowledge production and generation of the way forward to overcome the obstacles faced by Emerging Contractors, through individual perspectives. The research aims at increasing knowledge and capacity-building within this sector so as to empower the nation and ensuring self-sustainability.

The study of theoretical aspects of the perceptions of Emerging Contractors on their sustainability has enormous power to elevate and accelerate their expansion and development by improving the growth and competitiveness of Emerging Contractors, and remove the obstacles faced by these contractors. Secondly, findings of the study provide a platform for fresh discoveries and improvement of existing mechanisms that deal with empowering Emerging Contractors and the community at large.

By identifying gaps and potential downsides of Government and Emerging Contractors' performance, the study therefore will provide a firm ground for further research in this area. Although there have been major contributions that the Government has made towards improving Emerging Contractors and employment creation, this study also attempts to make meaningful contributions and add to the knowledge cycle of Emerging Contractors and Government. The study does not oppose any existing intervention of Government department at national and provincial levels, but only attempts to improve

and find lasting solutions to the problem. It also acknowledges the complementary role played by all such interventions in qualifying the Emerging Contractors. Emerging Contractors (EC) in South Africa have a direct impact on employment. It is therefore crucial that the Government identifies challenges these contractors face and give support to contribute to their reduction, thereby ensuring sustainability.

## **1.9. Literature review**

The main purpose of the literature review is identifying factors impacting on the implementation of Emerging Contractor Development Programme in the North West province so as to determine how any adverse impacts on the programme can be mitigated. The research will extensively review literature on the contractor development programme with a view to identifying factors or systems that impact on the programme's effectiveness. Then an attempt will be made to assess the extent to which these systems can be improved. It will proceed on the assumption that perceptions of Contractors, mentors and Government will vary with regard to most Contractor Development models or systems, and an attempt will be made to determine whether this is true in the construction industry of the North West Province. In response to these findings, strong recommendations will be developed to guide or align the nature and extent of improvements required.

Further to the above, decision-making skills gained from management techniques will be considered, since they have a great impact on the projects. According to Zedtwitz (2002) 'recently research of the project assessment process did not attract much interest. Most SMME's are not established and do not have regulated methodology to learning from project reviews either during or after the completion of their projects. This study, which is an investigation into the challenges faced by emerging contractors in South Africa, provides valuable results on the effectiveness of the scheme of empowering emerging contractors. The study also gives some possible suggestions as to how administration can be improved. This can be achieved through government's supportive action of training needs, business skills, financing problems, information technology skills and ethical conduct among emerging contractors'.

## **1.10 Research design and methodology**

This section will deal with matters relating to research methodology and design, research instruments, the sampling methods and the methods adopted to analyze the data for this study.

### **1.10.1 Research Design**

The method of data gathering that was used in this study are both qualitative and quantitative. Triangulation is the combination of both methods, drawing on both the quantitative and qualitative data collection.

- a) Qualitative research methods can be described as realistic, anthropological, and ethnographic and are founded on post-positivism and interpretivism paradigms. Bogdan and Biklen (1992:36) attempt to define qualitative research as 'inquiries of knowledge that are outside the framework prescribed by the scientific method, as well as assumptions of inferential statistics'. The overall objective is to understand social actions as they occur, to describe and give a meaning to them.
- b) Quantitative research is more easily defined as the collection of numerical and statistical data. It is built upon the 'positivist' paradigm, and is perceived as the scientific approach to research employing 'experimental' and 'quasi-experimental' strategies. Amaranatunga et al. (2002:212) describe quantitative data as 'data which can be sorted, classified, measured in a strictly "objective" way and are capable of being accurately described by a set of rules or formulae or strict procedures which then make their definition (if not always their interpretation) unambiguous and independent of individual judgments.'

### **1.10.2 Research methodology**

This section aims to outline the research methodology used in the study, to note how the research was controlled and monitored, and to ensure validity and reliability of the research data and procedures associated with the subsequent analysis and

presentation of the data. Research methodology is the way in which researchers go about solving problems (Buys, 2002). According to Fellows and Liu (1997), research methodology is the principles and procedures of logical thought processes which are applied to a scientific investigation.

Using the two research methods allows the researcher to obtain a full picture of the reality happening in the industry. It allows to triangulate data from interviews as well as from information obtained through two different methods (Myers, 2009), thereby making use of mixed method research design in this study.

From the data collected, a descriptive data analysis will be conducted. Data collected will be transferred to Microsoft Excel or SSPS for analysis of results. The imported data will be presented in a simplified manner by developing pie charts, bar charts, tables and graphs that will be used to analyse and evaluate the output. The purpose of doing this is to enable the researcher to be able to triangulate the participants' interviews together with respondents' responses and align them with relevant literature.

In this study both a qualitative and quantitative approach will be employed to review the implementation of the CDP, EPWP and Contractor Development Learnership Programme within the jurisdiction of Ngaka Modiri Molema District Municipality. The study is qualitative in the sense that attention is given to description, verification, evaluation and interpretation of the results (Peshkin, 1993, cited by Leedy and Ormond, 2010). However, it is also quantitative in the sense that mathematical calculations were employed for analysis of the results and interpretation of the results.

The following is to be covered by the method:

- ❖ Literature review of relevant topics in small contractor development ;
- ❖ Interviews with some of the programme participants within Contractor Development Programmes.
- ❖ Responses on questionnaires from upcoming small contractors on the programme.
- ❖ Examination of all gathered information with the aim of assessing the effectiveness of the programme against its objectives.

- ❖ An evaluation of the research findings and their understanding in terms of the literature reviewed.

## **1.11 Importance and benefits of the proposed study**

Most SMME's are not established and do not have a planned method to learn from project evaluations both during and after the completion of their projects. This study, which is an investigation into the effectiveness of development programmes for developing contractors in South Africa, offers valuable outcomes on the effectiveness of the scheme for empowering emerging contractors. The study gives some possible suggestions for improving administration. This can be achieved through government's supportive action of training needs, business skills, financing problems, information technology skills and ethical conduct among emerging contractors.

## **1.12 Delimitations and assumptions**

The two will be discussed under separate headings of delimitations and assumptions.

### **1.12.1 Delimitations (Scope)**

The research study of examining the effectiveness of the Contractor Development programs will be done in the North West province within the jurisdiction of Ngaka Modiri Molema District of the North West Province only. The Contractor Development Programme is one of the Government's policy to improve the lives of previously disadvantaged people in the country. Employees from government, mentors, consultants, and Emerging Contractors are participants who are going to fill the questionnaires for this study.

### **1.12.2. Assumptions**

The research will be underpinned by the following assumptions:

- ❖ Every participant is an adult who will value the importance of this study and will treat this study with honest and truth, very few will not give their time to it and will not give true reflection of what they have to give.
- ❖ Not all government employees, consultants, mentors, and emerging contractors will participate in the survey by responding to questionnaires.
- ❖ The government of the North West Province has no monitoring models or structure to build contractor enthusiasm to boost the effectiveness of the programme.
- ❖ Those who will participate will be true representatives of the emerging contractors.
- ❖ The study will uncover the perceptions of those rated, and those doing the ratings, in regard to the rationale of the effectiveness of contractor development programmes in the construction sector.

### **1.13 Sampling**

According to Bailey (2001:84), sampling denotes the procedure of selecting a portion of the population under consideration from which to attain imaginative and logical data about that population as a whole. A stratified random sampling method will be used in this research. The method involves the population being divided into a number of strata that are mutually inclusive and contain homogeneous members in terms of characteristics such as gender or age (Glicker, 2003:41). The desired number of participants is then randomly selected proportionally within each stratum. This type of sampling is mainly used to ensure that different elements within a population are sufficiently represented within the sample (Brink, 1990:10). The researcher selected this method because random sampling offers a high probability that the sample will be representative of the population. However, for in-depth interviews, purposive sampling was used, targeting mainly those who are responsible for administering performance management systems.

## **1.14 Research Instruments**

Since the purpose of this study is to evaluate effectiveness of the Contractor Development Programmes being practised by the government of the North West Province, the best research instruments or methods for gathering primary data will entail using a survey and conducting in-depth interviews. According to Babbie (2007:60), a survey is a design that offers a measurable or numeric explanation of some fraction of the population (the sample) through data-gathering by questioning individuals. This data-gathering in turn qualifies an investigator to develop general outcomes applicable to a population from a sample of feedback. Surveys are administered using questionnaires; interviews can be conducted; and questions may be posed via fax, e-mail, or over the phone. Before conducting such surveys, a “test run” pilot study is indicated.

For a survey, the researcher will use a personal questionnaire to be administered to all participants in the research. According to De Vos (2005:270), a personal questionnaire is explained as a set of questions on a form to be completed by a research respondent. Participants will be given questionnaires to respond to by completing them on their own, but the researcher is available to assist and explain if problems are encountered. Personal questionnaires will be used in this survey because most of the respondents are busy employees requiring time to complete these questionnaires: however the researcher was available at all times to assist. The major significance of this type of questionnaire is that it is less time-consuming and always to the point. For in-depth interviews, a list of questions was used as a guideline, even though new issues could be raised and indeed were welcomed and recorded.

## **1.15 Ethical issues**

The research process can pose ethical predicaments. These have arisen in past instances where a researcher has falsified data or plagiarised details of the work presented by another researcher. The researcher will look at minimising ethical parameters as signed for under the ethical clearance letter. In addition to that turn it in tool was used as a control measure for plagiarism. Further to the above the information regarding the participants in this study will be kept private and confidential

### **1.15.1 Privacy and Confidentiality**

Privacy and confidentiality imply that only the investigator and probably a number of limited members of staff should be aware of the identity of contributors, and that the investigator would have given an assurance in respect of that (Strydom, 2002:27).

In this study, where a questionnaire was used as a mechanism for data gathering, no identification detail was included in the questions and respondents were not required to write their names. In cases where respondents volunteered their names, such information was deleted immediately; furthermore, since the research study is of a tentative nature, the confidentiality of the information and the privacy of the participants were guaranteed.

### **1.15.2 Informed consent**

Informed consent involves voluntary participation by those involved, with the right to withdraw from the study at any time, therefore avoiding possible unwarranted motivation or intimidation (Kvale, 1996). To ensure implementation of the ethical principles, the researcher will provide prospective participants with written information about the study before they become further involved. This information includes the purpose of the study, details of subject confidentiality, information on threats and payments, and also who to ask for further information.

## **1.16 Summary**

This chapter examined the research problem. A background to the study envisaged the need to assess the effectiveness of the Contractor Development Programme in the Ngaka Modiri Molema district of the North West province. The research questions were stipulated, while the research objectives were explicitly stated. Assumptions were drawn and possible limitations identified. Through elaborating the purpose of the study, the research insights were articulated. To this end, it enabled the researcher to derive the scope of the study, define the delimitation and clearly establish the foundation of this study. Chapter 2 will highlight literature in relation to the research questions and the issues to be studied. The literature review is intended to locate the understanding of the

scope of the issues and obtain background from studies similar to the one being undertaken.

Chapter three discusses the study procedure that encompasses the study design, investigation devices, data gathering techniques and the data examination processes that were used for this investigation. Chapter 4 analyses and presents data that was collected through self-completion survey questionnaires. Chapter 5 consists of the summary, conclusion and recommendations.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

The section highlights the writings in regard to what the Contractor Development Programme (CDP) involves. The researcher will debate what other authorities and writers say about effectiveness of Contractor Development Programmes (CDP) and systems. Various issues linked to the effectiveness and management of Contractor Development Programmes such as construction skills, access to finance, availability of technical staff, business management etc. are also discussed. Problems arising from the implementation of CDP in the Province and various departments will be highlighted. The development model for Emerging Contractors (EC) calls for effective project teams who are skilled in the coordination and implementation of contractor development projects. Most Contractor Development projects are more complex than normal projects, hence they demand high project management and coordination skills. In support of the above, Wideman (1990) indicates that larger and complex projects require effective management.

According to Zedtwitz (2002) a recent study of the development evaluation procedure has not evoked much interest. Most SMME's are not established and do not have planned methods to learn from previous development either during or after the completion of their projects. This study, which is an investigation into the effectiveness of the Emerging Contractors Development Programmes in South Africa, provides valuable outcomes about the government policy of assisting previously underprivileged South Africans. The study provides some possible recommendations as to how the organization can be upgraded.

It was noted that in many countries the number of Emerging Contractors (SMEs) is higher than the number of well-established firms. Statistics from the European Union show that 99.8% of all registered enterprises in the non-financial sector were regarded as SMEs, employing two thirds of the total workforce in Europe, and generating approximately two-thirds of all value added (Schmiemann, 2009). A similar trend can also be found in South Africa. According to statistics from the CIDB, more than 130 000

contractors are registered and graded according to their financial capabilities in nine different grades.

About 100 000 registered contractors are in the lower five categories, which makes them micro- and small enterprises. An average of 25 000 contractors are in the middle range of the grading, suggesting these are medium sized companies; and only approximately 800 contractors can be found in the upper three categories, suggesting these are large enterprises. It is almost two decades after the end of Apartheid, and the country's resources and economic life are still not equally distributed between the various racial groups. Skills levels amongst HDIs are reported to be low (CIDB, 2007).

Legislation has been passed aimed at empowering Historically Disadvantaged Individuals (HDIs), and the pillar of this policy is the Broad-Based Black Economic Empowerment Act (South Africa, 2003a). SMMEs are being supported by the existing Preferential Procurement System, to enter the market in South Africa through the Preferential Procurement Framework Act (South Africa, 2000b). Through this Act, any public procurement process sees a preferential allocation of points on tender evaluation scorecards for HDI owned and managed companies.

Growth of these SMMEs however seems to be hampered. Many cases of failures and bankruptcy are reported for SMMEs (Stats SA, 2008), and about 70 per cent of emerging contractors fail in their first year of existence (CIDB and CETA, 2005). Their sustainability thus is questionable and reports indicate that they are increasingly leaving the industry (Gillingham, 2009). This therefore gives doubts that developmental programmers have managed to turn these into '*key industry players*' (Kganyango, 2004). According to the data released by the CIDB, the numbers of new SMMEs still exceeds the numbers of contractors having built up a track record of capability (CIDB, 2009).

In summary, the planning of the project, if implemented in the correct way, will reward the implementers through giving the team senior management support, the right long-term planning direction and correct techniques to manage the project to the end. Basically, one needs to understand the project in order to understand the management

of the project, as indicated by Verzuh (2003:5). Adding to that, understanding of the various functions of project management as well as the project itself, is the first priority for the development of Contractor Development programmes.

## **2.2 Emerging Contractors**

The term 'Emerging Contractors' in South Africa refers to SMMEs owned and managed by HDIs and these were classified through the National Small Business Act of 1996 (South Africa, 1996), which was amended in 2003 (South Africa, 2003b). Classification of companies is made according to the number of employees, as well as the annual turnover.

The medium SMME must have a maximum of 200 employees, with a total annual turnover of less ZAR 26m. Companies owned and managed by HDIs, and which are growing beyond SME status are referred to as emerging companies in this definition. Statistics from the CIDB show that the most of the emerging contractors in South Africa are truly emerging. "Black Empowered SMMEs," according to government publications (BEE Manual) refers to small-to medium-enterprises, and their annual turnover is less than R10 Million, however the direct ownership and management by black people should be between 25 percent and 50 percent.

## **2.3 Role and status of emerging contractors**

Globalization has caused governments to recognition the importance of upcoming businesses in the markets in which they operate. Further to that, governments need to formulate guidelines prior to implementation of policy objectives, especially those affecting target group such as small business. Globally, these groups of business are acknowledged for their contribution to economic growth, entrepreneurship and employment creation. Resultantly, emerging contractors are identified as the heart of world economies. However, it was only after Apartheid that government has now paved the way to opportunities for HDIs to participate in the formal economy.

## **2.4 Government mentorship**

The South African government has recognized many of these hindrances and has started to take corrective measures, fostering SMEs. The CIDB is charged with providing and implementing a strategy for 'growth and development of the construction industry' (South Africa, 2000a). This has been translated into the National Contractor Register, through which contractors are graded, and client bodies can then target particular sized and capable companies to execute works. The government introduced many programmes to enable SMEs to access finance, but there are barriers which are more difficult to overcome stemming from labour laws, as well as skill constraints which are yet to be addressed by the national government.

The Department of Public Works (DPW) aims to assist small contracting entities through two programmes, namely the Extended Public Works Programme (EPWP) and the Emerging Contractor Development Programmes (ECDP). The EPWP programme aims to skill individuals rather than contractors, however it is envisaged that some of the labourers coming through this programme will be equipped to exit the programme and subsequently form their own contracting entities (Department of Public Works, 2009). Part of the EPWP is the Contractor Learnership Programme, named Vuku'phile.

Through mentoring and training, this programme aims at equipping Emerging Contractors through formal and on-the-job training, which will school them with understanding enabling them to tender for and execute labour-intensive projects. While the EPWP primarily aims at the workforce, the Emerging Contractor Development Programme aims solely at contracting entities. In particular the Contractor Incubator Programme (CIP) within the wider ECDP is used as a vehicle to develop Emerging Contractors. Those who already have a positive track-record in the industry are eligible to apply to join this programme. The programme offers a range of opportunities, as suitable work for participating contractors and access to finance is identified; furthermore, mentors are allocated to assist them in running their enterprises.

The South African Federation of Civil Engineering Contractors (SAFCEC) has implemented its own development programmes. Its objective is 'to mentor, monitor and

prepare personnel of a sub-contractor or JV Partner' (SAFCEC, 2007). It is envisaged that pairing up emerging and established contractors, and their respective personnel, will develop the emerging partner into a sustainable business.

## **2.5. Main Challenges facing emerging contractors**

Of the chief challenges businesses face, rivalry, lack of self-confidence, debt collection, and lack of working capital were mentioned as the top five problems encountered by medium and micro-companies. Shakantu et al. (2006), through their desktop research, recognized four main obstructions for micro-enterprise expansion in the context of South African construction industries. The obstacles include rivalry and shortages of prospects, financial limitations, legal obstructions, as well as skills (adequate human resources) obstacles. Also lack of access to finance and cost of capital are further external barriers Shakantu et al. (2006) elaborate upon, supported by the findings of Ndlovu and Thwala (2008). Various legal acts, especially relating to issues around labour, e.g. the Basic Conditions of Employment Act, are seen as obstacles to emerging companies (Shakantu et al., 2006). Skilled human capital readily employable is lacking in South Africa, and hinders emerging contractors to grow (Shakantu et al., 2006).

However, the comparative lack of achievement small enterprises encounter in the country, as discussed by Rwelamila (2002); Miles (1980); Croswell and McCutchen (2001); Mphahlele (2001) and Ofori (1991); International Labour Organization (ILO) (1987) are as follows: insufficient funding and lack of ability to get credit from suppliers; failure to hire experienced personnel; poor pricing techniques, tendering, and contract documentation skills that the DPW has since been vigorously involved in hypothesizing.

### **2.5.1 Finance**

Long-term funding in terms of equity capital, required by upcoming enterprises, is practically non-existent for SMEs. 'In 1991, the U.S. Agency for International Development (USAID) and the Commonwealth Development Corporation (CDC) supported the establishment of a venture capital fund, for instance in Ghana (Africa), in

response to an apparent need for financial products and services designed to meet the long-term financing requirements of upcoming enterprises in Africa. The shortage of peripheral finance at the dire development or evolution phases of micro enterprises discourages the enterprises with growth potential from growing' (Nissanke, 2001).

Developing businesses typically raised their difficulties with access to finance, such as bank over-draughts and bank credit. Moreover, as also indicated by other writers (cf. Rogerson, 2000), access to formal bank loans are delayed due to lack of immoveable valuable properties, that will be used as security for banks. The incapability of suppliers to prepared a 'neat bill format' for their monthly operations increase their cash flow challenges, as additional draw-backs of payment result from non-corresponding claims and certificates. Emerging Contractors are not able to produce proper interim certificates of work completed to date, because of their incapacity to originate the accurate measurement of quantities and to compute the corresponding sums due in accordance with agreed rates, however coming up with rates as well as bidding is also a challenge often encountered.

The feeling of this challenge regarding access to finance and cash flow is not new. From the data collected it is evident that initiatives started by the national government to ease access to finance for SMEs have not yet reached their full potential. More active support needs to be given enabling emerging contractors to get access to finance. The approach of clients to assist in purchase of materials, allowing micro-companies to build up a track record, and making them more creditworthy could be another way to assist companies in this regard.

## **2.5.2 Education**

Tertiary education as well as continued development is a key contributing factor to a country's entrepreneurial capacity and denotes a worrying skills gap based on past inequality in schooling provision, which is not yet sufficiently addressed. Although it was pointed out by interviewees that not all Emerging Contractor lack general education which would assist them in running their companies, the various views collected point towards this challenge of the level of education. The level of education and training is however not only pointed out by parties interacting with the Emerging Contractors; some of them also saw the lack of education and training among their employees as a challenge. Overall the lack of education of the key members, i.e. owners/managers, of the Emerging Contractor, also represents another external barrier to development.

## **2.5.3 Training**

The global technical intervention has noted that, "our current personnel is unschooled, improperly educated and badly skilled". Salome Liebenberg, a practiced project coordinator and consultant, publicized that many upcoming enterprises owned by black people do not have the skills and assets to market themselves and complete projects without calling for outside support. The majority of adult business owners learn best through physical involvement in the learning experience. This is more general training, as also initiated through the EPWP as the organization that has the potential to end this problem. The nature of such training is basic, and if SMEs are to become sustainable entities, intensive training will be required. In the long-term, promoting education and continuous skills development in general is required, eliminating the large pool of poorly educated job seekers as well as Emerging Contractors.

Training and courses with regards to tender processes and building up of levels, as also seen in the respective Contractor Development Programmers, might assist in addressing this major shortcoming in Emerging Contractors' knowledge base. However, it is doubtful if the finer art of pricing can be taught in a course-like setting, as this will give rise to the need for mentorship-like interventions. In addition to that, the client representatives, assessing rates given by contractors on a daily basis, were very quick

to point out their concerns; for some interviewees it is the lack of knowledge amongst emerging contractors on how to price the various items which is the main concern.

#### **2.5.4 Abuse by main contractors**

Some experiences of abuse by main contractors in the form of exploitation of the emerging sub-contractors were noted. This abuse by main contractors appeared to be frequently related to the issue of payments of monthly claims, taking advantage of the lack of understanding of claim procedures by the emerging companies. It was also noted that, particularly the interviewed representatives from main contractors involved with the emerging companies, were quick to point out that they are proactive in working together with the sub-contractors to settle claims swiftly.

This is perhaps another indication of their own awareness of the frequent abuse of emerging sub-contractors in the industry. These malpractices also indicate the general nature of the relationships between main contractors and sub-contractors, which are not new and have been reported upon before (e.g. Hinze and Tracey, 1994; Dainty et al, 2001). Through active project management initiatives and interventions from the client's side, such abuse could be narrowed. The current popular customary procurement forms used by clients do not allow for such interventions.

#### **2.5.5 Lack of continuity**

In various conditions, it was common that construction work was performed for only half of the year by SMMEs, and in the second half of the year the company would be essentially inactive mainly due to unavailability of work as well as challenges they might have faced. In addition to that, there is a serious lack of talent management that has resulted in loss of key personal, who had acquired certain expertise and understanding during a project execution period, as they sought employment elsewhere. Furthermore, due to a lack of exposure, contractors cannot grow their capabilities and knowledge as has been noticed that main contractors commented upon the Emerging Contractors' circumstance.

The continuous labour unrest across the country that has resulted in massive delays and disruption to the appointed contractors caused by the local informal business people geared by the local authority has crippled many growing contractors.

### **2.5.6 Regulations**

Further to the project parameters, and in particular the local-labour clauses, appeared to be causing problems among emerging contractors. Due to government policies to create work opportunities, many contracts stipulate that local labour needs to be trained and be involved in every contract. With only limited work available, some projects see a rotation of labour too. Thus, once workers have been trained and their respective productivity has increased to an acceptable level, they get replaced by new workers, making sure they are getting the opportunity to earn some income too. This results in a discontinuity of internal capacity, and even workers who have been trained up by the emerging contractor are not allowed to be used on new contracts in another municipality or district, as also there the local labour must be the beneficiary of the local labour policies.

### **2.5.7 Legal barriers**

Considering the legal obstacles, a generally observed restriction to small and medium enterprises are the labour regulations. These have contributed much to the cost of employment and have exaggeratedly lengthened retrenchments and corrective action within the companies. In addition to the above statement, remedial action does not allow sufficient flexibility, particularly in remuneration adjustments and the preparation of working time (Bhorat et al, 2002). It results in enterprises having a feeling of a profit squeeze and has an influence on the preparedness to create jobs.

The duties of SMEs and private enterprise in creating growth of the economy is composite, due to numerous intermediary variables that are at play, such as competition, however development and different suppliers also play a major role. Economists have started to build hypothetical outlines which try to capture the role of the middle variables.

Medium and Small companies are tactically significant for private enterprise growth, for the reason that they limit the dominant power of large enterprises and increase the competitiveness of the market. Similarly, they are necessary for business skill improvement. The involvement of these companies in improvement, economic development, and employment creation in most parts of the world is well recognized. Thus, backing small companies is a vital approach for creating new employment prospects. Regardless of the statements above, the development of SMEs meets a number of limitations that impedes its prompt growth, which eventually reduces the value of their possible involvement in the economy of the country.

### **2.5.8 Project management**

Duncan (1996:6) defines project management as “the application of knowledge, skills, tools and techniques to project activities in order to meet or exceed stakeholder’s needs and expectations”.

Project management is the discipline of attaining objectives by optimizing the use of available resources such as time, money, materials, energy, human resources, space, etc. The project manager endeavours to sustain the progress and productive relations of the numerous parties involved by implementing all or some of five project life cycle stages, namely, conceptualization, design and development, construction phase, commissioning and handover. He should therefore have to guard three main objectives viz. time, quality and cost.

Lack of effective contract administration in the early stages is a leading cause of business failure for small and medium sized service providers. Business owners have a tendency to run their businesses as a measure of reducing operational costs. Poor book-keeping is also a reason why businesses fail. Commonly, this is not caused by low priorities being involved by new companies, but also lack of the basic business management skills.

It has always been a problem with sole proprietors, especially those who manage their own business, since records have shown that most of them convert business capital to their personal uses. However, most businesses suffer financially because of poor cost

management and basic book-keeping practices. It has become a tradition that entrepreneurs have poor project and contract management skills and will not be in a position to draw a thin line between business and personal needs. Company reserves were converted into personal and family needs, and this has resulted in a negative impact on their profits, resulting in crippling the growth of the entire business.

#### **2.5.8.1 Requirements of effective project managers and the project team**

They are a number of areas of project management, and it has been recognized by several authors that for the successful implementation of an ECDP, there must be a development leader who will manage and promote the programme. Moreover, coordination and leadership is important to the successful implementation of a project, since leadership is a tool to motivate people. That will qualify it to be characterized as “manager-ship” and will make leadership equally important, as this is about getting things done.

The approach that can be adopted is a “**Solutions Integration Model**”, of the 9 key focus areas as identified in the **Project Management Body of Knowledge (PMBOK)** to fully manage projects within the built environment from conception to completion, including the management of related construction services. The Project Manager/Leader or Contract Manager is the one focal point of responsibility in regard to the above. The findings of the study will revolve around the Project Leader, hence project management principles must be adopted in undertaking this study.

It is therefore essential that the core competencies that need sharpening are brought to the fore and discussed in more detail. Figure 1 identifies the core competencies and how they are integrated. In the process of developing Emerging Contractors these nine areas of project management skills need to be given to the upcoming contractors. This will make them more competent and give them a competitive advantage. The Figure 1 below describe the essential qualities of a project manager, hence the key personnel of the EC need these competency areas to be improved since most of the do not have Built environment qualifications.

**Figure1: Core Competencies of the Contractor's Project Manager**

**“Solution Integration Model”**



**2.5.8.2 Project management knowledge areas**

Projects encompass project management knowledge areas. It is, therefore, important to define the knowledge areas in order to identify the role of each knowledge area in implementing and managing the project. Wideman (1991:12) identifies scope, quality, time and cost management as the core group of project management control functions. Zack (2004) adds that for construction project management, additional knowledge areas

of occupational health and safety, finance, environment and claims management should be considered. The “Solutions Integration Model”, is based on the integration of the 9 key focal areas as identified in the Project Management Body of Knowledge (PMBOK).

### **2.5.8.3 Project time management**

The ‘Project Management Body of Knowledge (PMBOK)’ by the Project Management Institute (PMI) (2000:65) refers to project time management as comprising five elements, i.e. activity definition, sequencing, duration estimating, schedule development and schedule control, with project time management being defined as the process of ensuring timely completion of the project.

### **2.8.8.4 Project cost management**

The PMBOK (2000:83) defines project cost management as the process required to ensure that the project is completed within the approved budget. It comprises the following main processes: Resource planning, cost estimating, cost budgeting and cost control.

### **2.8.8.5 Project quality management**

As described in Verzuh (2003:208), quality management can result in the team being more effective in carrying out the management of the project. Project quality management provides the tools to ensure that projects meet the required objectives. It plays an important role in project planning and establishes the major functions of the project manager during project execution.

### **2.8.6 Project communication management**

The PMBOK (2000:117) defines project communication management as the processes required to ensure timely and suitable generation, collection, dissemination, storage and ultimate disposition of project information. It comprises communication planning, information distribution, performance reporting and administrative closure.

## **2.8.7 Project risk management**

Van Well-Stam, Lindenaar, van Kinderen and van den Bunt (2004:2) state that risk management provides support for attempts to gain better control over a project when it comes to time, money, quality, information and organisation. According to Chapman and Ward (1998:9), the essential purpose of risk management is to improve project performance. Project risk management is a broad concept that can be approached in different ways.

## **2.9 Competition and limited new opportunities**

There are a large numbers of small contractors entering at the lower end; this sector has become extremely competitive, thereby making it difficult for new entrants to keep a sustainable workflow. This inability to sustain workflow impacts on their ability to achieve sustainable employment and economic empowerment (Construction Industry Development Board, 2006).

## **2.10 Development Models**

No single contractor development model will apply to development across all grades of contractors, and all levels of business maturity. Different models are more appropriate to different levels of development. It is however suggested that programmes centring on developing contractors from Grades 1 to 2 must not be designed as incubator programmes, but rather be implemented as part of the Extended Public Works Programme (EPWP)

## **2.11 Managing Contractor Development**

This calls for a number of key development processes that need to be employed when undertaking the operational phase of a CDP and the following should not be left out since they are critical functions in contractor development:

- Implementing training and mentorship;
- Sharing the cost of contractor development;

- Facilitating dispute resolution;
- Allowing employees time to attend training courses.

## **2.12 Evaluation of Existing of Contractors**

The development programmes need to be evaluated to check their viability and contractors should be seen to be progressing from one level to another, graduating from a CDP. Evaluation criteria should be designed in the way that would make SMEs to meet the requirements for CIDB Contractor Competence Accreditation; and upgrading to a higher grade designation. However, accreditation should be accompanied by formal applications made to CIDB that will check the contractor's competence and award accreditation before approving their exit from development programmes.

## **2.13 Emerging Contractors and Skill Development**

This section focuses on emerging contractors and the interventions that are in place to develop the skills of black contractors in South Africa. Previous initiatives to develop the skills of emerging contractors will be reviewed in order to develop a "best practice" skills development model. McCutcheon and Croswell (2001:365-379) outline the challenges facing emerging contractors as capital and expertise (entrepreneurial, managerial, technical and administrative), as well as a record of accomplishment. McCutcheon and Croswell (2001:365-379) explain that contract continuity holds the key, since without business continuity, the contractor is likely to go out of business, be unavailable for the work when required and lose competence through lack of practice. In all these cases, the training invested in the small contractor will be lost.

### **2.13.1 Skills Development Act, Act 27 of 1998**

According to government publications, the Skills Development Act provides an institutional framework to devise and implement national, sector and workplace strategies to develop and improve the skills of the South African workforce (Engdahl and Hauki, 2001:62). According to Engdahl and Hauki (2001: 62), the purpose of the

Act is to increase the levels of investment in education and training of the labour force, as well as providing opportunities to new entrants to the labour market to afford them opportunities to gain work experience. Moreover, the Act also assists those who are at a disadvantage and find it difficult to find employment.

The Act established the National Skills Authority and the National Skills Fund and provided for the establishment of Sector Education and Training Authorities (SETAs). The functions of the National Skills Authority are; advising the Labour Minister regarding regulations made, and collaborating with the SETAs in different skills transfer development policies and strategies.

In addition to the above, it has to undertake investigations regarding the progress made during the implementation of the National Skills Development Strategy and give a detailed report on it.

Engdahl and Hauki (2001) add that members of the authority are appointed by the Minister to represent interests from labour, business, the community and development interests, as well as the State. They focus on specific economic sectors, determined by the education and training needs of employers and employees in similar categories of businesses. The potential for coherent occupational structures and career planning, as well as the financial and organisational ability of the proposed sector to support a SETA, are other issues taken into consideration.

According to Engdahl and Hauki (2001), the function of SETAs is to develop and implement a sector skills plan by establishing learnerships, as well as approving workplace skills plans and providing grants to stakeholders of the skills transfer. They also do education and training, monitoring processes in the sector. Furthermore, they are to collect and disburse the skills development levies in their sectors. The SETAs liaise with the National Skills Authority and report to the Director General of Labour. Every SETA consists of representatives from labour, employers and relevant government departments, and might also include other interested parties if the Minister of Labour considers it appropriate (Engdahl and Hauki, 2001).

### **2.13.2 The role of the Construction Industry Development Board**

The Construction Industry Development Board (CIDB) (2006) was established by parliament (Act 38 of 2000) as a legislative body to provide leadership to stakeholders and to kindle sustainable growth, reform and improvement of the construction sector for effective delivery, and the industry's enhanced role in the country's economy.

“The CIDB, which is responsible to the Minister of Public Works, comprises private and public sector individuals appointed by the minister on the basis of their individual knowledge and expertise. The board is supported by a professional and knowledge-based organization, structured to drive the strategic objectives of the CIDB” (CIDB, 2006)

The CIDB's mandate is to provide strategic leadership, promote sustainable growth, and improve performance and best practice. It is not limited to the above, but extends to offering high quality procurement and delivery management systems, and inventing approaches for monitoring and regulating the performance and registration of projects and contractors.

### **2.13.3 The Emerging Contractor Development Programme**

In 1997, the South African Department of Public Works set up the Emerging Contractor Development Programme (ECDP) to help fast-track the involvement of black-owned construction businesses in the sector. Training should be developed for different levels of emerging contractors, including contracting accredited training providers to prepare entrepreneurs for work appropriate to their size and stage of development (National Contractor Development Programme Brochure)

### **2.14 Conclusion**

Certain challenges might be addressed through SME internal changes. While lack of opportunities, lack of access to finance, and illiteracy are seen as an external barriers, since these challenges are controlled by external environment. However, other problems can be addressed through appropriate contractual exposures of the emerging contractors, all these need client to intervene in order to remedy the problems. The problems encountered through cash-flow can be addressed by means of varying contractual agreements with the main contractor to allow for more frequent payments. This however must be done hand-in-hand with creating awareness on how to build up rates and how to tender, as this forms the basis for subsequent monthly or weekly progress payment claims.

Ensuring non-delay of payments through processing accurate neat payment claims, must be envisaged and can be achieved through a direct interaction between the main contractor and emerging subcontractor. However such interaction needs a suitable context, and noted malpractices by main contractors exploiting subcontractors are seen as counter-productive. Initiatives by governmental bodies to foster the development of emerging contractors exist. The case studies evidenced that these initiatives made an impact on the respective emerging contractors.

This is possibly due to the large number of contractors, and the limited reach of developmental programmers. Analyzing the challenges makes it clear that the initiatives started might not address the problems in their entirety. Changes to public procurement,

seeing emerging contractors exposed to problems and solutions, might assist them to create the required stock of understanding and knowledge of required business principles, beyond basic training.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

In this section, matters relating to research methodology and design, research instruments, the sampling methods and the methods adopted to analyze the data for this study will be discussed. Leedy (1989:113) describes a methodology as an investigative framework within which facts are placed more clearly in order to provide a clear meaning of what they represent. The researcher defines methodology as a structure of unambiguous rules and procedures upon which claims of knowledge are evaluated, and providing rules for communicating and reasoning.

### **3.2. Research Design**

There are various research methods from which the researchers can choose the most appropriate to employ. According to Saunders *et al.* (2004), a research design is a general strategy of how the investigator goes about finding the answers to the research questions. Confirming this, Panneerselvam (2004) describes a research design as a plan that provides guidelines for data collection.

The method of information gathering that will be engaged in this study will be the combination of the two methods, qualitative and quantitative. Triangulation is the combination of both methods, drawing on both the quantitative and qualitative data collection (Michael D. Myers). Bogdan and Biklen (1992) define qualitative research as 'inquiries of knowledge that are outside the framework prescribed by the scientific method, as well as assumptions of inferential statistics'. Backer (2007) describes qualitative research as the non-numeric examination and interpretation of observation, for the purpose of discovering underlying meaning and patterns of relationship. It involves the strategic use of collection of the socially constructed nature of reality and it tries to understand intimate relationships of the researcher and the researched. The point of departure in field research is to take an insider's perspective on social actions as they occur, understand, describe and give a meaning to that.

On the other hand quantitative research is more easily defined as the compilation of both numerical and statistical information. Amaranatunga et al. (2002) describe quantitative data as 'data which can be sorted, classified, measured in a strictly "objective" way; they are capable of being accurately described by a set of rules or formulae or strict procedures which then make their definition (if not always their interpretation) unambiguous and independent of individual judgments'.

### **3.3 Research methodology**

This chapter will aim to outline the research methodology used in this research exercise, such that comments will be derived and established on how the research was managed, making sure validity and reliability of the research data and procedures associated with the subsequent analysis and presentation of the data was maintained. 'Research methodology is the way in which researchers go about solving problems (Buys, 2002). According to Fellows and Liu (1997), research methodology is the principles and procedures of logical thought processes which are applied to a scientific investigation.

Research method "refers to the techniques that are used or are available for the research" (Runeson and Skitmore, 1999). It is vital that the methodology is given a careful consideration at the outset of the research so that the most suitable approaches and research methods are adopted. Considering the two research methods allows one to gain a 'fuller' picture of what is happening. It allows you to triangulate data from interviews with data from documents; that is, data from two different methods (Michael D. Myers, 2009).

It is important to identify the type of research method that the researcher is intending to follow. Literature distinguishes between two distinct methods, namely; quantitative and qualitative research. Malongane (2014), citing Mancosa (2002), stated that there are also combined research studies, where the research method contains both qualitative and quantitative elements. The difference between the two research approaches has been covered by various authors, some definitions are discussed below.

- Monks (2010:65) cited the definition of qualitative research as “research that seeks to provide understanding of human experience, perceptions, motivations, intentions, and behaviours based on description and observation and utilising a naturalistic interpretative approach to a subject and its contextual setting”.
- Myers and Avison (1997:27) described qualitative research as “research that derives information from qualitative data sources which include observations, interviews, documents and texts, and the researcher’s impressions and reactions”.
- Malongane (2014), citing Leedy and Ormrod (2010), further identified five common qualitative research designs, namely: case study, ethnography, phenomenological paradigm, grounded theory study and content analysis.
- In terms of quantitative research, Monks (2010:65) stated that “quantitative research is based on traditional scientific methods, which generates numerical data and usually seeks to establish causal relationships between two or more variables, using statistical methods to test the strength and significance of the relationships”.
- Malongane (2014:41), citing Myers (2009), stated that “quantitative research investigates general trends across populations and focuses on numbers, whereas qualitative research constitutes an in-depth study of social and cultural phenomena which focuses on text”.

In the context of the stated definitions, this research study predominantly adopts the qualitative approach with some quantitative elements. Qualitative research (specifically case study design) was found to be more applicable in this research due to the fact that the research derives information from the data sources as described by Myers and Avison’s (1997) in the second bullet above. Further, the case study design was found to be suitable as this research investigation evaluates a case study. Malongane (2014:43), citing Leedy and Ormrod (2010), defined the case study design as research whereby “the researcher collects extensive data on the individual(s), programme(s) or event(s) on which an investigation is focused. The data often includes observations, interviews, documents (e.g., newspaper articles), past records and audio- visual

materials”. This research study gathers information from project documents as well as the CIDB contractor register. Project participants are not interviewed because the research does not investigate the ‘perceived’ success of the CDP. The quantitative research approach is also justifiable as the research translates some of the findings into numerical data.

The selected research approach is further justifiable primarily for the following reasons:

- Project documentation outlining the process for implementing the CDP and the nature of development support provided to the small contractors was obtained as part of the research.
- The CIDB register of contractors is also studied to determine whether the registered contractors have increased in grading during and after exiting the programme.
- An investigation is conducted on whether the small contractors have remained sustainable after completing the project; this was conducted through evaluating the company profiles obtained from the contractors.

### **3.4 Population**

A population is any group that is the subject of the researcher’s interest. O’Sullivan & Russel (1995:17) define population as the total set of units in which the investigator has some interest. Zigmund (1994) states that a target population is the specific, complete group relevant to the research project. It is not always possible to include all the emerging contractors, because some of them would be unavailable, sick or out of the country on work commitments. There are more than fifty emerging contractor in Ngaka Modiri Molema, but due to time constraints this research will target on constructors which are found be 15 SMMEs, from CIPRO and CIDB statistics.

#### **3.4.1 Sampling technique**

According to Bailey (2001), sampling denotes the process of selecting a fraction of the population from which to obtain descriptive and analytical data about the population as a whole. It is the process of selecting individuals to participate in a research study (Gravetter, 2009). A stratified random sampling method will be used in this research. The method consists of the population being divided into a number of strata which are mutually exclusive and have homogeneous members in terms of characteristics like gender or age (Glicker, 2003). The desired number of participants is then randomly selected proportionally within each stratum. This kind of sampling is mainly used to ensure that different groups of a population get sufficient representation in the sample (Brink 2003). The researcher chose this method because random sampling ensures a high chance that the sample will be representative of the population.

### **3.4.1.1 Sampling Methods**

Sampling is divided into two types. The two major types are non-probability samples and probability based samples. These cover the following areas under the different headings.

#### **3.4.1.1.1 Non-Probability sample:**

The researcher will use this technique in this research for the reason that follows. These samples focus on volunteers, or those present at the time of the research. This type is useful for quick and cheap studies, qualitative research, pilot studies and developing hypotheses for future research. The non-probability sampling is divided into three areas, which are convenience sample, quota sample and judgment sample.

##### **3.4.1.1.1.1 Convenience sample**

This is an accidental sample or man-in-the-street sample. Here the researcher is able to use the units that are convenient and close at hand. For the purpose of this research this method is going to be used because it is cost effective and not time consuming.

#### **3.4.1.1.1.2 Judgment sample**

The researcher will also make use of this sampling method because it needs one's own judgment that makes it easy to use. Researchers rely on their experience, and previous research findings to deliberate analysis. According to Babbie and Mouton (2001), the non-probability sample selects the type of units observed on the basis of your own judgment of which one will be the most useful or representative. Confidence is required that the chosen sample is truly representative of the entire population when using this sample.

#### **3.4.1.1.1.3 Quota sample**

Quota sampling technique is a tedious method since one need to design and build different quotas for different types of units. Identification of the strata and their proportions according to how they are represented in the population will be done followed by human judgment sampling to select the required number of subjects from each stratum.

#### **3.4.1.1.2 Probability based sample:**

The mathematical theory of probability is the central pivot of this type of sample. Population units will be identified and be given equal chances of being selected into the sample. The researcher will use this sample method as way of confirming the other non-probability based sample methods employed in this study, this method will not be fully employed.

#### **3.4.1.1.2.1 Random sample**

Each member in the population is identified and everybody has an equal known chance of being picked or not picked in the sample. However, the selection processes of units are independent of each other. This sampling method will not be employed even though the biased results are very minimum because of minimum human control, but will be used as a control tool.

#### **3.4.1.1.2.2 Systematic random sample**

This method is not going to be used in this study due to its systematic problems of systematic bias from pattern matching. Individuals are identified from a population group, and given an equal chance of being sampled.

#### **3.4.2 Method of data collection/Questionnaire**

The researcher has decided to use face-to-face interviews and emails as his methods of data gathering mainly because of the lower cost and effectiveness.

##### **3.4.2.1 E-mail**

The questionnaire was sent to the SMME's via e-mail for their approval and responses. This is a very cost effective method of dealing with persons to obtain approval and in addition it saves time. The researcher used this method because of its cost effectiveness and convenience. The respondents will attempt to answer the questionnaires during their own time. The questionnaire was designed very clearly and unambiguously.

##### **3.4.2.2 Face-to-Face interviews**

Due to the method demanding a lot of time, the researcher prepared some questionnaires that the interviewees would be given to respond to and interviewed. This is why structured interviews were conducted with the respondent to enable them to focus on the strategic issues that they deal with on a daily basis. The interviews focused on the following areas:

- Project management skills
- Financial constraints
- Knowledge of constructions skills and methods
- Comparative advantage

- Education
- Workload

Due to time constraints, the researcher will make use of questionnaires instead of face-to-face interviews.

### **3.4.2.3 Data collection procedure**

In order to prevent any bias to the research; project stakeholders were not interviewed formally for the purpose of formulating the research findings but rather, the research relies on documented evidence. The method followed in conducting the research is as follows:

- A literature review was conducted to investigate research on contractor development in the construction sector. The literature review provided a basis for evaluating the project, bearing in mind the extensive body of knowledge available on small contractor development initiatives.
- The literature review was followed by a data collection phase. The procedure that was followed is outlined below:
  - Project documentation was requested. The information requested included project documentation such as tender documents, contract data, works information, project organogram and minutes of meetings. This documentation forms part of the official project records and is distributed to all project stakeholders. It can thus be reasoned that the documentation contains a true reflection of the project.
  - A project database was requested which was managed by the training provider. The database detailed the initial list of contractors, entrance and exit status, training and skills development initiatives and contractor progress tracking. This record was validated against information obtained from the engineering consultants who were responsible for monitor and managing the project.
  - The CIDB register of contractors was also studied to determine the grading of the contractors and to verify that the contractors have improved their grading since exiting the programme.

- Compilation of data was then followed by an evaluation of the project outcomes which was, in turn, followed by documentation and conclusions.

Data which was used in this research was compiled from the different sources, such as books, articles, conference reports, North West University Library (data base sources) and construction magazines. Preliminary data which was used was obtained through emailing and face to face interviews of structured questionnaires. The questionnaires were administered as indicated below:

#### Stage 1

A list of all the construction SMME's in Ngaka Modiri Molema was obtained from the Construction Industry Development Board and CIPRO. The contractor's mailing list was obtained from the Construction Industry Development Board website.

#### Stage 2

It comprises location of the population using the information obtained as mentioned and to check whether they are operating. The contractors who are black-listed or no longer operating in the province were eliminated.

#### Stage 3

Preliminary research approach includes quantitative method of data sourcing that led to formation of a standardized self-administered questionnaire. The questionnaire targeted a sample of 10 emerging contractors residing and operating in Ngaka Modiri Molema district.

#### Stage 4

The pilot questionnaire was given to 10 contractors of between 1 and 20 years work experience.

## Stage 5

According to Crafford (2007), the construction industry has a poor response rate to surveys; therefore the author has to approach the target sample in two ways, emailing and face-to-face interviews. The questionnaire was emailed to the target population who had not responded in time. Further emails were sent to those who did not return the questionnaire and this served as the reminder. A face-to-face interview was then conducted as a follow-up to unreturned questionnaires

### **3.4.2.4 Data Analysis Method**

Data analysis is the process summarizing data collected from the field, which is bringing structure and meaning to the collected data. The researcher will use a statistical package to analyze data that will be collected from the sample using questionnaires. Statistical methods will be used to categorize, manipulate and summarize some characteristics of the sample group. In addition, the researcher will make use of flow charts and graphs, to present the analyzed data and also written descriptions shall be used.

### **3.4.3 Validity and Reliability**

Validity refers to the degree to which an instrument supports the intended claim, or measures what it is supposed to be measuring. According to Rubin and Babbie (2001), a measure is deemed reliable if it yields the same result repeatedly when applied to the same object. If the instrument is reliable it must then give an insignificant random error in measurement. In addition to the above, according to Goddard and Melville (2001), reliability implies “that the measurements are consistent, assuming that the experiment and the conditions remain the same”. Other sampling methods are being employed to validate and check the reliability of the results.

### **3.5 Ethical consideration**

Falsifying data, or duplication of work done by another researcher during the research process can cause ethical problems. Therefore false declaration must be avoided, however if it cannot be avoided, especially on secondary sources it will be have been acknowledged, as listed in the bibliography. The researcher has studied and comprehended the Ethics Clearance Form set by the Human Research Ethics Committee (HREC) of the University of North West and has submitted the form for ethical clearance with the committee that was approved and has been attached as an appendix to the study. The ethical clearance number as indicated on ethical clearance letter is **NWU-HS-2018-0047**. The ethical clearance certificate which has been reviewed by the Human Resource Research Ethics Committee (HRREC) on 18-Apr-2018 is valid from **18-Apr-2018** to **17-Apr-2021**.

### **3.6 Conclusion**

This chapter defined the research method employed in this study and also outlined key considerations and criteria that informed the research method. The criteria for evaluating the effectiveness of the development programme was summarised as follows: technical, financial and managerial training received by the contractors, the provision of relevant work experience for the duration of the programme as well as an increase in the contractor's CIDB grading after exiting the programme. The CDP is further evaluated against the CIDB's standard definition of a contractor development programme as stated above.

## CHAPTER FOUR: RESULTS, DATA PRESENTATION AND ANALYSIS

### 4.1 Introduction

The chapter gives an examination and analysis of the effectiveness of Contractor Development Programmes in South Africa. It is analytically planned to assess data in order to relate to the conceptual framework produced for the study. There are statistical calculations in the data analysis, but tabulation was used for scores.

The target population consisted of 20 contractors, however questionnaires were sent to only 14 SMME contractors who according to the records received from North West province were actively involved in construction. By 13th May 2018, 14 responses were acknowledged. This signified a response rate of 100 percent. The relatively high response rate can be attributed to the collection procedures, namely personal administration, reminder and personal collection wherever possible.

**Table 4.1 Sample Breakdown**

Category	Analysis of Respondent sample		Respondent	% Response
	Population	Sample		
Contractors	20	14	14	100%

This is statistically a large sample, as the size exceeds 30 percent as suggested by (Wisniewski 1994). Of the 14 responses received, 5 percent requested a reproduction of the summary of the outcomes to be sent to them for their records.

### 4.2 Data analysis

Zikmund (2003) states that rating questions can be best described by rank ordering using the mean or percentile ranking. Partnering open-ended questions, the responses were processed

according to the procedures of the grounded theory presented by Vasconcelos (2007). Processing of open-ended questions are processed through field surveys (data collection), coding, sorting, ranking and interpretation

### **4.3 Discussion of the results**

Distribution of questionnaires were done to 14 randomly selected contractors, and 14 managed to complete and respond back, though a little effort was made to maximize the response rate. The reason put forward for the delay of returns is the natural negative attitude of prospective respondents to the supposed bore of having to participate in the research activities that resulted in a reduced attitude towards research. The discussion of the results as received from the respondents will be done after the gathered data is converted into information through SSP software analysis of the responds. The graphical information generated by the software will be interpreted and discussed to give it a meaning. Assumptions will be made in some cases in the discussion as a way of analysing the results.

#### **4.3.1 Data analysis**

Zikmund (2003) states that rating questions can be best described by rank ordering using the mean or percentile ranking. Partnering open-ended questions, the responses were processed according to the procedures of the grounded theory presented by Vasconcelos (2007). Processing of Open-ended questions are processed through field surveys (Data collection), coding, sorting, ranking and interpretation

### **4.4 Response to Questionnaire**

A total of 14 questionnaires were sent to Emerging Contractors in Ngaka Modiri Molema district of the North West province. Among all the 14 contractors, 12 responded through the emails. In addition to that, face-to-face interviews and telephonic conversations were employed as a way of increasing the response rate, and reminding the remaining respondents, for those who did not respond to questionnaire through emails. Among the 3 interviews made, only 2 were successful through telephonic follow-ups, and another one was successful through physical

interactions with the SMMEs, because some contractors did not have time to attend my interviews and some were never in their offices. The following reasons were noted as why respondents were slow; lack of time and internet accessibility.

#### 4.4.1 The following table shows an Analysis of Response Rate, Table 4.4.1

Category	Analysis of Respondent sample		Respondent	% Response
	Population	Sample		
Contractors	20	14	14	100%

According to Zikmund (2003) the researcher should endeavour to use as many techniques as possible to increase the response rate. After the internet failed to get responses, face-to-face interviews were conducted to boost the response rate. The table above indicates that everybody who was requested to participate has responded. This might be mainly because the study was of interest to the EC, especially when they realised that it seeks to solve the problems they are encountering in the development programmes offered by the South African government.

#### 4.4.2 Demographic profiles of respondents

Collective Gender distribution of respondents

Gender distribution		Frequency	Percent	Cumulative Percent
Valid	Male	5	35.7	35.7
	Female	9	65.3	100.0
	Total	14	100.0	

The table above indicates the gender distribution of the respondents. 35.7% of respondents were male contractors, 65.3 % were female. It indicates that there was an unbalanced gender distribution of respondents who participated in the survey, hence females responded more than males. Due to the women empowerment programme initiated by the South African government, there are more women participants in the contractor development programmes. More so, women generally are quicker in responding to various life issues than men, who are very dominant and resistant to participation.

#### 4.4.3 Collective race distribution of respondents

Race distribution		Frequency	Percent	Cumulative Percent
Valid	Black	10	71.4	71.4
	Coloured	2	14.3	85.7
	Indians	2	14.3	100.0
	Total	14	100.0	

The chart above shows that the sample was done on a previously disadvantaged group, of only black, coloured and Indian contractors, since they are the ones under the contractor development programmes in the country. There are indications that there are more black contractors than the other two groups. However, the groups that fit within the historically disadvantaged groups are the blacks, coloureds and Indians, hence that might be the reason why only those three groups participated in the survey. Blacks are generally overriding other group in terms of population, hence that justifies their high percentage.

#### 4.4.4 Collective age distribution of respondents

The graph below shows that only 7.1% of respondents are below 30 years, 42.3% are between 31 and 40 years, 14.3% are contractors aged between 41 – 50 years and 35 percent are contractors above 50 years. The results indicate that youth do not want to participate in the business, hence people seem to be active in business when they are above 30 years. In addition, this is mainly controlled by politics and the results indicate that the younger generation

des not play a pivotal role in politics, unlike older peoples who support and take part in the political arena.

	<b>Age Category</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Valid	20- 30 Years	1	7.1	7.1
	31-40 Years	6	42.9	50.0
	41-50 Years	2	14.3	64.3
	51-60 Years	2	14.3	78.6
	61 and above	3	21.4	100.0
	Total	14	100.0	

#### 4.4.5 Collective qualification distribution of respondents

	<b>Qualification</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Valid	Grade 12 or Matric	4	28.6	28.6
	Diploma	3	21.4	50.0
	Bachelor's Degree	2	14.3	64.3
	Post Graduate	5	35.7	100.0
	Total	14	100.0	

Figure above indicates that 28.6 % of contractors only have grade12, and 21% have a diploma, which proves that there is a lack of construction and managerial skills in these SMME's. Another 50% attained a Bachelor's degree and Post-Graduate qualifications which implies that responses were done by directors and company owners. There were no respondents with any qualification lower than matric qualification. This means that respondents understood the

research questions since most respondents had decent academic qualifications for example, post-graduate qualifications

#### 4.4.6 Occupational status of respondents

Job Position		Frequency	Percent	Cumulative Percent
Valid	Technician	2	14.3	14.3
	Administration Officer	2	14.3	28.6
	Manager	1	7.1	35.7
	Director	9	64.3	100.0
	Total	14	100.0	

Figure above indicates the job description of the respondents. The majority of respondents are Directors which constitute 64%, and 7.1% are managers, and technicians and administration officers contribute 14.3%. From the above it shows that Directors mostly responded; this may be due to the fact that they are not busy or they want to participate for their companies. Managers show a low of 7.1%, and that might be because they are busy with work, therefore they do not have ample time to participate in the questionnaires. The technicians and administrators contributed 28.6% to the participation of the survey, and this might be because most companies delegate much of the work to their juniors and office administrators.

#### 4.4.7 Length of service of respondents

Length of service		Frequency	Percent	Cumulative Percent
Valid	Less than 1 year	1	7.1	7.1
	1- 10 years	6	42.9	50.0
	11-20 years	5	35.7	85.7
	21-30 years	2	14.3	100.0
	Total	14	100.0	

The table above indicates the length of service of the respondents and personnel in the companies sampled. The majority of respondents have more than 10 years' experience and only 7.1% have less than one years' experience. We can conclude that experience is not a problem among the SMEs, though it does not necessarily indicate the field where one is experienced in.

#### 4.4.8 CIDB Grade

CIDB Grade		Frequency	Percent	Cumulative Percent
Valid	Not Yet registered	8	32.8	32.8
	Grade 1 -4	2	38.6	71.4
	Grade 5 and above	4	28.6	100.0
	Total	14	100.0	

The table above indicates Construction Industry Development Board (CIDB) registered contractors and their grade. More than 30% of the participants indicated that they are not registered with the CIDB. Further to that, only 28.6% are registered as grade 5 and above, and this will indicate that most of them have not been appointed for big projects, as very few contractors have the financial capability. From the above table, we can deduce that 70% of the

respondents are not experienced since they are registered as Grade 4 and below, which proves lack of experience as indicated from literature review. The effectiveness of the Contractor Development Programmes has been hampered by this indication since it shows immaturity of upcoming contractors.

#### 4.4.9 Field of study of respondents

The table below indicates that the respondents lack financial and managerial skills since only 5% of respondents have management qualifications. Furthermore, respondents proved that they lack engineering skills because only 9.0% obtained engineering qualifications and about 28.6% have no formal qualification. The rest of the contractors, 57.1%, obtained Degrees in Education and Law, which means they do not have engineering techniques. Further to that, most directors, especially lawyers, will be busy with other businesses. Probably those who have indicated that they have engineering qualification are employees and hired by politicians to run sites for them.

Field of Studies		Frequency	Percent	Cumulative Percent
Valid	No qualification	4	28.6	28.6
	Civil engineering	2	9.0	37.6
	Project Management	2	5.3	42.9
	Teaching	4	28.6	71.5
	Law	2	28.5	100.0
	Total	14	100.0	

#### 4.4.10 Constructions Skills is a challenge

Construction Skills		Frequency	Valid Percent	Cumulative Percent
Valid	Strongly Agree	3	21.4	21.4
	Agree	5	35.7	57.1
	Not sure	4	28.6	85.7
	Strongly Disagree	2	14.3	100.0
	Total	14	100.0	

As depicted by the above table, 57% of respondents support that Construction skills are a challenge, 28.6% are not sure, and only 14.3 % do not agree that construction skills are a challenge. However, this shows that construction skills are a challenge when considering the respondents.

#### 4.4.11 Lack of Contract management experience

Contract management experience		Frequency	Valid Percent	Cumulative Percent
Valid	Very Low/ Poor	8	57.1	57.1
	Low/ Below Average	4	28.6	85.7
	Average	2	14.3	100.0
	Total	14	100.0	

Looking at the table above, we can deduce that contract management skills are a challenge among SMMEs. It also supports item 4.4.10, since Contract management is one of the skills the SMMEs should be having to run their contracts. Results have shown that more than 85% of the participants indicated below average contract management skills, and only 14.3%

indicated that they have average contract management skills. The findings generally confirmed the studies by Moss (2007). The findings also confirm the observation by SAQA (2007) that there is a need for training.

#### 4.4.12 How many projects awarded to your company

How many projects awarded to your company		Frequency	Percent	Cumulative Percent
Valid	0 Projects	7	50.0	50.0
	1 Project	6	42.9	92.9
	2 and above	1	7.1	100.0
	Total	14	100.0	

The table above indicate that the majority of the SMMEs have no experience since 92.6% of the respondents indicated that they only received two projects during the development programme, with 50% of them not having been awarded any project. However, only 7% have been given more than two contracts.

#### 4.4.13 How often were you engaged in development programmes

How often were you engaged in development programmes		Frequency	Percent	Cumulative Percent
Valid	Once	14	100.0	100.0

All respondents indicated that they were only involved once in Contractor Development Programmes, hence the indication is that the programme is not effective. However, most of the contractors will give misleading information such that the government's image will be tarnished because of politics.

#### 4.4.14 Political Influence in awarding tenders

Political Influence in awarding tenders		Frequency	Percent	Cumulative Percent
Valid	Strongly Disagree	7	50.0	50.0
	Disagree	7	50.0	100.0
	Total	14	100.0	

All responded indicate that there is no political interference in awarding tenders. This shows that most of the people who participated have no idea of how they got work. In addition to that this might be the very same group who are politically connected and do not want to disclose it for their own benefit.

#### 4.4.15 Workload is a challenge

Workload is a challenge		Frequency	Percent	Cumulative Percent
Valid	Strongly disagree	2	14.3	14.3
	Disagree	12	85.7	100.0
	Total	14	100.0	

The respondents do not agree that workload is a challenge, most probably because they do not have much work. The reason might be the fact that they do not want to indicate that they are not capable of handling more projects. The table above indicates that the programme is not effective since very few contractors have something to do.

#### 4.4.16

#### Always completing my projects in time

Always completing my projects in time		Frequency	Percent	Cumulative Percent
Valid	Agree	6	42.9	42.9
	Not sure	4	28.6	71.4
	Disagree	4	28.6	100.0
	Total	14	100.0	

The table above indicate that the SMMEs are always completing their works in time. Only 28.6% disagree and 42.6 % agree that they always complete their projects in time and 28% are not sure. Most of companies have pride that they do not want to show that they are failing to finish work on time. It is also possible that due to the scarcity and size of the work they manage to complete in time.

#### 4.4.17

#### Finance is a challenge

Finance is a challenge		Frequency	Percent	Cumulative Percent
Valid	Not sure	2	14.3	14.3
	Disagree	7	50.0	64.3
	Strongly Disagree	5	35.7	100.0
	Total	14	100.0	

We can read from the table that 14.3% are not sure whether finance is a challenge or not. It might be because they are not involved in the procurement of materials, and 83.7% disagree; this might be the management and owners of the companies who have too much pride to agree that they are financially struggling. They always give misleading information regarding their financial position, especially when they are tendering.

However literature indicates finance is a major challenge affecting SMEs, and also creates other problems in the built environment, mainly quality, time, labour unrest on site that will lead

to abandonment of work, among others. The findings were confirmed in studies by Uriyo et al. (2004); Shakantu et al, (2007), Kayanula and Quartey (2000), who also agreed with the findings and stated that access to finance remained a dominant constraint to SMME contractors.

#### 4.4.18 Bad construction ethics

Bad construction ethics		Frequency	Percent	Cumulative Percent
Valid	Disagree	1	7.1	7.1
	Not sure	2	14.3	21.4
	Agree	7	50.0	71.4
	Strongly Agree	4	28.6	100.0
	Total	14	100.0	

In every business, there is good and bad ethical behavior 7.1% disagree that there are bad construction practices, 21.4% are not sure whether there are good or bad construction ethics, and 78.6 % agree that there are bad construction ethics. This might be the directors who understand how work is being awarded and will not want to disclose whatever is happening in the construction atmosphere since it will affect their survival.

#### 4.4.19 Open-ended Questions

Every respondent strongly agreed that finance, education, equipment and construction skills are top challenges facing construction SMME's. Therefore, the respondents are giving enough support to the literature review on the above mentioned challenges. Despite the fact that they indicated that there were no problems on the other questions, the open-ended structured questions made it easier for the respondents to air out the truth regarding the reality they are facing.

#### **4.4.20 In your opinion, what are the challenges being faced by SMMEs?**

The respondents were not attempting most of the questions under these sections except for the one above. Respondents under this question indicate that equipment, finance, skills and tender allocations are major problems hindering sustainability of SMME's. Under these open ended questions, the level of understanding of most of the SMMEs was in question, because most of them could not give an opinion regarding the problems and challenges in the built environment. They liked one word answers or short and precise kinds of answers.

#### **4.5. Summary and interpretation**

Analysis listed needs for training, finance problems, lack of contract management skills, constructions skill, and unethical conduct among some stakeholders. Respondents indicated which training needs are relevant, which business skills are lacking, and the prevalence of unethical conduct among some stakeholders. In terms of research data, this reveals that there is a need to train SMME contractors in the following areas; interpretation of building drawings, management and administration of building sites, and finally, financial management.

Respondents strongly agree that payment is made late and further agree that they are faced with inflexible credit terms from suppliers and banks. It is agreed that loans are difficult to obtain from banks, and obtaining guarantees, insurance bonds and surety is a major barrier. Although the hypotheses were well supported by the findings emanating from the survey, there is a great concern with respect to the lack of business management skills as reflected in the testing of hypotheses. The next chapter will present the summary, conclusions and recommendations resulting from the study.

In conclusion to the problem statement, regarding Interventions to above problems there is inadequate preparation, poor assessment of needs, poor skills transfer techniques and inadequate understanding of the development needs of Emerging Contractors. It has been proved by lack of continuation, poor training approaches, poor mentorship, insufficient monitoring and lack of programme evaluations that promote unsustainable skills transfer.

This chapter presented discussions and some considerations on the approach to contractor development. The chapter considered some shortcomings of the CDP in the case study and compared and contrasted these to other CDPs. In this chapter, it was found that there are some key considerations to improve the nature of CDPs. These interventions include: requirements on minimum qualification upon entering with a CDP, level of prior experience for contractors entering the CDP, the requirement for a systematic measure of performance, some considerations on training, lack of improvement in CIDB grading as well as enabling access to further work opportunities.

## **CHAPTER FIVE: Summary, Conclusion and Recommendations**

### **5.1 Introduction**

The four main objectives of this study are to: (a) Determine how Emerging Contractors can team up with other interventions to create employment (b) Determine the challenges and shortcomings facing Emerging Contractors on the process , (c) Explore the ways in which Emerging Contractors can be sustainable and be major players in the economy for the benefit of the employees, the organization and the community at large, and Assess and evaluate the effectiveness of Contractor development programmes in use in various departments in the province. The previous chapters satisfied the stated research objectives. This final chapter presents the summary of the research, the conclusions and recommendations arising from the review of relevant literature as well as the research findings. This chapter further consolidates the results and analysis chapters.

### **5.2 Summary**

This research investigated the effectiveness of a CDP in developing small contractors. The study was limited to fourteen (14) contractors that were involved various projects in a programme implemented by a North West Province government in the execution of a road construction and building projects. This research considers the following factors as an indicator of development: technical, financial and managerial training received by the contractors, the provision of relevant work experience for the duration of the programme as well as an increase in the contractor's CIDB grading after exiting the programme. The CDP is further evaluated against the CIDB's standard definition of a contractor development programme. The literature study suggested that SMME contractors face a host of problems ranging from those caused by clients, consultants, and institutional weaknesses to corruption.

The research, implies that the following can be made with regard to a "need for training", for construction skills, pricing skills, managerial skills and management of finance. Government must make provision of funds for those who are entering into the business for the first time, in order to boost them financially. Moreover, the government must help the SMME's with equipment and management staff to give them a jump-start in business. From the research

findings, it is clear that the construction industry in developing countries urgently needs to address the challenges and constraints they are facing. The recommendation of a strong promotion of well-organized SMME contractor development programmers must be conducted.

The South African government must implement programmes for 'developing SMME contractors with a clear and supportive policy framework which encourages joint ventures, partnering and subcontracting which encourages exploitation of exchange of ideas between contractors of different sizes. The Government should set aside money to lend SMME contractors once a project has been awarded to the contractors without demanding strict measures.

From the findings of the research, the following conclusions can be made with regard to "need for training" which was rated the lowest by the participants. Contractors do not want to admit that they need to be empowered; even if they will not be able to convey the skills there are other aspects that should take priority. More so, the need for training in financial management was also highlighted as having the highest need for training. Moreover, it can be inferred that most SMME contractors lack business administrations skills; considering the findings from the research, the following conclusions can be made with respect to business ethics among SMME contractors:

Colluding of tenders was rated least by respondents. Even if the problem still survives as certain number of participants obtained indicated it as a challenge, it is therefore justified and important to address the problem as well;

Challenges originating in ethics problems were rated as a major concern, with the problems extending from client and professionals that produce Bills of Quantities and costing of the project which have to price in secret for a contractor, or giving the contractor project cost indication.

The researcher has arrived at the conclusion that ethics as a problem is immense and need to be urgently addressed; should we consider developing SMMEs, every aspect that has been indicated as a challenge by the participants should be treated as equally important when addressing them and given equal attention in order to succeed in the implementation of the CDP in the province and achieve the government's policy of contractor development.

It can be concluded that some SMME contractors run their business in an unethical manner. From the research findings, it is clear that the construction industry in developing countries

urgently needs to address the challenges and constraints it is facing. The study recommends a forceful advancement of well-structured SMME contractor development programmes. Given the necessary support from stakeholders, programmes and models could make a remarkable difference in easing the plight of SMME contractors.

### **5.3 Conclusions**

Based on the findings from the research, the following conclusion can be made with regard to “investigate financing problems”; and ‘All aspects on investigating financing problems were rated high with inflexible credit terms from banks rated the highest’. In summary, it can be concluded that SMME contractors face financing problems, mostly due to lack of security. From the findings from the research, the following conclusions can be made regarding business skills. Site and contract management as a problem was listed by respondents as a challenge they are facing. Following the findings from the research, the following conclusions can be made with regard to business ethics among SMME contractors as will be explained below.

The majority of respondents are directors which constitute 64%, and 7.1% are managers and from the above, it shows that it was mostly the directors who responded. This may be due to the fact that they are not busy, or they want to participate for their companies. Technicians and administrators contributed 28.6% on the participation of the survey, and this might be because most companies delegate much of the work to their juniors and office administrators.

The majority of respondents have more than 10 years’ experience and only 7.1% have less than one years’ experience. We can conclude that experience is not a problem among the SMEs, though it does not necessarily indicate the field where one is experienced.

From the above table under item 4.4.8 we can derive that 70% of the respondents are not experienced since they are registered as Grade 4 and below, which proves lack of experience as indicated from literature review.

Furthermore, respondents proved that they lack engineering skills because only 9.0% have obtained engineering qualifications and about 28.6% have no formal qualification. The rest of

the contractor, or participants, at 57.1 %, obtained a Degree in Education or Law, which means they do not have engineering techniques. Further to that most directors, especially lawyers, will be busy with other businesses.

However, indication shows that construction skills is a challenge when considering the respondents, since more than 50% support that there is a problem.

Results has shown that more than 85% of the participants indicated below average contract management skills, and only 14.3% indicated that they have average contract management skills. The findings generally confirmed the studies by Moss (2007). The findings also confirm the observation by SAQA (2007) that there is a need for training.

The majority of the SMMEs have no experience since 92.6% of the respondents indicated that they only received two projects during the development programme, with 50% of them having not been awarded any project.

All respondents indicated that they were only involved once in Contractor Development Programmes, rendering them not effective

All responded indicate that they is no Political interference in awarding tenders, this shows that most of the people participated have no idea of how they got work.

The respondents do not agree that workload is a challenge, most probably because they do not have much work.

The table above indicate that the SMMEs are always completing their works in time, only 28.6% disagree and 42.6 % agree that they always complete their projects in time and 28% are not sure. Most of companies have too much pride that they do not want to show that they are failing to finish work in time.

We can read from the table that 14.3% are not sure whether finance is a challenge or not, it might because they are not involved in the procurement of materials, and 83.7% disagree, this

might be the management and owners of the companies who has too much pride to agree that they are financially struggling.

However literature indicates that SMME contractors face many financing problems. This in turn gives rise to many undesirable problems like quality, time, unrest on site and abandonment of work among others. The findings were confirmed in studies by Uriyo et al. (2004); Shakantu et al., (2007), Kayanula and Quartey (2000), who also agreed with the findings and stated that access to finance remained a dominant constraint to SMME contractors'.

In every business, there is good and bad ethical behavioral, 7.1% disagree that there are bad construction practices, 21.4% are not sure whether there is good or bad construction ethics, and 78.6 % agree that there are bad construction ethics. This might be the directors who understand how work is being awarded.

Every respondent strongly agreed that finance, education, equipment and construction skills are top challenges facing construction SMME's. Therefore, the respondents are giving enough support to the literature review on the above mentioned challenges.

Respondents under this questions indicate that equipment, finance, skills and tender allocations are major problems hindering sustainability of SMME's.

In summary, it can be inferred that some SMME contractors conduct their business in an unethical manner.

## **5.4 Recommendations**

From the research findings, it is clear that the construction industry in developing countries urgently needs to address the challenges and constraints they are facing. The study recommends a vigorous promotion of well-structured SMME contractor development programmes. Given the necessary support from stakeholders, these programmes could make a remarkable difference in reducing the plight of SMME contractors, as well as that of the construction industry, in South Africa.

The answers of the study disclose that there is a remarkable need for training in the South African construction industry. Additional to this, the study indicates strongly the lack of management skills among the SMMEs. It further recognizes the financing constraints and challenges SMME contractors are facing. It is also recommended that SMME contractors conduct their business in an ethical manner, in order to support the government's CDP to assist them. The following are suggested to address contractors' constraints and challenges in the construction industry:

The construction industry participants need to urgently implement supportive legislation to create an enabling environment for SMME contractors to grow in the construction market. Contractor development programmes and models should be implemented urgently to develop a culture of continuous improvement. Education should contribute to a culture of learning, knowledge creation and knowledge sharing.

South Africa should embark on strategic programmes to promote the development of skills in areas of management, technical, book-keeping, supervisory, estimating and tendering skills to enable entrepreneurs to run their firms profitably and in a sustainable manner. This means that SMME contractors and the contractor development programmes should be carefully integrated into a streamlined effort designed to build their capacity to grow.

Programmes for developing SMME contractors should be implemented with a clear and supportive policy framework which encourages co-operation through joint ventures, partnering and subcontracting which inspires guidance between contractors of different sizes.

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## APPENDICES

APPENDIX A: COVER LETTER



NORTH WEST UNIVESITY MAFIKENG CAMPUS

NWU Business School

North-West University

Potchefstroom Campus

Private Bag x6001

Potchefstroom

2520

27<sup>th</sup> March 2018

Dear SMME Contractors

**RESEARCH:       Assessment of Effectiveness of Emerging Construction Contractor Development Programmes in Ngaka Modiri Molema.**

This letter serves to seek your assistance in completing the attached questionnaire for my research on the above mentioned topic.

This makes part of the requirements for the Master of Business Administration degree in Government Leadership specializing in Operations Management at North West University Graduate School.

The major objective of the study is to assess the effectiveness of emerging contractor's development programmes in Ngaka Modiri Molema challenges and constraints faced by small, medium and micro-enterprise contractors in the construction industry in South Africa and proposing possible solutions.

Everyone stands to benefit from the study as it will analytically look at methods how the SMME service providers can contribute positively and how these limitations can be eliminated. I would be very appreciative if you could complete the attached questionnaire and return it in the addressed, prepaid envelope, faxed or emailed to the undersigned using the above contact details. Needless to say, the information provided will be treated with strict confidentiality and names of individual firms will not be identified. Equally, a copy of the summary report will be available to co-operating firms. The response to the questionnaire should take about six minutes of your available time.

I look forward to receiving your response by not later than 5<sup>th</sup> April 2018 please.

Thank you in advance.

Yours faithfully,

**Tawedzegwa Mudhenge**

**Prof. J. Mayor**

Student/Researcher

Supervisor

## TAWEDZEGWA MUDHENGGE TURNITIN REPORT

## ORIGINALITY REPORT

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SIMILARITY INDEX

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## APPENDIX C: QUESTIONNAIRE

### **VOLUNTARY QUESTIONNAIRE FOR CONSTRUCTION SMMEs**

#### **Assessment of Effectiveness of Emerging Construction Contactor Development**

**Programme:** The case of Ngaka Modiri Molema.

Researcher: Tawedzegwa Mudhenge

Supervisor: Professor Meyer

#### **Notes to respondents**

The researcher needs your help on the topic as stated above.

Your answers will remain private and confidential.

This questionnaire is divided into four sections:

Section one: Requests your permission to use your responses for academic research.

Section two: Is biographical information

Section three: Sustainability (Service in business)

Section four:

#### **Completing the questionnaire**

Please answer the questions as honestly as you can according to given instructions.

Respond with either an x or a tick for section two and three, and give your perspectives for section four

**SECTION ONE: REQUEST YOUR PERMISSION TO USE YOUR RESPONSES FOR ACADEMIC RESEARCH.**

I hereby allow the researcher to use my responses for research purposes with an understanding that my identity will remain unknown.

Names.....

Postal address.....

.....

.....

.....

Contact no: .....

**SECTION TWO: BIOGRAPHICAL INFORMATION**

**Gender**

Male	
Female	

**Race**

Black	
White	
Indian	
Coloured	
Other	

**Age category**

20 to 30 years	
31 to 40 years	
41 to 50 years	
51 to 60 years	
61 and above	

### Highest qualifications

Grade 12/Matric	
Diploma	
Bachelor's degree	
Postgraduate degree	

### Job position

Technician	
Clerk	
Administration officer	
Manager	
Director	

### Length of service

Less than 1 year	
1 to 10 years	
11 to 20 years	
21 to 30 years	
31 to 40 years	
41 and above	

**Field of Studies**

1 Civil engineering	
2 Construction management	
3 Project Management	
4 Teaching	
5 Law	
6 Other	

**Total Construction experience**

0-1	
2-5	
6-10	
11 and above	

**Total experience in management**

0-2	
2-5	
6-10	
11 and above	

## CIDB Registration

GRADE	GB	CE	Other
Not registered yet			
1			
2			
3			
4			
5 And above			

### **SECTION THREE: Need for training**

Please rate the need for training for SMMEs using the following.

- 1 Very low/Poor
- 2 Low/Below Average
- 3 Average
- 4 Above Average
- 5 Excellent

1 Interpretation of tender documents and construction drawings

1	2	3	4	5
---	---	---	---	---

2 Training with regard to contract management and administrations

1	2	3	4	5
---	---	---	---	---

3 Financial management and cost control

1	2	3	4	5
---	---	---	---	---

**SECTION Four: Lack of access to finance**

Please rate financing problems as faced by SMME contractors with regard to the following aspects.

**Note**

- 1 Strongly disagree
- 2 Disagree
- 3 Not sure
- 4 Agree
- 5 Strongly agree

1 Finance access

1	2	3	4	5
---	---	---	---	---

2 Claims paid late by clients

1	2	3	4	5
---	---	---	---	---

3 Problems in obtaining advance working by both client and private

1	2	3	4	5
---	---	---	---	---

## APPENDIX D: ETHICAL CLEARANCE LETTER



Private Bag X6001, Potchefstroom, South  
Africa, 2520

Tel: +27(18) 299-1111/2222

Web: <http://www.nwu.ac.za>

**Human Resource Research Ethics Committee**

Tel: 018 289 2044

Email: [Betchani.Tchereni@nwu.ac.za](mailto:Betchani.Tchereni@nwu.ac.za)

**25-Apr-2018**

*Per e-mail*

Dear **PROF JAN ABRAHAM MEYER**

### **APPROVAL OF ETHICS APPLICATION: NWU-HS-2018-0047**

The following application has been reviewed by the Human Resource Research Ethics Committee (HRREC) on 18-Apr-2018.

**Name of student:** T MUDHENGHE - 23308869.

**Name of supervisor/promoter:** PROF JAN ABRAHAM MEYER.

**Title of study:** Assessment of Effectiveness of Emerging Construction Contactor Development Programmes: The case of Ngaka Modiri Molema..

**Application Risk Level:** No risk (No contact with human participants).

This letter serves to inform you that your application has been approved from **18-Apr-2018** to

**17-Apr-2021.**

**Special conditions of the approval (if applicable):**

Yours Sincerely

A handwritten signature in black ink, appearing to read 'B. Tchereni', is positioned above the typed name.

Prof B. Tchereni

Chairperson: Human Resource Research Ethics Committee (HRREC)

APPENDIX E: LANGUAGE EDITOR LETTER

1065 Hector Petersen Drive

Unit 5

Mmabatho

03/12/2018

This is to certify that the dissertation entitled

**ASSESSMENT OF EFFECTIVENESS OF EMERGING CONSTRUCTION CONTACTOR  
DEVELOPMENT PROGRAMMES IN NGAKA MODIRI MOLEMA**

Submitted by **TAWEDZEGWA MUDHENG**

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For the degree of

**MASTER OF BUSINESS ADMINISTRATION**

At the

**GRADUATE SCHOOL OF GOVERNANCE AND LEADERSHIP  
MAFIKENG CAMPUS  
NORTH WEST UNIVERSITY**

Has been edited for language by

Mary Helen Thomas (B.Sc. Hons. PGCE)

