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AN EVALUATION OF THE EPWP VUK'UPHILE LEARNERSHIP PROGRAMME WITHIN EKURHULENI METROPOLITAN MUNICIPALITY

Andrew Mukanyima

A research report submitted to the Faculty of Engineering and the Built Environment, University of Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of Master of Science in Engineering.

Johannesburg, 2012

DECLARATION

I, Andrew Mukanyima, declare that this research report is my own unaided work. It is being submitted to the Degree of Master of Science to the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination to any other University.

....

Signed Date

ABSTRACT

The EPWP Vuk'uphile learnership programme was formulated by the National Department of Public Works in 2006 to facilitate the development of emerging contractors into fully-fledged business entities which are able to execute labour-intensive projects. This research evaluates the programme implemented under Ekurhuleni Metropolitan Municipality. The EPWP Vuk'uphile within Ekurhuleni is not a "once off" programme; the imminent implementation of Phase 2 makes evaluation of Phase 1 important. The findings of this research inform programmatic intervention and ensure the continued growth of small contractor development initiatives within Ekurhuleni.

A questionnaire, interviews and a case study are used to collect data for the evaluation of the EPWP Vuk'uphile in Ekurhuleni. The questionnaire used was designed as a monitoring and evaluation tool for the EPWP and hence provides this research with a measuring instrument of the Vuk'uphile programme against its objectives. The case study is used to extract evidence of the sustainability of the current exit strategy as well as the quality of the graduates from the programme. The high response rate solicited from the project participants creates a broad evaluation platform for this research on which to make informed conclusions and recommendations on the EPWP Vuk'uphile in Ekurhuleni.

It is the research findings that the EPWP Vuk'uphile in Ekurhuleni is to a great extent a successful enterprise. The role played by the EPWP, Ekurhuleni and other stakeholders in identifying past failures in Public Works Programmes and mitigating them has ensured that sustainable growth is realised. The research findings also identify areas for improvement, for which this research provides recommendations.

KEYWORDS: Contractor learnership; Labour-intensive Construction; Expanded Public Works Programme

This research is dedicated to my Mum and Dad,

Beatrice and Peter Mukanyima

I love you

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ACRONYMS AND ABBREVIATIONS

ABSA	Almagated Banks of South Africa
CIDB	Construction Industry Development Board
CLO	Community Liaison Officer
COID	Compensation for Occupational Injuries and Diseases
COSATU	Congress of South African Trade Unions
DORA	Division of Revenue Act
ECDP	Emerging Contractor Development Programme
EMM	Ekurhuleni Metropolitan Municipality
EPWP	Expanded Public Works Programme
GDS	Growth Development Summit
HDIs	Historically Disadvantaged Individuals
HREC	Human Resources Ethics Committee
IDADA	Mentorship Support for the EPWP Vuk'uphile in EMM
IDP	Integrated Development Plan
ILO	International Labour Organisation
JVs	Joint Ventures
LCU	Labour Construction Unit
LED	Local Economic Development
LIC	Labour Intensive Construction

MSc	Masters of Science
NDPW	National Department of Public Works
PDIs	Previously Disadvantaged Individuals
PMBOK	Project Management Body of Knowledge
PWP	Public Works Programme
SAFCEC	South African Federation of Civil Contractors
SAQA	South African Qualifications Authority
SCDP	Small Contractor Development Programme
SETA	Sector Education and Training Authority
SOE	State Owned Enterprise
SoNA	State of the Nation Address
StatsSA	Statistics South Africa

CHAPTER 1 INTRODUCTION

The Growth and Development Summit (GDS) in South Africa of June 2003 agreed to foster 'smart partnerships', in all spheres of the economy which were aimed at creating work and fighting poverty. One of the results of that agreement was to implement an Expanded Public Works Programme (EPWP) as one of the many initiatives aimed at creating work opportunities and improving skills levels of historically disadvantaged people.

In 2003 Statistics South Africa (StatsSA) estimated the rate of structural unemployment to be 4.6 million in terms of the strict definition and 8.3 million in terms of broad definition, with an estimated rate of 70% of unemployed youth (aged between 16 and 34) who had never worked before, while 59% of all unemployed people had never worked. These unemployment rates are among the highest in the world. The EPWP became one of government's responses to address these challenges.

The government's mandate to create decent jobs, build a growing economy, promote education and skills development, stimulate rural development and building cohesive and sustainable communities could to an extent be addressed using labour intensive methods of construction. McCutcheon and Taylor Parkins (2003), highlight that small contractor development provides the opportunity to construct infrastructure and achieve a critical socio-economic objective, namely, employment.

The Expanded Public Work Programme was launched in April 2004 to promote economic growth and create sustainable development. The urgent need to address spiraling unemployment levels and the expected positive outcomes in education, skills development and social well being of the populace made the programme especially pertinent. EPWP (2005)

As a way of training and equipping prospective contractors with the requisite skills and technical expertise, the government launched 'contractor development' programmes within the EPWP. As the name suggests, it is a period of learning, practical training and mentorship in which the contractor is supposed to leave at the end of the programme as a self sustaining contracting entity.

Since the EPWP created a platform for small business in construction, there was a need for proper and sound strategies to be implemented in the programme. The government sought empowerment and employment of the formerly marginalized groups but at the same time needed to ensure the realization of better quality infrastructure and service delivery. In light of the above the EPWP Vuk'uphile Contractor Learnership Programme was launched.

Vuk'uphile labour intensive and supervisor learnership programme, formerly known as the EPWP Emerging Contractor Learnership, was initiated by the National Department of Public Works in coordination with the Construction Education and Training Authority (CETA) in 2006. The programme seeks to develop capacity among emerging contractors to execute labour intensive projects carried out in the EPWP. The programme is linked to the contractor grading system of the Construction Industry Development Board (CIDB), thereby encouraging and supporting continuous development of small contractors into medium sized entities. EPWP (2006)

According to Phillips (2004), the knowledge through previous programmes such as Gundo Lashu in Limpopo, that any successes to be realised in labour intensive projects carried out must be underlined by sound skills, experience and knowledge, gave impetus for the NDPW to implement the Vuk'uphile learnership programme within such a framework. Participants within the programme are expected to complete the levels of training as set in the EPWP guidelines. The learner contractors should be in a position to bid and execute labour intensive work under the EPWP.

The key to the formulation of the EPWP was the creation of guidelines and frameworks crafted on international best practise to facilitate the continued growth of the programme. This research is in line with the Monitoring and Evaluation framework of the EPWP which specifies the need for cross-sectional as well as longitudinal studies to evaluate programmes, EPWP (2005). The identified need for continuous checking to ensure programme balance is important as it also informs programmatic intervention on subsequent phases. This research offers an independent evaluation of the EPWP Vuk'uphile learnership in Ekurhuleni. All analysis and evaluation have been carried out against the programme objectives.

1.1 Problem Statement

The research identifies and evaluates the success and setbacks experienced in the implementation of the EPWP Vuk'uphile contractor learnership programmes phase 1 in Ekurhuleni Metropolitan Municipality, thereby proposing interventions for subsequent phases. The development programme was meant to provide training, learnership and skills development to ensure that contractors delivered quality service in infrastructure provision within the EPWP (EPWP, online). An analysis of the program successes and deficiencies, problems encountered and proposed solutions are sought to be answered by this research.

1.2 Research Question

To what extent has the implementation of the small contractor development initiatives in Vuk'uphile met the stated and implied objectives of this programme?

Sub – Questions

I. How were the project participants selected and what impact did it have on the programme?
II. Was the time spent on learning, practical training adequate and how well defined was the mentorship role, and is skills development a problem in the programme?
III. How was the programme financed, and what are the effects thereof?

IV. Which components of the programme have been beneficial and which have been counterproductive?

V. Does the programme have a sustainable exit strategy?

1.3 Hypothesis

The success of the labour-intensive intention of the EPWP is fundamentally based on sound inception and induction of the small contractors in the development programmes such as Vuk'uphile. Since some of the small contractors have no previous construction experience and their workers are sometimes novices on the job, proper skills training and mentorship will likely lead to improving service delivery via the EPWP. The contractor development programmes hence offer the significant factor between labour-intensive (optimum use of labour to achieve efficiency) and labour-extensive (employment of large numbers of people to create jobs) use of resources. Croswell and McCutcheon (2001)

1.4 Significance

The study is significant because it is essential to realize that, as project managers in developing areas, labour intensive methods of construction offer infrastructure provision as well as increased job creation opportunities, significantly changing the social status of the people. Small contractor development is an integral part of the implementation of labour intensive construction. Development of small contractors is therefore of paramount importance and a review of the implementation gives insight into improved implementation strategies for the programme at local government level and for academic purposes.

1.5 Objectives of the Study

- To evaluate the performance of the EPWP Vuk'uphile learnership programme at Municipal level.
- To evaluate small contractor development framework within the EPWP.
- To analyse and interpret the research findings condensing them into a research report.

- To provide recommendations for implementation of small contractor development programmes bases on the research findings.

1.6 Scope

The investigation focuses on Vuk'uphile contractor development programme implemented by the National Department of Public Works (NDPW). It is important to note that although the EPWP is a national programme, implementation is mostly at municipal and provincial government level, where the primary development of contractors takes place. The research seeks to give detail into the programme implementation as per the research question and sub-questions in section 1.2. A combination of research designs is used in the programme evaluation.

1.7 Limitations

The study only focuses on small contractor development within the EPWP Vuk'uphile learnership phase 1 in Ekurhuleni Metropolitan Municipality within the infrastructure sector of the EPWP. This research only reviews small contractor development for contractors with a CIDB rating of 2 and upwards.

Due to the sensitivity and confidentiality of some of the information being researched, there is a risk of not getting objective or comprehensive answers from some of the project participants.

1.8 Assumptions

The research assumes that respondents to the survey will have sufficient language and comprehension skills to clearly understand and contribute to the survey.

1.9 Research Methodology

This research employs a qualitative approach to review the implementation of the EPWP Vuk'uphile Learnership Programme within Ekurhuleni Metropolitan Municipality. The

research 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)

The following is to be covered by the method:

- Literature review of relevant topics in small contractor development as well as the EPWP;
- Interviews on some of the programme participants within Vuk'uphile learnership programme;
- Questionnaires responses from graduate small contractors on the programme;
- Analysis of all collected data with the aim evaluating the programme against its objectives;
- A review of the research findings and their interpretation in terms of the literature reviewed.
- A critique of the research methodology

1.10 Structure of the Report

Chapter 1: Introduction. This chapter provides background information on the development of small contractor development within the EPWP. The development and objectives of the EPWP Vuk'uphile learnership programme are also discussed. It further outlines the research problem and sets out the objectives of the research.

Chapter 2: Literature review. This chapter reviews relevant literature on small contractor development programmes. Focus is given on past programmes within sub-Saharan Africa. It also highlights the body of knowledge on training, mentoring, financing and selection of participants of the contractor development programmes. The main challenges to small contractor development are also discussed.

Chapter 3: Methodology. This chapter outlines this research selected method, qualitative analysis. The research designs used are discussed and their strength and weaknesses analysed. It also contains a critique of the overall research method.

Chapter 4: EPWP. This chapter contains an overview of the EPWP. It gives background to the programme, the guidelines and frameworks of the programme. Monitoring and Evaluation systems within the programme are also discussed. A discussion of the EPWP goals, targets and objectives is discussed. The section also introduces the EPWP Vuk'uphile learnership as a programme within the EPWP, discussing the goals and objectives of Vuk'uphile. The implementation model and stakeholder participation are also discussed. The Vuk'uphile Monitoring and Evaluation system is also reviewed and discussed.

Chapter 5: Ekurhuleni Metropolitan Municipality (EMM). The chapter provides detail on background of the EMM. The structure and Integrated Development Plans (IDPs) of the Municipality are discussed in detail. The section also discusses the background of EPWP Vuk'uphile in Ekurhuleni; the programme's implementation to date is highlighted. A case study of the EPWP Vuk'uphile exit project is discussed and evaluated.

Chapter 6: Analysis of Data. The chapter analyses the research data and evaluate it against the programme objective. A comparison is also drawn to related literature as reviewed in chapter 2.

Chapter 7: Conclusions and Recommendations. The chapter summarises findings of the analysis and provides conclusions on the evaluation of the EPWP Vuk'uphile learnership in Ekurhuleni Metropolitan Municipality. The section also provides recommendations on the research based on the conclusions. Further areas of studies are also recommended so as to consolidate the conclusions of this research as well as to improve the body of knowledge on small contractor development.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

The literature review is important to this research since it offers historical insight into small contractor development programmes internationally and an overview of the South African small contractor development programmes to date. It analyses what other authors have covered on the topic and therefore offering a body of knowledge for the evaluation of the current EPWP Vuk'uphile Small Contractor Development Programme.

This chapter reviews relevant literature pertaining to the small contractor development; it gives input on past programmes in sub-Saharan Africa, including contractor development within PWP in South Africa. It reviews literature on the selection of candidates, training, mentoring, financing, gender distribution as well as review the challenges faced within small contractor development.

2.2 History of Small Contractor Development in Sub-Saharan Africa

Croswell and McCutcheon (2001) cited in McCutcheon and Taylor Parkins (2003: 318) note that since the 1970s small contractor development has been propelled by:

- lack of local, indigenous contractors
- dominant presence of large expatriate contractors

According to Croswell and McCutcheon (2001), since the 1970s a total of 20 pilot developmental programmes have been implemented in sub-Saharan Africa on a large scale. Five of these have been carried out carried out on a large scale for more than 10 years and three have been well documented over a 15 year period. These levels of continued persistence and exercise of the small contractor development programmes over such durations seem to hold the key to the successes experienced in these projects.

Miles and Ward (Neck and Nelson, 1987: 7-8) bring forth the arguments as to why small enterprise development has been favoured over larger firms, due to the following:

- makes effective use of local materials and resources;
- creates jobs at relatively low capital cost (small enterprises are more likely to choose employment-intensive solutions);
- provides a vehicle for introducing a more equitable income distribution;
- employs workers with limited formal training, who then learn skills on the job and provide a pool of local skills that will favour future economic development; and
- adapts flexibly to market changes.

All these combined aspects above have thus given momentum to small scale contractor development, due to what seems to be apparent advantages over larger construction companies.

Howe (1984: 139) points out that since 1973 the Botswana government has been at the forefront of developing labour-intensive road construction and maintenance units, essentially setting up local entrepreneurs for development. This history of small contractor development initiatives only re-emphasizes the importance that has been placed on small contactors as a way of creating employment, empowering local communities and ensuring skills development within sub-Saharan Africa.

Croswell and McCutcheon (2001) highlight that development of small contractors for the construction industry has been advocated and explored in two different contexts in sub-Saharan Africa. Since the late 1970s it has been advocated in relation to the construction industry as a whole. Since the late 1980s it has been pursued in relation to the employment-intensive construction and maintenance of infrastructure, particularly low-cost, low-volume rural roads and other civil infrastructure.

This line of thinking is also brought to the fore by Segokgo, Hongve and Overby (2000). The authors point out that within the African context labour-based technology and construction for civil infrastructure was reborn around 1970 as a way of:

- Reducing the foreign exchange drain in many countries caused by the high costs of procuring and maintaining construction plant and equipment;
- Creating employment opportunities and providing cash injections mainly in the rural communities;
- Increasing skills in local communities; and
- Increasing the chances of sustainability of infrastructure through a sense of ownership.

Croswell and McCutcheon (2003:295) point out that small contractor development and employment-intensive implementation has not been easy. “Changing the way things are conventionally done is not easy. There are reasons why things are as they are.” Employment-intensive methods of construction were looked down on; hence there was need for the industry re-education on the opportunities that were not being exploited.

The relationship between employment-intensive methods and contractor development has created an essential link between service delivery (infrastructure provision) and long term development programmes. Successful employment intensive programmes in countries such as Kenya, Botswana, Lesotho, Malawi and Ghana on large scale programmes have given a base for other Sub-Saharan countries to embark on such programmes.

2.3 Overview of some past Programmes

This section of the literature review gives insight of what has been written of successive programmes in Botswana and Lesotho.

2.3.1 Botswana contractor development

Labour-intensive programmes have been implemented in Botswana since 1972, in order to combat high levels of:

- Unemployment;
- Poverty; and
- Rural Underdevelopment.

Muatjetjeja (2006) identifies six different programmes and evaluates whether they had met their objectives. According to the researcher the Labour Intensive Road Maintenance Programme provided good results. The programme had a successful model for the development of small contractors in labour-intensive work. The pilot of this programme which was named the Citizen Contractor Development Programme is described below.

Review of the Citizen Contractor Development Programme in Botswana

According to Obika et al (2004), the roads department in Botswana recognized that sustainable efficiency in road maintenance could be achieved by having a vibrant local contractor development programme. This consequently led to the identification of a need for training of small contractors using labour based methods hence the birth of the citizen contractor development programme. In 1999, Roughton International was appointed to conduct a demonstration of such a programme.

The programme structure involved the following:

- pre-contract services including, project design, the selection and pre-training of potential, emerging and small contractors and tender documentation;
- Supervision and on-the-job training of contractors;
- Provision of post-contract services.

Implementation was carried within a rural setup and the key objectives included:

- creation of employment particularly in rural areas;
- development of local contractors;

- the efficient maintenance of the national road network; and
- establishment of a model for sustaining the above three aims through the use of consultants to manage maintenance works. (Obika et al, 2004)

The above programme emphasized community and stakeholder participation throughout the project cycle time. The objective was to achieve community ownership of the initiatives which were being implemented.

The Botswana programme made use of already registered Grade A and B contractors so as to ensure continuity and development. The scope of work within the project was unbundled to create more opportunities for the different categories of emerging contractors. Of key note and of importance to this research is that the programme managed to ensure the training and development of 42 mixed grade contractors into entities capable of undertaking specific projects in road maintenance. (Obika et al, 2004)

Segokgo, Hongve and Overby (2000), cite that the success of citizen contractor development in Botswana cannot be separated from the appropriateness of Choice of Technique. Adequate skills training and mentoring in labour based construction methods can achieve the same quality of infrastructure provision. The Botswana project also proved that long training and trial periods are necessary to achieve service delivery through labour based construction.

Apart from all the project successes, challenges which have been transparent in the programmes are also identified. In Botswana, the Citizen Contractor development programme has been beset by the following challenges:

- Lack of financial resources;
- Lack of access to markets;
- Lack of financial and general management skills;
- Lack of technical capability and

- Lack of financial discipline (Segokgo, Hongve and Overby 2000)

These challenges, although they can be mitigated with proper planning and programme implementation, beleaguer most contractor development programmes. These are some of the aspects the researcher proposes to explore and mitigate within the EPWP Vuk'uphile programme.

Muatjetjeja (2006: 196) in his evaluation also adds that the fact that Roughton International had no prior experience in labour intensive construction, presented shortcomings in the programme implementation. In his opinion a company with previous labour intensive experience should have led the pilot programme. The programme failed to take advantage of the existence of other experienced contractors/workers/technical personnel who had been developed in previous programmes which would have resulted in improved fluency in the overall programme implementation. In conclusion Muatjetjeja (2006) highlights that the pilot programme has been successful, it has demonstrated that government, private sector and the public can effectively carry out employment intensive projects, in essence developing small scale contractors and increasing private sector involvement within infrastructure development.

2.3.2 Lesotho Contractor Development

The Lesotho Contractor development was sponsored by the International Labour Organization (ILO). According to Lehobo (1995), cited in Larcher (2001), in Lesotho the Labour Construction Unit (LCU) was set up in 1977 with the aim "to promote and propagate the use of efficient labour intensive methods and create as much gainful employment as possible in the country". The LCU was primarily responsible for the maintenance of development of the earth and gravel road network. In 1992 the World bank funded a developmental project on Labour based methods of construction which was supervised by the LCU, had technical support from the ILO and this led to the birthing of small contractor development in Lesotho.

Larcher (2001), highlights that the contractor development programme was mainly focused on training:

- Technical skills
- Managerial skills
- Supervisory skills

The training focused on-job (practical) as well as classroom training, so as to equip contractors with the requisite skills. The programme curriculum also extended to small business management so as to develop the contract entities. The training duration was 30 months and all costs were catered for within the programme. On completion of the training the contractors were awarded 6 months trail contracts. The equipment for the projects was available to the contractors to hire or on lease to buy arrangements. The programme was done with the involvement on the national bank.

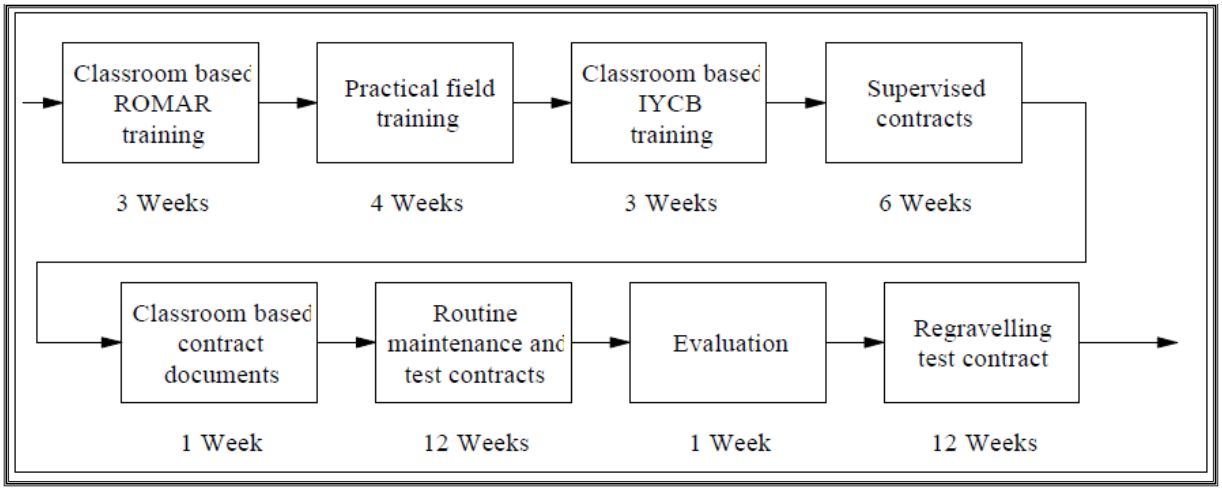

Figure 2-1 Lesotho Training Model (Larcher 2001)

Figure 2.1 outlines the training schematic of the Lesotho Contractor Development Programme. The acronyms in this diagram (ROMAR – Road Maintenance and Regravelling; IYCB – Improve Your Construction Business) refer to the types of training material the small contractors were exposed to within the programme. The successful programmes in Botswana and Lesotho were developed around a sustainable contractor development programme. These programmes offer significant insight on which to model and develop small contractor development programmes.

2.4 Small Contractor development in the PWP

In South Africa, since the inception of the procurement reform process in 1995, the Department of Public Works has been actively involved in the conceptualizing and implementing programmes to promote emerging contractors in the built environment. These programmes included:

- Targeted procurement and
- The Emerging Contractor Development Programme (ECDP)

The latter is the focus of this research report. These programmes have resulted in increased participation in the mainstream economy by previously disadvantaged individuals (PDIs). (DPW, 2007)

According to McCutcheon and Taylor Parkins (2003: 46), Mthombeni (1995 &1996), Phillips et al. (1995) and Thwala (2001), billions of Rands have been spent on the implementation of employment intensive programmes including contractor development in South Africa. To date, progress and success have been achieved in some programmes which include the Zibambele, started by Kwazulu-Natal province in 1999, Gundo Lashu started by Limpopo Province 2002 and the Mohloletse Youth Training Programme in Sekhukhuneland, Limpopo, funded by Umsobomvu Youth Fund since 2002.

The success of the past programmes such as Gundo Lashu has led to the South African government's plans of setting up learnership programmes countrywide. In September 2004, the National Department of Public Works (DPW) invited applications from construction contractors to enter the Contractor Development Programme. This was a government initiative to promote the sustainable development of small to medium-sized contracting businesses that can demonstrate the potential to perform contracts in the R1-million to R30-million range. Implementation was focused on mentorship, training and support to ensure that contractors became sustainable contracting enterprises. (Engineering News, online)

According to Miles and Ward (undated: 5), the Emerging Contractor Development Programme (ECDP), is meant to foster synergy between the three fundamental stakeholder groupings:

- The National DPW, which can provide work opportunities and has the authority to facilitate an environment in which emerging contractors have the opportunity to develop themselves into competent market-competitive contractors;
- Emerging contractors who are technically competent but lack knowledge of the Department's procedures, competitive estimating techniques, business management and also lack access to finance, supplies, transport and communication;
- Other organizations, which have an inherent interest in the development of emerging contractors and who have resources which emerging contractors require. These organizations include other government departments, the private sector and NGOs.

The success of past programmes, although localized, has created an inception model from which to evolve small contractor development within the PWP. Philips (2004) argues that labour-intensive construction within PWPs can only be supported with an effective contractor development program. He cites the Gundo Lashu Programme where emphasis was placed on developing the management and supervision capacity that is required in order for highly labour-intensive methods to be cost-effective and to result in good quality products.

2.5 Views of other Authors on Small contractor development

A large body of literature has been written on small contractor development: this research articulates the views of authors who provide input relevant to the EPWP Vuk'uphile objective so as to form an adequate knowledge base to do an evaluation.

Selection of programme participants

The importance of screening candidates is highlighted by McCutcheon in several of his papers. Croswell and McCutcheon (2001) highlight that, since the 1970s, focus has been

given to management and operation of the company itself: consequently much literature has been published on every aspect of managing a small contractor business. They however argue that not enough attention has been paid to the identification of people with entrepreneurial capability to run this small business.

McCutcheon and Taylor Parkins (2003: 37), further add that as much as technical training is the key for the contractors and supervisors to achieve competence, attention must be given to the character of the individuals. A careful selection process should be carried out to identify the potential candidates for development. McCutcheon and Fitchett (2005) argue that training alone does not develop the individual; hence any selection process should pay attention to the character and technical competence of the candidate.

Mkhize (1994: 6), citing DBSA (1992), accedes to the fact that contractor development in Southern Africa has not been intended to drive labour based construction but rather this has a supporting role of being a tool to identify and develop entrepreneurs.

These notions add relevance to the importance of identification of suitable participants in any future PWP. The construction budgets also attract “fly by night contactors”, hence the need for an instituted contractor development programme. The importance of screening candidates can therefore not be understated; the selection processes of the EPWP Vuk’uphile within this research must be evaluated.

Training

Croswell and McCutcheon (2001: 313), highlight that training is an intrinsic part of employment intensive construction (small contractor development). Training should apply to all personnel and levels within the programme. This is reinforced by the schedule for

"Code of Good Practice" in special public works programme in South Africa gazetted in 1997:

> Training is regarded as a critical component of Special Public Works Programmes. Every SPWP must have a clear training programme that strives to:
>
> - Ensure programme managers are aware of their training responsibilities;
> - Ensure a minimum of 2 days training for every 22 days worked;
> - Ensure a minimum of the equivalent of 2% of the project budget is allocated to funding the training programme. (Basic Conditions of Employment Act 1997: Act No 75 of 1997)

The White Paper on "Creating an Enabling Environment for the Construction Industry" (Department of Public Works 1999) in South Africa highlights that development of SME has been hampered by a lack of managerial and technical skill, which is obviously enjoyed by the bigger construction firms. These assertions are further supported by other researchers as being characteristic of the SME sector in most developing countries (Carradine & Logie, 2000; Materu, 2000; Mlinga &Lema, 2000; Segokgo, Hongve & Overby, 2000; Gubago, 2000) cited by Dlungwana and Rwelamila, (undated)

Kwesiga (1995), echoed by McCutcheon and Taylor Parkins (2003), elaborates that success in contractor development cannot be an achieved overnight. The key is in a long "learning period", typically three to five years, which replicates successful programmes in Kenya, Malawi, Botswana and Lesotho. This assertion is acceded by Mthombeni (1996), who states that, for any successful and long term public works programme, there should be a clear and concise training and development programme for the participants. Of equal note is the differentiation of contractor development from being project based to programme based (comprising several projects). This scenario ensures continuous development and skills transfer, aiding in the achievement self-sustaining small contractors.

Nilsson cited in Edmonds and Howe (undated: 55) says that in any place where labour based construction is implemented for the first time, it is likely that there will be no availability of the skilled personnel. Hence if any such programme is to be successful, the onus is on the project team to plan suitable pilot projects to ensure an adequate trained staff complement for the main programme. Ultimately the bigger the programme the longer and more intense will the incubator period and training must be continuous. This argument feeds directly into the notion of small contractor development within labour based construction.

Croswell and McCutcheon (2001: 326) also bring the argument that small contactor development and employment-intensive construction has mainly been a public sector or government initiative. This in turn seems to be oblivious of the level of expertise that is inherent in the private sector contracting and a fusion of this through the use of a project manager or engineering consultant would aid increased success in small contractor development. In conclusion the authors highlight that much success can be derived by tapping into the inherent power of properly drafted contracts in employment-intensive construction.

The ILO report "The Construction Industry in the Twenty-first Century" (Geneva 2001), highlights that although in most developing countries where vocational training centres are availed, skills transfer has mainly taken the form of apprenticeships. The value of formal training is not appreciated as time spent in class is viewed as lost among the small contractors and the workers. Training has mainly been achieved through persuasion in the form of remunerating the trainees during training.

Knox (1986: xi) cited by Galbraith (1990:4) suggests that "most instructors in adult education programs are expert in the context they teach, but they usually have little preparation in the process of helping adults learn." Such an assertion gives relevance to the need to review training within small contractor development initiatives.

As highlighted from literature, training is a key to the development of small contractors. The adequacy of the EPWP Vuk'uphile training within the programme objectives and expected protected learning period must be evaluated.

Economic Considerations

It should be noted that Miles and Ward (undated) citing the World Bank (1994: 52), highlight that developing countries invest $200 billion a year in new infrastructure - four per cent of their national output and a fifth of their total investment. It is in the nature of such figures that any new construction programmes have to achieve the desired output (value for money). Another point of view is that it makes economic sense to use construction as an avenue for job creation within developing countries considering the high unemployment rates.

According to Dlungwana and Rwelamila (undated), SMEs (small to medium enterprises) have long been a significant component of economies in developing countries and contribute towards employment creation. Small contractors fall within this SME bracket hence the essential benefit from development of such enterprises is to be promoted. Due to the specialization and relatively low overheads small contractors provide a base from which large contracting firms can source sub-contractors. This ultimately translates to development of the construction industry as an entity.

Mentorship

The success of most small business development has been on the backbone of a strong mentorship programmes. Egbeonu (2004:36) cites USAID (1995) which highlights that the USA federal affirmative procurement policy in recognition of the importance of mentoring, recommended that it be used to provide managerial and technical assistance to small firms. Watermeyer (1995) argues that small contractors from underprivileged communities cannot engage in construction without developmental support. Although several approaches are

proposed, mentorship is favoured since it allows suitably qualified professionals to transfer skills to the communities. This importance of mentoring is further conceded by Daloz (1990:105) citing Fagan (1987) who states that the business world appreciates the concept of mentoring so much that an international association and journal was founded.

Daloz (1990) also emphasises that effective mentorship promotes development of the learners resulting in the achieved of the desired objectives. The author further highlights that effective mentors must encourage their student and act as a bridge to the impediments they face to their development. Daloz (1990) also points out some problems which have commonly affected mentorship namely:

- need for control and misuse of power by mentor;
- charges of favoritism and rivalry;
- desertion by the mentor;
- dependence and
- differing ethics

Egbeonu (2004) identifies mentoring as one of the key areas affecting viability of the Public Works contractor development programme. The author exposes the different definitions of mentorship within the programme as one of its shortcomings. The fact that government saw mentorship as optional, the financing houses as mandatory and the Small Contractors as an imposition resulted in a high level of miscommunication affecting programme success.

However due to the pluralism of the development programme this research will offer other points of view looking into the structuring of the training of the small contractors and identifying the gaps that result in difficulties in the mentoring and exit strategy of the programme.

Challenges

According to McCutcheon and Croswell (2001), small contactor development seems to be beset by the same problems since their inception, despite several interventions which have been put in place. Due to the importance of small contractor development to the economy and job creation, these difficulties should be investigated. In particular, the authors highlight the following areas for further study:

- The complexity of civil engineering contracting has not always been appreciated and taken fully into account.
- In the industrialised world many small civil engineering contractors have a very strong educational base from which they can explore and expand their entrepreneurial capabilities.
- Similarly, many small and large contractors began their independent companies by breaking away from existing contractors, where they had a great deal of training and gained significant experience, and started as sub-contractors before becoming fully independent contractors in their own right.

Howe (1984: 140), writing on his work in Botswana, also adds to the above assertions, highlighting the traditional unfavourable conditions which have always beleaguered small contractor development:

- Reluctance of commercial lending agencies to provide finance
- Lack of start-up capital for the projects
- Stiff economic and technical competition, which does not favour unproven firms
- Lack of continuity in the award of contracts

This research will explore the views of Howe, McCutcheon and Taylor Parkins within the context of the Vuk'uphile programme.

According to Kwesiga (1995), little attention has been focused on the failure rates, failure mechanisms and patterns of the small contractor in the road sector. This can be attributed to the lack of statistical information or the incorrect assumption that, in addressing the constraints faced by the small contractor, implementation challenges will automatically be

eliminated. Kwesiga further mentions that the importance of defining failure, establishing failure rates, cost of failure and its implications, which cannot be overstated considering the volatility of the road construction and maintenance industry. These implications then might give direction as to whether more diversified technical and business training would be the appropriate type of development programme necessary for implementation.

These comments give a different angle to earlier views of previous authors, hence this research will use qualitative analysis backed up by statistical information in the review of the Small Contractor Development Programme in the EPWP as a way to substantiate any conclusions which will be derived through the research.

The status report of the South African Construction industry (DPW 2002), highlights issues which have impeded the growth of the development programme. It lists an oversupply of participants, lack of bridging capital and skilled resources, and lack of business management skills as major issues. The development progam was mainly focused on contractors undertaking low value contracts in the range of R500 000 or less. This was found to be self-defeating due to the large groups of participants, leading to lack of continuity, resulting in the proposal for the development of contractors covering R1.5million to R5million projects as the new aims of the emerging contractor development programme.

Hence this research will investigate and try address issues surronding eligibility of the project participants within these new proposals.

Muatjetjeja (2006: 30) points out that another factor that has impacted on small contractor development has been labour and employment legislation which requires that casual labourers be given the status of permanent employees after six months of continuous employment in government. In such a scenario, production would not be tied to

remuneration, hence the justification of the creation of sub-contracting entities which can implement programmes on a fixed project cost.

Wells (2001) evaluates the concept of outsourcing labour within the construction industry today. Some research findings have shown that the practice is exploitative and does not guarantee continuity of work to the workers involved. The author highlights that although more detailed research is needed, this concept seems to pose a serious threat to small contractor development. The practice potentially hampers training, which is certainly a fundamental within any contractor development programme.

Employment intensive construction cannot be separated from labour, hence this research will offer input on the recruitment strategies and the payment methods within EPWP Vuk'uphile in Ekurhuleni.

Mkhize (1994: 12) argues that successful programmes in Kenya, Botswana and Lesotho were local projects which only equipped the labourers, site staff and personnel with skills to execute those particular projects. Employment was short-term and no sustained contractor development was initiated. It is against such a backdrop that the review of an expansive programme such as Vuk'uphile has to be identified. Recent data from SAFCEC (2003) reports that 80% of small civil contracting firms have a life span of less than a year and only 7% survive for five years and beyond. Such assertions and findings raise key questions on the continuity of work or sustainability of programmes within public works now or in the future. This brings into question what levels of continued support small contractor development programmes would require.

Lazarus (2007: 47) citing English (2002) points out the low level entry requirements in the construction industry as one of the drawbacks to effective contractor development programmes as it has translated to low ability on the caliber of recruits. Ultimately this has led to slow assimilation of skills, hence poor development of emerging contractors.

Lazarus postulates that contractor development spearheaded through targeted procurement has not achieved the desired results because the programmes did not have well defined skills transfer frameworks. The support initiatives implemented are not well coordinated as they are:

> "…characterized by inadequate preparations, poor needs assessments and an inadequate understanding of the developing needs of emerging contractors. This is evident by discontinuances, unstructured training approaches, ad-hoc mentorship, inadequate monitoring and evaluation that promote unsustainable skills transfer, (Lazarus 2007: 1)."

The above discussion of the literature on challenges in small contractor development outlines issues that have come out over past programmes. The arguments put forward by the different authors offer an evaluation framework for these aspects within the EPWP Vuk'uphile. This literature gives the research an evaluation base of the programme against past programmes and accepted information within the subject area.

Evaluation

Edmonds and Howe (undated), highlight the importance of a periodic review within any programme as this helps in the monitoring and evaluation of the tasks at hand. Watermeyer and Thumbiran (2009) further add that for the programme successes to be realized there should be active involvement of technical expertise in public office for supervision, full-time mentors to aid development of business systems, and key performance assessments must be undertaken at regular intervals to monitor and evaluate progress made in the programme with regards to the expected deliverables.

The EPWP Monitoring and Evaluation guidelines (2005) specify the need for cross-sectional as well as longitudinal studies to evaluate programmes. This research mainly uses the EPWP Monitoring and Evaluation tools to provide data for an evaluation. The identified need for

continuous checking to ensure programme balance is important as it also informs programmatic intervention on subsequent phases. Monitoring and Evaluation cannot be used as reactive but pro-active way of ensuring continuous development.

Training Model

Hauptfleisch (2006) talks of the Integrated Emerging Contractor Development Model (IECDM) which was developed by the CSIR (Dlungwana, et al 2004). The model pays particular attention to the importance of training and mentoring within a Small Contractor development programme. Other line functions and relationships are considered in the model as interaction between the Small Contractor and the client, financier, CIDB, CETA, and Project Manager.

A schematic outline of the programme relations is shown in Figure 2.2.

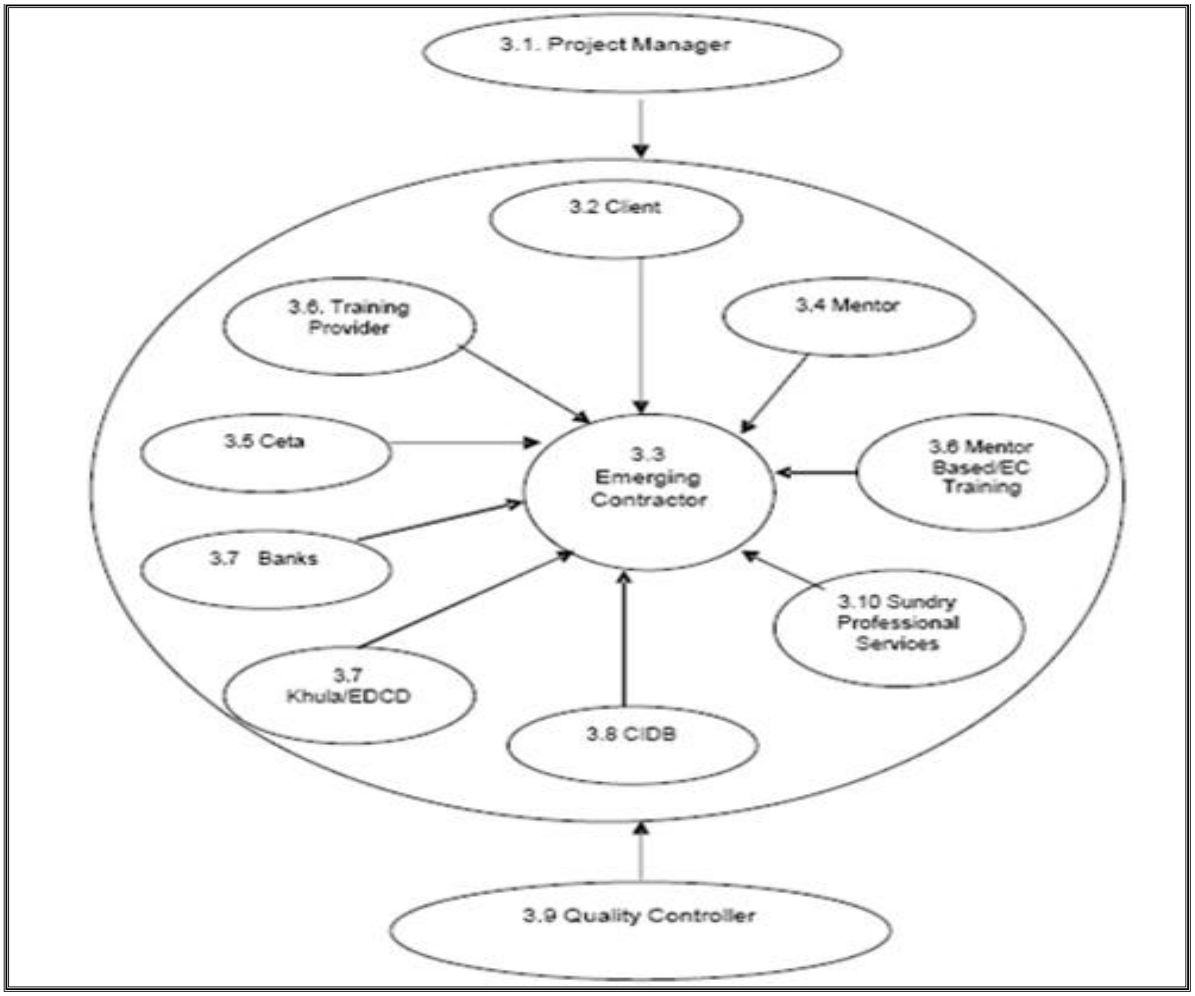

Figure 2-2 Integrated ECDM (Hauptfleisch 2006)

Hauptfleisch concludes that the adoption of this model within the National EPWP shows the positive effects it has had in small contractor development. This model is also versatile and can be applied in any other industry for sustained development.

The assertions above are reinforced by Dlungwana et al (2007) who raise the point that South Africa is still a "technological colony", inferring that the country relies on technologies that have been pioneered in other countries. This reliance has created an opportunity for the development of an Integrated Emerging Contractor Development Model which would facilitate skills and knowledge transfer, closing out the technological gap.

The IECDM was developed to assist small construction companies to become sustainable and competitive businesses (Dlungwana et al 2004). The model ensures effective

management of the programme through selection of suitable candidates, implementation of skills training and mentorship and total quality management within a two year period. A pilot programme was initiated in the Eastern Cape Province between 2004 and 2006: the summarized results showed improvements in performance, sustainability and competiveness of the small firms. To date it ranks as one of the few comprehensively managed contractor development programmes in South Africa (Hauptfleisch 2007).

Watermeyer et al (2007) describe a model for managing a series of projects in line with a budget, technical capacity and the conceived idea of contractor development. The conclusions surmised from the implementation of the model have resulted in the realization that:

1. Allocated medium term budgets can be spent in a way that results in not only good quality work, but adds to the social and economic deliverables, including employment and skills development.
2. Services of a number of consultants and contractors can be procured in the absence of a detailed scope of work within a public sector procurement regime.
3. It is possible to mobilize a team to tackle a large infrastructure project in a short space of time, once the go-ahead as been given.
4. Long-term, large contracts - rather than short-term, small contracts - permit service delivery to occur at scale
5. Long-term, large contracts can, effectively and efficiently, deliver on a wide range of social and economic objectives.
6. Demands placed on the client are minimal (Watermeyer and Thumbiran 2009).

Segokgo, Hongve and Overby (2000) indicate that contractor development has been practiced in two forms, supply-driven and demand-driven. Supply driven programmes are mainly conceived and financed by donors in collaboration with the relevant government. In these programmes success is a measure of the numbers trained and the amount of credit disbursed. However particular emphasis should be placed on demand driven programmes,

which entail identifying opportunities and empowering small firms with technical assistance and finance. In such a programme success is described in terms of the quantity and quality of works achieved in the end. The later approach talks to the holistic image of a sustainable programme, the principle from which the Vuk'uphile programme is drafted.

In the light of the above, it is clear that literature provides different training models for the implementation of small contractor development enterprises. All the models involve active stakeholder participation from implementing bodies. This research will therefore evaluate the current EPWP Vuk'uphile training model

Small Contractor Development Outputs

Watermeyer and Thumbiran (2009) highlight that infrastructure provision and contractor development can be achieved without compromising the socio and economic deliverables. In a case study of a pilot programme run by EThekwini Water and Sanitation in 2007, the programme delivered quality infrastructure despite having deliverables relating to poverty relief, enterprise development and training over a three year period (which were mostly achieved). These deliverables form the basis of most small contractor development programmes in the African context and hence will give insight to work covered by this research.

The authors add that, for the programme successes to be realized, there should be active involvement of technical expertise in public office for supervision, full-time mentor to aid development of business systems, key performance assessments must be undertaken at regular intervals to monitor and evaluate progress made in the programme with regards to the expected deliverables.

Watermeyer (1992) highlights the importance of a contractor development programme, stating that such a programme provides the opportunity for development of small contractors into conventional contractors, with adequate capacity to execute projects. The

characteristics of such an effective programme should lead to emerging contractor developing:

- Commercial skills
- Management and administrative skills
- Credibility in commercial circles
- Experience in pricing complete contracts, whilst accepting increasing greater risk and contract responsibility. (Watermeyer 1992)

The literature review clearly articulates that small contractor development is not a new concept, a lot of work has been put in the continued development of this idea in Sub-Saharan Africa since the 1970s. There is evident guideline and experience within literature on what would form a better implementation model and it is against this background that this research would reference its findings.

The success of most past PWPs has been localized and therefore this research questions whether the level of localized success in small contractor development programmes such as Gundo Lashu has managed to be established in the Vuk'uphile National Contractor Learnership Programme. Its adaptability within the different regions would show the improvement and versatility in contractor development thus creating a datum on which to cultivate the continued growth of small contractor development.

CHAPTER 3 RESEARCH METHODOLOGY

No single highway leads us exclusively towards a better understanding of the unknown. Many highways can take us in that direction. They may traverse different terrain, but they all converge on the same destination: the enhancement of human knowledge. (Leedy and Ormond 2010: 94) This description depicts the variance of approaches and methodologies to answering research questions.

3.1 Introduction

This research employs a qualitative approach to review the implementation of the EPWP Vuk'uphile Learnership Programme within Ekurhuleni Metropolitan Municipality. The qualitative approach will be used to evaluate all relevant data elicited from the programme participants, literature and research findings. The research is qualitative in the sense that attention is given to description, verification, evaluation and interpretation of the results. It should be noted that relevant statistical data is used to substantiate some of the research findings and to form a foundation on which to base the research outcomes.

The qualitative approach has been chosen since it offers:

- Description reveals the nature of the programme;
- Verification ascertains the validity of assumptions and theories;
- Evaluation provides means to judge the effectiveness of subject(s) under review;
- Interpretation opens up new insights, concepts and perspectives. (Peshkin 1993, cited in Leedy and Ormond 2010)

This chapter outlines the research designs used and their validity, discuss the limitations of the research as well as ethics.

3.2 Research Design

The following approaches have been used to collate data for the evaluation of the Vuk'uphile learnership programme:

1. The Literature Review provides a basis on which to evaluate the programme, bearing in mind the extensive body of knowledge available on small contractor development initiatives.
2. Surveys
    - The Questionnaire provides a tried and tested way to collect specific research data from programme participants.
    - One-on-One Interviews seek specific detail relevant to the programme and allow comparison of data.
    - Telephonic Interviews allow access to respondents who were not easily available and accessible.
3. A Case Study approach allows in-depth data sourcing specific to the research topic, thereby contributing to a better understanding of the small contractor development programme.

3.3 Methodology

As already indicated in the previous section, three research designs were used in obtaining data for analysis and evaluation of the research topic. This section explains and provides detail on how each particular design was used in collecting research data.

3.3.1 Literature review

The evaluation of small contractor development initiatives is not a new concept but rather a systematic tool that has been used to monitor and evaluate this component of the construction industry. Various authors have contributed extensively to this body of knowledge. Notably in South Africa, McCutcheon has published guidelines for Small Contractor development within this country as well as within Sub Saharan Africa. It should be noted that the research incorporates broad Government policy documents, EPWP documents and those of the Vuk'uphile programme to provide a base from which to measure the research findings.

In the light of the strength that is inherent in literature, it is of great relevance to use as a yardstick, the findings of other authors and researchers. Also the programme success can also be tracked against "government policy" as they form a set of strategic objectives for the implementation of the programme. This research uses the literature review to direct the analysis of the data received from the respondents. The literature review helps to provide points of consensus as well as arguments to what has been accepted as a knowledge base within the subject field.

3.3.2 Surveys

Three survey tools used in this study are elaborated on below:

Questionnaire

A draft questionnaire was developed for the purposes of this research, based on the literature survey, which is presented in **Appendix B**. The researcher approached the EPWP unit in July 2011 with a copy of the draft questionnaire and was advised that a detailed questionnaire had been developed by Econologists Africa (ECI Africa) in consultation with the EPWP; the document is also presented in **Appendix B**. It is important to highlight that the ECI Africa questionnaire was developed as part of the Monitoring and Evaluation techniques of the programme. EPWPs in South Africa are informed by clearly planned policy and guidelines generated by the original "EPWP architects", many of whom were skilled project management professionals from the University of the Witwatersrand in Johannesburg. Due to the clear policy and guidelines, the EPWP unit has followed a strict Monitoring and Evaluating process informed by cross-sectional and longitudinal studies of all past and current programmes. A Monitoring and Evaluation framework has been in place since 2004 and is informed by international experience and the EPWP policy objectives per programme (EPWP, 2005). It is in this light that ECI Africa was thus appointed to carry out an evaluation of the Vuk'uphile Learnership countrywide.

The ECI Africa questionnaire provides a broader question base which embeds the questions proposed in the draft questionnaire by this researcher. In essence it is more extensive and

provides a consistent measurement for the evaluation of the Vuk'uphile programme. Moreover, it gives this research access to the detailed approach to monitoring and evaluation of the EPWP as they had given a "brief" of their requirements to ECI Africa. Questions which are in the draft questionnaire and are not captured in the ECI Africa questionnaire are addressed in the discussions, interviews and observation of the case study.

Another key element taken into consideration in this research was to avoid "survey fatigue" (Nottingham University-Survey Unit, online) this is the expression used when a limited community of participants are subjected to a similar set of questions within relatively short spaces of time and end up giving biased answers as they feel they are being overburdened by the researchers. After considering the above the researcher decided to use the set of data collected by ECI Africa, as one of the sources to inform the evaluation of the research topic.

The ECI Africa questionnaire contains structured, semi structured and unstructured questions. It was work-shopped to the graduate small contractors in Ekurhuleni Metropolitan Municipality[1] on the 6th of June 2011. An allowance in the form of transport money was offered to encourage the graduate contractors to attend the workshop. The workshop was done within Ekurhuleni where all the programme participants are resident. A select team from ECI Africa handled the workshop and it was done in English. The workshop conveners took time to explain the scope and reason of the evaluation in line with the monitoring and evaluation process of the EPWP. The respondents were allowed to ask for clarity on any questions they did not understand and were encouraged to answer all questions on the questionnaire. At the end of the workshop session ECI Africa collected all the completed questionnaires for data extraction. The schedule of questions focuses on selection of participants, experience and skills before learnership, appreciation of services

[1] Ekurhuleni Metropolitan Municipality is an implementing body of the Vuk'uphile Learnership Programme and its role is described in Chapter 5.

offered within the learnership in class and practical training, access to finance, mentorship services, post learnership experience, and socio-economic impacts on the learners. These questions covered the Vuk'uphile programme objectives and answered to the research questions raised in this study.

One-on-One Interviews

The researcher obtained consent from professionals within the EPWP and Ekurhuleni to interview them in their offices. The discussions were semi structured as it allowed the researcher to obtain specific detail relevant to the programme through probing the interviewee. The questions in the discussions were guided by the quest to explore details of participants, experience and involvement of the respondents in the programme, stakeholder participation, socio-economic impacts and significantly the respondents' professional opinions of the programme outcomes.

The interviews were held at scheduled times and dates with Project Managers from the EPWP unit at the National Department of Public Works offices in Pretoria, while Project Managers and Engineers were interviewed at the Ekurhuleni Municipal buildings. Interviews were also held on construction sites with the Project Managers, as well as the small contractors. The researcher also held interviews with ECI Africa representatives at conveniently agreed meeting places.

Telephone Interviews

Due to conflicting schedules, some of the professional respondents preferred to have telephone interviews with the researcher. Telephone interviews also allowed the researcher quick access to respondents with whom he had already had one-on-one interviews to gain clarification on issues that emerged subsequently. The respondents were highly responsive to the questions and articulated their views and perspectives on the research topic.

3.3.3 Case study

Feagin, Orum, and Sjoberg (1991) cite that a case study approach is ideal to provide an in-depth data sourcing specific to the research topic, which thereby contributes to a better understanding of the subject matter. This research uses a case study approach to focus relevant attention on the Ekurhuleni Vuk'uphile Exit Programme. Focus is given to the Tsakane Industrial Project in Chapter 5, implemented by graduate contractors. The project not only provides a measure of the work done by small contractors but also gives insight to the outcomes of small contractor development initiatives within Ekurhuleni. The approach allows the researcher to provide the reader with specific detail on the programme which can have internal validity within EPWP Vuk'uphile learnership in Ekurhuleni.

Snow and Anderson (undated), cited in Feagin, Orum and Sjoberg (1991), assert that a case study is a triangulated research strategy. Denzin (1970), cited in Wang and Duffy (2009), state that triangulation is regarded as the application and combination of two or more data sources, approaches or methods, to the investigation of the same problem or phenomenon, with the aim of increasing the validity of the findings. In this way, the weaknesses or bias of one method are mitigated. This research employs a triangulation method which is a combination of data sourcing, interviews and direct observations to analyse the Tsakane case study.

The Tsakane case study evaluation seeks to answer questions on the competency of Vuk'uphile graduates, appreciation of business management, access to finance post learnership programme.

3.4 Validity of Research Designs

3.4.1 Literature review

Table 3-1 Strength and Weakness of Literature Review

Strengths	Weaknesses
• Generally accepted body of Knowledge over a period of time. • Unobtrusive – information exists prior to the research. • Data sources can be established and sources are verifiable. • Informs the researcher of the relevance content of the topic. • Independent information available • Appreciation of the subject matter. • Allows global, regional, countrywide comparison basis. • Promotes best practice	• Wide variety of views. • Information might be largely a result of author bias.

A literature review offers many advantages to research as indicated in the table above. The information from past publications gives credibility to the research analysis and outcomes. The research findings can agree or disagree thereby promoting the body of knowledge through relevant arguments and conclusions. It is important to highlight that all significant research has been informed by past publications, guideline documents and hence a review of related literature, as done by this research is pertinent to understanding the topic, offers a base for data evaluation and resulting conclusions.

The weakness' in the literature review has been mitigated by focusing on the relevant literature and using facts, verified findings for discussion under review of the topic.

3.4.2 Surveys

Table 3-2 Strength and Weakness of Surveys

Strengths	Weaknesses
Questionnaire • Quick to collect information • Standardised information • Information can be collected from a large group of respondents • Commonly accepted way of collecting data. • Offer confidentiality to respondents	• Poor response rates • Participants might omit information due to format of questions • Responses might be biased
One on One Interviews • Detailed information can be obtained • Insightful, provides opportunity to the researcher to observe respondents body language with each question. • Most answers to questions are collected • Quick collection of information	• Response bias, • Poor recollection • Time-consuming
Telephone Interviews • Allow easy access to respondents • Quick collection of information	• No direct contact/observation of respondent

In order to ensure increase validity and mitigate the weakness in the responses to the questionnaire, the questionnaire was workshopped to the respondents, hence a higher response rate was recorded. The researcher was on hand to explain any unclear questions and therefore almost all the information as requested was provided by the respondents. Although there is no control over the bias of the respondent, the workshop articulated the need for clear, genuine responses as anonymity was maintained. The limited validity of the

case study was mitigated by the researcher combining more than one research approach (questionnaire, interviews, literature and case study) to form a composite picture of the research topic.

3.4.3 Case Study

Table 3-3 Strength and Weakness of Case Study

Strengths	Weaknesses
• Provides in depth data on research topic • It is explores topic resulting in new knowledge, confirming literature and providing recommendations • Provides room for direct observation • Defined to a specific sample size	• Time consuming • Limited validity (internal/external)

The responses from the questionnaires are captured per question, recorded and tabulated as a percentage of the respondents per question. Microsoft Excel was used to tabulate the respondents' views per question: in this way the primary data was reduced to statistical data. This resultant statistical data has been analysed in terms of themes and concerns raised in the literature and the observations of the interviewees to form a triangulated method of data analysis. The research analyses each question separately and comes up with individual conclusions based on data collected and relevant literature.

One key research question is to establish the sustainability of the programme's exit strategy. In order to evaluate this aspect of the research topic further, a case study approach is used to source information for the Tsakane Industrial Park, which is an exit project done by graduates of the learnership. The data was systematically collected from the project documentation, project managers, contractors and direct observations and photographs of the site (see Chapter 5) and evaluated to inform the broader outcomes of the learnership programme in Ekurhuleni.

The weaknesses' in the case study was mitigated by verifying the findings against the broader spectrum of responses given by the small contractors in the questionnaire.

3.5 Limitations

The evaluation of the research topic is based on the perspectives of small contractors, and project managers from Ekurhuleni and the EPWP unit. It does not explore the views of other stakeholders in the programme, such as mentors, financiers and training providers. Although this might be considered to limit the scope of the evaluation, it is the researcher's view that small contractor development initiatives can best be informed by the small contractors themselves. In essence the responses from the small contractors are central to the evaluation of the programme.

3.6 Ethical Procedure

The researcher has read and understood the Ethics Clearance Form set by the Human Research Ethics Committee (HREC) of the University of the Witwatersrand. The researcher has however not submitted any form for ethical clearance with the committee due to the fact that he has not sourced his information from the small contractors themselves but has obtained it from ECI Africa. The small contractors, as part of their agreement with the EPWP, are expected to give input into the programme evaluation hence their participation in the ECI Africa questionnaire was within the programme dictates, as agreed by the participants in their learnership agreements signed with the EPWP. The data extracted from the respondents has been analysed without disclosing any individual participant's response or name and in this regard anonymity and privacy of the respondents has been maintained.

It should also be noted that of the interviews with small contractors on site, were informal and unstructured as they were meant to elaborate and confirm the information already collected. Ethical clearance was also not necessary for the semi-structured discussions with

the EPWP and Ekurhuleni project managers as these are professionals and they responded to questions from the researcher within the dictates of their professional conduct.

The researcher has attached the clearance he received from the National Department of Public Works to be able to partake of this research in **Appendix A.**

3.7 Method Summary

The research methodology provides a Monitoring and Evaluation exercise for the EPWP Vuk'uphile in Ekurhuleni. The evaluation techniques used resonate with acceptable processes with the EPWP framework. The data collected from the questionnaire has been analysed as a percentage of the total research population so as to get an evaluation measure. The data from the interviews has been incorporated into the research as a descriptive input and provided insight into the programme and the participant. The research method also provides the EPWP an evaluation based on best practise as it also uses comparison of small contractor development literature in evaluating the programme this academic input is not typically covered by consultants in the programme review. The conclusions drawn from this research are based on literature, observations and the researcher's view reflected on his experience within the construction industry.

CHAPTER 4 EXPANDED PUBLIC WORKS PROGRAMME

This chapter offers an overview of the Expanded Public Works Programme within South Africa. It highlights the EPWP goals, guidelines and frameworks designed to ensure the programme's competency. An overview of the EPWP Vuk'uphile learnership programme is also given, indicating the goals, objectives and implementation model of the programme.

4.1 Background

As with most African countries, the South African government inherited an unbalanced economic environment due to the historical legacies of colonialism and apartheid. A large proportion of the population did not receive any skills training or opportunities to participate effectively in the country's economy and earn a decent living. Therefore since the advent of democracy in 1994, Government has taken strides to try and empower formerly marginalized groups of people so as to create a balance from the policies of yesteryear.

Among the National Government's top priorities are job creation and skills development. In 2003, Statistics South Africa (StatsSA) estimated the rate of structural unemployment to be 4.6 million in terms of the strict definition and 8.3 million in terms of the broad definition, with an estimated rate of 70% of unemployed youth (age between 16 and 34) who had never worked before, while 59% of all unemployed people had never worked. These unemployment rates are among the highest in the world. The Expanded Public Works Programme (EPWP) is one of government's responses to address these challenges. President Thabo Mbeki formally announced the Expanded Public Works Programme in his State of the Nation Address in February 2003 and Cabinet adopted it in November 2003.

The Growth and Development Summit (GDS) June 2003 hence agreed to foster 'smart partnerships' in all spheres of the economy, which were aimed at creating work and fighting

poverty. One of the key agreements of the summit was to implement an Expanded Public Works Programme (EPWP), as one of the many initiatives aimed at creating work opportunities and improving skills levels of historically disadvantaged people.

Lieuw-Kie- Song, former Chief Director of EPWP, in his conference paper on Employment Guarantee Policies presented at the Levy Institute, New York (2009), sought to explain the rationale and choices made in the design of the EPWP in South Africa, including the lessons learnt to date within the South African context. The paper alludes to the fact that the main pillars of the South African economy, mining and agriculture, had become less labour intensive partially due to rapid integration into the global economy. This highlights the onus on government to provide other employment initiatives.

4.1.1 History of the EPWP

The Expanded Public Work Programme was launched in April 2004 to promote economic growth and create sustainable development. The urgent need to address spiraling unemployment levels and the expected positive outcomes in education, skills development and social well being of the populace made the programme pertinent on the implementation list.

According to the National Department of Public works website:

> The EPWP is one of government's initiatives/strategies to bridge the gap between the growing economy and the large numbers of unskilled and unemployed people who have yet to fully enjoy the benefits of economic development. All of the work opportunities generated by the EPWP are therefore combined with training, education or skills development, with the aim of increasing the ability of people to earn an income once they leave the programme. Together with the SETA's, the Department of Labour (DOL) coordinates the training and skills development aspects of the programme. (EPWP, online)

The EPWP is an important means of providing exposure to the world of work in a context where a very high proportion of the unemployed have never worked. However it must be noted that the EPWP provides for labour absorption and income transfers to poor households in the short to medium term: it was not designed as a policy instrument to address the structural nature of the unemployment crisis. (EPWP, online)

4.2 The Framework Agreement

The framework agreement for public works projects using labour intensive construction systems was born out of the realisation that greater use of employment-intensive methods could alleviate unemployment by generating more work opportunities. The fundamental need of such an agreement in South Africa at the time was more pertinent and relevant than in other Sub-Saharan countries where labour intensive construction was implemented, as mentioned in the Literature review. South Africa is a unique case, as these labour-intensive proposals were formulated in the early 90s which was a time of transition away from apartheid. McCutcheon and Taylor Parkins (2003).

The strong trade unions (COSATU) and which actively campaigns for a minimum wage, pension and other privileges for employees had “to buy in” on the idea that public works projects would form temporary work and hence some of those privileges of the employee had to be negotiated, considering that in all the international experience labour-intensive work had been more successful and feasible with remuneration linked per task. McCutcheon and Taylor Parkins (2003).

A draft framework agreement document was signed in 1993 through engagements between government, trade unions and the construction industry representatives. The draft document sought to maximise the use of labour-intensive systems of construction within public works programmes, with due regard to economics (McCutcheon and Taylor Parkins 2003).

A trade-off to payment being linked to production was reached on the basis that:

- The project was to be funded by the public sector;
- Unacceptable employment practices were forbidden;
- Active community participation in the projects;
- Recruitment was to be targeted at the unemployed, women and youth;
- Training and skills development were to be championed. (McCutcheon and Taylor Parkins 2003)

This last point gave impetus to the need for creating small contractor learnerships, as shall be reviewed by this research.

The core principles in the draft Framework Agreement have been used in public works since 1993 without formal adoption until they were written into a Code of Good Practice for Special Public Works Programmes (and a related Ministerial Determination), which was formally gazetted by the Department of Labour in 2002, after consultation with the National Economic Development and Labour Council (NEDLAC). (Phillips 2004: McCutcheon and Taylor Parkins 2003)

4.3 Code of Good Practice

The Code of Good Practice (2002) provides guidelines for the protection of workers engaged in SPWPs, taking into account: the need for workers to have basic rights; the objectives of the programmes; and the resource implications for government. The document forms the basis for a labour framework for PWPs and was gazetted by the Department of Labour.

The code sets targets for participation of women, female-headed households, youth, the disabled and households coping with HIV\AIDS within PWPs. The local community must be actively involved in the project, supplying labour as well as establishing community participation forums. The Code allows for special conditions of employment for workers

employed by contractors on labour intensive projects, including the use of task-based payment systems, and the setting of payments for tasks based on consideration of the local going rate for unskilled labour. Although the Code limits the time spent within any PWP, there is a special emphasis on the empowerment of individuals and communities engaged in PWP through the provision of training and skills development. (Code of Good Practice for Employment and Conditions on SPWP 1997)

It should also be noted that the Code makes provision for:

- Health and Safety
- Compensation for Occupational Injuries and Diseases (COID)
- Grievance Procedures etc.

It is important to note that the Code is based on international best practice experience that, wherever possible, work should be task-based. In all the ILO and sub-Saharan case studies, linking productivity to remuneration produced successful results in labour based construction. It should be noted however, that where application is not feasible, workers should be paid a fixed daily rate. To date the Code has been used on a number of special public works programmes such as Working for Water (under the Department of Water Affairs and Forestry), the Zivuseni poverty alleviation programme (an initiative of the Gauteng provincial government), and the Gundo Lashu labour-intensive roads programme (an initiative of the Limpopo provincial government) (EPWP, undated)

4.4 Guidelines

A guideline framework for the implementation of labour-intensive projects within the EPWP was developed in 2004 and updated in 2005. The document provided parameters on the implementation of labour intensive projects. Within the guidelines, the government agency or SOE appoints a consultant to design the works and to administer the contract. Most of the designs are expected to be “labour friendly” in order to tie in with the job creation aspects of the EPWP, so special clauses to this effect were factored into the guidelines. (EPWP and Treasury, undated)

In addition, the document provides guidance in respect of:

- Identification of suitable projects;
- Appropriate design for labour-intensive construction;
- The specification of labour-intensive works; and
- The compilation of contract documentation for labour-intensive projects.

(EPWP, online)

The guidelines stipulate that the employment of locally employed temporary workers on all EPWP labour-intensive infrastructure projects have to be in line with the Code of Good Practice for Employment and Conditions of Work for Special Public Works Programmes issued in terms of the Basic Conditions of Employment Act, 1997 (Act No 75 of 1997) and promulgated in the Government Gazette, Notice No P64 of 25 January 2002. (EPWP, undated)

4.5 Institutional Frameworks

The success of the PWP could not be realised without a co-ordinated approach from the different stakeholders. Government through the NDPW saw the need for the creation of a separate unit within the Department specifically to champion the EPWP. The EPWP unit has the responsibility to drive the implementation of PWPs within and across all spheres of government. It therefore interacts with the various levels of government and SOEs engaging in PWPs.

The National EPWP framework also provides that EPWP projects and programmes must be identified within each government department, that can be implemented using labour-intensive or community based service delivery methods, with predetermined key deliverables over a given timeframe in the Infrastructure, Environmental, Social & Economic Sectors. (NDPW, 2009)

4.5.1 Training

The EPWP unit works in conjunction with CETA (SAQA) and CIDB in order to facilitate capacity building of labour intensive construction methods within projects undertaken by the provincial and local authorities. It should be noted that EPWP does not carry out any projects but rather ensures that adequate expert knowledge and skills development is garnered to create a platform for implementation. CETA is also responsible for conducting quality assurance evaluations on the training offered to the programme participants. The Department of Labour funds the training programmes to meet the training entitlement for workers employed on EPWP projects. (NDPW, 2009)

4.5.2 Finance

The EPWP unit is not responsible for financing any projects undertaken by the SOEs as all the money allocated comes from National Treasury. The EPWP plays a supportive role and identifies best practice among the implementing bodies on their PWPs. All labour intensive projects to be undertaken under the EPWP are funded under the Medium-Term Expenditure Framework (MTEF) available from NDPW for the implementing municipalities and provinces. (NDPW, 2009)

4.5.3 Division of Revenue Act (DORA)

Through the Division of Revenue Act, 2009: No. 12 of 2009, Government created an additional incentive package in terms of the Provincial Infrastructure Grants (PIGs) and Municipal Infrastructure Grant (MIGs), these monies are paid out to provinces and municipalities who are implementing labour-intensive PWPs, in accordance with the Guidelines produced by DPW, and approved by SALGA and National Treasury. The incentives are paid out to the implementing body through National Treasury which liaises with the EPWP unit to ensure that the expected targets have been met (job opportunities created and training requirements). (NDPW, 2009)

A more detailed discussion of the roles and responsibilities of the different stakeholders is

given in the Vuk'uphile section below. These define the different institutional frameworks found within the programme.

4.6 Monitoring and Evaluation

The NDPW is responsible for overall monitoring and evaluation of the PWPs. Monitoring and Evaluation forms an integral part to the any programme success as the information so generated builds on the body of knowledge and helps for best practice to be achieved/replicated in any subsequent programmes. The information so collated is conveyed as progress reports to cabinet/government the main driver of the programme. (EPWP, 2005)

The evaluation framework has focused on monitoring the impact of the programme as part of reporting on the purposes and goal of the programme. Departments are expected to report quarterly on the outputs detailed in the logical framework. Data collected from the implementing bodies is consolidated and reported in the form of quarterly monitoring reports. (EPWP, 2005)

The monitoring indicators of the EPWP have been integrated into other existing reporting structures. In addition, Government reached an agreement with Stats SA that the EPWP indicators are to be included in both the Labour Force Survey and the General Household Survey (Phillips, 2004): such incorporation essentially provides the ideal platform on which the targets of the EPWP can be monitored and evaluated. The surveys conducted by Stats SA target the number of people employed, skills levels, social benefits etc to produce a measuring instrument on the turnaround strategy of government to create job opportunities through the EPWP. Below are the summarised tables on the EPWP objectives to be monitored and evaluated, a summary of the evaluation techniques sourced from the aforementioned document.

Table 4-1 EPWP Objectives to be Monitored and Evaluated (EPWP, 2005)

Objective	Measure
Over the first five years to create temporary work opportunities and income for at least 1 million unemployed South Africans	Number of total, women, youth and disabled job opportunities Person days of work Average income of EPWP participants per sector
To provide needed public goods and services, labour-intensively, at acceptable standards, through the use of mainly public sector budgets and public and private sector implementation capacity.	Cost of goods and services provided to standard in the Infrastructure, Environment and Culture and Social Sectors Cost of each job created
*To increase the potential for at least 14% of public works participants to earn future income by providing work experience, training and information related to local work opportunities, further education and training and SMME development.	% of participants at point of exit to secure • Employment • Education or Training • A SMME

*It is estimated that the breakdown of work opportunities for the various sectors would be as follows: Infrastructure - 8%; Environment & Culture - 10%; Social - 40% and Economic - 30%)

Table 4-2 Summary of Evaluation Techniques (EPWP, 2005)

Technique	Implementation	Areas Measured	Timeframes
Cross-sectional Surveys	Surveys of contractors/ implementing agents, beneficiaries, communities & government departments	Profile of beneficiaries & their households; impact of income transfers; impact of assets created; relevance & quality of training, role of contractor (targeting, training etc.); community perceptions of the benefit of the project; efficacy of design & implementation	Years 1, 3 and 5, surveys to be conducted at the end of the project cycle
Longitudinal Surveys	Surveys of beneficiaries 6 months after exiting the EPWP & 6 months thereafter	Whether employment or self-employment occurs after exiting the EPWP; Longer-term impact of income transfers & training; Offsetting effects (displacement and substitution).	Years 1, 3 and 5, surveys to be conducted 6 months after beneficiaries exit the EPWP & 6 months thereafter
Case Studies and Completion Reports	In-depth studies of selected projects by researchers, spread across sectors and provinces Assessment of Quality of assets and services. Evaluation of the quality of infrastructure and services against accepted benchmarks	All measurement areas excluding employment prospects of beneficiaries after exiting the EPWP. Quality of assets. Implementation process All forms of infrastructure and services	Years 1 – 5
Poverty Impact Analysis	Secondary data & data derived from surveys utilised	Impact of income, assets and services transferred to poor households on poverty & vulnerability	Years 3 & 5

These evaluation tools (Tables 4.1 and 4.2) have been used extensively through quarterly reporting structure of the EPWP. This research report uses case studies and completion reports as elucidated in the methodology to evaluate the Vuk'uphile contractor learnership within Ekurhuleni.

4.7 EPWP Phase 1

4.7.1 Goals

To create one million temporary work opportunities, coupled with training, over the first five years (2004 – 2009) with at least 40% women, 30% youth and 2% disabled. To achieve this goal, the government would:

- Over the first five years of the programme create temporary work opportunities and income for at least one million unemployed people;
- Provide needed public goods and services, labour-intensively, at acceptable standards, through mainly public sector resources and public and private sector implementation capacity; and
- Increase the potential of participants to earn a future income by providing work experience, training and information related to local work opportunities, further education and training and SMME development. (EPWP, 2005)

The objectives stemming from the inception of the EPWP are listed below:

- Facilitate training and skills development of all EPWP participants;
- Create work opportunities in the public sector;
- Increasing the labour intensity of government-funded projects;
- Development of Small Medium Micro enterprises through learnership/incubation programmes;
- Utilising general government expenditure on goods and services to provide the work experience component. (EPWP, online)

4.7.2 Implementation and methodology

The EPWP is implemented through provinces and municipalities as these are the main delivery arms of government. The national government departments are responsible for sector coordination of the EPWP. The success of the programme as spelt out from its inception is highly dependent on cooperative governance. All levels of government and state owned enterprises (SOEs) are expected to provide temporary employment opportunities which target unskilled and unemployed persons. The developmental programmes should ensure that, apart from providing employment, the learners are adequately trained, thereby allowing them to gain a skill which can be used for their empowerment. These guidelines are spelt out in the National EPWP framework.

The EPWP was designed to allow a wide diversity of existing best practice Public Works programmes to expand. Government made it clear that the EPWP should not be a "make-work" but should be an economically efficient programme. In essence, labour intensive methods would only be applied when technically and economically suited. To support labour intensive construction, appropriate labour friendly designs were to be introduced within the projects. The programme is not about changing existing successful labour intensive initiative but rather to develop and promote them, hence expanding their applications on a broader scale with the result of greater labour absorption. The emphasis, as with best practise in any type of construction, is to achieve cost effective quality services, but with the added objective of using labour-intensive methods.

4.7.3 EPWP Targets

In the beginning, the programme had a target of providing employment opportunities and training to at least one million unemployed people in its first five years. (EPWP, 2005) Work opportunities were expected to be created in the following ways:

- **Infrastructure Sector** - Increasing the labour intensity of government-funded infrastructure projects.

- **Environmental Sector** - Creating work opportunities in public environmental programmes (e.g. Working for Water).
- **Social Sector** - Creating work opportunities in public social programmes (e.g. community-based health and social welfare care and early childhood development).
- **Economic Sector** - Developing small businesses and cooperatives, including utilising general government expenditure on goods and services to provide the work experience component of small enterprise learnership / incubation programmes. (EPWP, online)

For the purposes of this research, a brief description shall only be outlined for the Infrastructure Sector as it is within the limitations of this research. Any further information on the other sectors can be readily sourced from the National Department of Public Works.

4.7.4 Infrastructure Sector

This sector aims to increase the labour intensity on government-funded infrastructure projects. Suitable projects within government sectors and SOEs are identified and are implemented using labour-intensive methods. (EPWP, online)

As detailed in the Literature Review in Chapter 2, local and international evidence suggests that machines can be replaced with labour in many of the construction activities associated with civil infrastructure without compromising quality or cost of the project deliverables, such as low-volume roads, municipal water and sanitation pipelines, as well as storm water drains. (McCutcheon and Taylor Parkins 2003) This body of knowledge hence informs a wide application within the infrastructure sector to create employment within the EPWP. It is in light of the above that special learnerships' have been set up within this sector of the EPWP: one such programme is Vuk'uphile which is being evaluated in this research.

In all EPWP sectors, the participants should be trained in the requisite skill and knowledge for implementing the designed projects. Participants and others stakeholders (mainly CETA,

CIDB and Sponsors) work together under the coordination of the National Department Public Works to deliver on the goals and objectives as set out in the EPWP. Within the infrastructure sector as specified under the EPWP guidelines, labour-intensive construction methods are only given preference where they are technically and economically feasible. This ensures that quality of the deliverable, the project outcome, is not compromised.

The implementation of labour-intensive projects in the EPWP can be summarised as:

- Using labour intensive construction methods to provide employment opportunities to local unemployed people;
- Providing training or skills development to those locally employed workers; and
- Building cost-effective and quality assets.

4.7.5 Post EPWP Phase 1

At the end of the EPWP phase 1 in April 2009, the Infrastructure Sector was identified as the largest employment generator within the EPWP. The EPWP therefore turned its focus to devising various mechanisms aimed at expanding the use of labour-intensive methods for those types of infrastructure which offered the most potential for additional employment creation. This makes the focus of this research on the infrastructure sector even more relevant, as in socio-economic terms, this sector has become the “cash cow” of the EPWP.

Achievements of EPWP phase 1

The EPWP phase 1 was designed to run from 2004 to 2009 and the goals had been set for the five year period. However the target to create 1-million work opportunities through the programme was attained in 2008, a year earlier than envisaged in the 2004 electoral mandate. This indicated the possibility to expand the programme significantly beyond its ambitious targets of phase 1, and to improve the quality of the programme. (SoNA 2009)

4.8 EPWP Phase 2

The second phase of the Expanded Public Works Programme commenced on 1 April 2009.

Goals of the second phase of the EPWP are:

- To target an overall creation of 2 million full time equivalent jobs (FTEs) over 5 years (2009-2014) for poor and unemployed people in South Africa. A FTE may be made up of a series of fixed-term assignments over twelve consecutive months, and is recognised as being the equivalent of one full-time job;
- To introduce an EPWP incentive grant as a wage incentive to eligible public bodies to meet their EPWP targets, maximise employment creation and assist them to off-set costs that may be incurred in making public body projects and programmes more labour intensive. (EPWP, online)

The EPWP phase 2 draws from successes and lessons of the phase 1 and seeks the creation of longer term of longer term, more stable employment in provinces, municipalities and non-governmental organisations. A R4 billion budget was added to this programme to incentivise the use of labour-intensive construction methods of construction within the various municipalities and provincial departments. (EPWP, online)

4.9 Vuk'uphile Learnership Programme

4.9.1 Background

Vuk'uphile labour intensive contractor and supervisor learnership programme, formerly known as the EPWP Emerging Contractor Learnership, was initiated by the National Department of Public Works in coordination with CETA. The programme seeks to develop capacity among emerging contractors to execute labour-intensive projects carried out in the EPWP, (EPWP, 2006). The programme is linked to the contractor grading system of the CIDB, thereby encouraging and supporting continuous development of small contractors into medium sized entities. The knowledge through previous programmes such as Gundo Lashu in Limpopo that any success in labour-intensive projects must be underlined by sound skills,

experience and knowledge has given impetus for the NDPW to implement such a programme. Participants within the programme are expected to complete the levels of training as set out in the EPWP guidelines. The learner contractors should be in a position to bid and execute labour-intensive work under the EPWP.

4.9.2 Vuk'uphile goals and objectives

Goal

To develop emerging contractors into fully-fledged business entities which are able to execute labour-intensive projects.

Objectives and Outcomes

- Develop Learner Contracting Companies (Emerging Contractor) that include:

  - One (1) contractor, i.e. Manager of entity (trained at NQF 4 – 254 Credits) Labour Intensive Methods of Construction and Entrepreneurial Skills Programme

  - Two (2) site supervisors i.e. technical expert (trained at NQF 4 – 218 Credits) Labour Intensive Methods of Construction

- Increase capacity in LIC sector to support EPWP.
- To provide a contracting entity that is able to operate locally and wider.
- Provide a contracting entity that is able to sustain itself in the open market after completion of the training, and
- Skills Transfer with Contractors & Supervisors to emerge with:

  - Recognised Qualification
  - Project Track Record
  - Financial Track Record
  - Relationship with a bank
  - CIDB Ranking of Grade 3 to 4

(EPWP Vuk'uphile promotional material, undated)

4.9.3 Implementation and methodology

As with all EPWP programmes, the Vuk'uphile Contractor learnership is implemented through provinces and municipalities as these are the main delivery arms of government. The implementing body is expected to assist and provide the requisite training platform within a work environment from which the learner can harness experience and at the same time perform on expected project deliverables. However, of major note is that this programme is implemented in partnership with various stakeholders, who are responsible for some of the following:

- Selection of programme participants (learners);
- Selection and budgeting for appropriate on-site practical training projects;
- Coordination of learnership and mentorship;
- Assess performance on projects and progress against development goals (Monitoring and Evaluation).

The programme is focused on emerging contractors/enterprises that are able to bid and implement projects in the region of R 2 Million Rand as part of the on-site practical training component of the learnership. SOEs are expected to float tenders on projects that are labour intensive and which are broken down into packages that the emerging contractors can successfully complete.

4.9.4 Vuk'uphile Stakeholders

NDPW

The National Department of Public Works is responsible for overall coordination of the Vuk'uphile learnership. It formulates Guidelines, appoints Mentors and monitors Quality Assurance within the scope of the learnership.

Public Body

The implementation body is responsible for the provision of projects that the learners are to carry out. It is up to the implementation body to identify suitable projects within their precincts which can be carried out labour-intensively. The public body as provider of the

project budget acts as the employer and appoints the consultant engineer or project manager.

Learner

The learner contractor or supervisor must be available to be trained through the learnership. The learner must comply with all the EPWP guidelines specific to training as well as other requirements within the scope of the Vuk'uphile learnership programme.

Community Facilitator

The community facilitator is appointed by the implementing body to inform the community of the planned projects, which enables the establishment of community forums made up of the local representatives, thereby ensuring "buy-in" from the local constituents. The community forums also provide a platform for the local people who form part of the EPWP target participants to be incorporated within the programme.

Financial Service Provider

The financial service provider ensures bridging finance for the emerging contractors, and gives information and advice as regards the financial and credit record of prospective contractors. The service provider also provides financial training to the participants as well as monitoring cash flows for the contracting entity.

Training Provider

The training provider is responsible for the provision of theoretical training, assessing of learner progress both within the classroom and on site. The training provider is expected to compile assessment reports on the evaluation, which must be availed to other stakeholders so that the learners' performance can be tracked.

CETA

CETA ensures that the training being provided to the participants is accredited and registered with SAQA in terms of the National Qualification Framework levels (NQF). It also monitors that an adequate budget has been set aside for the training and evaluates

theoretical training offered to learners periodically (quality assurance). CETA is also involved in the appointment of training providers for the programme.

CSIR

CSIR works in collaboration with the NDPW to develop evaluation and monitoring tools for continuous evaluation of the programme focusing on learner development.

Mentor

Mentorship is one of the critical support areas to enhance the success of emerging small business/contractor development. Mentors are required to be trusted associates responsible for guiding and advising learners during implementation of on-site projects. The mentor's main responsibilities are listed below:

- Provide advice aimed at improving business systems within the emerging contracting entity;
- Offer guidance and advice during project implementation;
- Ensure through assessments that each selected learner has a structured development plan;
- Offer guidance and advice to selected contractors in areas which need improvement;
- Co-Signatory to the emerging contractor's bank account;
- Develop the learners skills in the following aspects
    - Technical
    - Administrative
    - Contractual
    - Managerial
    - Entrepreneurial/Commercial. (EPWP Vuk'uphile promotional material, undated)

To ensure that the mentors are able to impart the necessary expertise to the learner contractors, the mentors must possess the following:

- On-site experience within the construction industry totaling more than ten years;
- Previously gained exposure and experience in the development of emerging enterprises;

- Be registered as a professional with a Built Environment Statutory Body;
- Sign and declare adherence to the South African Council for Project and Construction Management Professional's (SACPCMP) code of ethics for mentors.

(EPWP Vuk'uphile promotional material, undated)

The success of the programme as spelt out from inception is highly dependent on a concerted effort, cooperation and implementation among stakeholders. Strong partnerships should be fostered among all spheres of government as well as with the non-state entities.

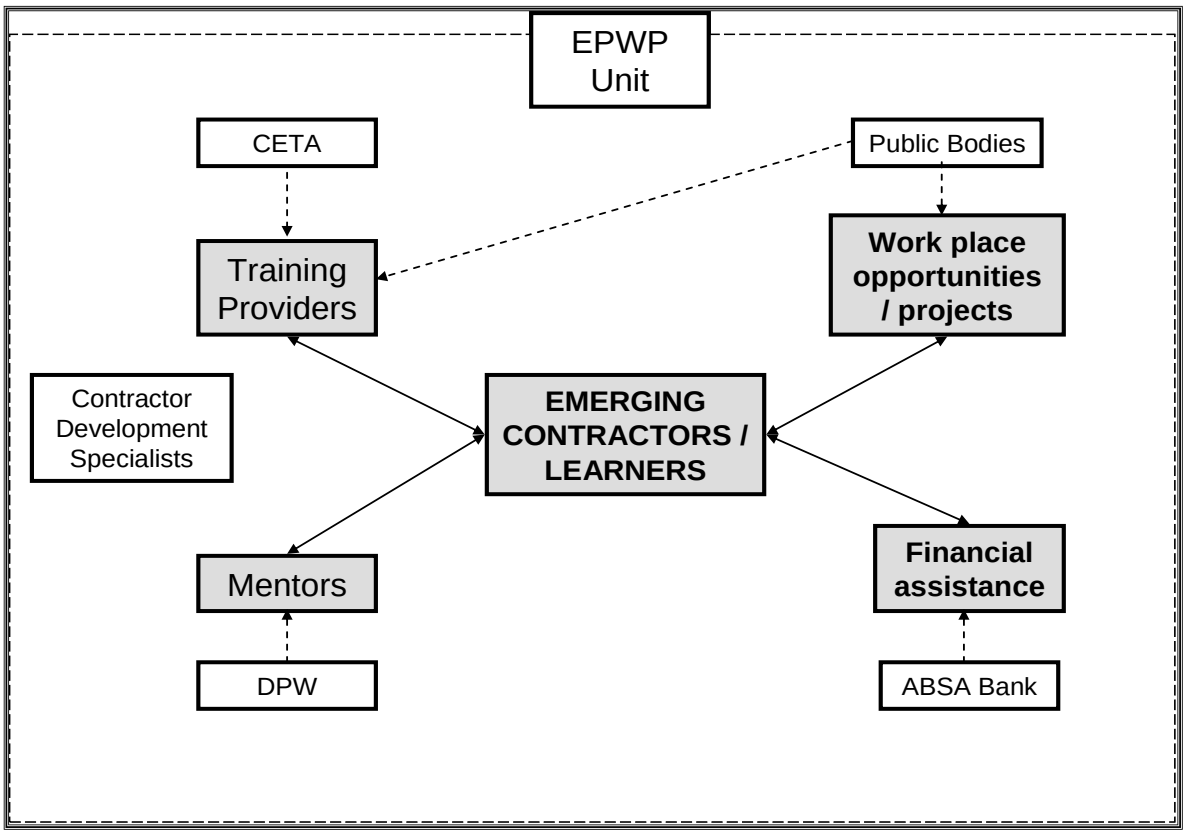

Figure 4-1 Stakeholder Relationship within Vuk'uphile (ECI Africa 2007)

The above schematic highlights the different roles and partnerships within the programme but for these relationships to work, reference documents must be drawn up. These are categorised as Memorandums of Agreement (MOA's), Agreements and Contracts, as listed below:

- MOA – CETA, DPW and public body;
- MOA – ABSA and DPW;
- Learnership Agreement – CETA, Learner and Training Provider;

- Contract – public body and Learner Contracting Company;
- Contract of Employment – Public body and Learners;
- Agreement/Contract – Learner Contracting Company and Learner Supervisor;
- Contract – Public body and Consulting Engineer.

(EPWP Vuk'uphile promotional material, undated)

4.9.5 Framework of learnership process

The NDPW in partnership with ABSA, CETA and Public Body after signing MOAs are tasked with the following:

- Appointment of Training Providers and Mentors;
- Selection of Learners – this is carried in the series of steps outlined below
  - Advertisement of Vuk'uphile Learnership Programme
  - Briefing sessions
  - Pre-screening of applicants
  - Short-listing for written Assessments
  - Written Assessments
  - Short-listing for Interviews.
  - Financial screening
  - Interviews
  - Final selection
- Training is categorized into On-site Project Training and Classroom, both components of the training are expected to be for the duration of 30months. Outlined below is a table of training and stages

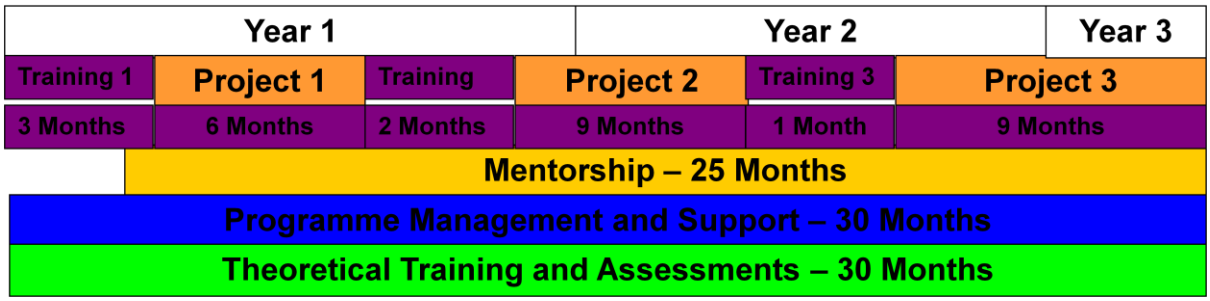

Figure 4-2 Vuk'uphile Training Model (NDPW, 2006)

Training Budgets are determined as follows:

- Mentorship, 1:10 Mentor: Learner Contracting Entity Ratio
  - 1st project – R500,000 to R1,000,000
  - 2nd project – R750,000 to R1,500,000
  - 3rd project – R1,000,000 to R3,000,000
  - Mentorship – R0.96m/yr
- Training, 254 credits for Contractors and 218 credits for Supervisors – R1.605m

4.9.6 The exit strategy

The programme exit strategy is supported by the Economic Sector of the EPWP. However various opportunities are potentially available to exiting contractors.

- Secure contract with new employer/client;
- Further education and training;
- Qualified contractor with a track record;
- Improved CIDB grading

4.9.7 Monitoring and Evaluation

As alluded earlier in the EPWP overview section on Monitoring and Evaluation, this process is supported by already existing reporting structures. Within Vuk'uphile monitoring and reporting is supported via an Information Management System (MIS). Four key indicators have been identified for assessment on an ongoing basis:

1. Financial
   - Budget
   - Expenditure
   - Source of funding
2. Training
   - Types (life Skills, Technical skills and Management related)
   - Duration of training
   - Training budgets (size and source of training budget)

3. Job Opportunities
    - Number of jobs created
    - Duration of jobs created
    - Cost per job
4. Demographic data
    - Youth
    - Women
    - People with disabilities (Vuk'uphile promotional material, undated)

As a way of this research answering the evaluation and review of the programme the research questionnaires tabled to the various participants and stakeholders within the programme talk to the indicators above.

4.9.8 Vuk'uphile Achievements to date

Through Vuk'uphile, DPW and the CETA have effectively replicated Gundo Lashu 30 times over. More than 1000 learners have started their training programmes to date. A total of 3000 learnerships are planned for implementation over the next four to five years. In the process, the learners will execute approximately R3 billion worth of provincial and municipal EPWP infrastructure projects as their training projects, creating approximately 100 000 work opportunities. Vuk'uphile is also making a significant contribution to broad-based BEE and the transformation of the construction industry. (DRT/DPW 2006)

CHAPTER 5 EKURHULENI METROPOLITAN MUNICIPALITY

This Chapter provides detailed information on the Ekurhuleni Metropolitan Municipality, with emphasis on its current Integrated Development Plans (IDPs), structure and the EPWP Vuk'uphile programme within the municipality.

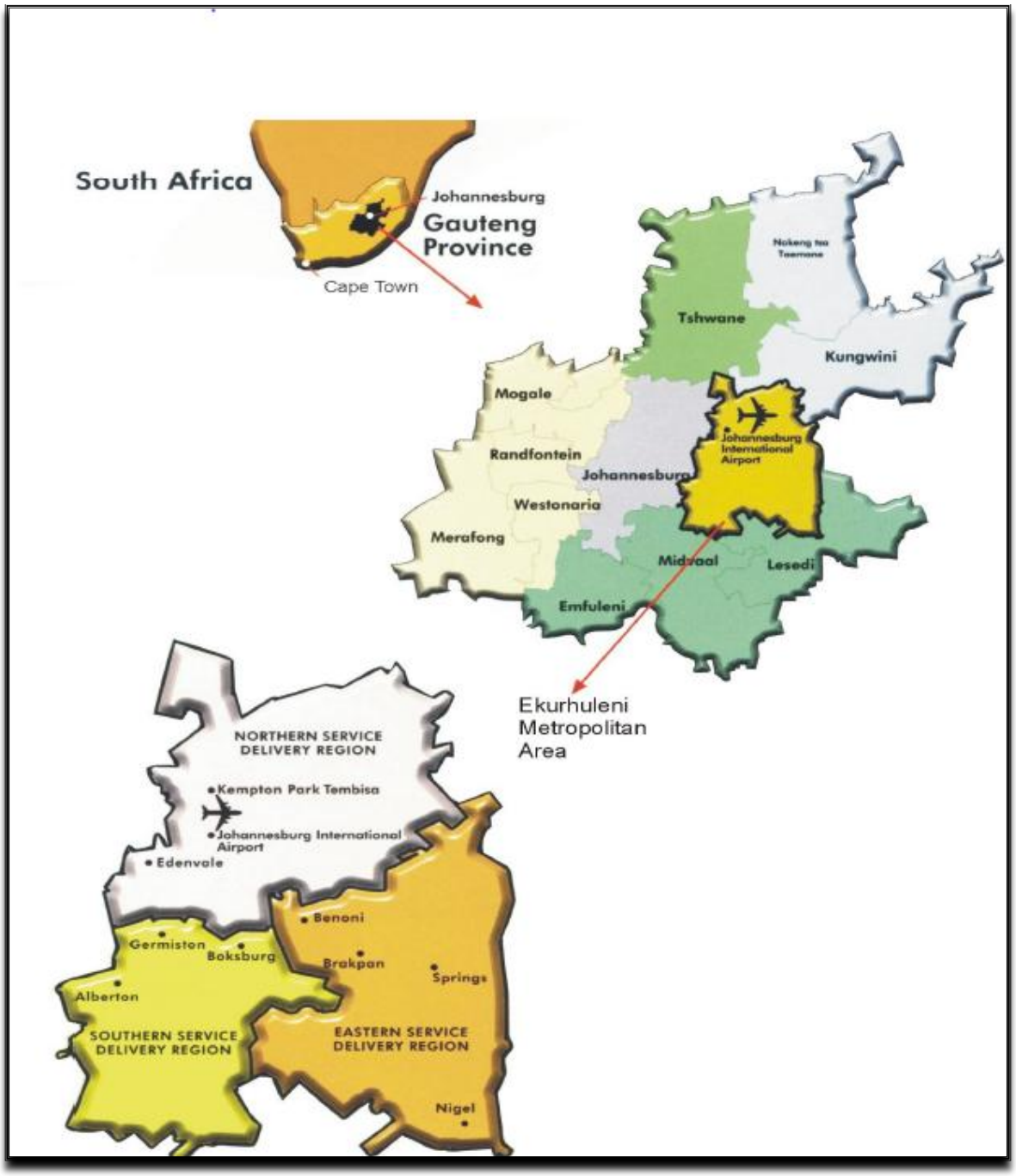

Figure 5-1 Ekurhuleni Map (www.ekurhuleni.gov.za)

5.1 Background

The Ekurhuleni Metropolitan Municipality (EMM) is one of the six metropolitan municipalities in South Africa and one of the three in the Gauteng Province. The Ekurhuleni Metropolitan Municipality was established after the Municipal Elections of December 2000 and is responsible for the rendering of municipal services to the area formerly known as the East Rand (EMM IDP, 2011/12-2013/14). The municipality comprises nine towns of the former East Rand: Greater Alberton, Benoni, Germiston, Springs, Kempton Park , Edenvale, Nigel, Brakpan, Boksburg plus the addition of the two municipalities Kyalami Metropolitan Council and the Gauteng Eastern Services Council, all the above being amalgamated to form the EMM.

The name Ekurhuleni is a Tsonga word, translated 'place of peace'. It is a vibrant, cosmopolitan and culturally diverse region with over 2.5 million residents. It has a total surface area of approximately 2000km^2, translating to a population density 1 400 people per km making it one of the most densely populated areas in Gauteng province and country as a whole. (EMM IDP, 2011/12-2013/14). The area has approximately 8 000 industries and is responsible for about 23% of the gross geographical product of Gauteng province, which is sub-Saharan Africa's most economically powerful and active region, commonly earning it the nick name "Africa's Workshop". (http://www.sacities.net/workwith/ekurhuleni)

5.2 Ekurhuleni Integrated Development Plan

In terms of the Municipal Systems Act (No 32 of 2000), all municipalities must develop an Integrated Development Plan (IDP). The IDP document is a strategic development plan which extends over a five-year period which must be used by municipalities as a guideline to their operations. The IDP is a legislative requirement; hence it has legal status and supersedes all other plans that guide development at local government level. According to the National EPWP framework, the Integrated Development Plans must include an EPWP policy for the relevant municipality. The policy is expected to promote EPWP principles and

the re-structuring of local government activities to facilitate and create greater employment opportunities per unit of expenditure.

The EMM IDP is the principal strategic planning instrument which guides and informs all planning, budgeting, management and decision–making processes in the municipality through integrated development planning, which necessitates the involvement of all relevant stakeholders and the municipality to ensure that it:

- identifies its key development priorities;
- formulates a clear vision, mission and values;
- formulates appropriate strategies;
- develops the appropriate organisational structure and systems to realise the vision and mission; and
- aligns resources with the developmental priorities. (Ekurhuleni Government, Online)

5.3 Vision, Mission, Values and Strategic Priorities

5.3.1 Vision

"To be a Smart, Creative and Developmental City" (Ekurhuleni Government, Online)

5.3.2 Mission

The mission statement reads:

> Ekurhuleni provides sustainable and people centred development services that are affordable, appropriate and of high quality. We are focused on social, environmental and economic regeneration of our city and communities, as guided by the principles of Batho Pele and through the commitment of a motivated and dedicated team. (Ekurhuleni Government, Online)

5.3.3 Values

In pursuing the above-mentioned vision and mission the EMM is committed to upholding the following core values:

- Performance Excellence;
- Integrity;
- Community Centeredness;
- Transparency; and
- Cooperative Governance. (Ekurhuleni Government, Online)

5.3.4 Strategic priorities

EMM identified seven strategic development priorities which form the foundation of the work EMM is doing towards achieving its vision:

- Promoting good governance;
- Fighting poverty and underdevelopment;
- Urban renewal;
- Job creation;
- Safety and security;
- Partnership against HIV and Aids; and
- Enhancing public participation. (EMM IDP, 2011/12-2013/14)

5.4 Institutional Structure

The Ekurhuleni Metropolitan Municipality (EMM) is administered under a Mayoral Executive and Ward Participatory System of local governance, which is meant to ensure that governance is taken right down to community level and that all citizens within the metropolis are represented in decision-making. This increases residents' sense of belonging, accountability and empowerment and actively involves them in all issues dealt with by the metropolitan municipality. (EMM IDP, 2011/12-2013/14).

The Council is made up of 175 councillors, comprising 88 ward representatives and 87 proportional representative councillors. The ward councillor chairs a ward committee which engages directly with the community hence setting up the Ward Participatory System ensuring active participation. Councillors also serve on the Development Tribunal where political oversight is ensured over the physical development of the Metropolitan area. (EMM IDP, 2011/12-2013/14). The Mayoral Committee is made up of 13 full-time councillors, which comprises the Executive Mayor, ten Members of Mayoral Committee (MMCs), a Speaker and a Chief Whip of Council.

Political oversight of the administration is ensured via Section 80 committees in control of the different portfolios in Council, which comprise:

- Corporate Services and City Planning;
- Community Safety;
- Roads Transport and Civil Works;
- Water and Energy
- Health
- Economic Development;
- Finance;
- Sport, Recreation, Arts & Culture;
- Environmental Development; and
- Housing. (EMM IDP, 2011/12-2013/14)

5.4.1 Political structure

The political structure is supported by an organisational structure with three main components (Fig 5.2):

- 7 Departments providing institutional management
- 4 Corporate Services department and
- 13 Service Delivery Departments

It should be noted that since November 2007 EMM adopted the Customer Care Centre (CCC) model for enhanced service delivery resulting in the creation of 20 Customer Care Areas (CCA), thereby bringing municipal services to the people within their residential zones.

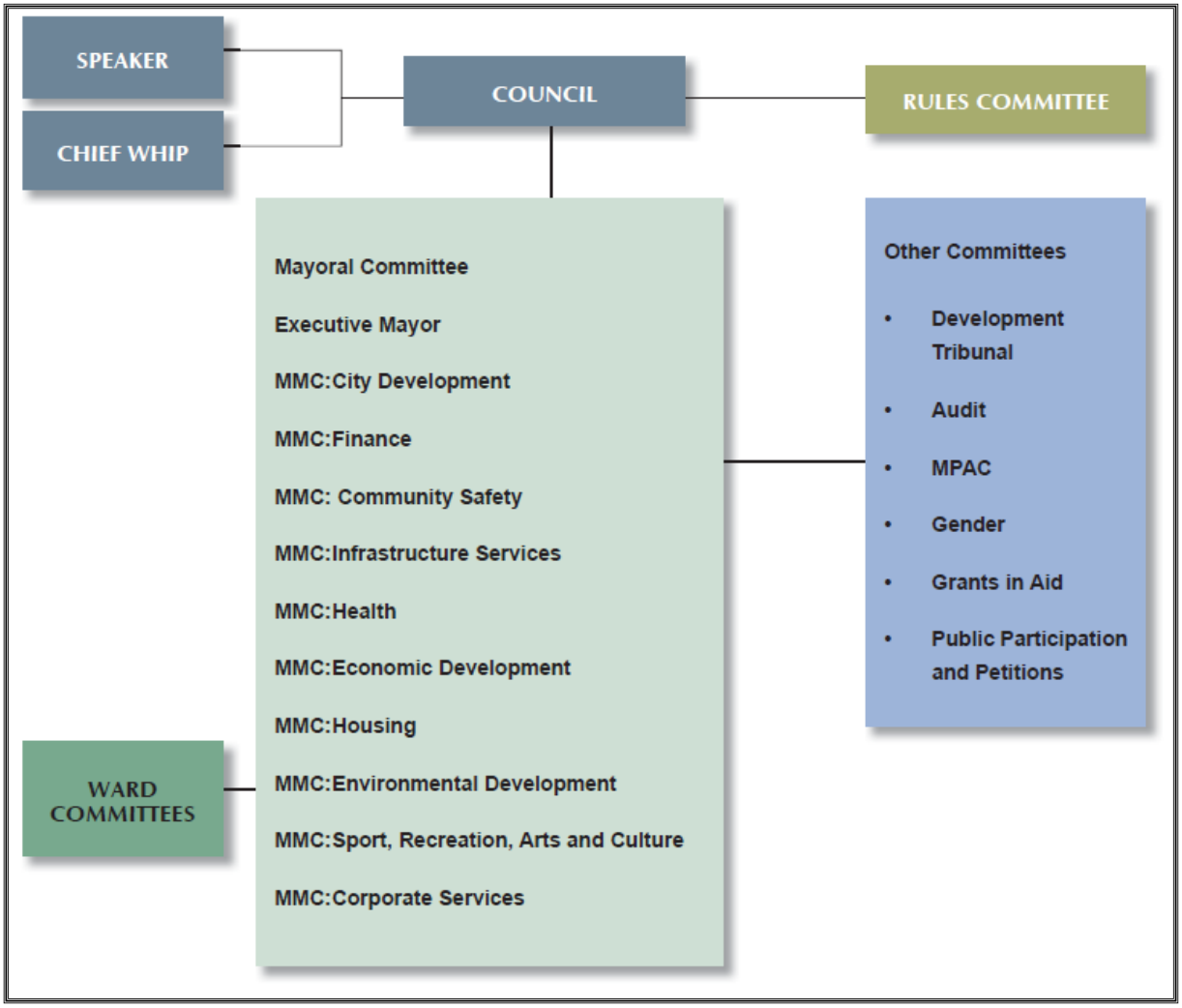

Figure 5-2 EMM Political Structure (EMM IDP, 2011/12-2013/14)

5.4.2 Service Delivery Structure

Figure 5-3 highlights the service delivery arms of EMM. The Local Economic Development unit (LED) is responsible for identifying projects which can be implemented labour intensively. Implementation is then done in co-ordination with other units such as Roads and Stormwater.

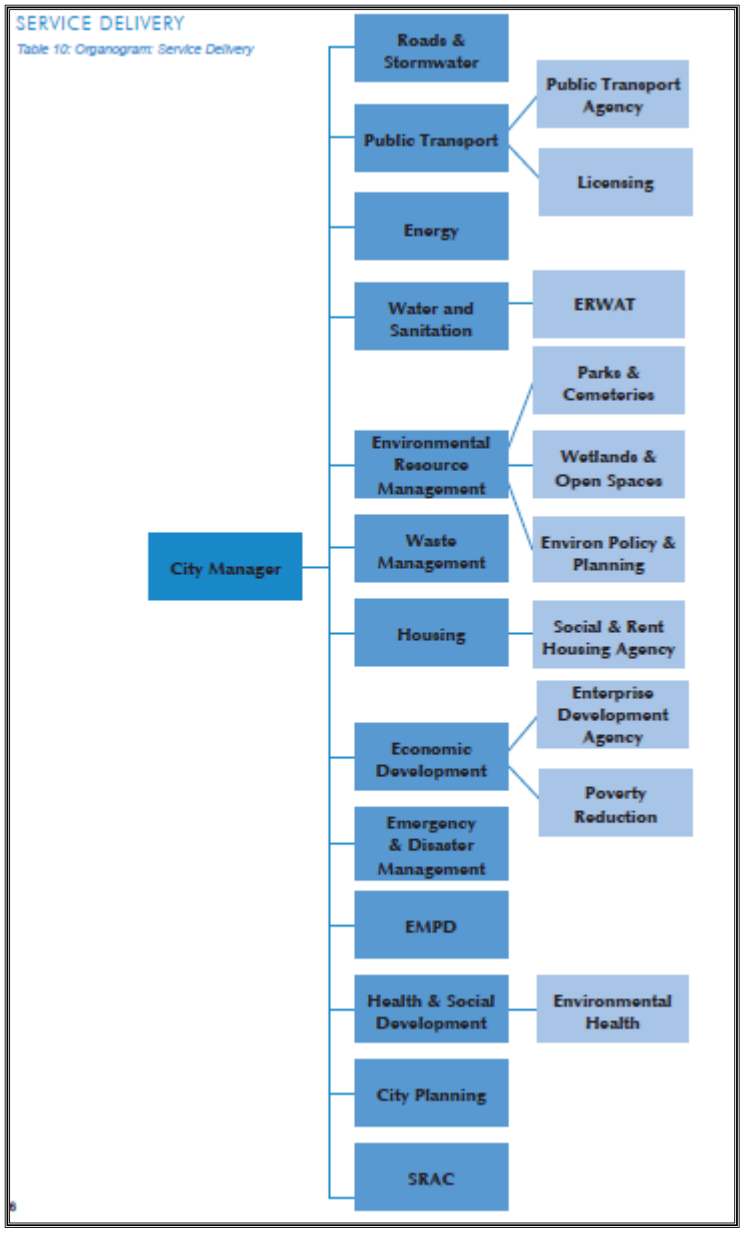

Figure 5-3 EMM Service Delivery Organogram (EMM IDP, 2011/12-2013/14)

5.5 EPWP Vuk'uphile in Ekurhuleni

5.5.1 Background

As clearly demonstrated in the Ekurhuleni IDP as well as in other spheres of government, the key objectives of government have been to ensure job creation, skills development, fight poverty and underdevelopment. Ekurhuleni has ±24% of the local population living in

poverty and the current unemployment rate stands at ±35%, these levels of poverty and unemployment in Ekurhuleni are unacceptably high and hence the need for a systematic redress through such empowerment initiatives as the Vuk'uphile.

Vuk'uphile, although a program initiative of the NDPW, can only be run on the backbone of provincial departments, municipalities and SOEs as implementing agencies. It is in the light of the above that Ekurhuleni Metropolitan Municipality agreed to enter into partnership with DPW so as to ensure delivery of government goals through corporate governance. It should be appreciated that a program such as Vuk'uphile cannot address all the employment needs of the population but can certainly make an impact within the local communities.

5.5.2 Program implementation

The Vuk'uphile Learnership programme in Ekurhuleni was officially started with the signing of the MOA between NDPW, Ekurhuleni and CETA on 17 February 2005. As articulated in Chapter 4, the program objective is to develop emerging contractors into fully fledged contractors in the Ekurhuleni area. The Vuk'uphile in Ekurhuleni was openly advertised to all residents of the Metropolitan Municipality. It should be appreciated that the program is not limited to certain ethnicities of people but rather open to all aspiring contractors, the only targeting is through a quota system that is applicable in the recruitment.

Learners for the programme were selected as detailed in the overview of Vuk'uphile in Chapter 4. A total of 25 learner contractors and 40 learner supervisors were recruited to the programme in February 2006. Six of the learner contractors withdrew from the programme in the inception phase citing disinterest, so the learnership was started with 19 learner contractors and 40 supervisors. The participants were contracted and introduced to a CETA approved series of classroom training modules, coupled with on-site training, starting on 28 August 2006.

The participants were inducted through the learning and practical development of the program and, as set out in the learnership, were expected to complete a minimum of three sets of projects over a three year period. The contractors were expected to leave the program after they had completed courses with a National Qualification Framework (NQF) level 2, while the supervisors had to obtain an NQF level 4. The NQF level courses are accredited by the South African Qualifications Authority (SAQA), the levels and descriptors of which are contained in **Appendix D**. The lower level qualification for the contractors was due to the fact that the programme wanted to offer people who had years of site experience, but were prevented from continuing their formal education under apartheid legislation, a chance to participate. The higher level for the site supervisors relates to the need for more sophisticated mathematical understanding, e.g. for setting out work and for taking off quantities in the exercising of their scope of work.

In July 2009, a total of 19 Learner Contractors and 40 Learner Supervisors completed the programme. It should be sadly noted that one of the contractors who did graduate from the programme unfortunately passed away in the exit phase of the learnership.

Classroom Training (or "in-class")

Liteworks was appointed by the NDPW and CETA as the training provider for the classroom learner modules for Ekurhuleni Vuk'uphile. It should be appreciated that a shift in the programme is being established, as the EPWP hands over control to the bigger Metropolitan Municipalities. In Phase 2 of Vuk'uphile in Ekurhuleni, the municipality is expected to make the appointment of the requisite in-class training service provider.

Mentorship

IDADA projects were appointed as the mentorship support for the learnership. The learners were divided into two groups, one group with ten and another with nine learners, each of which was allocated mentors to oversee their participation within the learnership. This created a mentor to student ratio of 0.1. The mentors were co-signatories to the bank accounts of the learner contractors so as to aid them in their cash flow management and

according to Egbeonu (2004) it is also meant to reduce the risk to the bank and the programme.

NDPW Involvement

Information relating to the NDPW involvement within EPWP Vuk'uphile in Ekurhuleni was sourced from the Director and Project Managers within the EPWP unit, responsible for Ekurhuleni.

The NDPW is the main co-ordinating body under which the programme is run. The DPW signed MOAs with the EMM council for the learnership in 2006. As in the institutional structure of the DPW, the specific EPWP Unit is responsible for the continued development of labour-intensive methods within public works. The EPWP objectives within the unit hence require the appointment of project managers to co-ordinate the programme and ensure that projects carried out in the different municipalities and SOE's are monitored and evaluated.

The learnership mentors are expected to submit monthly progress reports. The mentors identify problematic aspects which are brought to the attention of the EPWP via the project managers. It should however be noted that the EPWP unit is not involved on a daily basis with the Vuk'uphile learnership. The mentor reports and input from the other stakeholders are collated and published quarterly, offering a realistic datum for the project goals and results on the ground, leaving room for programmatic intervention.

Ekurhuleni Municipality Involvement

Input of the involvement of EMM in the EPWP Vuk'uphile learnership was sourced from the Chief Engineer responsible for championing Labour Intensive Construction in Ekurhuleni and Ekurhuleni LED Project Managers.

Since the programme is a coordinated initiative with other stakeholders, the municipality plays a role in the selection and recruitment of the learners and other supporting roles necessary in the setting up of Vuk'uphile in Ekurhuleni. Unlike in the DPW where a dedicated unit has been created specifically to spearhead the EPWPs, this is not mirrored within the Municipality. In Ekurhuleni however the municipality has appointed Labour Intensive Construction champions (LICs), who are responsible for coordinating EPWPs throughout the different sectors. However for the purposes of this research focus is limited to the infrastructure sector.

The EPWP champions are responsible for reporting on progress of the projects to the Municipality Principals. The reports done at the municipality are coordinated with the NDPW reports as information fed in from the learnership is the same. Progress reports from the municipality however are compiled and reported on a 'need to know' basis: it should be noted that unlike the NDPW with a dedicated EPWP staff compliment, officials championing LIC within the Metropolitan Municipality are expected to perform other duties. The Vuk'uphile project budget in comparison other municipality programmes is comparatively small and this poses a challenge as priority is given to other activities rather than the learnership projects.

The Municipality is also responsible for monitoring the bank accounts of the learner contractors, which is done through the bank statements which are availed from ABSA bank, as the financing house.

The municipality is responsible for identifying suitable labour projects within their precinct which can be used by the learners within Vuk'uphile. These projects are informed by the IDPs and available municipal budgets. It should be noted that although most projects done under the learnership are a normal component of service delivery as identified in the municipality, however where suitable projects have not been identified the municipality will occasionally create projects suitable for the learnership. It should be noted that apart from

providing the projects necessary for training under the learnership, Ekurhuleni provides exit projects for the learners on successful completion of the Vuk'uphile learnership. The exit projects are offered as closed tenders that can only be tendered for by the graduates, a process that allows the contractors to get a feel of the competitive nature of business.

The projects vary in size and the contractors are encouraged to form Joint Ventures (JVs), where appropriate, to secure the tenders. It should be noted that, as per the CIDB grading, certain contractor levels are not qualified to implement projects of a value higher than their grading category. The JVs allow the upgrading of the CIDB grading of the tendering entity, as the combined resources are taken into consideration. **Appendix C** presents the CIDB grading system and corresponding project value as well as the JV calculator. The creation of JVs not only serves as an exit strategy but also provides practical experience of conduct within construction projects. In order to ensure successful implementation of the JV and projects, the identified projects are broken down into different components such as building work, paving, grassing, roads and palisade fencing so that a separate entity can be assigned to each component as per the JV. A detailed description of an exit project is given below of the Tsakane Business Park which is being implemented within Ekurhuleni.

5.5.3 Challenges

The challenges which are highlighted in relation to the involvement of EMM are that:

- The EPWP Vuk'uphile in Ekurhuleni does not have a dedicated project team or unit as is the case at the NDPW. Officials who work and report on the projects are already engaged in various other activities for the municipality. There is in essence a shortage of professional manpower to aid in the monitoring of the programme.
- The budgets for the training projects are not very high as compared to other core projects being down by the municipality and consequently not much attention is given to the programme.

5.5.4 Nature of the Projects

The Vuk'uphile learnership, as already described, promotes labour-intensive construction methods, hence projects ideally have to be identified which would fuse quality provision of service infrastructure using labour based construction methods and at the same time facilitate skills development and employment creation as per the core objectives of the EPWP.

In the Ekurhuleni Metropolitan Municipality these projects are categorised into paving, palisade fencing, building of industrial stalls, erection of taxi rank stalls, storm water drain construction, and construction of ablution blocks. Inserted below are photographs and descriptions of the sites which were successfully implemented under the Vuk'uphile learnership.

The value of the projects undertaken by the learner contractors range from a minimum value of R 350 000 to a maximum value of R 800 000. It should be noted that isolating projects of such value within the Metropolitan Municipalities can be difficult due to the nature and amount of work. Ekurhuleni identified higher value projects and then unbundled them so that they meet the values specified above. Unbundling the contracts mean that a number of different learner contracting entities could be working on the same projects but with demarcated limits of contract sections.

5.5.5 Labour

In all the projects the learner contractors are expected to recruit adequate labourers to ensure effective and timeous delivery of the project. Vuk'uphile not only aims to empower individuals but also impact on communities, hence what has become the acceptable norm in labour intensive projects is that the labour has to be sourced from the respective local communities where the projects are being implemented.

To ensure a systematic approach to the sourcing of the labour, effective community participation is used through the different ward councillors and community representatives. The selection of labour gives first preference to unemployed people, mainly those who have never worked so as to give them job opportunities and stimulate their development. The programme tries to ensure that, on exiting, the labourers would have gained some formal training in a trade, which could be applied elsewhere.

The contracting entities hence employ the local labourers as general hands but are allowed to retain their skilled labour from outside the participating communities. This allows the core team of the contractor to be a unit which would be built up with the necessary experience to deliver the projects and functional continuity of the entity is maintained. In doing so, the Vuk'uphile learnership programme effectively distinguishes itself from just being another labour programme. Instead, it is clearly a developmental programme with serious goals which have to be attained.

Recruitment of labour has to meet gender equity as specified with the EPWP, thereby empowering previously marginalised groups. Phase 1 of EPWP Vuk'uphile in Ekurhuleni managed to recruit a significant percentage of women as labour. It has to be highlighted that due to the nature of infrastructure projects and sites there has been low uptake from people with disabilities.

5.5.6 Exit Phase

In qualitative terms, the program seeks to develop and empower small contractors but a true measure of that development is the CIDB grading. Ekurhuleni municipality has focused on ensuring that all learner contractors exit the programme with better CIDB rating, however it should be highlighted that some graduates do not provide the requisite data required by CIDB for the upgrade, hence it would appear on paper that there is no improvement on their grading. Grading of the participants is discussed in detail in Chapter 6.

5.5.7 Future Plans

Phase 2 of the Vuk'uphile is currently being rolled out nationally in 2011, however in Ekurhuleni plans are already advanced as at the time of this research. The municipality is currently pre-screening suitable candidates for participation within the programme. It has planned to enrol 20 Learner Contractors and 20 Learner supervisors.

As indicated earlier, the programme is open to all residents from Ekurhuleni and has been advertised in all the daily newspapers and in all official languages. It is important to highlight that the main respondents are black South Africans, with a few responses from coloureds, while no responses have come from the Indian and white communities.

In Phase 2 of the programme financing is to be offered by NEDBANK.

5.6 Case Study: Tsakane Industrial Park

5.6.1 Project description

The Ekurhuleni Metropolitan Municipality, Local Economic Development (LED) department identified a recapitalization project on one of their existing underutilised trading facilities in Tsakane, to be redeveloped as an Industrial Park which will benefit the local community better.

5.6.2 Site location

Regional Location

Tsakane is located in Brakpan which lies in the Eastern Service Delivery Region as indicated in Figure above. Regional Access to the Tsakane is excellent as two major freeways the N17 and the N3 form the backbone network, a major arterial link Heidelberg Road R23 links to the two freeways and provides access to minor roads linking into Tsakane.



Figure 5-4 Tsakane Regional Location (www.ekurhuleni.gov.za)

Local location

The site lies within the heart of the community and is surrounded by residential units, streets, the new Tsakane mall, taxi pickups, the new Fire Station, the new Magistrates courts and the new South African Police Services (SAPS) buildings hence it falls within the overall development framework for urban usage. EMM, LED 2008



Figure 5-5 Tsakane Local Location (EMM, LED 2008)

5.6.3 Project Data

Project Objectives

Prior to the inception of the project, the site contained dilapidated industrial hives and a clinic, so the objective of the project was to modernise the existing facility and renovate the clinic which was on the verge of being closed since it did not conform to the Department of Health specifications anymore. This would have entailed residents having to travel a longer distance to access basic health care.

The Tsakane Industrial Park project hence is not primarily a training exercise, but rather a vehicle for service delivery for the local municipality. This essentially highlights the importance of scrutinising what Vuk'uphile has achieved in terms of small contractor development through analyses of the project scope, implementation and the quality of infrastructure provided.

Project Scope

The project scope encompassed the construction of light industrial trading sheds, offices, renovation of the existing clinic to meet the Department of Health Class 1 specifications, paving and fencing. All these had to be implemented by the successful contracting tenderer. As per EPWP guidelines, specialised services such as electrical are allowed to be sub-contracted and this option was implemented on the project.

Project Budget

The initial estimated budget for the project was sixteen (16) million Rands, however a geotechnical investigation showed the need for specialised foundations which resulted in alterations on the proposed design and hence the projects costs escalated to twenty-three (23) million Rands.

Tender Process

The Tsakane Industrial Park project was advertised as a closed tender for which only the Vuk'uphile graduates from Ekurhuleni could apply. It should be highlighted that this was essentially a deviation from normal tendering processes, however due to the need to create a strong exit base for the small contractors it was supported. Similarly, the Ekurhuleni LED chose to overlook financial guarantees from the bidders. The small contractors were encouraged to form Joint Ventures since the project value exceeded the contract values there could implement on their individual CIDB grading. The JVs were expected to tender market related rates and a 10% variation either side was acceptable. After completion of the adjudication process was done the LEC invited all the small contractors who had failed to win the contract to show them where they had been disqualified and how to correct that in any future tender process. This is a commitment Ekurhuleni is making in support of small contractor development to ensure that they are knowledgeable on exiting the program.

Project Team

The Project team comprised:

- Divine Ideas Project was appointed as Project Managers to monitor and fulfil all other project management functions on the project. The Project Managers reported to the Ekurhuleni LED internal project management team. The internal project managers acted as the Client and in turn were responsible for briefing the Municipal Council on progress with regards to project. This also created a continuous feedback mechanism to relate whether Council was achieving its intended goals on service delivery and at the same time ensuring small contractor development.
- VMR Architects, produced the winning conceptual design for the site recapitalisation proposal, hence they were directly involved in the implementation of the project.
- Kriel and Bismilla Quantity Surveyors: the JBCC form of contract allows for the principal agent for the employer to be a Quantity Surveyor (QS) and hence Kriel and Bismilla performed all the duties in line with the principal agent. The QS also consolidated the quantities at the end of the project and finalised contract amounts.

Appointment of Contractor

The successful JV bid was won by:

AFRICAN MOON TRADING 47cc T/A PULEDI CONSTRUCTION AND CIVIL

AFRICAN MOON TRADING 50cc T/A MONYOKE HUNADI PROJECTS

AFRICAN MOON TRADING 60cc T/A GILIMBA CONSTRUCTION

The contract was signed between the above parties and the Ekurhuleni LED on 1 February 2010. The Joint Building Contracts Committee (JBCC) type of contact was used. Special conditions of contract were drafted to the agreement as follows:

1. The contractors were not liable for any penalties as the project was under the learnership programme;
2. The contractors were not required to provide any guarantees;
3. There was no consideration for the CIDB grading.

Financing

The JV Contractors did not apply for any loans from a financial institution to implement the project but were able to carry out site establishment from their own cash reserves.

"Special Agreement"

The three partners in the JV agreed to implement the whole project as one entity and elected Puledi Construction and Civil as their main representative in dealing with the client (Ekurhuleni LED).

Project payments where paid through to a joint account to which all parties were co-signatories. The JV partners used these funds to meet every day contract demands of labour, materials and equipment. The JV also responsibly partitioned the scope of project work and responsibilities among themselves, all acting in the mutual interests of the other partners. The partners had a standing agreement to share the profit only on project

completion. This united front shown by the JV partners highlights aspects of the time spent together in the learnership and shows the existence of deep fostered working relationships.

5.6.4 Project Implementation

The contract was signed in February 2010 but work on the project finally began in June 2010, three months behind schedule. The contract duration was for a period of eighteen (18) months from the date appointment.

It should be noted that although there are a number of dynamic factors which influenced or affected the Tsakane Industrial Park project, the researcher has chosen to focus on the issues listed below which are central to obtaining insight into small contractor development.

Labour

One key factor in PWPs is labour: as per the EPWP guidelines, local labour must be used in executing the projects hence creating opportunities for the empowerment of the local community. The successful JV for the Tsakane Industrial Project sourced all their labour from Tsakane. Mkhize (1994; 136) also raises the importance of community participation as this safeguards assets created from the projects and minimise any future maintenance and replacement costs.

The contractors' core team was made up of the contractor, site agent and construction supervisor. The remaining labour was recruited through the local Ward Councillor and community liaison officer (CLO). Although few skilled and semi-skilled were recruited, most of the labour was mainly unskilled and had to be subjected to on-site training by the contractors. The contractors hence had to ensure that quality and not quantity was recruited in the sourcing of labour. It is essential to highlight that from the contractors' point of view the local labour was more than receptive to the work and optimizing the opportunities presented.

According to the Ekurhuleni LED, there were a total of 65000 man hours of work opportunity and a total of 600 job opportunities created on the project.

Training and Capacity Building

The construction site supervisor and the recruited skilled artisans were directly responsible to ensure the transfer of skills to the unskilled labour. These are positive signs for contractor development in South Africa as it shows growth and sustainability of the graduates of the learnership programmes.

According to the contractor interviewed, high levels of punctuality, reliability and eagerness to learn were demonstrated by the Tsakane local labour. Although it would seem that there might be a risk associated with recruiting local labour unknown to the contractors, in this case it was properly mitigated through training and fostering good working partnerships.

5.6.5 Infrastructure Provision

The three main tools for achieving project deliverables in project management are Cost, Time and Quality (PMBOK). The Tsakane Industrial Park project managed to construct the entire infrastructure required as per the project designs. The three main factors above give a good basis from which to evaluate the project.

Cost

According to the LED the project initial budget was sixteen (16) million Rands, however due to a design oversight a geological investigation indicated that special foundations were required on the site. This redesign and subsequent contract cost increased the project cost to twenty three (23) million Rands.

Due to the redesign of the foundation, changes had to be made on the brick work and concrete specifications requiring a number of variation orders, which resulted in the

escalated project budget. It should be noted that rate variations due material increases were factored in, after consultation with the Quantity Surveyor.

Time

As per contract the project duration was eighteen (18) months from the appointment date, however the project incurred a further three months delay due to the refusal of existing occupants to move. Construction work on site on began in June 2010 and a certificate of final completion was issued November 2011: effectively the project ran for seventeen (17) months, taking into consideration the legislated breaks for holidays.

The only extension of time requested and issued was as a result of the three months delay in vacating the site. This timeous delivery of the contract marks a significant stride in small contractor development.

Quality

It should be noted that although the contract for this project was awarded to learnership graduates, Ekurhuleni was still expected to provide quality infrastructure as per their IDPs and service delivery mandate to the Tsakane local community. In this regard it becomes of significant importance to highlight the quality of the finished product.

As in all projects quality is mainly a function of the choice of technique, namely whether the equipment and tools used were appropriate to the construction technology, as influenced by workmanship as measured by the level of skill and experience that the construction teams on site have in dealing with the construction methods as well as material. It should be indicated that since this was an exit project no equipment was made available to the contractor and hence it was up to their discretion to source the requisite equipment for implementing the project.

According to the Ekurhuleni LED, the finished infrastructure has met the client's expectations. The researcher has had the opportunity to visit the site and inserted below are project photographs showing that a high degree quality of work on this project has been attained.

The Tsakane Industrial Park project managed to construct:

- 57 Light Industrial buildings;
- 5 Offices;
- 1 "Level 1" Clinic as per the Department of Health specifications;
- Paved site;
- Palisade fencing.

Site Pictures and Descriptions

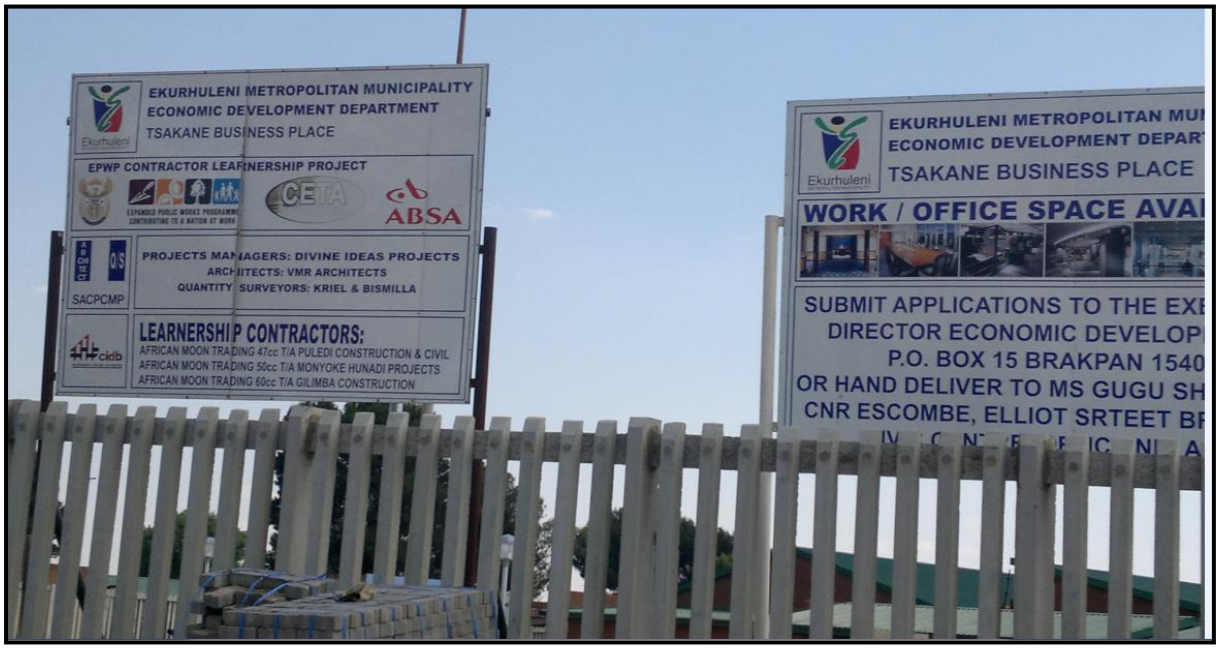

Figure 5-6 Project Boards



Figure 5-7 Properly Laid Pavement



Figure 5-8 Industrial Stalls



Figure 5-9 Office Blocks



Figure 5-10 New Level 1 Clinic

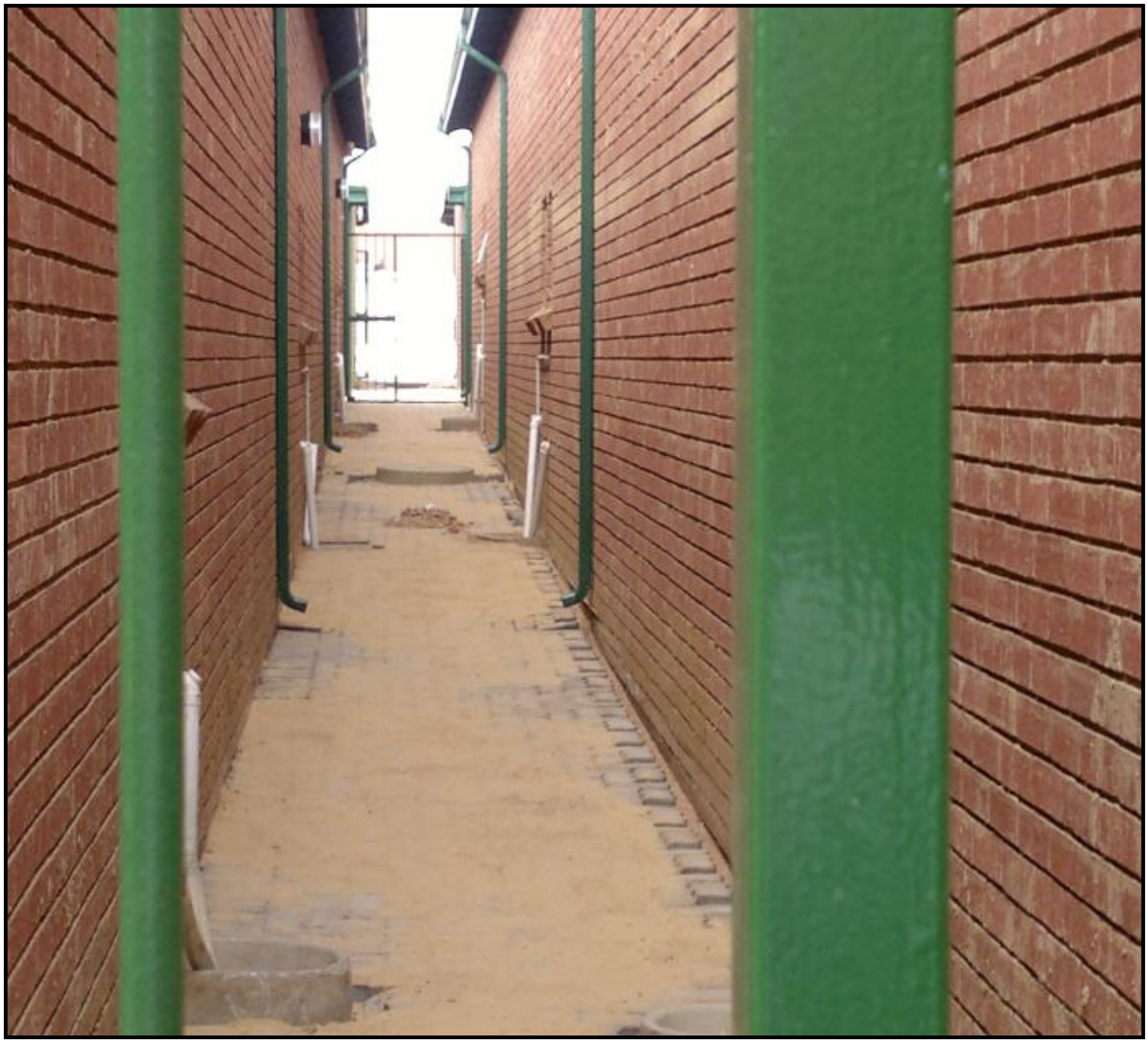

Figure 5-11 Brickwork and Sanitary lanes between Industrial Stalls

5.6.6 Problems/Challenges Encountered

Every projects provides opportunities and challenges for the project team, the Tsakane Industrial Park was no different and discussed below are some of the obstacles experienced.

There was a delay in commencing the project due to the refusal of existing occupants to move, which was eventually solved through engagement with the community. The LED also had to give assurances to the “old” occupants that space would be made for them in the new park to continue their trading.

Some of the local labourers did not have adequate skills for the categories in which they wanted to be placed, thereby compromising the quality of the infrastructure. The contractors had to compile a portfolio of evidence on the poor workmanship and the cost implication resulting in the summary discharge of the "unskilled artisans". Important to note is that this was done with the full knowledge of the Ward Councillor and Community Liaison Officer who were involved in the recruitment of local labour.

The laborers were paid fortnightly and their wages were changed from task rates to a daily rate, which created problems as some groups lagged behind on their work in the full knowledge of a secure income. Sub-contractors were also required to recruit local labour and this also posed a challenge in rendering of the specialized service as well as in the working relationships with the "new recruits".

5.6.7 Recommendations

a) The recruitment of local labour should be done with thorough screening so that "local labour" does not act as an impediment to the continued small contractor development efforts.
b) The rate of pay should be kept as a task rate, this has proved successful in most labour based construction projects and will provide no motivation for delaying completion of work.
c) In the present environment it is of tremendous importance to ensure active community participation on projects at the conceptualization stage. This notion is validated by Mkhize (1994; 158), who asserts that labour based construction cannot be implemented successfully without community involvement from planning stage. The community involvement and participation will result in better acceptance and uptake of projects within communities.

5.6.8 Conclusions

The Tsakane Industrial Park project has not only provided quality infrastructure but achieved substantial development for the contractors: all this effort has been made under the consolidated umbrella of the Vuk'uphile learnership. Most of the learner contractors who entered the programme had little or no previous knowledge of construction and with CIDB grading of 1 – 2 CE have now progressed so that they are in a position to tender for projects of higher value requiring a CIDB grading of 2-4 CE.

The fact that contractors can now form sustainable JVs shows growth and knowledge of sustainable business practises and is an exemplar for the continued development of small contractors in South Africa. The Ekurhuleni Municipality has learnt valuable lessons through the infrastructure exit projects which can be extended to future developmental programmes for the Metropolitan.

CHAPTER 6 ANALYSIS OF DATA

6.1 Introduction

The Vuk'uphile Learnership programme offers new insight into the development of small contractors in South Africa. It marks the transition from community based public works programmes to a more dynamic and robust implementation model. It is in the light of the above that the researcher has chosen to evaluate small contractor development within Vuk'uphile but specific to Ekurhuleni as described in the limitations. Although it is appreciated that small contractor development has been affected by the same problems since the 1970s (Croswell and McCutcheon; 2001), the structure, drive and support of Vuk'uphile within the EPWP promotes room for the evaluation of the programme. As the programme is now in the inception stage of phase 2, it becomes even more relevant to evaluate and learn from phase 1.

The data captured for analysis has been extracted from questionnaire responses from the graduate learner contractors, interviews from Ekurhuleni Project Managers, EPWP Project Managers, Training Instructors and Mentors. This evaluation of the Ekurhuleni Vuk'uphile does not aim to provide exhaustive analysis of the programme but rather to offer the reader a valuable contribution on the growth of small contractor development in Ekurhuleni Metropolitan Municipality.

6.2 Questionnaire Response Rate

The questionnaire outlined in Chapter 3 was workshopped to the Vuk'uphile learnership graduates by Econologists Africa Private Limited (ECI Africa) as described in the methodology. The learnership had nineteen (19) learner contractors and fourteen (14) availed themselves to complete the questionnaire at the workshop.

This translates to a 74% response rate which is a very high percentage response rate from the programme participants. Figure 6.1 demonstrates the split.

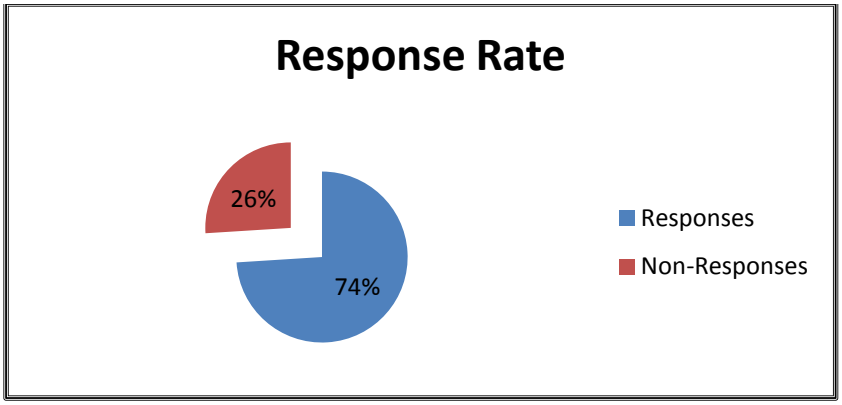

Figure 6-1 Questionnaire Response Rate

The questionnaire contained a total of sixty five (65) questions and to a great extent the graduates managed to give responses to all questions asked, creating a wide enough base to extract data from the programme.

6.3 Questionnaire Responses and Findings

The findings and analysis of the responses to the questionnaire have been structured in the different categories as formulated in the questionnaire. The reader should note that this is not in order of importance but is meant to ensure a consistent presentation layout. The data interpretation from the findings has been broken down and analysed, to form sub-conclusions which will feed into the conclusions of the broader study.

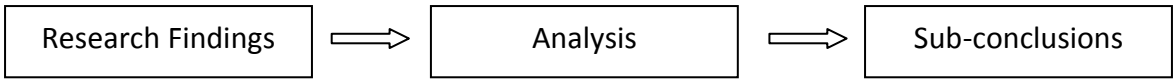

Figure 6-2 Interpretation of Findings

6.3.1 Motivation for enrolling into VLP

The question was semi structured with the researcher offering nine (9) options for the respondent and a tenth option for any other reason(s) that might have been omitted. The

respondent had an option of picking three factors that had made them enrol into the Vuk'uphile Learnership Programme.

From the Column Chart below most of the respondents highlighted that their main reason(s) were;

1. Skills Improvement
2. Formal Qualification Gain
3. To Grow Own Business

The lowest responses to the reasons for joining the learnership were;

1. Earn a stipend
2. Employment Gain

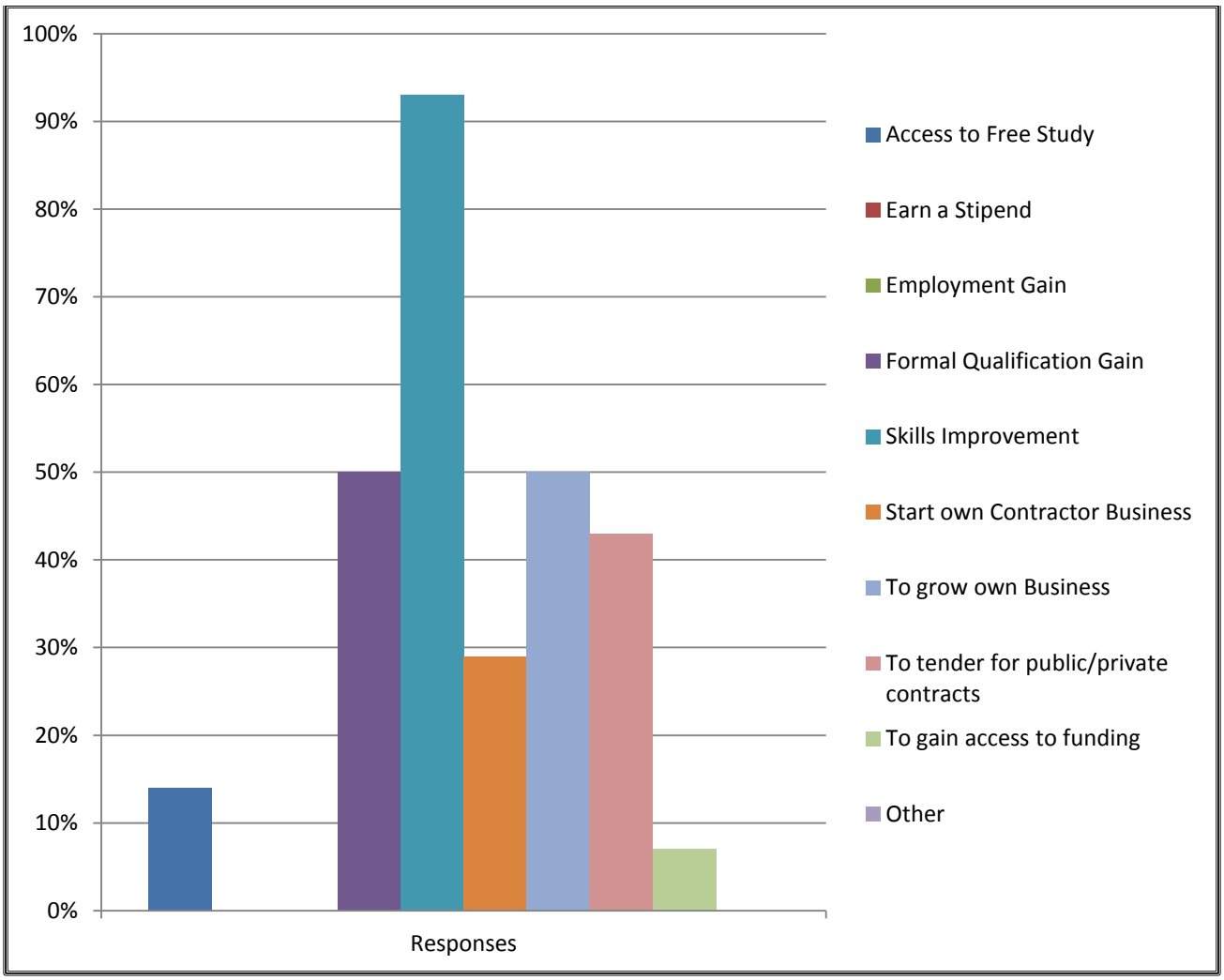

Figure 6-3 Responses for Enrolling into Vuk'uphile

These responses feed directly into the hypothesis of the research that a formalised small contractor training programme will consequently lead to skills development and encourage growth of SMMEs within the construction industry in South Africa. An earlier national review of Vuk'uphile programme in 2007 by ECI Africa found that 20% of learner contractors were motivated to join the program to secure employment. The respondents in this research sample value the empowerment objectives of the programme and are seeking development. These results also compare significantly with the ILO study of 2001 which concluded that training could only be achieved through remuneration. None of the respondents in this research highlighted the need to earn a stipend as motivation to enter the programme.

The fact that Ekurhuleni respondents do not view the programme merely as an employment opportunity or an avenue to just earn a stipend highlights a significant paradigm shift, which is encouraging in the pursuit of empowerment programmes such as Vuk'uphile and talks to EPWP objectives.

6.3.2 Contracting entity profile

As established in the Learnership each contracting entity is composed of a learner contractor and two learner's supervisors. However variations in Gender, Age, Race, Disability and Experience were investigated and are analysed below.

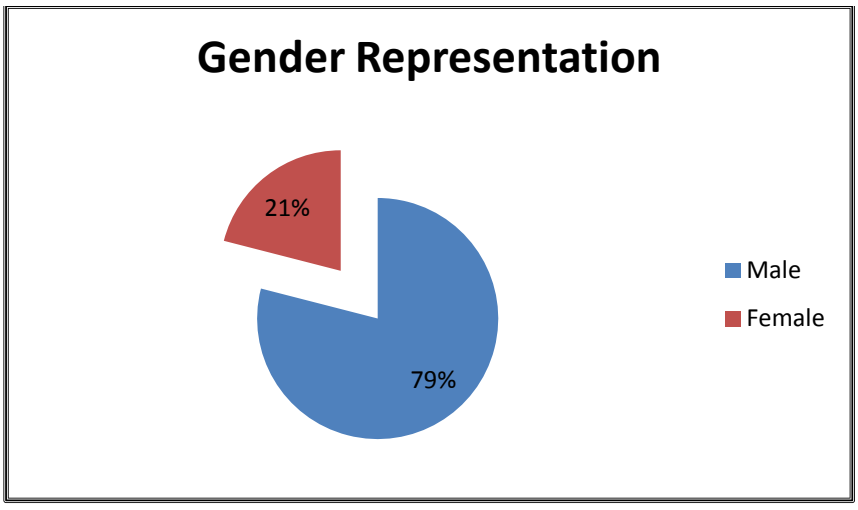

Figure 6-4 Gender Representation

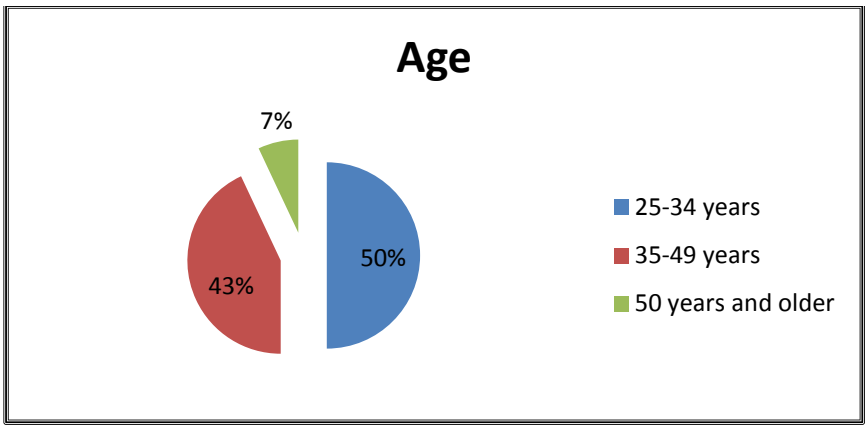

Figure 6-5 Age Distribution

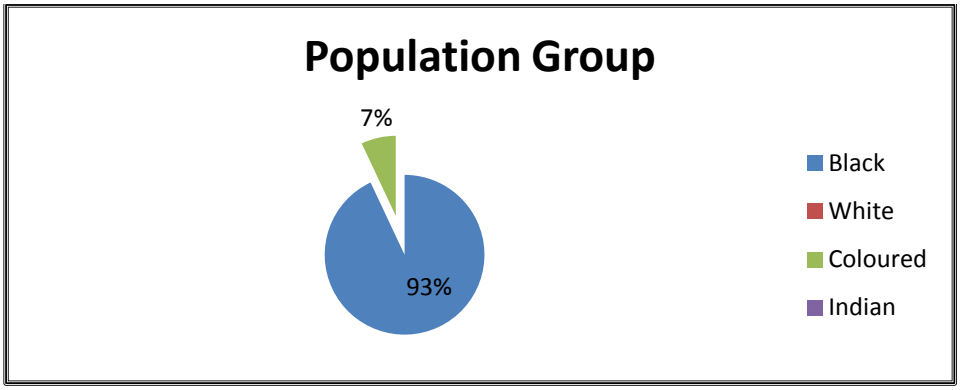

Figure 6-6 Population Groups

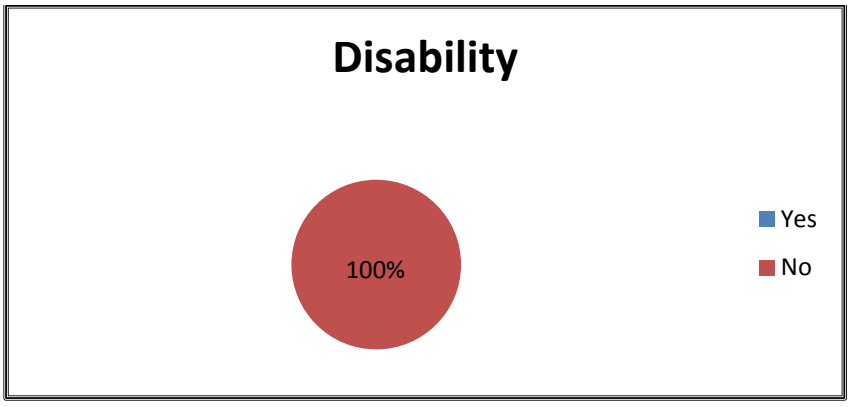

Figure 6-7 Disability Distribution

As depicted in the pie charts above, the respondents fall into the following categories;

1. 21 % Female and 79% Male
2. 50% youth (in South African policy, below 35years)
3. 93% Blacks and 7% Coloured
4. 100% no disabilities

The Goal for EPWP phase 1 is: To create one million temporary work opportunities, coupled with training, over the first five years (2004 – 2009) with at least 40% women, 30% youth and 2% disabled. (EPWP)

The Vuk'uphile learnership is part of the EPWP and as such, conformity to the overall goals of the master programme is important. The research findings point to a lower uptake of contractor learnership among women and people with disabilities within Ekurhuleni. It is important to note that past PWPs, such as Gundo Lashu, did manage to meet gender targets and this raises arguments as to the sustainability of the programme targets within an urban environment such as EMM since Gundo Lashu was carried out in Limpopo province rural areas. Geertsema (2007) cited in Agherdien and Smallwood (2008) puts forward several reasons for this trend, including that traditionally the construction industry has been regarded as a male dominated field and women tend to shun it. Agherdien and Smallwood (2008) further indicate that on the current CIDB register of the few women in construction, a high percentage is registered at Level 1, which is the lowest ranking scale.

The physical components of construction work, combined with difficulties in accessing the sites seem to act as a deterrent to people with disabilities. Key to note however is the South African government pledge to ensure that the disability quota is achieved, evidenced by an extract from the speech by Minister of Women, Children and People with Disabilities (2011) "The failure by both the public and private sector to achieve the 2% target set for the employment of people with disabilities as part of our workforce is an indictment of our commitment to give life to the Constitution we fought so hard for." In the light of these sentiments it is prudent for the Vuk'uphile enrolment to ensure that disabled persons are recruited into the programme.

Among the respondents a high participation level was recorded from black South Africans, which aligns with government mandate of empowering formerly disadvantaged groups. It should be highlighted that the Vuk'uphile learnership is open to all population groups

although a quota system is applicable on the intake. The lack of uptake from white and Indian communities can therefore be attributed to self exclusion.

From the analysis it can be concluded that Vuk'uphile in Ekurhuleni is in line with EPWP goals, however significant effort should be put in trying to attract more women in construction by effectively engaging female business groups. The success of women's empowerment can only be realised by attracting suitable candidates and not just making the numbers. The advertisements for the programme should also promote applications from people with disabilities and effort should be made to workshop the programme within disability centres.

6.3.3 Pre-learnership Experience

Did you run your own business before?

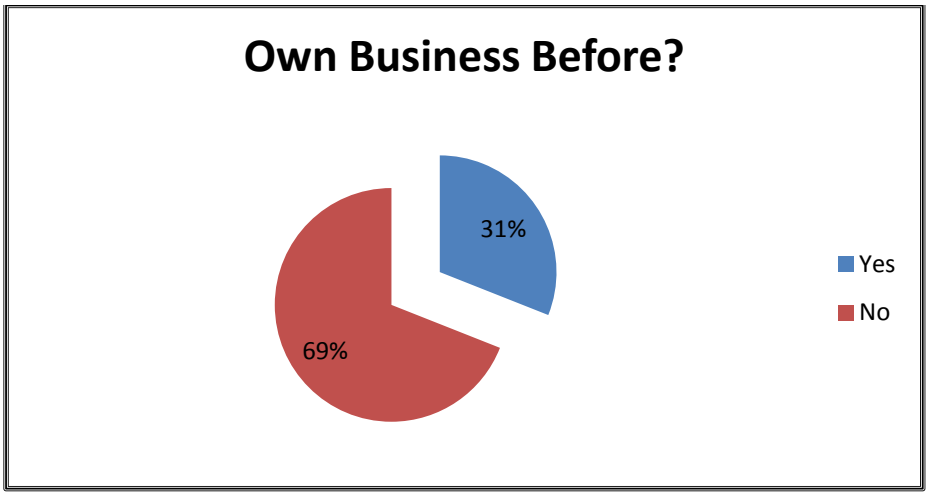

Figure 6-8 Responses to Owning Business

The idea behind Vuk'uphile is to offer opportunities for growth and development, at the same time availing new opportunities for entrepreneurship. A significant proportion of the Ekurhuleni respondents had no prior experience of running a business, however Mkhize (1994; 143) attests to the fact that prior experience is an important aspect for any small contractor development program. It is important to make a follow up on the contractors and come up with a comparative measure of their success given that most of them lacked

prior experience in owning a business. In the researcher's view it is very pertinent for the EPWP and Ekurhuleni to maximise selection with prior construction experience.

6.3.4 Selection of programme participants

How did you apply to participate in the Vuk'uphile Programme?

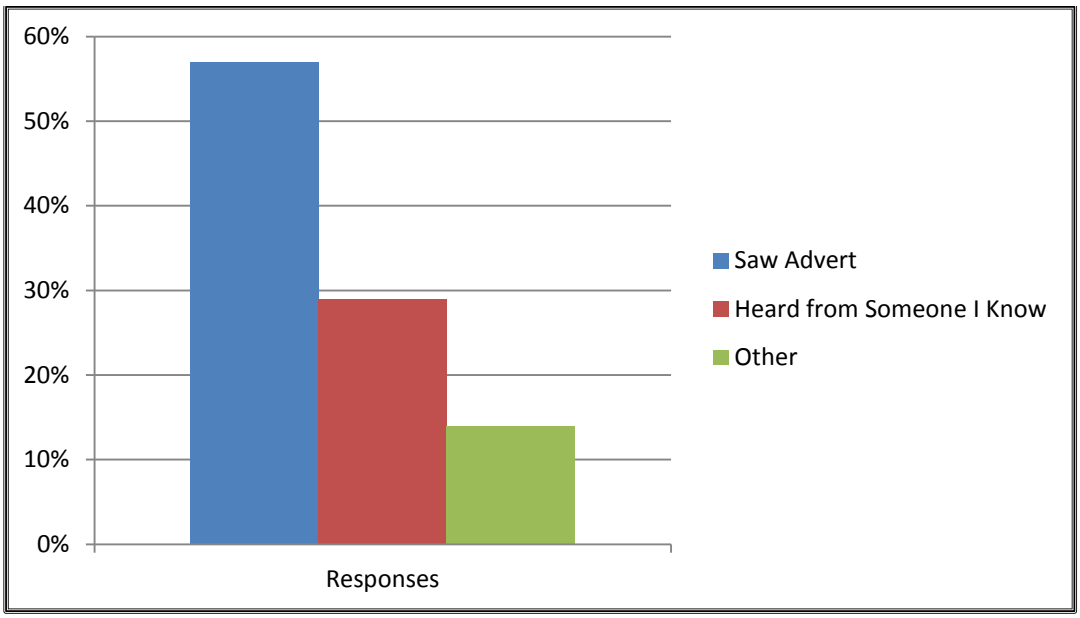

Figure 6-9 How Respondents got to know of Programme

Like all public programmes Vuk'uphile should be transparent and freely open to all people to apply. The question sought to elaborate on the openness of the Learnership processes from the conceptualisation or planning stage. A fairly high percentage of the respondents i.e. 57% applied to the program after seeing adverts in the local newspapers. In this regard the programme is indeed reaching the target community and is not biased towards particular groups.

How were you selected to participate in the programme?

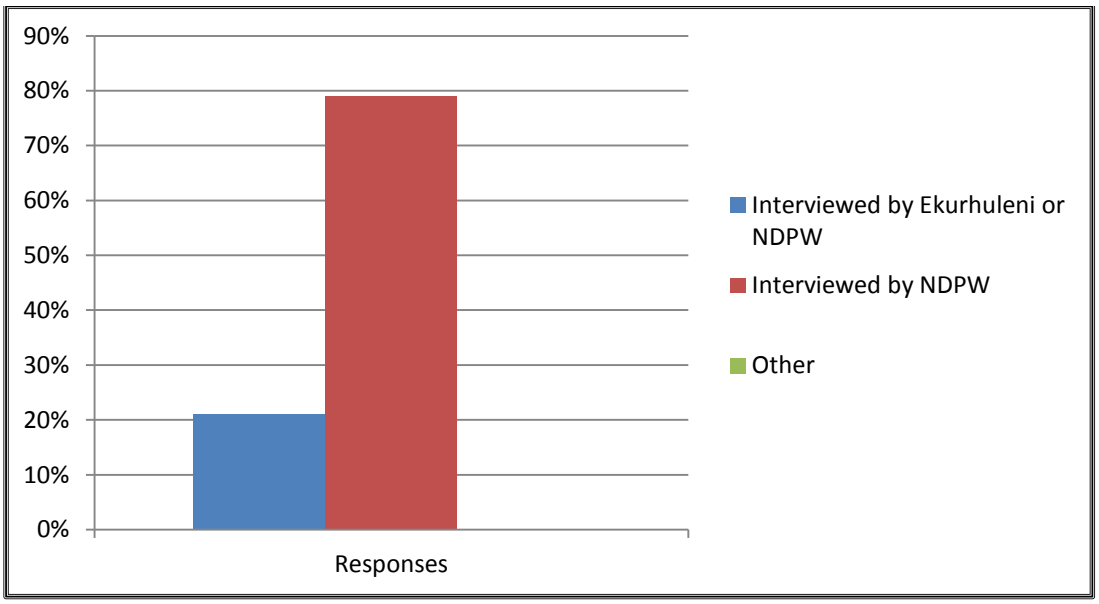

Figure 6-10 Respondents Interviews

It is important to note that contractor development provides a good base for nurturing entrepreneurship. One of the main issues that has been affecting the continued growth and sustainability of such enterprises is the existence of "opportunistic" contractors, whom Mkhize (1994; 143) calls "fly-by-night": participants who have no prior contracting experience or skill. Vuk'uphile has sought to curtail this practise by ensuring that a comprehensive pre-screening process is applied and from the above column chart, it is clearly demonstrated that 100% of the respondents were interviewed before appointment to the programme.

These efforts at identifying and mitigating against potential risk areas is a positive attribute within the Vuk'uphile learnership and sets a precedent to build on for any future contractor development initiatives. The importance of screening candidates is highlighted by McCutcheon in several of his papers; citing McCutcheon and Fitchett (2005) the authors argue that training alone does not develop the individual hence any selection process should pay attention to the character and technical competence of the candidate.

6.3.5 Vuk'uphile learnership programme services

A series of questions were proposed to the respondents on the services received in the learnership. The respondents were expected to indicate their participation/involvement in the services offered in the Programme.

100% of the respondents indicated that they had received Classroom training, Practical training and Mentorship support. These are among the core services which form part of the "incubation process" of the learnership and hence to a greater extent the Vuk'uphile Learnership in Ekurhuleni is in line with its implementation model. Availability of and access to these services within the programme is of significant importance: Kwesiga (1995) points out that the success of any development programme revolves around a sustained training programme which Vuk'uphile is providing. In essence Vuk'uphile is replicating other well established development programmes such as Gundo Lashu in Limpopo province.

Another key aspect of the services offered is Access to finance: 93% of the respondents indicated that they had obtained access to financing during the learnership. Although there was no clear reason given for failure to obtain finance from the remaining percentage it can be speculated that failure to complete credit checks might have compromised receiving the service. Important to the programme is the fact that most of the respondents have managed to obtain access to finance, which is a positive for Vuk'uphile, bearing in mind McCutcheon and Taylor Parkins (2003) allude to the fact that small contractor development has been hampered by lack of access to financing. The implementation model of Vuk'uphile in Ekurhuleni and the involvement of ABSA Bank as a stakeholder has fostered high levels of partnership and created a platform for contractors to access bridging capital.

What was the most useful service to you offered during the Learnership?

As mentioned above, for research purposes the learnership was broken down into four main services;

1. Classroom Training
2. Practical Training
3. Mentorship Support
4. Access to Finance

The respondents were asked to rate the services' importance to themselves as participants within the learnership, in order of first, second, third and fourth respectively. Figure below is a summary of the respondents' feedback.

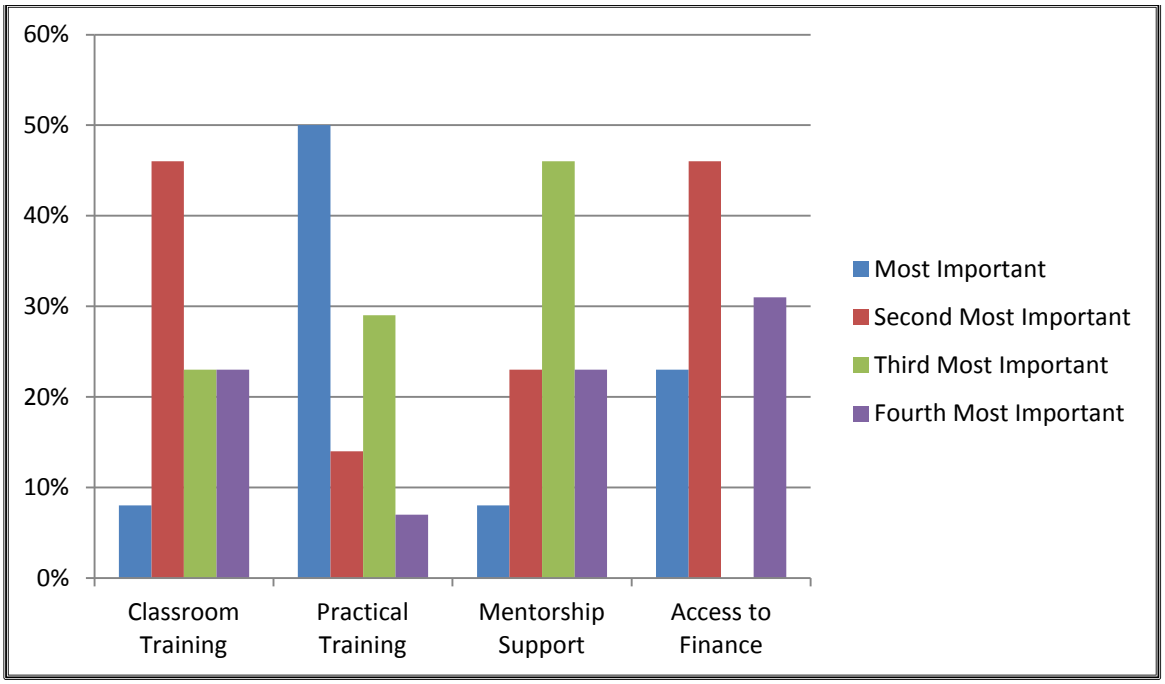

Figure 6-11 Usefulness of Services

According to the findings a higher percentage contractors rated Practical training as the most important aspect of the services offered in the learnership. These results demonstrate to a great extent the desire from the small contractors to combat skills deprivation. The right candidate for any learnership is one who is ready for self development. Vuk'uphile is hence meeting the objectives of the EPWP in nurturing skills development, which will aid in the empowerment of small contractors. The responses also seem to show that the rigorous selection process is indeed identifying the "right candidates" as the above dispels generally accepted notions that small contractors are lazy and only want to be spoon-fed.

In Figure 6.11 the results indicate that the respondents chose classroom training and access to finance as the second most important services of the learnership. Recent data from SAFCEC (2003) reports that 80% of small civil contracting firms have a life span of less than a year and only 7% survive for five years and beyond due to viability issues. The Ekurhuleni contractors' ability to conceive the importance of access to finance and impact on their business is creditable to the positive impact of the programme. It is the researcher's view that a further evaluation of the programme should be done in five years time on the same respondents and the percentage of surviving contracting entities be recorded.

The results in Figure 6.11 indicate mentorship support was rated the least important service offered by the learnership. The success of most small business development has been on the backbone of a strong mentorship programmes. Egbeonu (2004:36) cites USAID (1995), the USA federal affirmative procurement policy in recognition of the importance of mentoring, which recommended that it be used to provide managerial and technical assistance to small firms. The fact that in Vuk'uphile Ekurhuleni the contractors found this to be the least useful component leaves room for questions on the role of mentorship in contractor development. Ebgeonu (2004), highlights that the main problem with mentorship in PWPs has been the different interpretations of the mentor roles from government, finance houses and the small contractors. He argues that there should be a breaking down of barriers between mentors and contractors.

It is the researcher's view that mentorship within PWPs is essential and cannot be substituted. Watermeyer (1995) argues that small contractors from underprivileged communities cannot engage in construction without developmental support. Although several approaches are proposed, mentorship is favoured since it allows suitably qualified professionals to transfer skills to the communities. Using the researcher's knowledge of the strong correlation between practical training and mentorship support in construction, and the fact that small contractors value greatly practical training it becomes apparent that the lower rating for mentorship in the responses might be due to other issues.

It is recommended that mentors be interviewed and their capacity to offer mentorship support be assessed. Mentors and Contractors should hold participatory workshops during the course of the learnership and all issues raised should be addressed though the EPWP unit. This is most likely to minimise animosity and encourage interaction so that mentors are seen favourably in the eyes of contractors and their knowledge, skill and expertise is put to good use in small contractor development.

6.3.6 Training

As detailed in Chapter 5, Liteworks was the training service provider for the Ekurhuleni Learnership. The research seeks to get an appreciation from the respondents on the usefulness of the training aspects offered within the Learnership.

According to the EPWP project managers, effort was made to identify candidates with potential to succeed and previous construction knowledge was central to the selection processes. It is then relevant to get an appreciation from the respondents on the subject matter offered as part of classroom training within the learnership considering the variation in educational backgrounds. The course material offered to the small contractors is NQF Level 2 as outlined in Chapter 5.[2] The analysis of training responses is not limited to the respondents' views but also interpreted against the SAQA criteria for the NQF Levels.

Figure 6.12 below indicates the responses to the relevance of the classroom training material toward the development of the small contractor. The rating terms of "very useful" meaning of significant importance to the learner, "quite useful" adding more information to the learner and "not useful" not a adding value to the learner were explained to the respondents' during the questionnaire workshop.

[2] NQF levels have been discussed in Chapter 5 and find in Appendix D the different level descriptors from SAQA

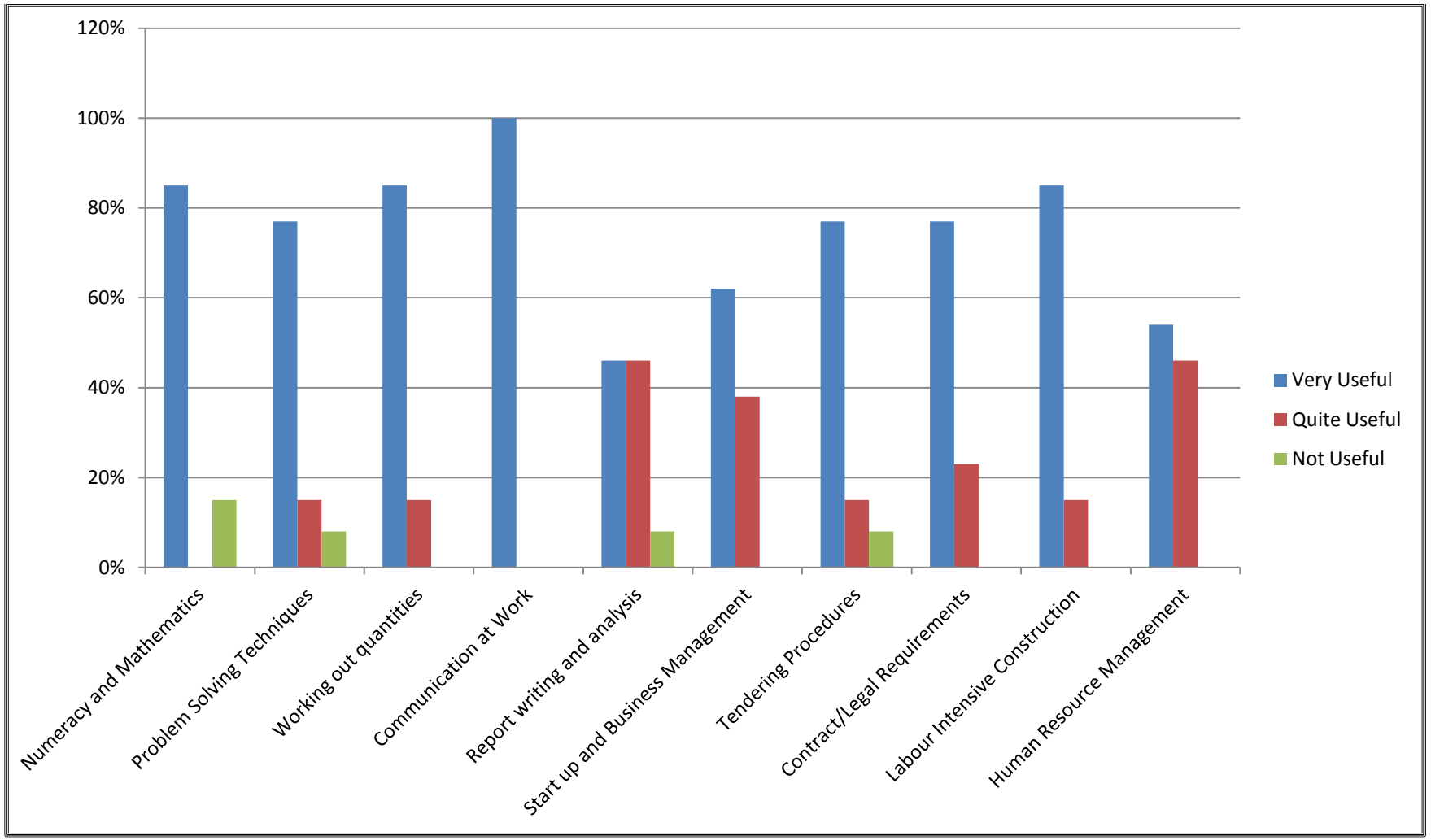

Figure 6-12 Usefulness of Subject

Each of the individual subjects Communications skills, Labour Intensive Construction issues, Working out quantities, Numeracy and Mathematics were rated as very useful by more than 80% of the respondents. In as much as the other subjects did not have a high percentage response it is important to highlight that no subject was rated as being completely 'not useful' to the contractors. The EPWP and Vuk'uphile have thus managed to establish a relevant curriculum for classroom training which can be replicated in small contractor training.

What were the main problems experienced during the classroom training?

The above question was unstructured and sought to get an appreciation from the project participants on the problematic areas so that programmatic intervention can be recommended to ensure continued and sustained contractor development. The responses from the contractors have been captured and analysed as separate issues. Of note is that unstructured questions offer an insight into opinions that can help shape the programme, hence each of the issues raised is equally important. The following problems listed below were highlighted by respondents:

1. **"NQF 4 Supervisors received more training than the NQF 2 contractors."**
   In Vuk'uphile phase 1, the minimum entry requirements of the learner contractors was completion of Grade 10, leaving leeway to incorporate applicants with prior construction experience but who had not managed to complete Grade 12. The learner supervisors however had to have completed Grade 12, as they would be in charge of meeting the day to day supervision for the contracting entity. The above response highlights the need of contractors to acquire a strong knowledge base, although the EPWP approach to the different learning components has been outlined above. The research findings indicate that there is a desire within the ranks of the respondents to absorb more knowledge to the benefit of small contractor development. The eagerness demonstrated is commendable and any future implementation programme should ensure corresponding levels of training for the contractors and supervisors. This notion is also highlighted in the ILO report on employment (2001) citing Fluitman (1989) who

recommends that training must be demand led: it must be "needed, wanted and feasible".

2. **"Things done in class were easy and different on the site but less time."**
   This response highlights deficiencies within the teaching methodologies applied to the contractors within the training programme. As already established above, there is resentment from the contractors to being spoon-fed. The EPWP unit in co-ordination with CETA must monitor the adequacy of classroom training being offered to learner contractors.
3. **"Certain things were done on our behalf and we never face our competitors and tendering proceedings were not given to us."**
   Although this response was cited by the respondents, Figure 6.12 above shows that there was a high level of appreciation among the contractors on the subject of Tendering procedures as 75% found it very useful. However from the response there is a resentment of being "spoon fed", hence it is imperative to ensure that the training providers allow the contractors to understand and appreciate subject matter as they are taught. Although the issue of competitors is raised, the Ekurhuleni Vuk'uphile is an "incubator" for the small contractors. The training model is set up to allow development of the contractors before exposing them to the open market. It is the researcher's view that this aspect of the programme should be kept as it is, for a sustainable learnership.
4. **"Not enough equipment for facilitators and did not get access to computers."**
   The EPWP and Ekurhuleni should assess the capacity of training service providers to perform their duty. The fact that learners did not get access to computers is a serious impediment considering today's business market. As much as the successful training service provider meets the tender specifications, there should be an inspection of facilities and resources available to them to ensure learners are not constrained by lack of access to key learning tools.
5. **"Training centre was far and there was no stipend offered."**
   The learner contractors were not housed centrally, but rather had to commute from their different locations within Ekurhuleni. It can be appreciated that the distance to the training facility would vary from individual to individual and considering that some of the learner contractors were previously unemployed, the response above would form a

genuine problem. It is recommended that Ekurhuleni as an implementing body of Vuk'uphile set aside a budget which can be accessed by participants who are genuinely affected by distance between their places of residence and the training centres.

What Training model best suits you?

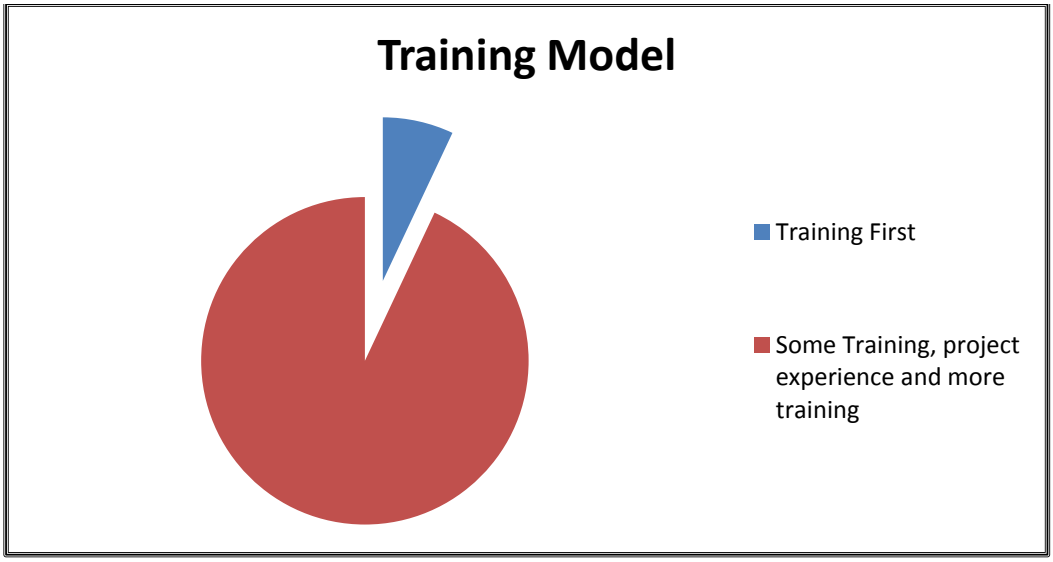

Figure 6-13 Training Model Preference

A high percentage of the respondents indicated that they preferred to do some training first, apply it on a project and then attend more training. This is in line with the current programme setup which is described in detail in chapter 4 and shown in Figure 6.14 below

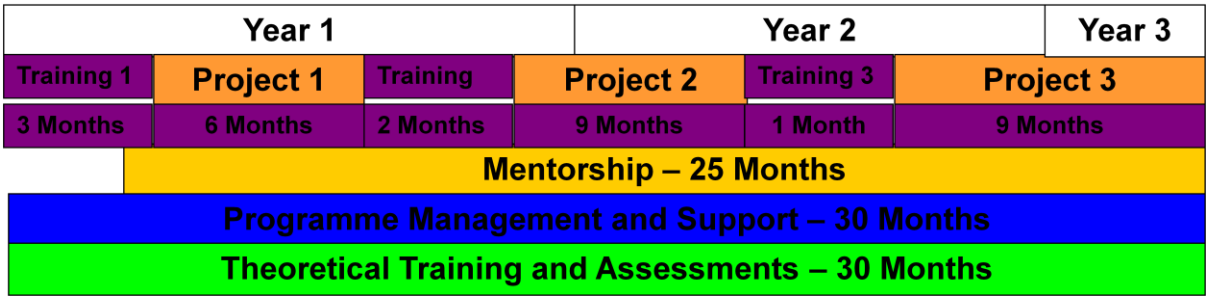

Figure 6-14 Vuk'uphile Training Model (NDPW 2006)

A follow-up unstructured question was posed to the contractors to probe their choice of training model and the responses are given below:

1. It's better to do classroom then practise what you have learned, go to project and discuss problems after;
2. An opportunity to face real problems after exposure to practicals;
3. See what you have learnt can be applied on site when doing a project after training and learn new things;
4. Disrupts classes.

Responses one to three are in the same mould and form 93% of the views represented in Figure 6.13 above. It is therefore highly indicated from the research findings that the current Vuk'uphile training structure in Figure 6.14 is acceptable to the programme participants.

How many training projects did you complete in the Learnership?

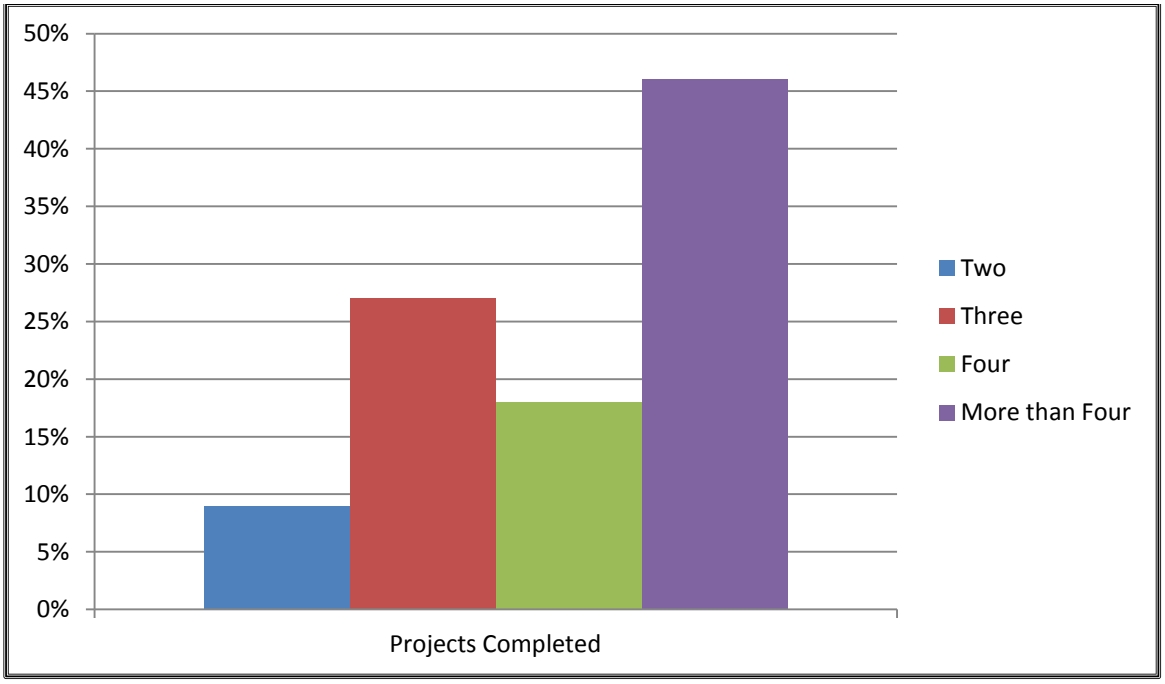

Figure 6-15 Projects Completed

Figure 6.15 should be read in conjunction with Figure 6.14 which outlines the Vuk'uphile training model. The learner contractors are expected to complete a minimum of three projects during the learnership. The figure illustrates that 91% of the respondents managed

to complete three or more projects during the course of the learnership. To get an even more refined interpretation, 18% and 46 % completed four and more than four projects respectively.

McCutcheon (2001) highlights that it is important to ensure that small contractor development programmes are not “make work” avenues but are rather sustainable development initiatives. The research findings above clearly show high levels of projects completed, with more than 50% of respondents surpassing the programme’s expectation. In the light of the above information the Ekurhuleni Vuk’uphile is clearly proving to be a successful programme enjoying the support of the implementing body. The fact that adequate projects are being identified for implementation shows that this is more than just “a make work” adventure but a sustainable development programme.

Nature of Projects

The respondents were asked to indicate in which sector their completed projects fell. The responses were collected and recorded for the minimum three learner projects expected to be completed during the course of the learnership. This gives a good basis of analysis to track learner development within the learnership, as a constant set of questions are being used for projects 1, 2 and 3.

Project sector

100% of the respondents carried out their first project within Road Construction, Sidewalks and Paving sector. Although there is a variation in project 2 and project 3 this sector still has a higher percentage of participants as compared to the storm water sector and others. The success of a construction programme depends on the choice of technique and in Sub-Saharan Africa citing prominent examples in Kenya, Botswana and Lesotho, contractor development has been spearheaded in the Road Construction, Sidewalks and Paving Sector. In this regard the Ekurhuleni Vuk’uphile has been successful in establishing a solid base for

development through the identification and implementation of the relevant projects. Figure 6.16 below indicates a summary of the participant's responses to the sector under which the various projects fall.

Figure 6.16 also contains responses to questions on the involvement of the learner contractors in the industry sector prior to undertaking the projects and whether the projects were in the same field as the training received. The researcher would like to rather draw attention to the questions: "To what extent did the mentorship you receive, assist you with completion of this project?" and "Did the training you receive, assist you in completing the project?" These questions are important to the research as they tie in to the research questions on the adequacy of mentoring and training received by the learner contractors. A fair percentage of the respondents seem to indicate that mentorship contributed greatly to the success they recorded in their projects. These views tie in to the earlier responses in which the majority of learner contractors regarded mentorship as the least important of the services offered within the programme. Whereas small contractor development has been modelled on the basis of strong mentorship support, the researcher aligns with Egbeonu (2004) that mentorship within PWPs in South Africa needs reformulation rather than removal, because the researcher appreciates the strong positive role of mentorship within construction. As much as problems are being highlighted within Vuk'uphile, only correction can achieve the desired success.

It is important to note from figure 6.16 that mentorship input has not been fully appreciated by the small contractors, however this does not apply to the relevance and appreciation shown to the importance of training in helping the contractors to implement their projects. The high response shows the positive impact that training has had on improving the skills and ability levels of the contractors. In this regard Ekurhuleni Vuk'uphile has shown significant growth in the development and nurturing of small contractor development within South Africa.

Questions		Percentage Responses Project 1	Percentage Responses Project 2	Percentage Responses Project 3
In which Sector was this project?	Roads Construction /Sidewalks /Paving	100%	64%	44%
	Stormwater		18%	11%
	Manufacturing			11%
	Other		18%	33%
Have you ever worked in this particular industry sector before?	Yes	44%	60%	40%
	No	56%	40%	60%
Was this project in the same sector for which you had received training?	Yes	56%	60%	75%
	No	44%	40%	25%
To what extent did the mentorship you receive, assist you with completion of this project?	A lot	46%	60%	57%
	A little	37%	30%	29%
	Not at all	15%	10%	14%
Did the training you received, assist you in completing the project?	Yes	91%	100%	100%
	No	9%		

Figure 6-16 Training Projects

Have you or your company tendered for a project/contract outside the Learnership programme while undergoing training?

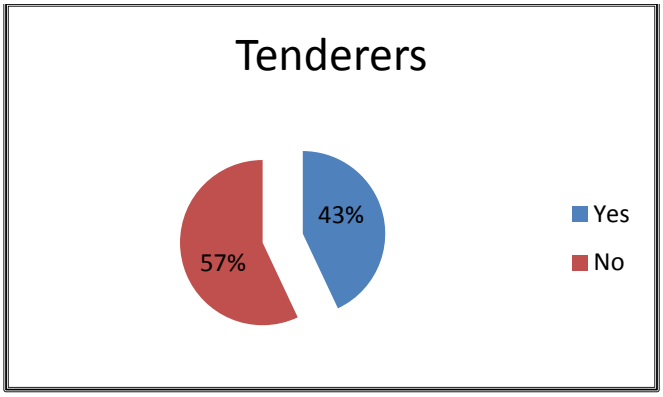

Figure 6-17 Percentage of Tenderers

Was your company successful in obtaining the Tender?

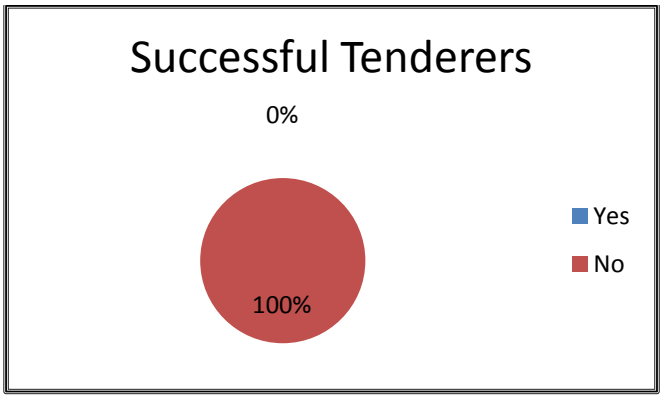

Figure 6-18 Percentage of Success

The self development initiatives of the contractors can be measured by their desire to broaden their contracting entities beyond doing work in the learnership. Mkhize (1994: 6; DBSA, 1992) argues that contractor development in Southern Africa has not been intended to drive labour based construction but rather this has a supporting role of being a tool to identify and develop entrepreneurs. These notions add relevance to the importance of identification of suitable participants in any future PWP. The questions above tie into the relevance of recruiting self-starters within the learnership. 43% of the respondents indicated that they had tendered for “other work” whilst still in the learnership, although none of them was successful in winning the tender. The fact that learner contractors are identifying

opportunities and are ready to exploit them if given the opportunity speaks volumes for the EPWP Vuk'uphile Ekurhuleni Learnership.

6.3.7 Project Finance

As described in Chapter 4, ABSA provided financing for the small contractors. Segokgo, Hongve and Overby (2000) highlight that in Botswana the major challenge to small contractor development has been lack of access to financial resources coupled with inadequate financial discipline among the contractors. These assertions are not only limited to the Botswana case but have formed a major hurdle for development of small contractors in sub-Saharan Africa. The status report of the South African Construction industry (DPW 2002), highlights among other issues lack of brigding finance and proper busines and financial management skill as impediments to contractor development. In exploring the financing of the Vuk'uphile the researcher seeks to establish whether these barriers have had any effect on the programme. Several questions were posed to the contractors on the project financing within the learnership and the responses are discussed below.

Were you able to obtain a loan from ABSA during the learnership?

100% of the respondents managed to get financing from ABSA. This can be attributed to the high stakeholder participation between ABSA and EPWP fostering a smart partnership to ensure that the Vuk'uphile Learnership is implemented successfully. The importance of the rigorous pre-selection process cannot be underestimated, as it is the foundation for ensuring that candidates to the learnership are not financially delinquent and do not have bad credit history.

Figure 6.19 below illustrates the loan amounts received against the percentage of responses. 90% of the respondents managed to secure significant loan amounts in comparison to the project value. Using the researcher's construction experience, it is generally accepted "industry practice" that bridging finance forming 33% of the project

value is adequate to set up site and start work. The corresponding column chart Figure 6.20 illustrates that more than 50% of the recipients received loan amounts which were in the range of 50% to 75% of the Project cost. These findings are significant as they form a basis to answer the question of whether small contractor development can succeed, if it is properly funded.

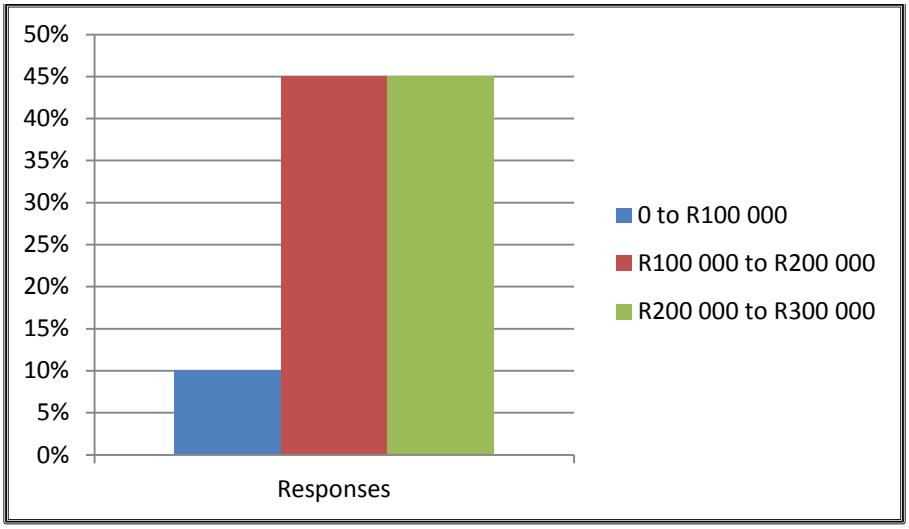

Figure 6-19 Loan Amounts Received

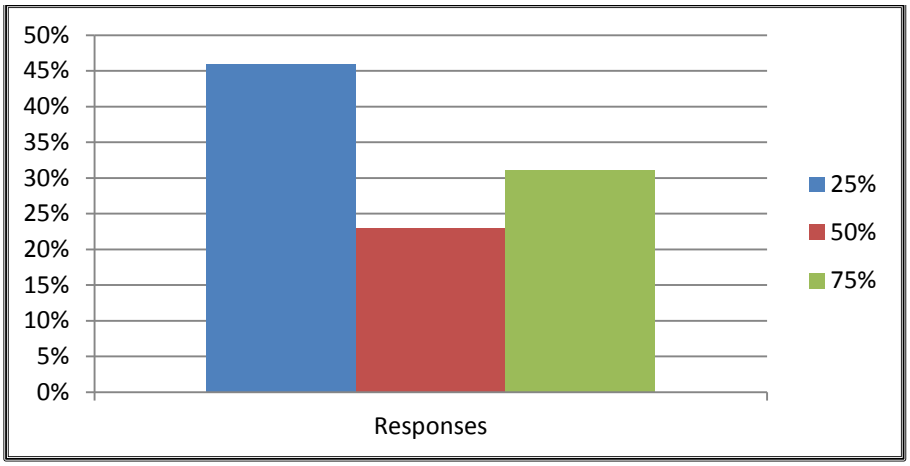

Figure 6-20 Value of Loan as a percentage of Tender

100% of the respondents managed to repay back the loan amounts that had been obtained from ABSA. The figure 6.21 below indicates a measure of how easy or difficulty it was to repay the loan.

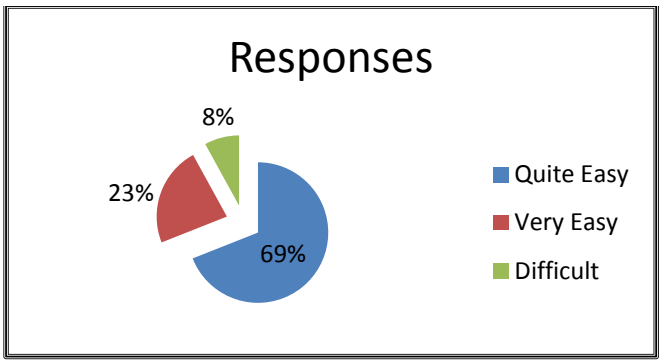

Figure 6-21 Ease of Loan Repayment

One of the keys to any sustainable business is cashflow: the fact that contractors managed to receive amounts of between R100 000 to R300 000 in loans from ABSA, which only formed a percentage of the project cost and was paid back with relative ease as acknowledged by 92% of the recipients is an important milestone within contractor development. These figures and assertions show positives for Vuk'uphile as they illustrate financial discipline among the Ekurhuleni participants, which has been a nemesis for past small contractor development initiatives in years past.

6.3.8 Mentorship Services

As outlined in Chapter five the contractors were divided into two groups and were all mentored under the umbrella of IDADA Projects. The company is in the construction sector and offers civil engineering expertise, project management and business mentoring.

Egbeonu (2004) describes the importance of mentorship within contractor development programmes. The author points out several weaknesses regarding mentorship in past PWPs in that government saw mentorship as optional, the financing houses as mandatory and the small contractors as an imposition which resulted in a high level of miscommunication affecting programme success. In the light of this, a range of questions explored the impact and extent of mentorship within the Vuk'uphile Ekurhuleni Learnership. Discussed below are the respondents' views to mentorship within the programme.

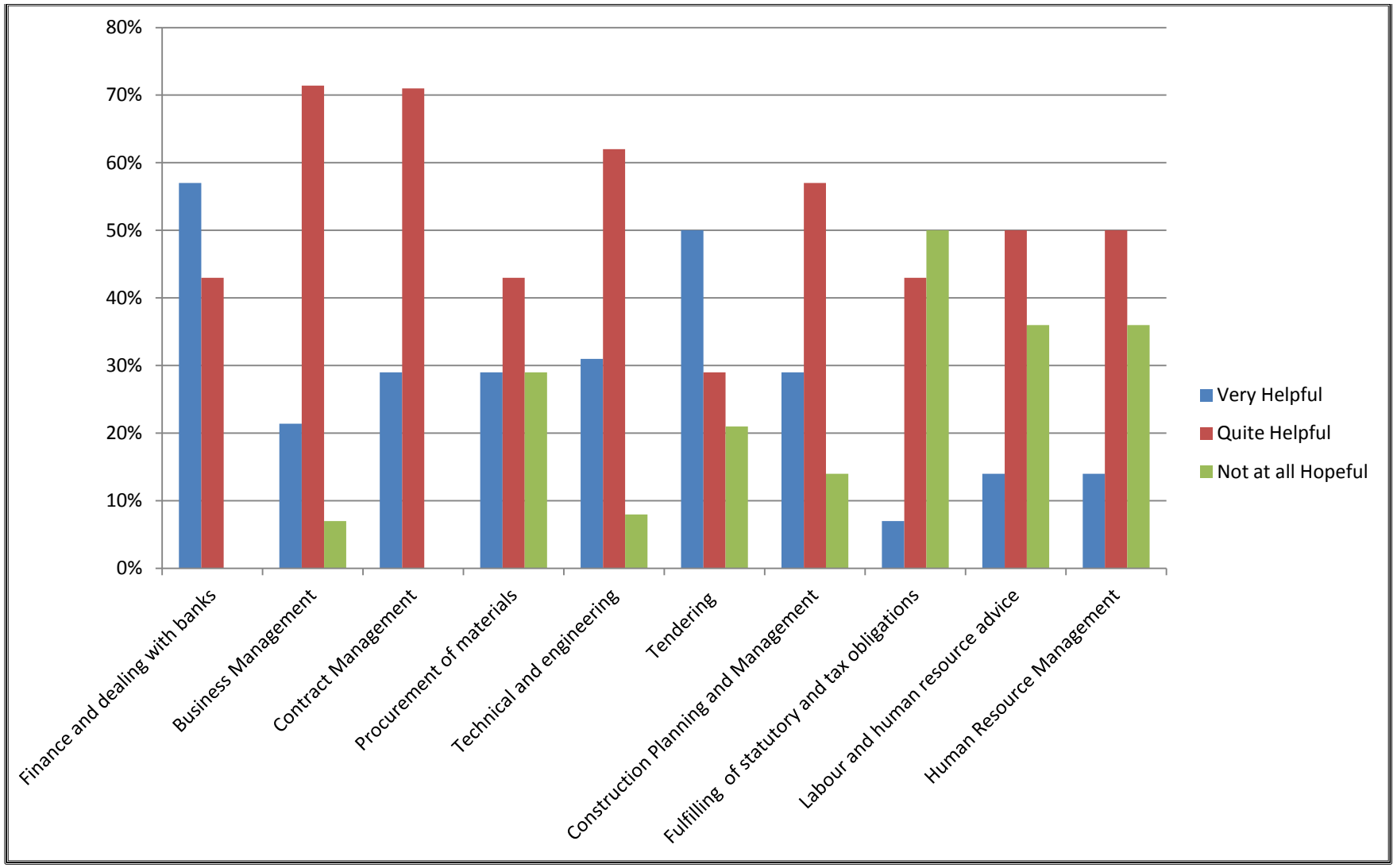

Figure 6-22 Helpfulness of Mentor

Figure 6.22 shows the contractors' responses to the mentors input into their skills development and experience during the Learnership. The rating terms of "very helpful" meaning of significant importance to the learner, "quite helpful" adding more information to the learner and "not at all helpful" not adding value to the learner were explained to the respondents during the questionnaire workshop. The above responses show that the contractors to some extent rate the mentorship in the different aspects as being helpful. In figure 6.22 using the terms "very helpful" and "quite helpful" to assess the level of mentor rating results in 75% of the respondents indicating positiveness in seven of the ten mentor aspects discussed. The mentors' contribution however was rated lower in:

- Fulfilling statutory and tax obligations;
- Labour and human resource advice;
- Human resource management.

More than 35% of respondents indicated that it was not helpful at all. The importance of sound business management cannot be separated from statutory and tax obligations. LIC as the name entails is heavily reliant on the human resource component; hence the need for the mentors to contribute significantly to these aspects cannot be overemphasised. In the subsequent phases of Vuk'uphile in Ekurhuleni the EPWP unit and EMM must ensure that these issues are addressed by the mentors, to the learner contractors' benefit.

To what extent did the mentor contribute to the success of your company?

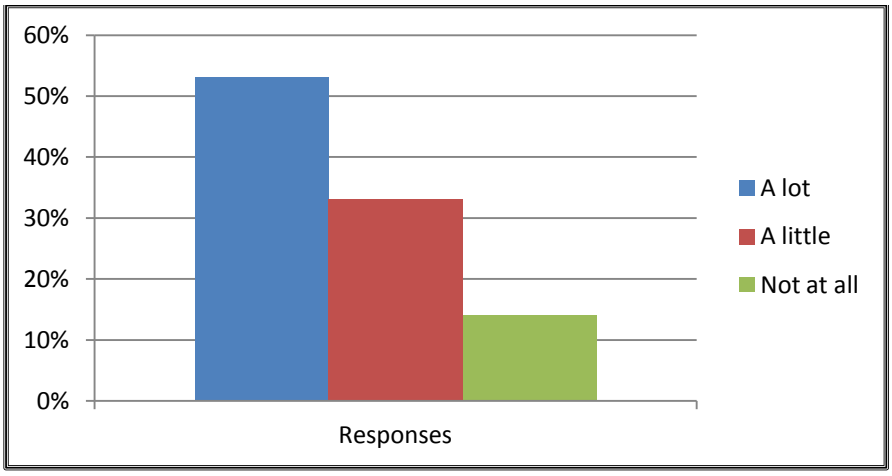

Figure 6-23 Contribution of Mentor

Slightly more than 50% of the respondents attributed the success of their company to the mentorship, with 30% viewing it as of little benefit. These results compare starkly to the individual rating of the mentorship aspects in Figure 6.22. It seems that there is an appreciation of the mentorship subject areas but not a good working relationship between the mentors and contractors. The ECI Africa report of 2007 commissioned by the NDPW recommended that the benefits of mentoring must be optimised considering the costs of the exercise. The findings above, indicating that just over 50% of respondents attribute their success to mentorship, are not good enough. These inadequacies are further articulated in Figure 6.24 below highlighting responses given by contractors on the frequency of meetings between themselves and the mentor. Only 21% thought that they had enough meetings while 79 % were of the view that the meetings were too few.

How would you rate the amount of meetings you had with your mentor?

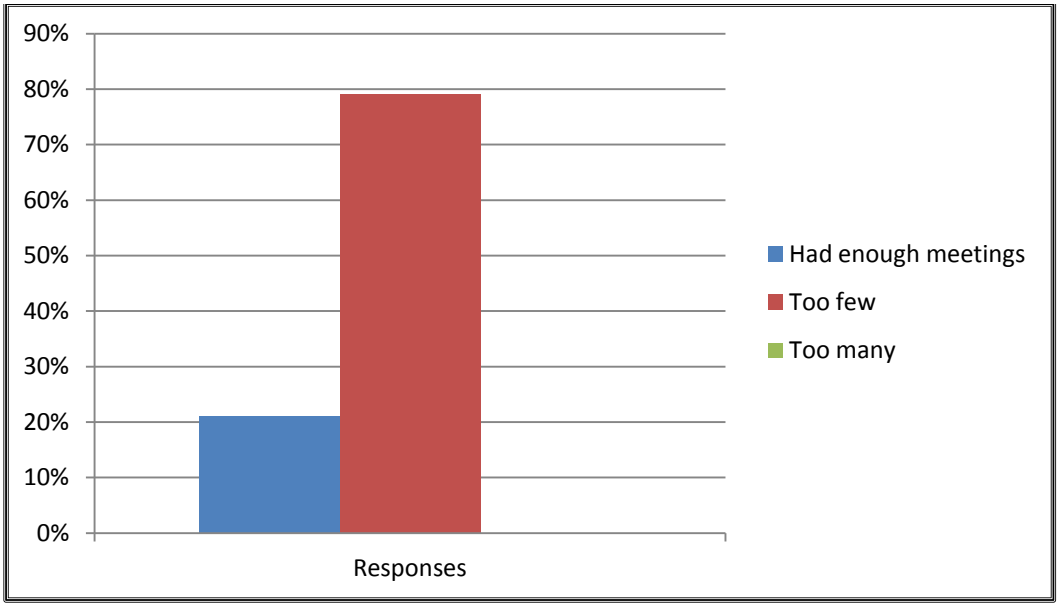

Figure 6-24 Adequacy of Meetings

In the light of the findings above it is the researcher's view that mentorship benefits are not being fully optimised within Ekurhuleni Vuk'uphile. Egbeonu (2004:150), quoting Hauptfleisch (2003 interview) accedes to the difficulty of the mentorship relationship between "inexperienced and poorly resourced black contractors" and experienced professionals. Rwelamila (2003) however recommends that mentorship and the activities

involved should be monitored, audited and evaluated in order to examine effectiveness and check if desired objectives are being met.

This research therefore recommends that a systematic monitoring process be setup for mentorship, as already discussed in section 6.3.5 mentorship is of critical importance in small contractor development therefore continued progress and participation should be encouraged within Vuk'uphile. Periodic workshops should be arranged by the EPWP or by Ekurhuleni for contractors and mentors so that issues affecting the development programme are raised and resolved at an early stage. Ultimately this will go a long way in optimising the potential mentorship benefits.

6.3.9 Small contractors' perspective of the programme

Thinking of the overall Vuk'uphile programme, what would you change?

Mentorship

Some of the project participants think it is prudent that a continuous monitoring exercise be put in place by the EPWP to evaluate performance of the mentors. A review on the choice of mentors and training company is also recommended. However some of the project participants believe that mentorship is being terminated prematurely within the learnership. Several conclusions can be drawn from this, however it is the researcher's view that the recommendation already addressed in the previous section are a sufficient starting point from which to review mentorship.

Tendering and Allocation of projects needs to be equitable among learners

Although some of the participants have indicated that there is an inequitable allocation of work, interviews with the Ekurhuleni Project Managers highlight that the alleged inequitable distribution has been mainly as a result of competency within the different contracting entities. The researcher recommends that the EPWP unit project managers should review and investigate if any allegations of corruption are true.

Continued monitoring of Small Contractor Development

Some of the contractors think that the EPWP should keep continuous account of the contractors post learnership. It is the researcher's view that development of a small business is not a once off enterprise, and that continued nurturing should be advocated. In this regard, a budget should be set aside to ensure that the trained entrepreneurs are absorbed within industry either as employees or employers. In such a setup, it is ensured that the money already invested in the skills development is not put to waste.

6.3.10 Experience Post Learnership Programme

The Vuk'uphile learnership is not a make work exercise but rather seeks to develop successful small contracting entities, hence evaluation of the post learnership period is important to measure if the objective has been met. A series of questions were posed to the learner contractors and the responses shall be discussed below.

Figure 6.25 below indicates the percentage responses from the graduates on knowledge of EPWP Guidelines[3] as a result of their experience in the Vuk'uphile programme in Ekurhuleni. 93% of the respondents indicated having knowledge of the EPWP Guidelines which, considering the design and objectives of the EPWP, the contractors' knowledge of the Guidelines is important in ensuring that the government's programme outputs are realised and also enhances opportunities for the new contractors within future public works projects. This expressed confidence in their knowledge of the Guidelines is a positive for the programme in Ekurhuleni, considering that the programme seeks to develop additional capacity in labour-intensive construction.

[3] EPWP Guidelines govern employment-intensive construction within public works, so familiarity with them is essential for the successful completion of such projects. A detail discussion was given in Chapter four.

In response to the question of whether graduates have tendered for EPWP work after learnership, 69% of the respondents indicated that they had tendered for LIC projects under the EPWP. The objective of the programme is to create a competitive contractor: the evaluation was done 18 months post graduation and the 31% who have not tendered for any work is a relatively high figure and exposes the programme to questions on competency of graduates and selection of candidates. As elucidated in Chapter four and in the questions covering selection of participants the programme is in line with literature.

In this regard it is the researcher's view that the incorporation of an entrepreneurship curriculum will aid in the contractors in identifying and exploiting opportunities. The contractors' must be motivated by the success of their mentors and peers who have also developed into professional entities.

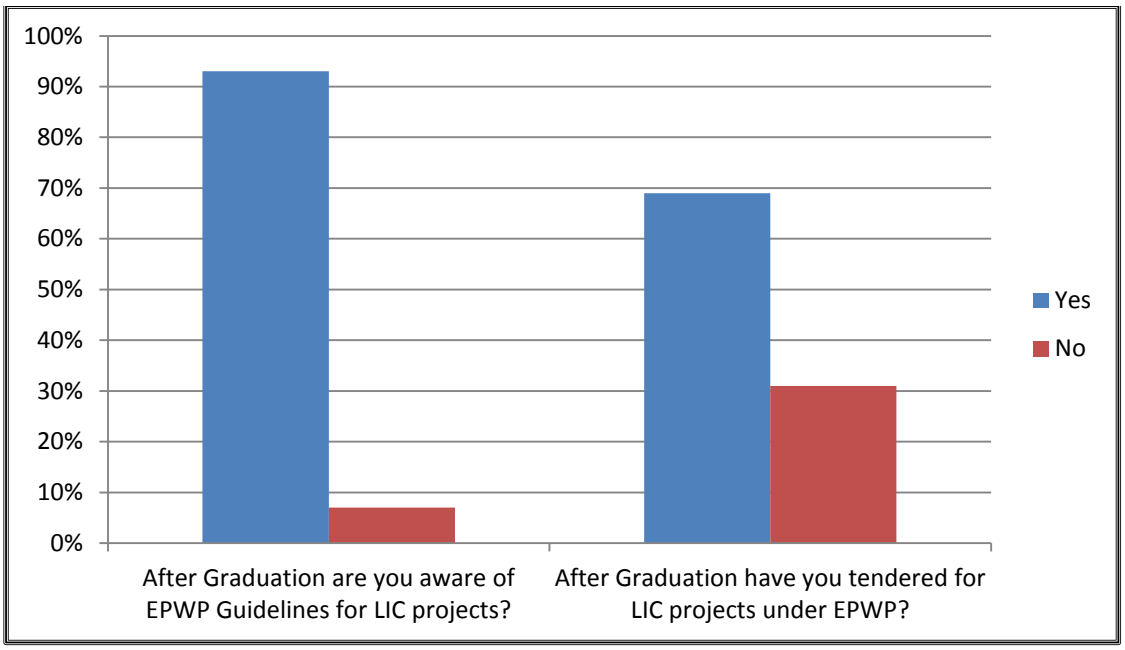

Figure 6-25 Responses to EPWP Knowledge

Of the respondents who answered No to having tendered to LIC projects after completion of Learnership, the following responses were advanced:

1. 33% - My company is no longer in operation.
2. 22% - I am unable to put together tender application.
3. 45% - I have not seen request for tenders in LIC projects.
4. 0% - I am employed by another company in the construction industry.

SAFCEC (2003) reports that 80% of small civil contracting firms have a life span of less than a year and only 7% survive for five years and beyond. Although from the responses only one third of the contracting entities responding have shut down, there is some degree of struggling to retain work among some of the surviving ones. The Vuk'uphile programme should foster smart private and public partnership so that opportunities are available for contractors in the private and public enterprises within the first three to five years post graduation. The three to five year time span is recommended since it recurs in literature as the accepted measure of whether a construction company is robust in the face of the cyclic and volatile environment that characterizes the industry. Fitchett (2009:316) citing Farstad (2001:351) highlights that in Europe the vulnerability of small enterprises in all sectors is high, for example, loans granted to small and medium enterprises "… are provided with an expected annual loss of 25% and research in UK indicates a failure rate of small businesses to range between 30 and 50% in a three year period". Fitchett 2009 further cites Van Wyk (2003:2) who asserts that in the formal construction sector in South Africa, 1 400 companies were liquidated in the period 2000 to 2002.

The fact that respondents are unable to put together a tender application reinforces the need to have stronger practical lessons on tendering procedures. The programme should revisit the training model around the subject and ensure a high level of competency as ultimately a graduate contractor who cannot complete or understand tendering procedures will not go far.

The response that contractors have failed to tender due to not seeing any tender requests for labour-intensive projects does not reflect well on the contractors. Public tenders are advertised in the daily newspapers and are easily accessible to the general public: failure to know this leads to several speculations. One of the key issues in contractor development initiatives has been "a sense of entitlement": Ekurhuleni project managers have described some learner contractors as "lacking drive". In light of these findings the programme must instill in its ranks the competitive nature of the open market: the researcher strongly

believes that entrepreneurship as well as business strategy curriculum should be included within the Vuk'uphile training.

The research findings also show that none of the contractors has joined formal employment. Although this might be encouraging as the programme participants acknowledge that they are contractors and need to set up successful entities, another line of thought might be the adequacy of the qualification the contractors are getting out of the programme and their ability to use it within a formal environment. It is the researcher's view that while the programme may aim to develop the small contractors, the curriculum should explore and engage with a range of career moves in response to different market conditions. In essence small contractors should not be limited to management courses but should also undertake technical subjects and qualifications which will render them employable if the need arises.

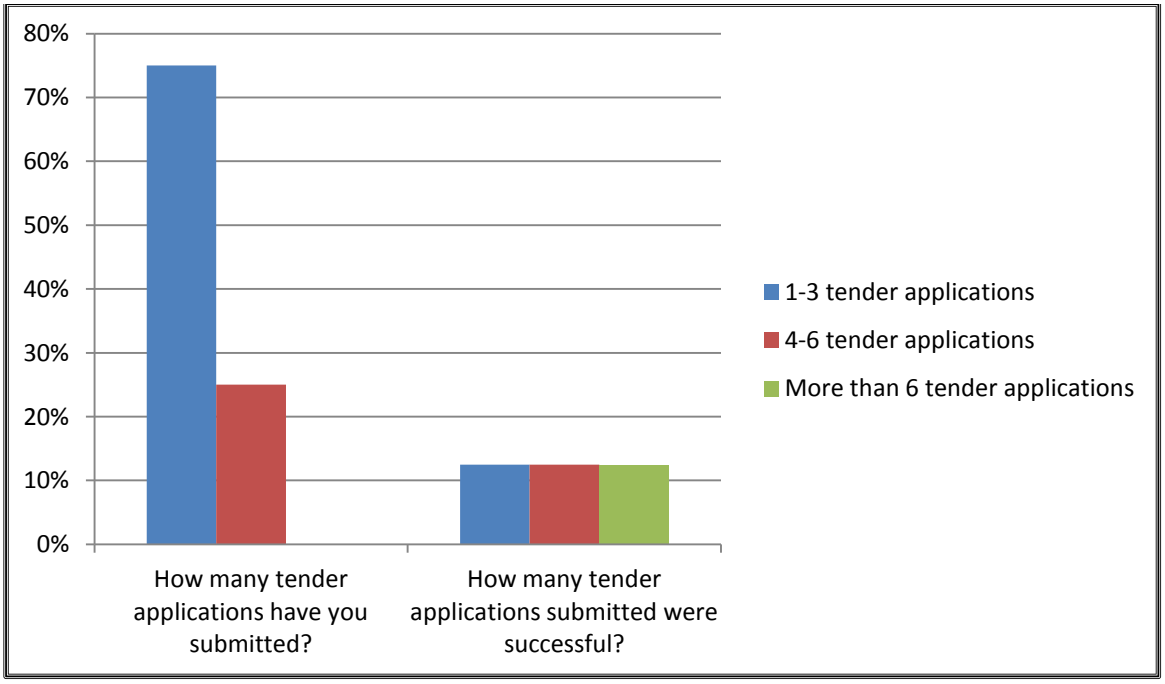

Figure 6-26 Post Learnership Tendering

Of the respondents who answered "Yes" to tendering for LIC projects under EPWP, 75% managed to tender for one to three projects whilst the remaining tendered for four to six projects. The subsequent question on the percentage of successful tenders indicates that

63% of the respondents failed to secure a tender while the remaining percentage was evenly distributed among the classes shown in Figure 6.26 above. Although it can be appreciated that the programme is generating some dividend as graduate contractors are successful securing projects, the figures above are still not satisfactory. These findings reflect a very low conversion of opportunities from the graduate contractors. It is appreciated that the contractors rated tendering procedures from the mentors and classroom training as quite useful but one key problem raised as a problem with classroom learning was that: “Certain things were done on our behalf and we never face our competitors and tendering proceedings were not given to us”.

Therefore, the adequacy of tendering procedures training and mentor support for tendering training should be reviewed. The training providers and mentors must allow the contractors to understand and appreciate the subject matter; this will result in an increase in the contractor competency in the post learnership phase.

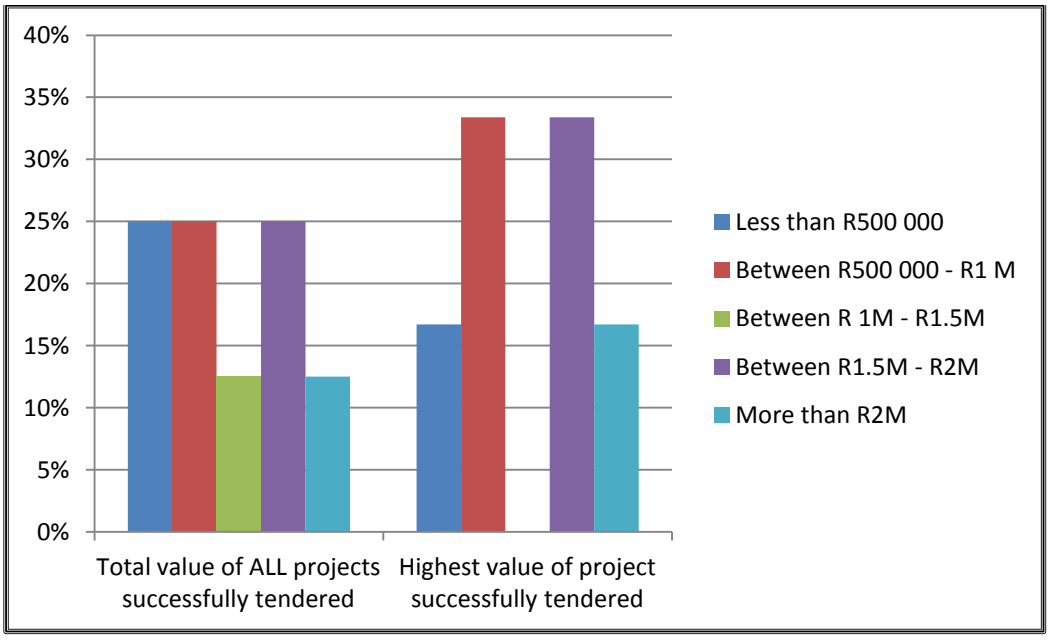

Figure 6-27 Value of Tenders

In which sectors were the projects that you successfully tendered for and implemented?

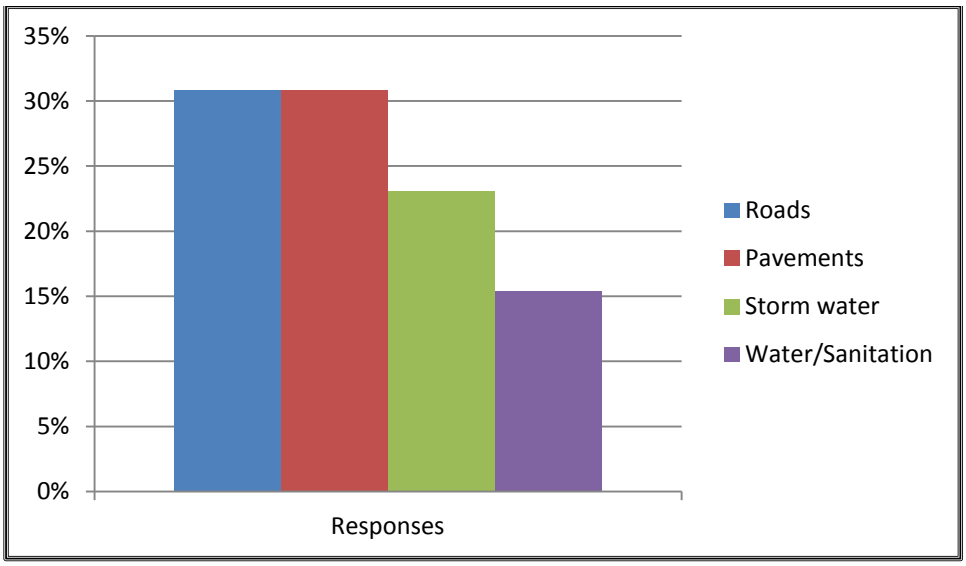

Figure 6-28 Project Sector

100% of the respondents indicated that all these projects were in an urban area, hence challenging the perception that small contractor development can only be implemented successfully in rural areas. The Ekurhuleni Municipality, EPWP unit and SA government is achieving significant results in the competitive environment of metropolitan centres in contrast with programmes in Kenya, Gundo Lashu, Botswana which were all within rural set ups. The programme resultantly not only provides for development of small contractors but also creates an avenue for job opportunities to the unemployed urban population.

Did Vuk'uphile Learnership lead to an improvement of you company's CIDB?

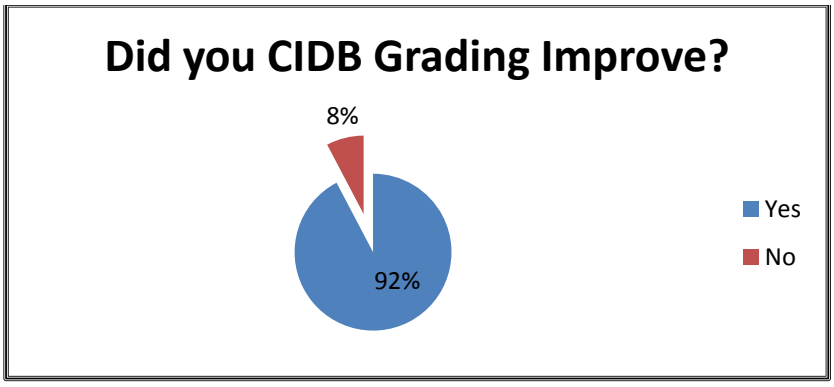

Figure 6-29 CIDB Responses

The main reasons offered for non improvement in CIDB grading were:

- Projects are of a lesser value than the scope of CIDB
- The total amount received during the timelines did not meet the CIDBs criterion for contractor grades

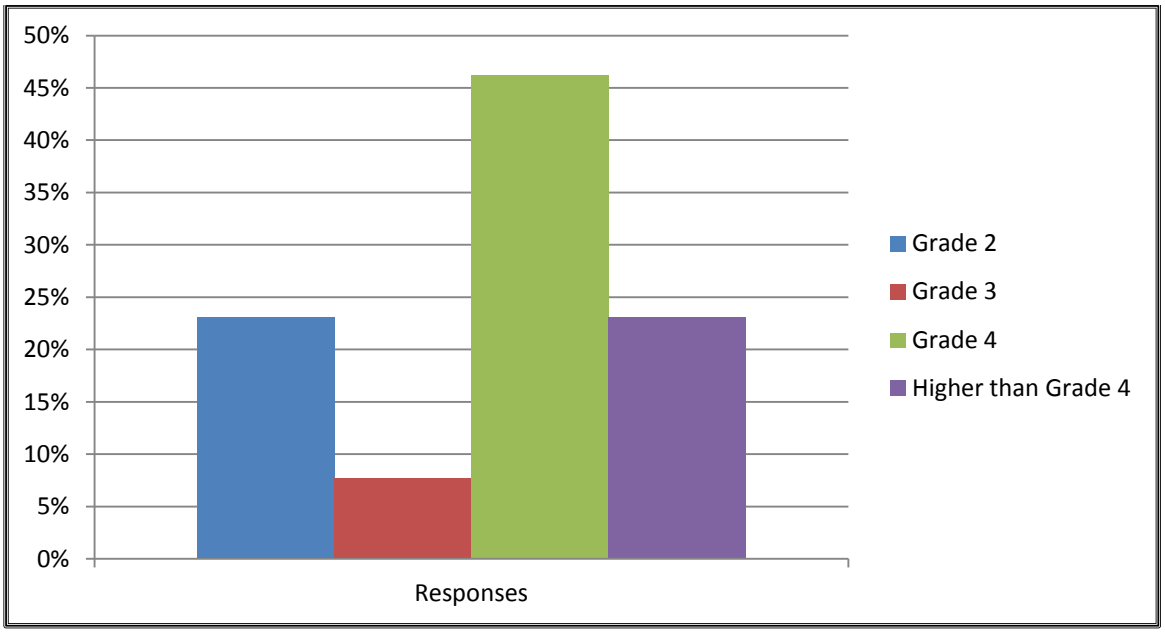

Figure 6-30 Current CIDB Grading

Figure 6.30 indicates the contracting entities' current CIDB Grading. Although it is appreciated that the value of some training projects is low, the Grading is also a function of the cumulative annual turnover. It is therefore not enough to point to the value of one project as a reason for non-improvement: the Vuk'uphile training is structured so that the minimum grade a contractor should exit with is level 3 in the event that they have conformed to CIDB processes. The research findings indicate that 23% of the contractors have not improved beyond grade 2. This significant percentage represents a mismatch between programme aims and the revealed results. Mthombeni (2011) cites the biggest setback in registration as being the fact that contractors view the process as being "automatic". In essence they do not submit the requisite information to the CIDB register for grade review. This research proposes that the workings of the CIDB and its processes be incorporated into the curriculum of the learner contractors. Appendix C contains the CIDB grades and Joint Venture Calculator

How many people do you or have you employed while implementing your projects?

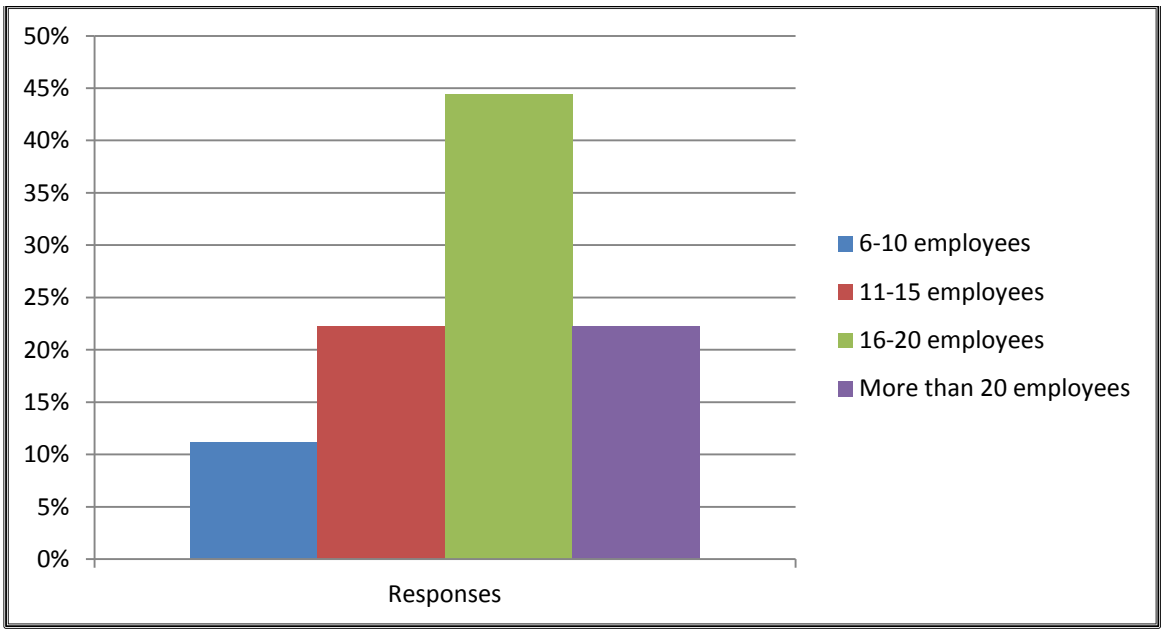

Figure 6-31 Number of Employees

One major reason for pursuing PWPs has to create work opportunities not only for the contractor but for the general population. Figure 6.31 indicates that the employment intensive nature of LIC is being realised within Vuk'uphile since the small contractors are recruiting labour into their projects. It also shows the appreciation of EPWP Guidelines on LIC among small contractors, creating the additional capacity specified in the programme objectives.

Financial Support

In this section the focus of the research is to establish whether, in the post learnership phase, the contractors are able to raise loans from financial institutions. As established in the literature review (Chapter 2) a critical issue in the growth and development of small contractors has been the inability to get sureties and loans from banks. Although several reasons are recorded, the findings below offer insight on whether any progress is being made and highlight areas for improvement.

Since you completed the Learnership has your company been able to raise a loan?

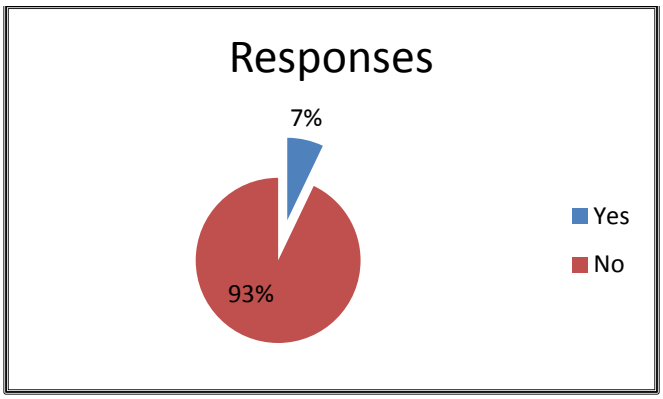

Figure 6-32 Ability to Raise a Loan

Figure 6-32 shows that only 7% of the respondents have managed to raise a loan with a financial institution. The questionnaire offered a follow up unstructured question to the respondents who answered No, to give reasons for failing to secure financial assistance. As argued earlier in this chapter, although responses to unstructured questions may vary, the researcher would like to offer the different input to the readers, to allow insight into the respondents' views. Listed below are reasons put forward by the 93% of the respondents who have failed to secure loans:

1. I have no projects for now – frequently cited (no money because of no work, need to improve work opportunities);
2. Poor banking rating;
3. Failure to provide collateral/security;
4. Application not successful;
5. Capital was saved to sustain Business.

From the above, the major reason for failure to obtain a loan has been the inability to secure work or have any current projects. In as much as this problem might be solely as a result of the inability of the contractors, another view might be the fact that government has failed to ensure continuity of work available for the development of small contractors. Both views reflect unfavourably on the Vuk'uphile programme and affect its success rate: graduates should be properly equipped to compete successfully in the open market and it is

the researcher's opinion that success of contractor development initiatives can only be sustained through a continued exit program of three to five years.

Now that you graduated from the learnership and running your own company, how do you rate the overall impact of the programme on your business?

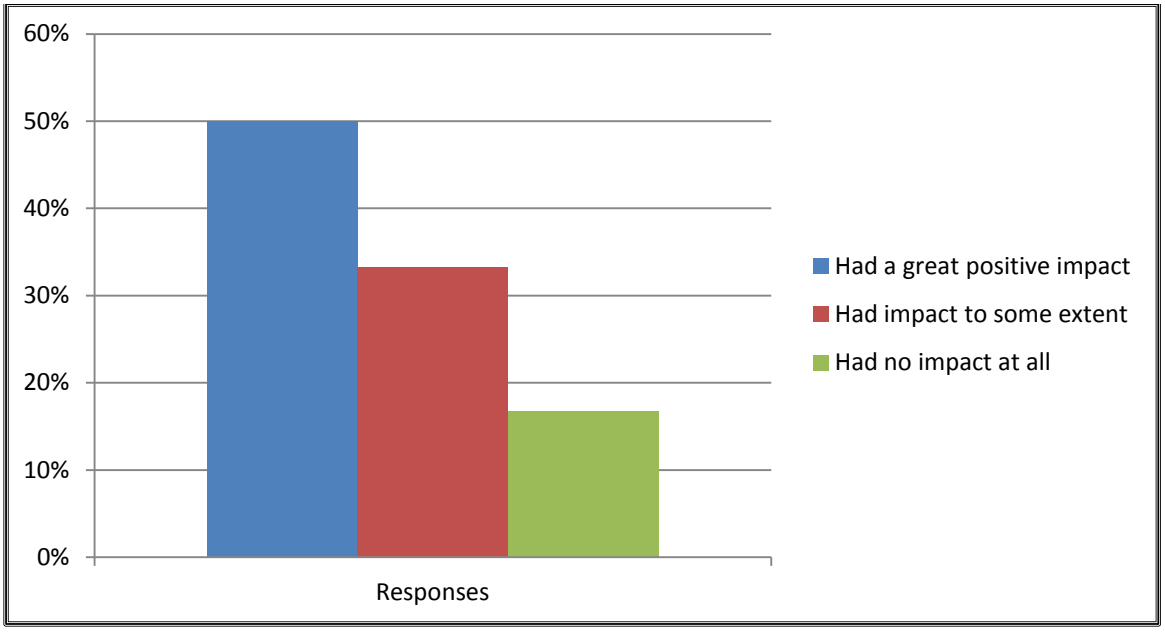

Figure 6-33 Impact of programme on Business

In figure 6-33, 50% of the respondents' indicated that the programme had a great positive impact to their own business. These results indicate that progress is being made in empowering the formerly marginalised groups through Vuk'uphile. However the above also indicates there is room for improvement: the onus of such a programme as Vuk'uphile is to make a significant difference as it is targeting the unemployed and under resourced.

6.3.11 Vuk'uphile learnership programme impact on your life

A series of questions was put forward to the respondents, to determine the impact of the programme on their individual capacity. Bearing in mind that core to the EPWP objectives is empowerment; a measure of the impact will give perspective to the success of the programme.

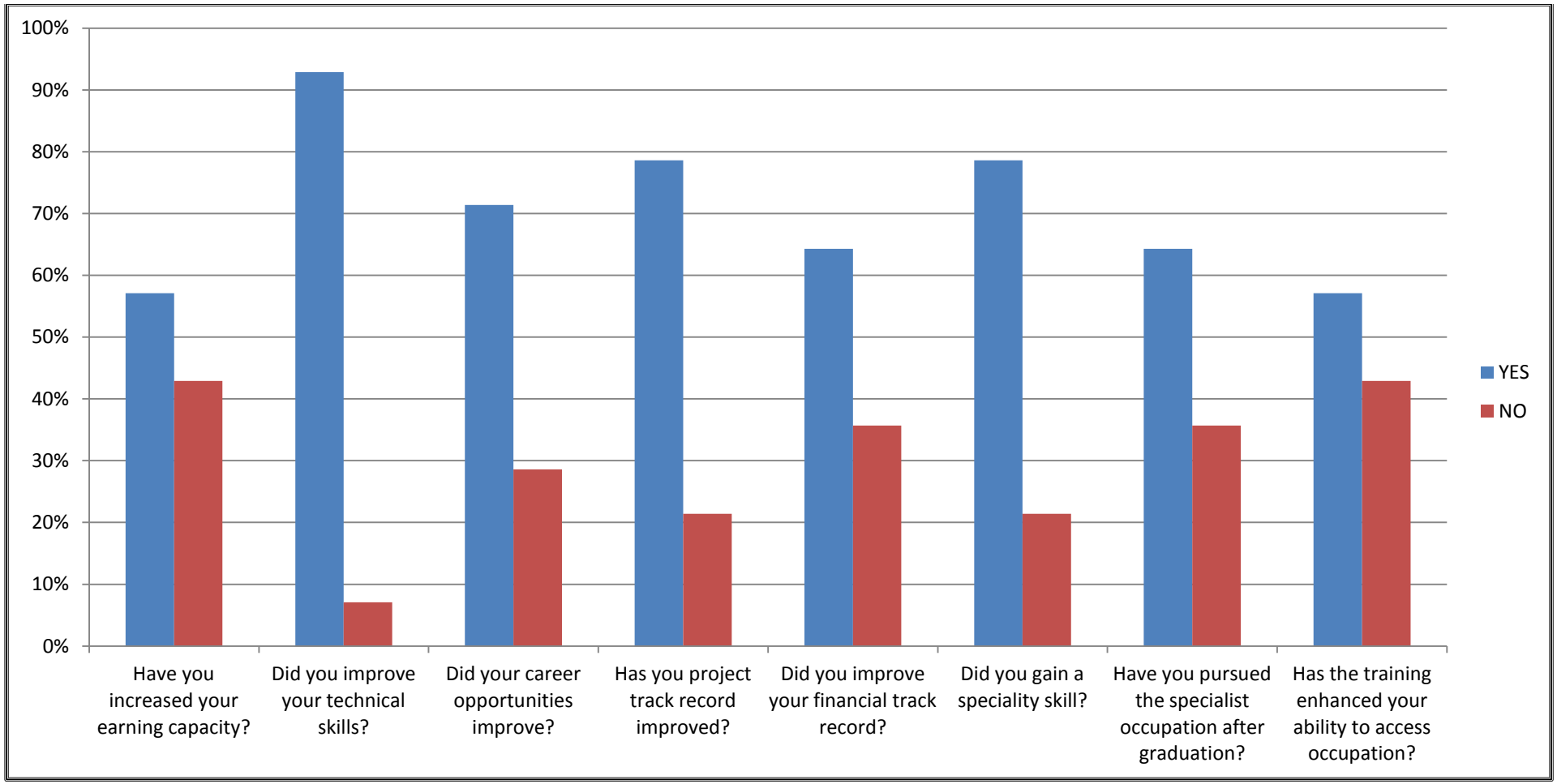

Figure 6-34 Vuk'uphile Impact

Figure 6.34 shows that within some degree of variance the responses show that Vuk'uphile is indeed making an impact on the small contractors. The high percentage of graduates who have improved their technical skills, career opportunities and earning capacity shows the positive empowerment influence of the programme.

These programme benefits are not only limited to individuals but extend to the business (contracting entity). The respondents articulate an improved project track record, financial record and ability to obtain specialized skills. Vuk'uphile is not only focusing on the development of individuals but it is seeing through the constructive development of contracting entities which can have a wholesome impact on the economy. Miles and Ward (in Neck and Nelson, 1987: 7-8) articulate the importance of supporting small businesses which can be best summarized as:

- makes effective use of local materials and resources;
- creates jobs at relatively low capital cost (small enterprises are more likely to choose employment-intensive solutions);
- provides a vehicle for introducing a more equitable income distribution;
- employs workers with limited formal training, who then learn skills on the job and provide a pool of local skills that will favour future economic development; and
- adapts flexibly to market changes.

In view of the responses in Figure 6.34 and the relevance of Miles and Ward's sentiments, Vuk'uphile can therefore be evaluated as having a positive impact to the economy.

Are you currently employed or unemployed?

43% of the respondents indicated that they were employed in their own companies and their job title was contractor. These findings reflect positively on the Vuk'uphile learnership as well as the graduates from the program. It should be appreciated that previous PWPs have failed to

yield significant development of the graduate contractors. The 43% represents success in tendering, securing finances, and project implementation, which have always troubled the growth of small contractors.

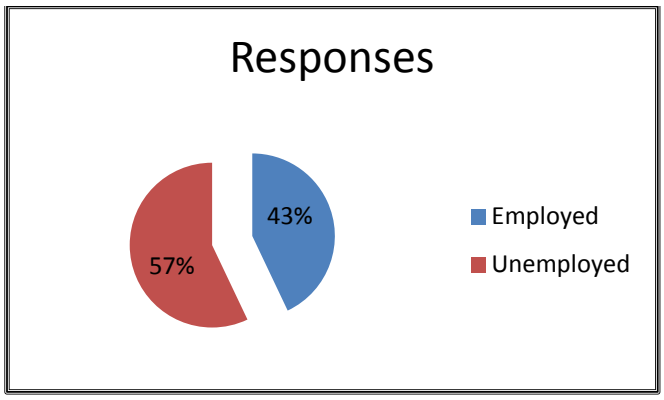

Figure 6-35 Percentage Graduates Employed

It is important to note that of the 57% who are currently unemployed, none has secured employment in another company. This finding is open to different interpretations but the Vuk'uphile learnership might have resulted in the creation of strong entrepreneurs who appreciate the cyclic nature of construction and business as a whole and are willing to secure their own projects as contractor.

Although the above might not apply to the whole set of unemployed contractors it is important to highlight some of the respondents' views of their failure to obtain employment.

1. Qualification is not recognised by sector. The adequacy of the NQF 2 qualification obtained by the contractors and its sustainability in their personal development is what is being questioned. (Appendix B contains the SAQA level descriptors.) It seems that although the NQF 2 qualification is adequate within the premise of the learnership and aiding the contractors to run their own companies, the NQF level 2 training under the learnership does not make the contractor easily employable. In this regard it is recommended that the NQF level 4 training be offered to the contractors and not be limited to the supervisors.

2. No related work in area. The availability of work is cyclic due to the nature of the construction industry: even big companies have experienced a dip in projects after the 2010 Soccer World Cup. As already mentioned in the preceding section, it is not enough to graduate contractors and let them fend for themselves. The EPWP should spearhead the development of a longer exit programme ensuring that skills developed are harnessed as the contractors gradually are empowered out of the system.
3. Not enough work experience gained. Although this issue was raised, the comprehensiveness of the Vuk'uphile training seems to be credible as given Figure 6.14.

Although these perspectives are important, of note is that positive views on the above factors were given by the contractors who are currently employed on projects. This opens up a debate which portrays the impact of the programme. It is the researcher's view that further study be done on the Vuk'uphile graduates to extract more information to the reasons for the conflicting responses.

What is your reaction to the following statement: Overall, Vuk'uphile Learnership Programme has positively contributed to my life.

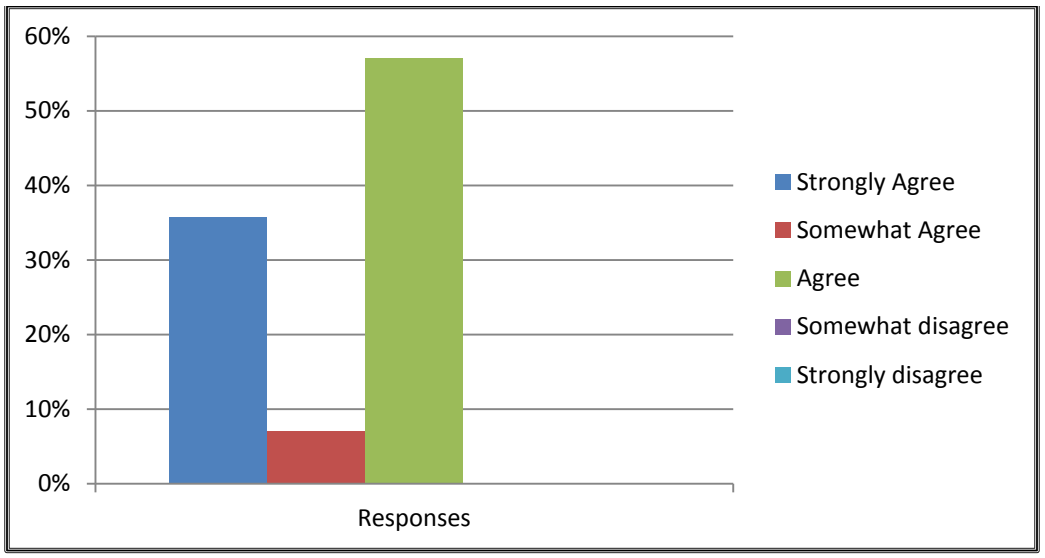

Figure 6-36 Overall Impact of Vuk'uphile

The question provided for five different interpretations: figure 6.36 shows that 100% of the respondents do agree that Vuk'uphile has positively contributed to their lives. This is very interesting, given the fact that the respondents highlighted areas of shortcomings throughout the responses to the survey. It becomes evident that although respondents feel that the programme can be improved the Vuk'uphile Learnership is indeed delivering on its mandate to ensure small contractor development.

6.4 Summary of Analysis

The summary of the research findings indicate that the questionnaire[4] has captured the core objectives of the Vuk'uphile learnership: the responses solicited from the participants talk to the programme outcomes, hence creating an evaluation platform for this research. It is important to indicate that like all research design the questionnaire has weaknesses: bias cannot be eliminated completely from the responses, however the work-shopping of the document allowed for a high response rate which has allowed broad information from which to make conclusions on the EPWP Vuk'uphile in Ekurhuleni. The responses indicate that the programme is indeed developing small contractors and points out to a need to revisit mentors' and training providers' roles. These findings will be discussed to a greater extent in the conclusions of this research.

[4] The reduced data in Microsoft Excel from the questionnaires can be readily provided by the researcher, kindly contact andrewmukanyima@gmail.com

CHAPTER 7 CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

This research sought to evaluate the EPWP Vuk'uphile Learnership Programme within Ekurhuleni Metropolitan Municipality, based on a review of the literature, surveys of small contractors and project managers, a case study and the use of project data. The findings of this research are important as they inform programmatic intervention to facilitate the continued growth of small contractor development initiatives within Ekurhuleni. This is particularly relevant, in the light of the imminent implementation of Phase II of the EPWP Vuk'uphile learnership programme. The research findings also seek to add to the knowledge base of small contractor development beyond the confines of the study area and the EPWP.

7.2 Conclusions

The outcomes of a programme such as Vuk'uphile can best be measured against the goals and objectives which it seeks to achieve. The findings of this research form an independent assessment of how "an outsider" views the Monitoring and Evaluation processes within the EPWP, as this research uses the same programme objectives to evaluate the programme. This research also offers a comparative evaluation of the programme based on literature thereby providing conclusions and recommendations based on best practice.

The detail given below, as already discussed in chapter four, presents the Vuk'uphile goals, objectives and expected outcomes. The focus of this research was on the participation of small contractors within EPWP Vuk'uphile learnership in Ekurhuleni Metropolitan Municipality.

Vuk'uphile Phase 1 Goal

To develop emerging contractors into fully-fledged business entities which are able to execute labour-intensive projects.

Objectives and Outcomes

- Develop Learner Contracting Companies (Emerging Contractor)
  - One (1) contractor, i.e. Manager of entity (trained at NQF 2) Labour Intensive Methods of Construction and Entrepreneurial Skills Programme
  - Two (2) site supervisors i.e. technical expert (trained at NQF 4 – 218 Credits) Labour Intensive Methods of Construction
- Increase capacity in LIC sector to support EPWP.
- To provide a contracting entity that is able to operate locally and wider.
- Provide a contracting entity that is able to sustain itself in the open market after completion of the training, and
- Skills Transfer with Contractors & Supervisors to emerge with:
  - Recognised Qualification
  - Project Track Record
  - Financial Track Record
  - Relationship with a bank
  - CIDB Ranking of Grade 3 to 4 (EPWP Vuk'uphile Promotional material, undated)

The research findings indicate that the selection of candidates is in line with what has been set out in the programme guidelines. The transparency of the selection process is evident in all the participants going through standard interviews and the fact that information of the program was advertised through public media. The findings show that due consideration has been given

to the candidates' selection process. The high need for skills development, obtaining a formal qualification and growing one's own business shows that programme design is paying attention to the identification of candidates with an entrepreneurial spirit. The need to explore and implement such a rigorous selection process is also advocated for by Croswell and McCutcheon (2001).

The research findings also indicate that the programme is failing to meet the 40% and 2% EPWP targets on the percentage recruitment of women and people with disabilities respectively. The importance of these targets is reinforced by an extract from the speech by Minister of Women, Children and People with Disabilities (2011): "The failure by both the public and private sector to achieve the 2% target set for the employment of people with disabilities as part of our workforce is an indictment of our commitment to give life to the Constitution we fought so hard for." The Vuk'uphile learnership falls under the umbrella of EPWP projects, hence the same guidelines and principles apply.

The Vuk'uphile learnership, as discussed, is made up of four services, classroom training, practical training, mentorship and access to finance. The contribution of the four services is meant to provide a strong base for the development of small contractors into a complete contracting entity. The research findings indicate that there is a general appreciation among the contractors of the services offered. The importance placed on the practical training and classroom training support the fact that the programme is indeed nurturing skills among project participants. The importance of access to finance cannot be undervalued and no business can function without a stable cash-flow. The slightly lower importance placed on mentorship seems to indicate that mentorship is failing to have the desired impact among the project participants.

There is a strong consensus among the respondents that the current Vuk'uphile training structure is acceptable and makes sense to the programme participants. Although several recommendations have been put forward by participants, the varying nature and backgrounds of students should be appreciated: from the researcher's own experience some students prefer and understand theory more easily than practical application, and vice versa. Of key note to this research is the insatiable desire shown by contractors to gain relevant skills and qualifications. The small contractors' credit greatly the success they have achieved in implementing projects to the training received in the learnership. In this regard training in the programme is in line with the ILO report on employment in the twenty first century (2001) citing (Fluitman, 1989) which recommends that training must be demand lead, it must be "needed, wanted and feasible"

The completion of the Vuk'uphile training model and schedules is central to the development of the small contractor. The research findings indicate that 91% of the project participants completed all aspects of the training. This high level of success can be extrapolated into the exit projects done by the graduate contractors. The results as evidenced by the case study give a very robust and clear picture of the successful development of a fully-fledged business entity which is able to execute labour-intensive projects.

This research demonstrates that the same project sectors (roads and storm-water drains) which have been dominant in past rural small contractor development initiatives (Kenya, Botswana, and Gundo Lashu) apply competitively within an urban context such as EMM. This dispels the notion that small contractor development is only suited to rural areas and provides significant opportunities for the Ekurhuleni local government to create jobs and job opportunities due to the labour intensive component of small contractor projects.

Mentorship has been developed in all Public Works Programme as a key means of skills transfer. Interesting to note in the findings is a high appreciation of the mentorship subject areas but a more modest assessment of the impact of the contribution of mentors to the success of the contractors. It is the researcher's view that this points to a poor working relationship between the mentors and contractors due to the style of mentoring provided for in the programme described by Egbeonu 2004 as "executive mentoring[5]". The research findings conclude that there has been considerable effort put into addressing the nature of candidates selected into the programme but no consistent review of the mentorship role.

A key objective of Vuk'uphile is to ensure a competent contracting entity that is able to sustain itself in the open market upon graduation from the learnership. The research findings show that the learner contractors participating in the programme are identifying opportunities as they have tendered for work even while in the learnership. A high percentage of the graduate small contractors on exiting the programme are indeed tendering for EPWP projects as well as private contracts although only a fraction of graduates has been able to obtain tenders. The findings highlight that the program participants to some extent have evolved into independent business entities. It is the researcher's view that although it can be appreciated that the programme is generating some dividend as graduate contractors are successful securing projects, the figures realised from this research are still not satisfactory. As an extension of the exit strategy 'post-learnership' provisions to assist the contractors in the more competitive environment should be adopted, e.g. in the form of selected tender and preferential contracts.

Unlike in previous small contractor development programmes where there was poor and difficult private sector financing of the black contractors (Egbeonu, 2004: 160), the research

[5] "Executive mentoring" as defined by Egbeonu 2004 is when the mentor is a joint signatory to the contractor's bank accounts

findings highlight that the Vuk'uphile learnership has a sound private finance base through ABSA Bank. The learner contractors receive "enough" capital as cash-flow to implement all training projects within the learnership. It is important to point out that all the learnership participants interviewed managed to repay all the loans advanced to them, which is contrary to the perceived lack of financial discipline which has always been associated with small contractors, as cited by Segokgo, Hongve and Overby (2000). The active stakeholder participation within Ekurhuleni Vuk'uphile and the support being given to the small contractors by the EPWP which guarantees their loans from finance houses is a positive development in small contractor programmes in South Africa. This outcome ties in with the Vuk'uphile inline objectives to ensure a credible financial track record as well as a relationship with the bank for the contractor on exiting the learnership. The achievements and progress made in these aspects provide a key success area for the learnership programme.

The CIDB grading offers a unique assessment tool to the growth of contractors within the construction industry. The independence of the CIDB register provides room for credible evaluation of the Vuk'uphile programme participants. The graduates are expected to exit the programme with a minimum grade 3 rating and significantly 77% of the participants have achieved this. Although questions can be asked about the remaining percentage it is the researcher's view that there is significant growth within the Ekurhuleni small contractors who participated in the programme.

The case study in chapter five points to the fact that the Vuk'uphile in Ekurhuleni is providing quality graduates and that there is a sustainable exit strategy within the programme. The ability of the Joint Venture to raise their own project finances, clearly demonstrates self sustainability among the contractors. Although it can be argued that the results are only from three contractors graduating from the programme, the researcher would like to note that the quality demonstrated on this project has "internal validity" within the Ekurhuleni graduates. Various

other exit project sites were visited and discussed with Ekurhuleni project managers and they do attest to the fact that they are getting quality for money from the small contractors' projects.

Vuk'uphile seeks to develop the under-resourced and the unemployed socio-economically. The findings indicate that small contractors duly acknowledge that the programme has made a positive impact in their lives. It is interesting to note that there are more respondents who highlight the successes of the programme than those who think otherwise. It is the researcher's view that Vuk'uphile is indeed changing lives for the better; the fact that there is dissent in some quarters does not mean programme failure but rather creates the window of opportunity sought by this research to provide recommendations which can try to address the issues raised by some of the small contractors.

In light of the above it is the researcher's view that the EPWP Vuk'uphile in Ekurhuleni is to a great extent a successful enterprise. The role played by the EPWP, Ekurhuleni and other stakeholders in identifying past failures in PWPs and mitigating them has ensured that sustainable growth is realized in this programme. However the research findings also identify areas for improvement, for which this research will provide recommendations.

7.3 Recommendations

The research findings clearly illustrate that there has been a significant positive shift in the implementation of small contractor development within the EPWP. Although areas of weakness have been identified through this research, recommendations have been provided to inform programmatic intervention where necessary and facilitate the continued growth of small contractor development initiatives within Ekurhuleni EPWP.

- Significant effort should be put in trying to attract more women into the programme by effectively engaging female business groups. It should be noted that the success of women's empowerment within the programme can only be realised by attracting suitable candidates and not just making the numbers. The programme should also promote applications from people with disabilities and effort should be made to workshop the programme within disability centres.
- The small contractors must attain the same level of qualification (NQF4) as supervisors on exiting the programme. The research findings indicate there is a desire within the ranks of the respondents to absorb more knowledge to the benefit of small contractor development. The eagerness demonstrated is commendable and any future implementation programme should ensure corresponding levels of training for the contractors and supervisors.
- The Vuk'uphile curriculum should include training in entrepreneur development and business strategy, to enable small contractors to appreciate the competitive nature of construction and identify business and work opportunities. Focus should also be given on current tendering procedures training through more exposure to the practical tendering exercise. If the small contractors cannot tender they cannot be able to get work.
- The research recommends that a module on the workings of the CIDB and its processes be incorporated into the curriculum of the learner contractors.
- The EPWP and CETA should devise a joint method to monitor the adequacy of the training received by the small contractors. Training service providers must have adequate facilities and the requisite experience to teach Labour Intensive Construction.
- Mentorship reformulation rather than removal is recommended for the programme: a systematic monitoring process should be setup for mentorship. Mentors must be interviewed and their capacity to offer mentorship support should be assessed regularly.
- Mentors and Contractors should hold participatory workshops during the course of the learnership and all issues raised should be addressed through the EPWP unit.

- A continuous monitoring exercise must be put in place by the EPWP to evaluate performance of the mentors and trainers. A review on the choice of mentors and trainers is recommended and their contracts must be renewable on performance.
- The existing private finance arrangements in the programme must be maintained and the EPWP must continue to provide guarantees against the loans to the small contractors within the learnership.
- The Vuk'uphile exit strategy must foster strong links with industry, it is not enough to spend money on the programme, only to see the productivity lost when skills are underutilized. The exit programme should allow for private and public partnerships so that opportunities are available for contractors from private and public enterprises within the first five years post graduation. In this way, small contractor development can be nurtured and the long term goal of having self-sustaining enterprises realized.
- High stakeholder participation should be fostered and ties already developed within Vuk'uphile must be continually strengthened to ensure the programme's continued growth.
- 'Post-learnership' support to assist the contractors in the more competitive environment should be adopted, typically three to five years after graduation e.g. in the form of selected tenders and preferential contracts.

7.4 Limitation

The conclusion and recommendations are relevant specifically to the EPWP Vuk'uphile Learnership Programme in Ekurhuleni. The findings should be verified and adapted for other programmes and in regions beyond the study area.

7.5 Further Study

A longitudinal evaluation should be done on the EPWP Vuk'uphile learnership within Ekurhuleni so as to ascertain the long term impact of the small contractor development initiatives. A study of the roles of mentorship and teaching methods within the programme should also be conducted.

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APPENDIX A: NDPW CLEARANCE

public works
Department:
Public Works
REPUBLIC OF SOUTH AFRICA

EXPANDED PUBLIC WORKS PROGRAMME

Private Bag X65, PRETORIA. 0001 Int Code: +27 12 Tel: 337 3000/2163/3397/3441 Fax: 086 697 2366
Cell: 082 957 9384 e-mail: thembani.mackaukau@dpw.gov.za website: www.publicworks.gov.za

Unit 79 Calrswald Creek,
Calswald, Ninth Road,
Midrand 1685

Attention: Mr. Andrew Mukunyima

Dear Sir,

APPROVAL FOR MR ANDREW MUKANYIMA TO UNDERTAKE EVALUATION OF THE EPWP VUK'UPHILE LEARNERSHIP PROGRAMME

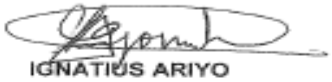
The National Department of Public Works has approved your request to undertake an evaluation of the implementation of the EPWP Vuk'uphile Learnership Programme as a research project for your Masters of Science in Engineering degree.

All interviews and questionnaires shall only be carried with the consent of the participants and the data so obtained shall solely be for the purposes of this research and shall not form part of any publication except the research report for the Masters of Science in Engineering degree.

The findings, conclusions and recommendations of the research report shall be made available to the National Department of Public Works.

APPROVAL FOR MR ANDREW MUKANYIMA TO UNDERTAKE EVALUATION OF THE EPWP VUK'UPHILE LEARNERSHIP PROGRAMME

Yours Sincerely,



IGNATIUS ARIYO
CHIEF DIRECTOR: EPWP INFRASTRUCTURE SECTOR
NATIONAL DEPARTMENT OF PUBLIC WORKS,
DATE: 1/09/2011

APPENDIX B: QUESTIONNAIRES

This section contains the ECI Africa Questionnaire complied in coordination with the NDPW. Also included is the draft questionnaire which was prepared by the researcher.

VUK'UPHLE CONTRACTOR DEVELOPMENT QUESTIONNAIRE: CONTRACTORS AND SUPERVISORS

INTRODUCTION: The interviewer introduces himself/herself to the respondent.

Name of Interviewer:_____

I. GENERAL INFORMATION

1.	Date of Interview	
2.	Name of respondent	
3.	Cell phone number	
4.	Name of Company	
5.	Position in Company	Contractor 1 Supervisor 2
6.	How long has your company been in existence?	
7.	Business Partners	Contractor and mentor 1 Contractor and Supervisor 2 Contractor only 3 Supervisor only 4

II. MOTIVATION FOR ENROLLING IN VUK'UPHILE LEARNERSHIP PROGRAMME

Q1. When did you start Vuk'uphile Learnership Programme?

Month:_____

Year:_____

Q2. What are the top three (3) reasons that that made you to enrol in Vuk'uphile Learnership Programme?

Access to free study	1	
Earn a stipend	2	
Employment gain	3	
Formal qualification gain	4	
Skills improvement	5	
Start own contractor business	6	
To grow own business	7	
To tender for government /private contracts	8	

To gain access to funding	9		
Other	10		

Q3. When did you complete the Vuk'uphile Learnership?

Month: _____

Year: _____

III. COMPANY BUSINESS PARTNERS

Q4. About the people in your company, including yourself (respondent) .....[TICK BELOW]

a. How many are males and how many are females?
b. What are the ages of these people?
c. What population group?
d. Does any of you suffer from a disability?
e. Have any of you ever run your own business before?

	RESPONDENT	PARTNER 1	PARTNER 2
a. GENDER			
- Male	1	1	1
- Female	2	2	2
b. AGE			
- 18-24	1	1	1
- 25-34	2	2	2
- 35-49	3	3	3
- 50+	4	4	4
c. POP.GROUP:			
- Black	1	1	1
- White	2	2	2
- Coloured	3	3	3
- Indian	4	4	4
d. DISABILITY			
- Yes	1	1	1
- No	2	2	2
e. RUN OWN BUSINESS BEFORE			
- Yes	1	1	1
- No	2	2	2

IV. VUK'UPHILE LEARNERSHIP EXPERIENCE

A. INFORMATION ON PARTICIPATING IMPLEMENTING BODIES

Q5. (a) At what centre did you complete the Learnership?

	Province	Implementing Body (Name department or municipality etc)
	Eastern Cape	
	Free State	
	Gauteng	
	KwaZulu-Natal	
	Limpopo	
	Mpumalanga	
	North West	
	Northern Cape	
	Western Cape	

(b) How did apply to participate in the Vuk'uphile Programme?

I saw the advert for Vuk'uphile Programme	1
I heard about the Programme from someone I know	2
Other (Specify .....)	3

(c) How were you selected to participate in the Vuk'uphile Programme?

Interviewed by the Municipality/NDPW	1
Interviewed by the NDPW	2
Interviewed by both the Municipality and the NDPW	3
Other (Specify .....)	4

(d) Is the centre located in an urban or rural area?

Urban	1
Rural	2

B. VUK'UPHILE LEARNERSHIP PROGRAMME SERVICES

Q6. I am going to read to you the services offered by the Learnership programme. Please tell me which of these services you received.	
1. Classroom training	
2. Practical training	
3. Mentorship support	
4. Access to finance	

Q7. I am going to read to you the services offered by the Learnership programme. Please tell me which of these was the MOST useful to you, second most useful, third and fourth i.e. the least useful? **RANK IN ORDER**	
1. Classroom training	
2. Practical training	
3. Mentorship support	
4. Access to finance	

Q8. **ASK FOR THE MOST USEFUL**; Why did you find ... most useful?
.....
.....
.....
.....
.....
.....
.....
.....

C. TRAINING PROGRAMME

Q9. What was the name of your training service provider during the Learnership?	

Q10. How relevant and useful did you find training that you received? Did you find the training for each of the following, very useful/ quite useful or not useful? **ANSWER FOR WHAT IS APPLICABALE TO YOU, i.e. EITHER CONTRACTOR OR SUPERVISOR**			
CONTRACTORS	**Very useful**	**Quite useful**	**Not useful**
1. Numeracy and mathematics	1	2	3
2. Problem solving techniques	1	2	3
3. Working out quantities required / costing	1	2	3
4. Communication in the workplace	1	2	3
5. Report writing and analysis	1	2	3
6. Starting up and managing a business	1	2	3
7. Tendering procedures	1	2	3
8. Contract / legal requirements	1	2	3
9. Labour intensive construction issues	1	2	3
10. Human Resource Management issues	1	2	3

SUPERVISORS	Very useful	Quite useful	Not useful
1. Numeracy and mathematics	1	2	3
2. Quality management	1	2	3
3. Procurement / buying and storage of materials	1	2	3
4. Communication in the workplace / Communication skills	1	2	3
5. Report writing and analysis	1	2	3
6. Interpreting technical drawings	1	2	3
7. Contract / legal requirements	1	2	3
8. Civil construction procedures	1	2	3
9. Labour intensive construction issues	1	2	3
10. Human Resource Management issues	1	2	3

Q11. What were the main problems you experienced during your classroom training? **SPONTANEOUS**

.....
.....

.....
.....

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.....

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.....

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.....

Q12. Please tell me what you would prefer:

Would you rather do all the training first / upfront OR	1
Do some training, followed by a project and more training (as it is now)	2

Q13. Why do you say that? **PROBE**
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

D. TRAINING PROJECTS

Q14. How many training projects did you complete during the Vuk'uphile Learnership?	
One	1
Two	2
Three	3
Four	4
More than four	5
None	6 – SKIP TO Q17

Q15. ASK A/ B/ C /D FOR EACH PROJECT COMPLETED

A. In which sector was this project?			
	PROJECT 1	PROJECT 2	PROJECT 3
1. Road construction / sidewalks / paving	1	1	1
2. Stormwater drains	2	2	2
3. Sanitation projects	3	3	3
4. Water projects	4	4	4
5. Manufacturing e.g. block making / stadium and facilities management	5	5	5
6. Other (specify).....	6	6	6
B. Have you ever worked in this particular industry sector before?			
- Yes	1	1	1
- No	2	2	2
C. Was this project in the same sector for which you had received training?			
- Yes	1	1	1
- No	2	2	2
D. To what extent did the mentorship you received, assist you with the completion of this project?			
- A lot	1	1	1
- A little	2	2	2
- Not at all	3	3	3

E. Did the training you received assist you in completing the project?			
- Yes - No	1 2	1 2	1 2

Q16. Have you/ your company tendered for a project/ contract outside of the Learnership programme while you were undergoing training?	
Yes No	1 2 – **SKIP to Q18**

Q17. **IF YES**: Was your company successful in getting this tender?	
Yes No	1 2

E. PROJECT FINANCE: FINANCIAL SUPPORT FROM ABSA

Q18. During the Learnership, were you able to obtain a loan from ABSA?	
Yes No	1 2 ..... SKIP TO Q25

Q19. If YES, How much did you get from ABSA? .....

Q20. If YES, How much did you get for the value of the Tender?	
25% 50% 75% 100%	1 2 3 4

Q21. If YES, Did you have to re-pay money loaned to you by ABSA?	
Yes No	1 2

Q22 (a). **IF YES** – How easy / difficult did you find it to repay the loans?	
Very easy Quite easy Difficult Very difficult	**1** 2 3 **4**

Q23 (b). If **NO** – What was the main reason for not repaying the loan?	
	1 2 3 4

Q24. If NO from Q18, what was the main reason for not obtaining a loan from ABSA?
.....
.....

F. MENTORSHIP SERVICES

Q25. What was the name/ company name of your mentor?	
Q26. In what sector/ industry are they?	

Q27 (a) Based on your experience during the Learnership, please tell me whether your mentor was very helpful, quite helpful or not at all helpful on each aspect I read to you. Now how helpful was your mentor with....?

	VERY HELPFUL	QUITE HELPFUL	NOT AT ALL HELPFUL
1. Finance and dealing with banks	1	2	3
2. Business management	1	2	3
3. Contract management	1	2	3
4. Procurement of materials and other required services	1	2	3
5. Technical and engineering	1	2	3
6. Tendering	1	2	3
7. Construction Planning and Management	1	2	3
8. Fulfilling of statutory and tax obligations	1	2	3
9. Labour and human resource advice	1	2	3
10. Human Resource Management issues	1	2	3

Q27 (b) What would you state as an explanation for your answers in Q27 (a) above. What did the mentor do to help? OR What did the mentor fail to do that you expected them to do?
.....
.....
.....
.....
.....

.....
.....
.....

Q28. To what extent would you say your mentor contributed to the success of your company?	
1. A lot 2. A little 3. Not at all	1 2 3

Q29. Thinking about the meetings that you had with your mentor, would you say that.....? **SPONTANEOUS – ONE ANSWER**	
1. You had enough meetings 2. Too few 3. Too many	1 2 3

Q30. Finally thinking of the overall Vuk'uphile program, if there was **one** thing you could change or improve, what would that **ONE** thing be? And why?
.....
.....
.....
.....

III. EXPERIENCE POST LEARNERSHIP PROGRAMME (OUTCOME)

A. IMPLEMENTING LABOUR INTENSIVE CONSTRUCTION PROJECTS

Q31. Since you completed the Learnership, are you aware of the EPWP Guidelines for labour intensive construction projects?

Yes	1
No	2

Q32. Since you completed the Learnership, have you tendered for labour intensive construction projects under EPWP?

Yes	1
(SKIP TO Q41).....No	2

Q33. If yes, how many tender applications have you submitted?

1-3 tender applications	1
4-6 tender applications	2
More than 6 tender applications	3

Q34. How many of the submitted tender applications were successful?

1-2 tenders	1
3-4 tenders	2
5 and more tenders successful	3
None of my tender application was successful	4

Q35. What is the total value of ALL the projects that you successfully tendered for?

Less than R500, 000	1
Between R500, 000 and R1 million	2
Between R1 million and R1.5 million	3
Between R1.5 million and R2 million	4
More than R2 million	5

Q36. What is the highest value of the project that you successfully tendered for?
.....

Q37. In which sectors were the projects that you successfully tendered for and implemented?

Roads	1
Pavements	2
Storm water	3
Water / Sanitation	4
Electricity	5
Other, specify (.....)	6

Q38 (a) Which organisations (government departments or municipalities) commissioned these projects? List them:

	1
	2
	3
	4
	5
	6

Q38 (b) Are these projects in urban or rural area?

Urban	1
Rural	2
In both urban and rural	3

Q39. How many people do you or you have employed while implementing these projects?

1-5 employees	1
6-10 employees	2
11-15 employees	3
16-20 employees	4
More than 20 employees	5

Q40. Of the people you employ, how many are:

Youth		1
Women		2
Disabled		3
Men		4

Q41. If NO from Q32, what is the reason or reasons you have not been able to tender for labour intensive construction projects?

I am employed by another company in the construction industry	1
My company is no longer in operation	2
I am unable to put together tender application	3
I have not seen request for tenders in Labour Intensive Construction Projects	4
Other (specify).....	5

Q42. Did the Vuk'uphile Learnership lead to the improvement of the CIDB Grading of your company?

Yes	1
No	2

Q43. If yes, what is the current CIDB Grading?

Grade 1	1
Grade 2	2
Grade 3	3
Grade 4	4
Higher than Grade 4	5

Q44. If NO from Q42, what would you say is the reason for non-improvement of the CIDB Grading of your company?

B. FINANCIAL SUPPORT FOR PROJECT IMPLEMENTATION

Q45. Since you completed the Learnership, has your company been able to raise a loan?

Yes	1	
No	2	>Q48

Q46. If yes, from which financial institution?

ABSA	1
Another Financial Institution, name it (.....)	2

Q47. What is the total amount of loan finance you have been able to raise?

Amount: R.....	1

Q48. If no, what was the reason? List:

	1
	2
	3

Q49. Now that you have successfully completed the Vuk'phile Learnership and are running your own company, how would you rate the overall impact of the Programme on your business?

Had a great positive impact	1
Had impact to some extent	2
Had no impact at all	3

III. VUKUPHILE LEARNERSHIP PROGRAMME IMPACT ON YOUR LIFE

Q50. Did your participation lead to an increase in your earning capacity?

Yes	1
No	2

Q51. Improve your technical skills?

Yes	1
No	2

Q52. Improve your career opportunities?

Yes	1
No	2

Q53. Improve your project track record?

Yes	1
No	2

Q54. Improve your financial track record?

Yes	1
No	2

Q55. Did the training equip you with a particular speciality skill linked to a particular project?

Yes	1
No	2

Q56. Have you pursued the specialist occupation when the EPWP project was complete?

Yes	1
No	2

Q57. Has the training enhanced your ability to access occupation in the construction sector?

Yes	1
No	2

Q58. Are you currently employed or unemployed?

Employed in own contractor company	1
Employed by another company (Name of Company_____	2
(SKIP TO Q61) Unemployed	3

Q59 (a) If employed, what is your job title

Contractor	1
Supervisor	2
Other (Specify.....)	3

Q59 (b) If employed, in what type of projects?

Roads	1
Pavements	2
Storm water	3
Water / Sanitation	4
Electricity	5
Other (Specify.....)	6

Q60. And, what is the nature of employment?

Contract	1
Permanent	2
Casual	3

Q61. If unemployed, what are reasons?

No demand for people with this type of qualification	1
No related work in this area	2
Not enough work experience	3
Not interested in work related to the Vuk'uphile Learnership	4
Other	5

Q62. Has the Vuk'uphile Learnership Programme enabled you to get a job?

Yes	1
(If no, go to Q64) .....No	2

Q63. If yes, please provide reasons

Qualification is recognized by the sector	1
There is a demand for people with this type of qualification	2
There is a demand for people with this level of qualification	3
There is related work in this area	4
Will have gained the necessary work experience	5
Other	6

Q64. If no, please provide reasons

Qualification not recognized by the sector	1
No demand for people with this type of qualification	2
No demand for people with this level of qualification	3
No related work in this area	4
Not enough work experience gained	5
Other	6

Q65. What is your reaction to the following statement: Overall, Vuk'uphile Learnership Programme has positively contributed to my life.

Strongly agree	1
Somewhat agree	2
Agree	3
Somewhat disagree	4
Strongly disagree	5

Thank you for your Time and Effort!
End of Interview

QUESTIONAIRE DESIGN

Draft Questionnaire

My name is Andrew Mukanyima student number 345949 from the University of the Witwatersrand in Johannesburg. I am currently carrying out an evaluation of the Vuk'uphile Contractor Learnership programme as part of MSc Degree in Civil Engineering and would appreciate your co-operation with responses to the questions listed below. The evaluation is intended to inform the body of knowledge on small contractor development as well as provide the National Department of Public Works with an independent evaluation of how the programme is being implemented in Ekurhuleni Metropolitan Municipality. The research conclusions and recommendations will provide broad Monitoring and Evaluation data as well as offer programmatic interventions for future phases of the programme. The objective of this interview is to obtain input from programme participants on how to best implement this project for the benefit of the intended beneficiaries.

My Supervisor is Dr Anne Fitchett; contact details Anne.Fitchett@wits.ac.za, 011 717 7107

My facilitators are:

(i) Mr. Ignatius Ariyo, Chief Director, EPWP (NDPW); Ignatius.Ariyo@dpw.gov.za, 012 337 2716

(ii) Mr. Thembani Mackaukau, Director, EPWP (NDPW); Thembani.Mackaukau@dpw.gov.za, 012 337 2163

Please note that this questionnaire will be used as part of a consultative process to inform research on the evaluation of small contractor development within Vuk'uphile in Ekurhuleni. All the information provided shall be kept confidential and only used for the purpose of this research.

DRAFT

Answer all questions according to the best of your knowledge, skills and experience. Choose an answer that best fits your knowledge and understanding of the subject. You may provide your name or organisation IF you wish but this is optional and any provided name will remain confidential

ORGANIZATION NAME :
CONTACT PERSON :
CONTACT DETAILS :
DESIGNATION :

DRAFT

A. Level of Education and Training

A1. What is your highest formal qualification?

Qualification	Status of Qualification		SAQA level
	Partial	Completed	
Grade 0-10			
Matric			
Diploma/Artisan Qualification			
Bachelor Degree, 4yr Prof/tech degree			
Postgraduate diploma/degree			

If the answer to any of the above is "Partial" kindly indicate the name and highest year of qualification
finished.....

A2 Previous On the job training or experience before entering Learnership

Training Programme/Activity	Course/Qualification	Status of Qualification	
		Partial	Completed

Note: participants are encouraged to fill in the blank spaces with any relevant training schedule provided which might have been omitted by the questionnaire.

If the answer to any of the above is "Partial" kindly indicate the name and highest year of Training Programme finished.....

.....

.....

A3. Have you carried out any construction work as a small enterprise before entering Vuk'uphile?

.....

.....

A4. Please tick in the appropriate box the nature of your experience in Construction Industry.

Title	
Small contractor	
Foreman/Supervisor	
Equipment Operator	
Artisan	
General labourer	
Other (specify)	

DRAFT

B Vuk'uphile training Programme

B1. What is the highest level qualification you achieved in the programme?

.....

.....

.....

.....

.....

B2. How would you rate the following aspects of the Vuk'uphile training and how they have benefited your work in the programme?

Training Programme/Activity	Tick Appropriate box			
	Poor	Fair	Good	Excellent
Contract Administration				
Health and Safety				
Management and Supervision of work teams				
Procurement processes and resource management				
Computer Literacy and business communication				
Interpretation of construction drawings and specifications				
Use of Labour Intensive Methods of Construction				
Quality control and management on a construction project				

DRAFT

B3.On the above listed programme activities can you please highlight three which have been most developmental to you.

.....

.....

.....

.....

B4.Please indicate if there is/are any specific area(s) which you still need development in?

.....

.....

.....

.....

Training Duration

B5. During which period where you enrolled in the training programme

Month and year.....to .....month and year

B6. Which implementing body did you participate under? Please fill in below

Department of.....
Municipality.....

B7. Kindly indicate whether you completed training in each phase by ticking appropriate box.

PHASE	Training and expected duration		Was Training Completed		
	Classroom	Practical	Yes	No	Partially
Phase 1	3 months	6 months			
Phase 2	2 months	9 months			
Phase 3	1 month	9 months			

Note: Partially means training was done for a time period less than the expected duration.

DRAFT

B8. If you answered Partially or No please can you indicate a reason to why training was not completed?

.....

.....

.....

Mentorship

B9. How would you rate the following aspects of Mentorship you received and how they have benefited your work in the programme?

Mentorship Aspect	Tick Appropriate box			
	Poor	Fair	Good	Excellent
Technical				
Administrative				
Contractual				
Managerial				
Entrepreneurial/Commercial				

B10. Have you experienced any challenges with working with your mentor? YES / NO

B11. If Yes, can you provide detail of what has been a problem area?

a. Finance	
b. Technical	
c. Managerial	
d. Other (specify).....	

B12. How would you rate the overall contribution of your mentor to your entity?

Poor	Fair	Good	Excellent

DRAFT

B13. In your own words how would you describe the working relationship with the mentor?

.....

.....

.....

C. Selection of Candidates

C1. How did you enter the programme?

I responded to an Advertisement	
I was referred by someone I knew	
Other (specify).....	

C2. How did you meet up with the other two partners in your company?

I have worked with them previously	
I was paired with them in the programme	
They are my friends or relatives	
Other (specify).....	

C3. As a Contracting Company/Entity how many labourers do you employ at present?

.....

C4. How many are?

e. Women	
f. Disabled	
g. Youths	

DRAFT

D. Sponsorship/Financing

D.1 Does your company/entity have the following documents?

To tick appropriate

	Yes	No
SARS tax clearance		
Company Registration Certificate		
BEE Certification		
CIDB Grading		
Others (Specify).....		

D2. Have you encountered problems accessing finance (overdraft facility from bank)?

YES / NO

D3. If YES, please can you specify reason(s)

.....

.....

.....

.....

D4. How do you view Government support in ensuring provision of adequate sponsorship?

Poor	Fair	Good	Excellent

What would you want to be improved?

.....

.....

.....

D5. Has your work or projects been hampered from successful completion due to inadequate support from the bank?.....YES/NO

D6. What is the highest Contract work you have carried out?

DRAFT

Less than R500 000	
R500 000 – R1 000 000	
R 1 000 000 – R2 000 000	
R 2 000 000 – R 3 500 000	
More than R 3 500 000	
Other (specify).....	

How much did you receive as financing from the bank on the Project?

.....

.....

.....

D7. What have been the main challenges in carrying out your projects?

Note: You can tick more than one box

Lack of technical support	
Not enough funding from bank	
Not enough manpower	
Late payment on work carried out	
Not enough equipment	
Other (specify).....	

DRAFT

D8. Does your company have any specific equipment/machinery of your own to carry out work? YES/NO

If YES, please list in the column below.

Type of Equipment	Number

E. Exit strategy

E1. When was the last time you worked on a project for the programme?

Currently working on a project	
Less than 6 months ago	
More than 6 months but less than 1 year	
More than 1 year	

E2. Have you carried out any other project related to the training/learning?

Private Sector (other projects not government related)	
Public Sector (for Government)	

E3. What is the highest contract value you been able to successfully complete

Less than R500 000	
R500 000 – R1 000 000	
R 1 000 000 – R2 000 000	
R 2 000 000 – R 3 500 000	
More than R 3 500 000	
Other (specify).....	

DRAFT

Do you feel your company would be able to carry out a higher value contract? If so, what amount?

R.....

E4. After exiting Learnership have you ventured into

a. Other business (specify).....

b. Or you still in construction related work (Yes/No)? .....

E5. If you are still in construction has your CIDB Grading improved? YES / No

E6. What is your current CIDB Grading after completing the Learnership?.....

E7. What was your CIDB grading when you first started in construction?.....

E8. In your own few words has this programme empowered you or you feel that there are some things that can be improved?

.....

.....

.....

.....

.....

E9. What are your plans for the future?

.....

.....

.....

.....

DRAFT

THANK YOU, END OF QUESTIONNAIRE

APPENDIX C: CIDB GRADING AND JV CALCULATOR

cidb criteria used to determine financial capability

Designation	Upper limit of tender value range (R)	Best Annual Turnover (R)	Largest Contract	Available Capital (R)
7	40,000,000	24,000,000	10,000,000	4,000,000
6	13,000,000	7,800,000	3,250,000	1,300,000
5	6,500,000	3,250,000	1,600,000	650,000
4	4,000,000	2,000,000	1,000,000	200,000
3	2,000,000	1,000,000	500,000	100,000
2	650,000	No Requirement	150,000	No Requirement

cidb
development through partnership

Joint Venture Grading Designation Calculator

Designation	Deemed to satisfy joint venture arrangements
3	Three contractors registered in contractor grading designation 2
4	Three contractors registered in contractor grading designation 3
5	Two contractors registered in contractor grading designation 4 One contractor registered in contractor grading designation 4 and two registered in contractor grading designation 3
6	Two contractors registered in contractor grading designation 5 One contractor registered in contractor grading designation 5 and two registered in contractor grading designation 4
7	Two contractors registered in contractor grading designation 6 One contractor registered in contractor grading designation 6 and two registered in contractor grading designation 5
8	Three contractors registered in contractor grading designation 7
9	Three contractors registered in contractor grading designation 8

[1] The following table summarises the combinations of designations held by Joint Venture partners and which will as a result be deemed to satisfy the requirements for the relevant designation:

APPENDIX D: SAQA LEVELS AND DESCRIPTORS






Level Descriptors for the South African National Qualifications Framework

Purpose and philosophical underpinning

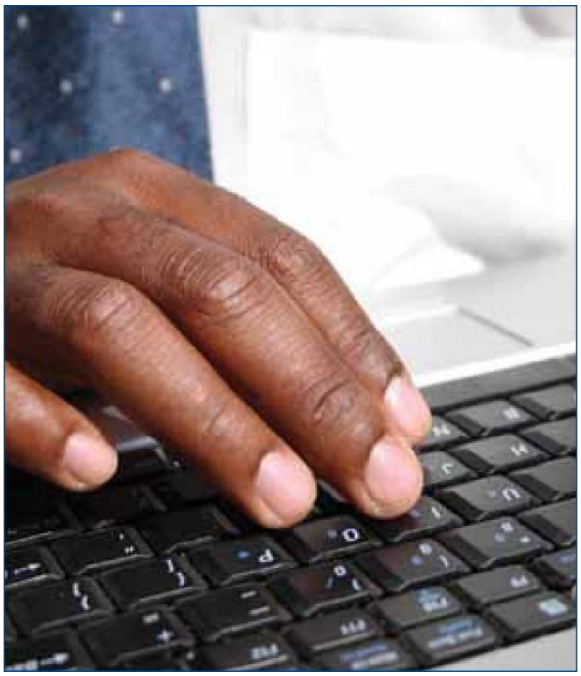
1. The purpose of level descriptors for Levels One to Ten of the National Qualifications Framework is to ensure coherence in learning achievement in the allocation of qualifications and part qualifications to particular levels, and to facilitate the assessment of the national and international comparability of qualifications and part qualifications.

2. In order to advance the objectives of the NQF, the South African Qualifications Authority is responsible for the development of the content of the level descriptors for each level of the NQF in agreement with the three Quality Councils: The Council on Higher Education, Umalusi and the Council for Trades and Occupations.

3. The philosophical underpinning of the National Qualifications Framework and the level descriptors is applied competence which is in line with the outcomes-based theoretical framework adopted in the South African context.

4. Ten categories are used in the level descriptors to describe applied competencies across each of the ten levels of the National Qualifications Framework:

   - Scope of knowledge
   - Knowledge literacy
   - Method and procedure
   - Problem solving
   - Ethics and professional practise
   - Accessing, processing and managing information
   - Producing and communicating of information
   - Context and systems
   - Management of learning
   - Accountability



Definitions

5. In these level descriptors any word or expression to which a meaning has been assigned in the National Qualifications Framework Act (Act 67 of 2008) shall have such meaning unless the context indicates otherwise. A basic set of definitions is given below and further definitions and help in the interpretation of particular words or phrases used in the level descriptors are given in separate guidelines which will be developed by each of the Quality Councils.

6. "Applied competence" has three constituent elements: Foundational competence embraces the intellectual/ academic skills of knowledge together with analysis, synthesis and evaluation, which includes information processing and problem solving; Practical competence includes the concept of operational context; and Reflexive competence incorporates learner autonomy.

7. "Field" means a particular area of learning used as an organising mechanism for the NQF.

8. "Level" means one of the series of levels of learning achievement arranged in ascending order from one to ten according to which the NQF is organised and to which qualification types are pegged.

9. "Level descriptor" means that statement describing learning achievement at a particular level of the NQF that provides a broad indication of the types of learning outcomes and assessment criteria that are appropriate to a qualification at that level.

10. "National Qualifications Framework" is a comprehensive System approved by the Minister for the classification, registration, publication and articulation of quality-assured national qualifications.

11. "Sub-framework" means one of three coordinated qualifications sub-frameworks which make up the NQF as a single integrated system: The Higher Education Qualifications Sub- Framework, the General and Further Education and Training Sub-Framework and the Occupational Qualifications Sub-Framework.

Contextual application of the level descriptors

12. The following principles underpin the application of the level descriptors across the three sub-frameworks of the NQF:

   - There is one common set of level descriptors for the NQF to be used in different contexts
   - The level descriptors incorporate ten competencies
   - The level descriptors are designed to meet the needs of academic as well as occupational qualifications
   - There must be correlation between qualification levels and occupational levels in the world of work
   - The Critical Cross-Field Outcomes of SAQA are embedded in the level descriptors

- Level descriptors are cumulative i.e. there is progression in the competencies from one level to the next
- Level descriptors are applicable to the Recognition of Prior Learning (RPL)
- Level descriptors are descriptive and not prescriptive
- The nomenclature for qualifications is dealt with in the sub-frameworks of the NQF

13. Level descriptors embrace learning in a wide variety of contexts (vocational, occupational, academic and professional) and environments (classroom, laboratory, field, clinic, community, etc.). Contextual interpretation of the level descriptors within each of the three sub-frameworks across academic, professional, and occupational contexts is encouraged. In this regard separate guidelines will be developed for each sub-framework.

14. Level descriptors provide a scaffold from which more specific descriptors can be developed by a variety of different sectors and practitioners, for example discipline-or profession- based. It is also recognised that in the processes of curriculum design and development, the interpretation of these generic level descriptors will be influenced by for example, field-, discipline- and context-specific nuances.

15. The nomenclature for qualifications is dealt within the sub-frameworks of the NQF.

16. Level descriptors are designed to act as a guide and a starting point for, inter alia:
    - Writing learning outcomes and associated assessment criteria for qualifications and part qualifications
    - Pegging a qualification at an appropriate level on the NQF used together with purpose statements, outcomes and assessment criteria
    - Assisting learners to gain admission through RPL at an appropriate level on the NQF
    - Making comparisons across qualifications in a variety of fields and disciplines pegged at the same level of the NQF
    - Programme quality management used together with purpose statements, outcomes and assessment criteria

17. Level descriptors are not learning outcomes or assessment criteria, but rather provide a broad frame from which the specific and contextualised outcomes and assessment criteria for a particular programme can be derived.

18. The competencies listed at a particular level in the framework broadly describe the learning achieved at that level, but an individual learning programme may not necessarily meet each and every criterion listed.

19. Level descriptors do not describe years of study.

20. In the level descriptors, the accessing, analysing and managing of information and communication in terms of reading, listening and speaking will, where applicable, include Braille and sign language to accommodate learners with special needs. In the case of sign language, listening and speaking refer to receptive and productive language use.



Level descriptors

21. The following level descriptors describe the learning achievement at a particular level of the NQF that provides a broad indication of the learning achievements or outcomes that are appropriate to a qualification at that level.

22 .NQF LEVEL ONE

a. *Scope of knowledge*, in respect of which a learner is able to demonstrate a general knowledge of one or more areas or fields of study, in addition to the fundamental areas of study
b. *Knowledge literacy*, in respect of which a learner is able to demonstrate an understanding that knowledge in a particular field develops over a period of time through the efforts of a number of people and often through the synthesis of information from a variety of related sources and fields
c. *Method and procedure*, in respect of which a learner is able to demonstrate an ability to use key common tools and instruments, and a capacity to apply him/herself to a well-defined task under direct supervision
d. *Problem solving*, in respect of which a learner is able to demonstrate an ability to recognise and solve problems within a familiar, well-defined context
e. *Ethics and professional practice*, in respect of which a learner is able to demonstrate an ability to identify and develop own personal values and ethics, and an ability to identify ethics applicable in a specific environment
f. *Accessing, processing and managing information*, in respect of which a learner is able to demonstrate an ability to recall, collect and organise given information clearly and accurately, sound listening and speaking (receptive and productive language use), reading and writing skills, and basic numeracy skills including an understanding of symbolic systems
g. *Producing and communicating information*, in respect of which a learner is able to demonstrate an ability to report information clearly and accurately in spoken/signed and written form
h. *Context and systems*, in respect of which a learner is able to demonstrate an understanding of the context within which he/she operates
i. *Management of learning*, in respect of which a learner is able to demonstrate an ability to sequence and schedule learning tasks, and an ability to access and use a range of learning resources
j. *Accountability*, in respect of which a learner is able to demonstrate an ability to work as part of a group

23 .NQF LEVEL TWO

a. *Scope of knowledge*, in respect of which a learner is able to demonstrate a basic operational knowledge of one or more areas or fields of study, in addition to the fundamental areas of study
b. *Knowledge literacy*, in respect of which a learner is able to demonstrate an understanding that one's own knowledge of a particular field or system develops through active participation in relevant activities
c. *Method and procedure*, in respect of which a learner is able to demonstrate an ability to use a variety of common tools and instruments, and a capacity to work in a disciplined manner in a well-structured and supervised environment
d. *Problem solving*, in respect of which a learner is able to demonstrate an ability to use own knowledge to select and apply known solutions to well-defined routine problems
e. *Ethics and professional practice*, in respect of which a learner is able to demonstrate an ability to apply personal values and ethics in a specific environment
f. *Accessing, processing and managing information*, in respect of which a learner is able to demonstrate the ability to apply literacy and numeracy skills to a range of different but familiar contexts.
g. *Producing and communicating information*, in respect of which a learner is able to demonstrate a basic ability to collect, organise and report information clearly and accurately, and an ability to express an opinion on given information clearly in spoken/signed and written form
h. *Context and systems*, in respect of which a learner is able to demonstrate an understanding of the environment within which he/she operates in a wider context
i. *Management of learning*, in respect of which a learner is able to demonstrate a capacity to learn in a disciplined manner in a well-structured and supervised environment
j. *Accountability*, in respect of which a learner is able to demonstrate an ability to manage own time effectively, an ability to develop sound working relationships, and an ability to work effectively as part of a group

24 .NQF LEVEL THREE

a. *Scope of knowledge*, in respect of which a learner is able to demonstrate a basic understanding of the key concepts and knowledge of one or more fields or disciplines, in addition to the fundamental areas of study
b. *Knowledge literacy*, in respect of which a learner is able to demonstrate an understanding that knowledge in a field can only be applied if the knowledge as well as its relationship to other relevant information in related fields is understood
c. *Method and procedure*, in respect of which a learner is able to demonstrate operational literacy, a capacity to operate within clearly defined contexts, and an ability to work within a managed environment
d. *Problem solving*, in respect of which a learner is able to demonstrate an ability to use own knowledge to select appropriate procedures to solve problems within given parameters
e. E*thics and professional practice*, in respect of which a learner is able to demonstrate an ability to comply with organisational ethics
f. *Accessing, processing and managing information*, in respect of which a learner is able to demonstrate a basic ability to summarise and interpret information

g. *Producing and communicating information*, in respect of which a learner is able to produce a coherent presentation and report, providing explanations for positions taken

h. *Context and systems*, in respect of which a learner is able to demonstrate an understanding of the organisation or operating environment as a system, and application of skills in measuring the environment using key instruments and equipment

i. *Management of learning*, in respect of which a learner is able to demonstrate an ability to learn within a managed environment

j. *Accountability*, in respect of which a learner is able to demonstrate capacity to actively contribute to team effectiveness

25 .NQF LEVEL FOUR

a. *Scope of knowledge*, in respect of which a learner is able to demonstrate a fundamental knowledge base of the most important areas of one or more fields or disciplines, in addition to the fundamental areas of study and a fundamental understanding of the key terms, rules, concepts, established principles and theories in one or more fields or disciplines

b. *Knowledge literacy*, in respect of which a learner is able to demonstrate an understanding that knowledge in one field can be applied to related fields

c. *Method and procedure*, in respect of which a learner is able to demonstrate an ability to apply essential methods, procedures and techniques of the field or discipline to a given familiar context, and an ability to motivate a change using relevant evidence

d. *Problem solving*, in respect of which a learner is able to demonstrate an ability to use own knowledge to solve common problems within a familiar context, and an ability to adjust an application of a common solution within relevant parameters to meet the needs of small changes in the problem or operating context with an understanding of the consequences of related actions

e. *Ethics and professional practice*, in respect of which a learner is able to demonstrate an ability to adhere to organisational ethics and a code of conduct, and an ability to understand societal values and ethics

f. *Accessing, processing and managing information*, in respect of which a learner is able to demonstrate a basic ability in gathering relevant information, analysis and evaluation skills, and an ability to apply and carry out actions by interpreting information from text and operational symbols or representations

g. *Producing and communicating information*, in respect of which a learner is able to demonstrate an ability to communicate and present information reliably and accurately in written and in oral or signed form

h. *Context and systems*, in respect of which a learner is able to demonstrate an understanding of the organisation or operating environment as a system within a wider context

i. *Management of learning*, in respect of which a learner is able to demonstrate a capacity to take responsibility for own learning within a supervised environment, and a capacity to evaluate own performance against given criteria

j. *Accountability*, in respect of which a learner is able to demonstrate a capacity to take decisions about and responsibility for actions, and a capacity to take the initiative to address any shortcomings found

26 .NQF LEVEL FIVE

a. *Scope of knowledge*, in respect of which a learner is able to demonstrate an informed understanding of the core areas of one or more fields, disciplines or practices, and an informed understanding of the key terms, concepts, facts, general principles, rules and theories of that field, discipline or practice

b. *Knowledge literacy*, in respect of which a learner is able to demonstrate an awareness of how knowledge or a knowledge system develops and evolves within the area of study or operation

c. *Method and procedure*, in respect of which a learner is able to demonstrate an ability to select and apply standard methods, procedures or techniques within the field, discipline or practice, and to plan and manage an implementation process within a well-defined, familiar and supported environment

d. *Problem solving*, in respect of which a learner is able to demonstrate an ability to identify, evaluate and solve defined, routine and new problems within a familiar context, and to apply solutions based on relevant evidence and procedures or other forms of explanation appropriate to the field, discipline or practice demonstrating an understanding of the consequences

e. *Ethics and professional practice*, in respect of which a learner is able to demonstrate an ability to take account of, and act in accordance with prescribed organisational and professional ethical codes of conduct, values and practices and to seek guidance on ethical and professional issues where necessary

f. *Accessing, processing and managing information*, in respect of which a learner is able to demonstrate an ability to gather information from a range of sources, including oral, written or symbolic texts, to select information appropriate to the task, and to apply basic processes of analysis, synthesis and evaluation on that information

g. *Producing and communicating information*, in respect of which a learner is able to demonstrate an ability to communicate information reliably, accurately and coherently, using conventions appropriate to the context, in written and oral or signed form or in practical demonstration, including an understanding of and respect for conventions around intellectual property, copyright and plagiarism, including the associated legal implications

h. *Context and systems*, in respect of which a learner is able to demonstrate an ability to operate in a range of familiar and new contexts, demonstrating an understanding of different kinds of systems, their constituent parts and the relationships between these parts, and to understand how actions in one area impact on other areas within the same system

i. *Management of learning*, in respect of which a learner

is able to demonstrate an ability to: evaluate his or her performance or the performance of others and to take appropriate action where necessary; and take responsibility for his or her learning within a structured learning process and to promote the learning of others

j. *Accountability*, in respect of which a learner is able to demonstrate an ability to account for his or her actions, to work effectively with and respect others, and, in a defined context, to take supervisory responsibility for others and for the responsible use of resources where appropriate

27 .NQF LEVEL SIX

a. *Scope of knowledge*, in respect of which a learner is able to demonstrate: detailed knowledge of the main areas of one or more fields, disciplines or practices,

including an understanding of and an ability to apply the key terms, concepts, facts, principles, rules and theories of that field, discipline or practice to unfamiliar but relevant contexts; and knowledge of an area or areas of specialisation and how that knowledge relates to other fields, disciplines or practices

b. *Knowledge literacy*, in respect of which a learner is able to demonstrate a understanding of different forms of knowledge, schools of thought and forms of explanation within an area of study, operation or practice, and an awareness of knowledge production processes

c. *Method and procedure*, in respect of which a learner is able to demonstrate an ability to evaluate, select and apply appropriate methods, procedures or techniques in processes of investigation or application within a defined context

d. *Problem solving*, in respect of which a learner is able to demonstrate an ability to identify, analyse and solve problems in unfamiliar contexts, gathering evidence and applying solutions based on evidence and procedures appropriate to the field, discipline or practice

e. *Ethics and professional practice*, in respect of which a learner is able to demonstrate an understanding of the ethical implications of decisions and actions, within an organisational or professional context, based on an awareness of the complexity of ethical dilemmas

f. *Accessing, processing and managing information*, in respect of which a learner is able to demonstrate an ability to evaluate different sources of information, to select information appropriate to the task, and to apply well-developed processes of analysis, synthesis and evaluation to that information

g. *Producing and communicating information*, in respect of which a learner is able to demonstrate an ability to present and communicate complex information reliably and coherently using appropriate academic and professional or occupational conventions, formats and technologies for a given context

h. *Context and systems*, in respect of which a learner is able to demonstrate an ability to make decisions and act appropriately in familiar and new contexts, demonstrating an understanding of the relationships between systems, and of how actions, ideas or developments in one system impact on other systems

i. *Management of learning*, in respect of which a learner is able to demonstrate an ability to evaluate performance against given criteria, and accurately identify and address his or her task-specific learning needs in a given context, and to provide support to the learning needs of others where appropriate

j. *Accountability*, in respect of which a learner is able to demonstrate an ability to work effectively in a team or group, and to take responsibility for his or her

decisions and actions and the decisions and actions of others within well-defined contexts, including the responsibility for the use of resources where appropriate

28 .NQF LEVEL SEVEN

a. *Scope of knowledge*, in respect of which a learner is able to demonstrate: integrated knowledge of the central areas of one or more fields, disciplines or practices, including an understanding of and an ability to apply and evaluate the key terms, concepts, facts, principles, rules and theories of that field, discipline or practice; and detailed knowledge of an area or areas of specialisation and how that knowledge relates to other fields, disciplines or practices



b. *Knowledge literacy*, in respect of which a learner is able to demonstrate an understanding of knowledge as contested and an ability to evaluate types of knowledge and explanations typical within the area of study or practice

c. *Method and procedure*, in respect of which a learner is able to demonstrate: an understanding of a range of methods of enquiry in a field, discipline or practice, and their suitability to specific investigations; and an ability to select and apply a range of methods to resolve problems or introduce change within a practice

d. *Problem solving*, in respect of which a learner is able to demonstrate an ability to identify, analyse, evaluate, critically reflect on and address complex problems, applying evidence-based solutions and theory-driven arguments

e. *Ethics and professional practice*, in respect of which a learner is able to demonstrate an ability to take decisions and act ethically and professionally, and the ability to justify those decisions and actions drawing on appropriate ethical values and approaches, within a supported environment

f. *Accessing, processing and managing information*, in respect of which a learner is able to demonstrate an ability to develop appropriate processes of information gathering for a given context or use; and an ability to independently validate the sources of information and evaluate and manage the information

g. *Producing and communicating information*, in respect of which a learner is able to demonstrate an ability to develop and communicate his or her ideas and opinions in well-formed arguments, using appropriate academic, professional, or occupational discourse

h. *Context and systems*, in respect of which a learner is able to demonstrate an ability to manage processes in unfamiliar and variable contexts, recognising that problem solving is context- and system-bound, and does not occur in isolation

i. *Management of learning*, in respect of which a learner is able to demonstrate an ability to identify, evaluate and address his or her learning needs in a self-directed manner, and to facilitate collaborative learning processes

j. *Accountability*, in respect of which a learner is able to demonstrate an ability to take full responsibility for his or her work, decision-making and use of resources, and limited accountability for the decisions and actions of others in varied or ill-defined contexts

29 .NQF LEVEL EIGHT

a. *Scope of knowledge*, in respect of which a learner is able to demonstrate: knowledge of and engagement in an area at the forefront of a field, discipline or practice; an understanding of the theories, research methodologies, methods and techniques relevant to the field, discipline or practice; and an understanding of how to apply such knowledge in a particular context

b. *Knowledge literacy*, in respect of which a learner is able to demonstrate an ability to interrogate multiple sources of knowledge in an area of specialisation and to evaluate knowledge and processes of knowledge production

c. *Method and procedure*, in respect of which a learner is able to demonstrate an understanding of the complexities and uncertainties of selecting, applying or transferring appropriate standard procedures, processes or techniques to unfamiliar problems in a specialised field, discipline or practice

d. *Problem solving*, in respect of which a learner is able to demonstrate an ability to use a range of specialised skills to identify, analyse and address complex or abstract problems drawing systematically on the body of knowledge and methods appropriate to a field, discipline or practice

e. *Ethics and professional practice*, in respect of which a learner is able to demonstrate an ability to identify and address ethical issues based on critical reflection on the suitability of different ethical value systems to specific contexts

f. *Accessing, processing and managing information*, in respect of which a learner is able to demonstrate an ability to critically review information gathering, synthesis of data, evaluation and management processes in specialised contexts in order to develop creative responses to problems and issues

g. *Producing and communicating information*, in respect of which a learner is able to demonstrate an ability to present and communicate academic, professional or occupational ideas and texts effectively to a range of audiences, offering creative insights, rigorous interpretations and solutions to problems and issues appropriate to the context

h. *Context and systems*, in respect of which a learner is able to demonstrate an ability to operate effectively within a system, or manage a system based on an understanding of the roles and relationships between elements within the system

i. *Management of learning*, in respect of which a learner is able to demonstrate an ability to apply, in a self-critical manner, learning strategies which effectively address his or her professional and ongoing learning needs and the professional and ongoing learning needs of others

j. *Accountability*, in respect of which a learner is able to demonstrate an ability to take full responsibility for his or her work, decision-making and use of resources, and full accountability for the decisions and actions of others where appropriate

30 .NQF LEVEL NINE

a. *Scope of knowledge*, in respect of which a learner is able to demonstrate: specialist knowledge to enable engagement with and critique of current research or practices; and an advanced scholarship or research in a particular field, discipline or practice



b. *Knowledge literacy*, in respect of which a learner is able to demonstrate an ability to evaluate current processes of knowledge production and to choose an appropriate process of enquiry for the area of study or practice

c. *Method and procedure*, in respect of which a learner is able to demonstrate a command of and ability to design, select and apply appropriate and creative methods, techniques, processes or technologies to complex practical and theoretical problems

d. *Problem solving*, in respect of which a learner is able to demonstrate: an ability to use a wide range of specialised skills in identifying, conceptualising, designing and implementing methods of enquiry to address complex and challenging problems within

a field, discipline or practice; and an understanding of the consequences of any solutions or insights generated within a specialised context

e. *Ethics and professional practice*, in respect of which

a learner is able to demonstrate an ability to make autonomous ethical decisions which affect knowledge production, or complex organisational or professional issues, an ability to critically contribute to the development of ethical standards in a specific context

f. *Accessing, processing and managing information*, in respect of which a learner is able to demonstrate an ability to design and implement a strategy for the processing and management of information, in order to conduct a comprehensive review of leading and current research in an area of specialisation to produce significant insights

g. *Producing and communicating information*, in respect of which a learner is able to demonstrate an ability to use the resources of academic and professional or occupational discourses to communicate and defend substantial ideas that are the products of research or development in an area of specialisation; and use a range of advanced and specialised skills and discourses appropriate to a field, discipline or practice, to communicate to a range of audiences with different levels of knowledge or expertise

h. *Context and systems*, in respect of which a learner is able to demonstrate an ability to make interventions at an appropriate level within a system, based on an understanding of hierarchical relations within the system, and the ability to address the intended and unintended consequences of interventions

i. *Management of learning*, in respect of which a learner is able to demonstrate an ability to develop his or her own learning strategies which sustain independent learning and academic or professional development, and can interact effectively within the learning or professional group as a means of enhancing learning

j. *Accountability*, in respect of which a learner is able to demonstrate an ability to operate independently and take full responsibility for his or her own work, and, where appropriate, to account for leading and initiating processes and implementing systems, ensuring good resource management and governance practices

31 **.NQF LEVEL TEN**

a. *Scope of knowledge*, in respect of which a learner is able to demonstrate: expertise and critical knowledge in an area at the forefront of the field, discipline or practice; and the ability to conceptualise new research initiatives, and create new knowledge or practice

b. *Knowledge literacy*, in respect of which a learner is able to demonstrate an ability to contribute to scholarly debates around theories of knowledge and processes of knowledge production in an area of study or practice

c. *Method and procedure*, in respect of which a learner is able to demonstrate an ability to develop new methods, techniques, processes, systems or technologies in original, creative and innovative ways appropriate to specialised and complex contexts

d. *Problem solving*, in respect of which a learner is able to demonstrate an ability to apply specialist knowledge and theory in critically reflexive, creative and novel ways to address complex practical and theoretical problems

e. *Ethics and professional practice*, in respect of which a learner is able to demonstrate an ability to identify, address and manage emerging ethical issues, and to advance processes of ethical decision-making, including monitoring and evaluation of the consequences of these decisions where appropriate

f. *Accessing, processing and managing information*, in respect of which a learner is able to demonstrate an ability to make independent judgements about managing incomplete or inconsistent information or data in an iterative process of analysis and synthesis, for the development of significant original insights into new complex and abstract ideas, information or issues

g. *Producing and communicating information*, in respect of which a learner is able to demonstrate an ability to produce substantial, independent, in-depth and publishable work which meets international standards, is considered to be new or innovative by peers, and makes a significant contribution to the discipline, field, or practice; and an ability to develop a communication strategy to disseminate and defend research, strategic and policy initiatives and their implementation to specialist and nonspecialist audiences using the full resources of an academic and professional or occupational discourse

h. *Context and systems*, in respect of which a learner is able to demonstrate: an understanding of theoretical underpinnings in the management of complex systems to achieve systemic change; and an ability to independently design, sustain and manage change within a system or systems

i. *Management of learning*, in respect of which a learner is able to demonstrate an ability to demonstrate intellectual independence, research leadership and management of research and research development in a discipline, field or practice

j. *Accountability*, in respect of which a learner is able to demonstrate an ability to operate independently and take full responsibility for his or her work, and where appropriate to lead, oversee and be held ultimately accountable for the overall governance of processes and systems

Review period

32. The level descriptors will be reviewed at least every five years by SAQA in consultation with the three Quality Councils.

Short title

33. This document must be referred to as the Level Descriptors for the National Qualifications Framework.



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