

**Factors Affecting Employment of South Sudan Technical Vocational
Education and Training Graduates:
A Case study of Building and Construction Industry in Juba County**

Towongo Leonard Mabe: 2010/X/HD/216/MVP

**A Dissertation Submitted to the School of Post Graduate Studies
and Research in Partial fulfillment for the award of the Degree of
Master of Vocational Pedagogy of Kyambogo University.**

October, 2013

DECLARATION

I, Towongo Leonard Mabe, do hereby declare that this is my own original work and has never been presented by any group or individual for an award to this University or any other University or institution of higher learning.

Signature:..........

Date: 7/20/2013.....

APPROVAL

This is to certify that Towongo Leonard Mabe has written this Dissertation under our supervision and that it is ready for submission.

Supervisor:

M/s Opit Elizabeth

.....


Date..... 7/10/2013

Principal Supervisor:

Dr. Cula Andrew Anthony

.....


Date..... 7th October 2013

DEDICATION

This work is dedicated to my wife, mother, brothers and sisters who have always wished to see me achieve this level of education. As for my son Junior, I often held back secret tears when I realised that I could not give him all the attention and care he required from a father. For lack of words adequate enough to convey my gratitude for the understanding and support shown to me, I dedicate this piece of work to you all.

ACKNOWLEDGEMENT

First I want to thank the Almighty God, for without Him, I would not have accomplished this great achievement. Secondly, I extend my sincere thanks to the SIU funding agency of the Norwegian Foreign Ministry for the sponsorship of the NOMA project scholarship that made it possible for me to study in Kyambogo University.

Special thanks go to Professor Liv Mjelde, Dr. Richard Daly, Professor Lennart Nilsson, Dr. Ronny Sannerud and Mr. Børge Skåland the facilitators and coordinators of the program from Norway for the Support accorded to me throughout the course of study.

My unreserved gratitude goes to my supervisors; Dr. A.A. Cula and Ms. Opit Elizabeth whose inspirations, guidance and wise advice shaped this piece of work.

My appreciation further goes to the mentors in NOMA house; Professor William Opeju, Associate Professor Catherine Gombe, Associate. Professor Habib Kato, Dr. John Baptist Matovu, Dr. Okello Benson, Dr. Connie Nsibambi, Mr. John Mugisha, Mr. Ali Kyakulumbye, Mr. Chris Serwaniko, Mr Kikomeko Joseph, Ms Joan Kekimuri, Ms Kulabako Mary and Ms Dina Arinaitwe, for all their efforts towards my success in this course. God bless you all.

My gratitude also goes to all the MVP NOMA students for the spirit of sharing and cooperation during the course of study. Thank you very much.

I am also indebted to all my informants from Juba South Sudan who endeavoured to avail information whenever I contacted them.

Finally my thanks go to the Governments of the Republic of South Sudan and Uganda and their respective Ministries of Education for the wonderful support given to me during my study.

TABLE OF CONTENTS

DECLARATION	i
APPROVAL	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS.....	v
LIST OF FIGURES	ix
LIST OF TABLES.....	x
LIST OF ABBREVIATIONS AND ACRONYMS	xi
ABSTRACT.....	xii
CHAPTER ONE:INTRODUCTION	1
1.1 OVERVIEW	1
1.2 BACKGROUND TO THE STUDY	1
1.3 PERSONAL BACKGROUND.....	3
1.4 MOTIVATION.....	3
1.5 PROBLEM STATEMENT	4
1.6 PURPOSE OF THE STUDY	5
1.7 OBJECTIVES	5
1.8 RESEARCH QUESTIONS	6
1.9 SCOPE OF THE STUDY	6
1.9.1 GEOGRAPHICAL SCOPE	6
1.9.2 CONTENT SCOPE	6
1.10 JUSTIFICATION OF THE STUDY	7

1.11 SIGNIFICANCE OF THE STUDY.....	8
1.12 LIMITATION OF THE STUDY.....	8
1.13 CONCEPTUAL FRAMEWORK.....	9
1.14 DEFINITION OF OPERATIONAL TERMS	11
CHAPTER TWO:LITERATURE REVIEW.....	13
2.1 INTRODUCTION	13
2.2 UNEMPLOYMENT OF CIVIL ENGINEERING GRADUATES.....	13
2.3 CIVIL ENGINEER GRADUATES FAILURE TO CREATE THEIR OWN EMPLOYMENT	15
2.4 EMPLOYMENT OF FOREIGN CIVIL ENGINEER GRADUATES	16
2.5 SOLUTIONS TO UNEMPLOYMENT OF CIVIL ENGINEER GRADUATES	18
2.6 SUMMARY	23
CHAPTER THREE: METHODOLOGY	24
3.1 INTRODUCTION	24
3.2 RESEARCH DESIGN	24
3.3 TARGET POPULATION.....	24
3.4 SAMPLING TECHNIQUES & SIZE	25
3.5 METHOD OF DATA COLLECTION	26
3.5.1: INTERVIEW	27
3.5.2 OBSERVATION	27
3.5.3 DOCUMENTARY ANALYSIS.....	28
3.6 DATA COLLECTION INSTRUMENTS	28
3.7 PILOT TESTING OF THE RESEARCH INSTRUMENTS.....	28

3.7.1 ENSURING VALIDITY OF THE INSTRUMENT.....	28
3.7.2 ENSURING THE RELIABILITY OF THE INSTRUMENTS.....	29
3.8 DATA COLLECTION PROCEDURE.....	29
3.9 DATA PROCESSING AND ANALYSIS.....	30
CHAPTER FOUR: PRESENTATION OF FINDINGS.....	31
4.1 INTRODUCTION	31
4.2 UNEMPLOYMENT OF SOUTH SUDANESE CIVIL ENGINEER GRADUATES.....	32
4.3 INABILITY OF UNEMPLOYED SOUTH SUDANESE CIVIL ENGINEER GRADUATES TO CREATE JOBS	40
4.4 EMPLOYMENT OF FOREIGN CIVIL ENGINEER GRADUATES	43
4.5 SOLUTIONS TO THE PROBLEM OF UNEMPLOYMENT OF THE SOUTH SUDANESE CIVIL ENGINEER GRADUATES IN THE BUILDING AND CONSTRUCTION INDUSTRY	48
CHAPTER FIVE: DISCUSSION AND ANALYSIS OF THE FINDINGS	51
51.1 INTRODUCTION	51
5.2 UNEMPLOYMENT OF SOUTH SUDANESE CIVIL ENGINEER GRADUATES.....	51
5.3 INABILITY OF UNEMPLOYED SOUTH SUDANESE CIVIL ENGINEER GRADUATES TO CREATE JOBS	54
5.4 EMPLOYMENT OF FOREIGN CIVIL ENGINEERS BY EMPLOYERS IN THE BUILDING AND CONSTRUCTION INDUSTRY	55
5.5 SOLUTIONS TO UNEMPLOYMENT OF THE SOUTH SUDANESE CIVIL ENGINEER GRADUATES IN THE BUILDING AND CONSTRUCTION INDUSTRY	57
CHAPTER SIX: SUMMARY, CONCLUSION AND RECOMMENDATION	59

6.1. SUMMARY	59
6.2 CONCLUSION	60
6.3 RECOMMENDATIONS	60
6.4 AREAS FOR FURTHER RESEARCH.....	65
REFERENCES	66
APPENDIX I: INTERVIEW GUIDE FOR ALL RESPONDENTS OF THE STUDY.....	75
APPENDIX II: OBSERVATION CHECKLIST.....	77
APPENDIX III : A MAP OF THE REPUBLIC OF SOUTH SUDAN SHOWING JUBA COUNTY	78
APPENDIX IV: LETTER OF INTRODUCTION	79

LIST OF FIGURES

Figure 1.1: Conceptual Framework:.....	10
Figure 4.2.1 Tools and Materials used in TVET Centre and workplace:.....	35
Figure 4.2.2: Unused modern Tools at MTC kept in store in Juba:.....	36
Figure 4.2.3: Foreign Civil Engineer Employees & Employers in Juba county.....	38
Figure 4.4: Houses built by foreign civil Engineers graduates in Juba.....	46

LIST OF TABLES

Table 3.4: Sample size of the study population:.....	26
Table 4.1: Respondents of the Study:.....	31
Table 4.2: Summary of factors responsible for the unemployment of South Sudanese civil engineer graduates:.....	32
Table 4.3: Summary of factors responsible for inability to create jobs:.....	40
Table 4.4: Summary of factors responsible for the employment of foreign civil engineers graduates in Juba.....	43
Table 4.5: Summary of factors responsible for the unemployment of South Sudanese civil engineers graduates in Juba.....	48

LIST OF ABBREVIATIONS AND ACRONYMS

BTVET	Business Technical Vocational Education and Training Institutions
CPA	Comprehensive Peace Agreement
CPD	Continuing Professional Development
FBOs	Faith-Based-Organizations
GDP	Gross domestic product
GIZ	German international co-operation
GTZ	German Agency for Technical Cooperation
GoSS	Government of South Sudan
ILO	International Labour Organization
JICA	Japan International Co-operation Agency
MoEST	Ministry of education Science and Technology
MoLPS	Ministry of labour and public service
MTC	Multiple training Centre
NGOs	Non-governmental Organizations
NOMA	Norwegian Masters Abroad
SAVOT	Situational Analysis of Vocational Training
UK	United Kingdom
UNESCO	United Nation Education Scientific Culture Organisation
U.S.A	United Stated of America
VET	Vocational Education and Training

ABSTRACT

The study is about factors affecting employment of South Sudanese civil engineer graduates by the Building and Construction Industry in Juba County. The study sought to establish why South Sudanese civil engineer graduates are not employed by the Building and Construction Industry employers, establish why South Sudanese civil engineer graduates are failing to create their own employment in the Building and Construction Industry, investigate why the Building and Construction Industry of South Sudan employs foreign civil engineers and suggest possible solutions to the factors affecting the employment of South Sudanese civil engineer graduates by Building and Construction Industry. The Study was exploratory and descriptive in nature. Data was obtained from Directors for Technical Vocational Education and Training in the Ministry of Labour and Public Service, Ministry of General Education and Instruction, Education Committee Republic of South Sudan Legislative Assembly, Building and Construction Industry Employers, Unemployed South Sudanese Civil Engineer Graduates, Employed Foreign Civil Engineer graduates, Principals and Instructors Technical Vocational Education and Training Centers. The respondents of the study were purposively sampled. In all, a total forty four (44) respondents participated in the study. Interview, observation, and documentary analysis methods were employed for data collection and data was qualitatively analyzed. The study found that South Sudanese civil engineer graduates were unemployed by the Building and Construction Industry due to Poor training and inadequate experience in handling the modern tools. Another finding was that, Sudanese civil engineer could not create their own jobs because of inadequate skills and experience to create their own jobs in the Building and Construction Industry. Findings further showed that foreign civil engineer graduates were employed by the Building and Construction Industry because been experienced, cheap to hire and serous in seeking for jobs in the Building and Construction Industry. In view of the above findings, the researcher recommended that, the government of the Republic of South Sudan should increase the budget for vocational education and training from 5% to 20% of its annual budget, vocational basic skills should be taught right from primary school up to the secondary schools, qualified teaching staff and a good learning environment that includes provision of adequate tools and materials must be taken care of by the government in the planning and execution of policies on Technical Vocational Education and Training (TVET) in South Sudan.

CHAPTER ONE

INTRODUCTION

1.1 Overview

This chapter presents personal background, motivation, background to the study, statement of the problem, purpose and objectives of the study. It also gives research questions, scope of the study, justification of the study, the significance and limitations of the study, conceptual framework as well as definition of the operational terms.

1.2 Background to the Study

Civil engineers are of high demand in South Sudan. This is because of the high labour demand in the Building and Construction Industry. Many people are employed in this industry and the industry requires knowledge and skills in building and construction civil engineering at all levels (Ellen & Mosel, 2011).

In South Sudan, after signing the Comprehensive Peace Agreement (CPA) in 2005 government became aware that, rebuilding the country in many ways particularly construction of buildings, roads, bridges and waterways would be necessary in the event of independence. Consequently, a lot of effort was put on Technical Vocational Education to produce “hands on” graduates particularly in the Building and Construction Industry (*South Sudan Vocational training policy, 2008*).

During the comprehensive peace agreement (CPA) period (2005 to 2011), many Technical Vocational Education and Training (TVET) Centers were established in Juba County. Some of these include: Multiple Training Centre (MTC), Juba Technical, Youth Education Vocational Centre, St. Vincent Vocational Training Center, Juba Vocational Training Centre and many more

(*MoEST education statistics for South Sudan, 2012*). These TVET Centers in Juba produced many graduates at certificate levels especially in building and construction. From 2009 to 2011, 960 learners were graduated from these TVET Centers. 89.6% of these graduates did not get employment. Only 10.4% of them got employment in other sectors such as police force, the army and other government sectors other than Building and Construction Industry (*South Sudan Educational Statistics 2011 & EMIS 2012*).

South Sudan achieved independence in July 2011. As a new country, it has attracted many investors from all over the world. The number of investors has increased since the CPA and many of them are in Building and Construction Industry. There are 500 building and Construction firms in the country but the majority of them are found in Juba, which could have absorbed the entire TVET civil engineer graduates of Juba County (Ellen & Mosel 2011).

The Building and Construction Industry employs a large number of foreign civil engineer graduates. This is plainly seen wherever one goes where buildings or any construction is going on in Juba County (Ellen & Mosel 2011). This made the researcher to wonder as to why the South Sudan civil engineers are unemployed by the Building and Construction Industry, yet there is an abundant labour market in the Building and Construction Industry in Juba County. The researcher further wondered why these graduates were not creating their own jobs in the Building and Construction Industry. Instead of the South Sudanese civil engineer graduates working in the Building and Construction Industry, some of these civil engineer graduates end up in the streets of Juba causing in-security where robbing and killing of people is reported daily in the newspapers and FM radios. There must have been factors affecting these graduates from being employed or even creating their own employment in the Building and Construction Industry.

1.3 Personal Background

I am a South Sudan graduate from North West University Potchefstroom campus in South Africa. I graduated in 2006 with “Bachelor of Education degree”. While at university, my major subject were economic and education physiology. My educational background together with my work experience in teacher education with government of South Sudan since 2007 to date fits very well in this course. The knowledge I have acquired at this training will be employed directly with an impact on the students or trainees whom I will be training. I am working with Government of South Sudan as a teacher trainer but the government work in partnership with development partners such as Windle Trust International and Norwegian Refugee Council, ECS/world relief and EDC South Sudan. This exposed me to a lot of challenges such as organizing teachers training programmes. Lack of training tools and materials for practical skills sometimes can lead to total abandonment of the lesson and this is when a skilled instructor has to be innovative and find alternatives to conduct practical lessons.

1.4 Motivation

From experiences in the study of Masters in Vocational Pedagogy which was based on mini-research expeditions in Uganda’s Business Technical Vocational Education and Training Institutions (BTVET), more about teaching and vocational learning organizations were uncovered to the researcher. The mini-research projects conducted in vocational training institutions revealed that most of these institutions still followed traditional academic methods that gave more value to vocational theory and examinations as means for learners to acquire vocational competence in the vocational education and training.

Vocational Education and Training system today has shown improvement in learning approaches. Basing on research findings from recent researchers, the recommended approach to

use in Vocational Education and Training is experiential or practical learning so as to develop the professional competence. In this case, learning by doing and learning through social relations have been found promising in advancing policy in vocational learning (Daly & Mjelde 2002, p. 191), which calls for adopting new pedagogical principles of learning such as group work and apprenticeship learning.

Training students of programmes of civil engineering particularly those leading to specialization in Building and Construction is very demanding. The curriculum must be suitable for the level at which the students are. A good curriculum is likely to produce efficient and effective graduates. However, for this to be realized, the teaching environment which includes classrooms and workshops and relevant books must be suitable for learning. Perhaps the most important of all these is the teacher. Is the teacher trained well enough to teach, guide students and supervise them in field work? Above all are pedagogical approaches used? There are many things which need to be put in place in training students of civil engineering at any level. It is always expensive to train students in this area. However, when they are not trained well, half backed graduates are realized by training institutions and they can get problems of unemployment. Thus, the researcher based the current study on these experiences, with the objective of establishing the factors affecting the employment of South Sudanese Technical Vocational Education and Training (TVET) civil engineer graduates in Juba County.

1.5 Problem Statement

Technical Vocational Education and Training (TVET) in South Sudan is one of the top priorities of the Government and is looked at as the quickest and the best way to equip people with skills to participate in the reconstruction and development of the new Country. TVET Centres were established in Juba County to produce technical labour that is required for the development and

reconstruction of the country. South Sudan Education Statistic has shown that 960 TVET civil engineers graduated between 2009 and 2011 in Juba County. These could be employed in the Building and Construction Industry which is a lucrative industry in the country.

Much as the South Sudanese civil engineer graduates are expected to benefit from the lucrative Building and Construction Industry business and to participate fully in the reconstruction and development of the new Country, they have limited access to employment in this industry. Most of the Building and Construction business in the country is done by foreign civil engineer graduates as plainly seen at any Building or Construction site in Juba County. Why are the South Sudanese civil engineer graduates not employed and why can't they create their own jobs in the Building and Construction Industry? This study set out to establish factors affecting employment of South Sudanese civil engineer graduates in the Building and Construction Industry.

1.6 Purpose of the Study

The purpose of the study was to establish factors causing unemployment of South Sudanese TVET civil engineer graduates in the Building and Construction Industry.

1.7 Objectives

1. To establish why South Sudanese civil engineer graduates are not employed by the Building and Construction Industry employers.
2. To ascertain why South Sudanese civil engineer graduates are failing to create their own employment in the Building and Construction Industry.
3. To determine why the Building and Construction Industry of South Sudan employs foreign civil engineers.

4. To suggest possible solutions to the factors affecting the employment of South Sudanese civil engineer graduates by Building and Construction Industry.

1.8 Research Questions

1. What factors are responsible for unemployment of South Sudanese civil engineer graduates in the Building and Construction Industry in Juba County?
2. Why are the South Sudanese civil engineer graduates failing to create their own employment in the Building and Construction Industry?
3. What factors are responsible for employment of foreign civil engineer graduates by the Building and Construction Industry in Juba County?
4. What are the possible solutions to the factors affecting the employment of South Sudanese civil engineer graduates by Building and Construction Industry?

1.9 Scope of the Study

The scope consisted of geographical scope and content scope.

1.9.1 Geographical Scope

This study was conducted in the Ministry of Labour and Public Service and Ministry of Education, six selected construction industries and three vocational training centres in Juba County, Central Equatoria State. (See appendix IV for a map showing Juba).

1.9.2 Content Scope

The study covered the reasons as to why South Sudanese civil engineer graduates were not employed by the Building and Construction employers of South Sudan, why the unemployed South Sudanese civil engineer graduates were failing to create their own employment in the

Building and Construction Industry and why the Building and Construction employers of South Sudan employ imported civil engineers instead of the nationals and finally suggestions for solutions to the unemployment problem.

1.10 Justification of the Study

According to Amin (2005, p.135), justification of the study shows the relevance of the study at the material time, and why it is worth conducting it.

1.10.1 Here Bellow is the Justification for this Study

The Republic of South Sudan as a young nation has taken VET as the quickest and the best way to equip people with skills to participate in the reconstruction and development of the new Country (*South Sudan Vocational training policy, 2008*). Although many students are trained and graduate with certificates as civil engineers in South Sudan, reports have shown that most of South Sudanese civil engineer graduates are unemployed and they also find it very difficult to create their own jobs ¹(Rostati & Guarcello, 2011, p. 16). Yet Herrmann, Bailey & Allman (2010) observed that the demand for vocational employees in the building and construction industry is extremely high in both the public and private sectors in South Sudan. Therefore, this project was to unveil the factors causing unemployment among the South Sudanese civil engineer graduates. The establishment of these factors would be a reference point for identifying the solutions to unemployment problems of South Sudan civil engineers. The eradication of unemployment among these graduates would lead to maximum utilisation of all of them in the contribution to the development and the reconstruction of the new country.

¹ <http://www.newslook.com/videos/293758-job-creation-one-of-south-sudan-s-biggest-challenges>

1.11 Significance of the Study

The study was to create awareness among the stakeholders about the factors affecting employment of South Sudanese civil engineer graduates, hence a way forward for intervention on the unemployment problem in South Sudan. The findings of the study will be useful to policy makers particularly in the areas of Technical Vocational Education and Training and national employment/labour.

Future researchers will most likely find the finding of this study useful.

The study will also be useful for curricular developers in order to be able to develop a comprehensive curriculum that brings in employers, TVET Centers, the government and other stakeholders for high quality production of graduates.

1.12 Limitation of the Study

Some respondents had busy schedules and this made the interview appointments to be re-scheduled from time to time with the respondents. This had affected time meant to be spent in interviews. However, the researcher was flexible and had to use weekends and even late evening time for interviews. The study schedule was flexible and the data gathering timetable was adjusted to suit the time of the respondents.

Language was another limiting factor. In Juba, people speak mixed languages, for example Arabic and English. The researcher had to resort to hire a translator who was fluent in both Arabic and English. This was rather expensive.

1.13 Conceptual Framework.

The conceptual framework for this study was developed based on the progresivists philosophical view of education. The progresivists believe that education should aim at producing individuals who are capable of making a positive contribution to society (Amutabi, Nafukho & Otunga, 2005, P.46). John Dewey was one of such progresivists. He stressed an experiential, problem – solving approach to learning (Zinn, 2004, P.47). In this case, the training civil engineer graduates went through should enable them to contribute greatly to building the new country. They would be productive members of society in their technical vocational field of building and construction. In order to play effective and positive role in society, people need to get employment or they need to create employment for themselves once they have graduated in their various fields. In this case, South Sudanese civil engineer graduates should have acquired knowledge and skills in building and construction to be able to get employment or create employment for themselves in the Building and Construction Industry.

Ellen & Mosel (2011) observed that there are many building and construction firms in South Sudan particularly in Juba County. These would absorb all civil engineer graduates in the country.

The relationships between civil engineer graduates and employment are diagrammatically shown on figure 1.1 below:

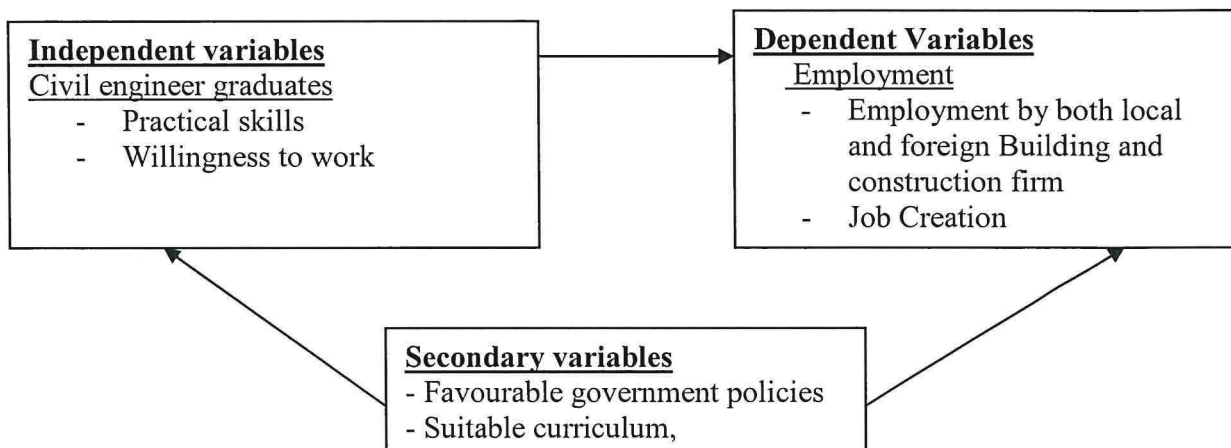


Figure 1.1: The relationships between civil engineer graduates and employment

Source: Author

The diagram in figure 1.1 reveals that for civil engineers to be employed or create their own jobs, they have to undergo practical skill training and have positive attitude towards work. Having Practical skills and positive attitude to work are independent variables and employment of the civil engineer graduates and job creation are dependent variable. The practical and employability skills acquired by the civil engineer graduates during the training enhance their employability and job creation in the Building and Construction Industry.

However, there are other secondary variables that may also influence both the independent and dependent variables positively or negatively. These include: Favourable government policies and Suitable curriculum. Civil engineer graduates who have been trained following a suitable curriculum with efficient and effective instructors will be able to possess practical skills which are needed in the job market, but the reverse is true if the curriculum used for teaching is not suitable. Positive support from the government to the TVET Centres will enhance the good

training and equipping the civil engineer graduates with employability skills. But if training and employment policies does not favour the civil engineer graduates in the country, then these graduates will end up not getting properly trained with employable skills and cannot even create their own jobs. The policies must be favourable to the running of the TVET Institutions which in turn produce employable civil engineer graduates who are creative and skilful in building and construction.

1.14 Definition of Operational Terms

In the context of this study, the following are the meanings of key terms.

Employment is used to mean the condition of having a job or work; this may be private or public.

Factors affecting employment refers to those issues that make the graduates not to be employed in both public and private sectors.

Technical Vocational Education is any training that makes an individual productive, innovative and self-creative in preparation for living and gainful employment.

Technical Vocational Education and Training (TVET) graduates refers to those graduates who have gone through the formal process of provision of skills, knowledge, attitude and values needed for the place of work and to become job creators.

Civil engineer graduates imply those Certificate and Diploma graduates with building skill, water engineering skills, road construction skills, carpentry and joinery skills.

Imported civil engineers stand for the foreign civil engineers who come into the country for employment in the Building and Construction Industry.

Job creation means the process of recognising and evaluating business opportunities, assembling the necessary resources to take advantage of them and take appropriate action to ensure success.

Building and Construction Industry refers to firms that deal with construction of Houses, Roads and bridges.

Stakeholders stand for persons or organizations that have investments in the content of a program, or in the dissemination and evaluation of a program.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents related literature to the problem under study. The literature is reviewed and presented in relation to the study objectives.

2.2 Unemployment of Civil engineering Graduates

Building and construction industry is very important all over the world. It would seem that all graduates of civil engineering would be able to get employment after receiving training.

However, this may not be the case because there are factors that may hinder their employment in building and construction industry.

According to the UK's top business lobbying organization (CBI, 2010), unemployment in UK was caused by the economic recession that hit UK badly in 2010. This forced most of the building and construction companies to cut down on the recruitment of civil engineers and to reduce the existing number of the employees in the industry to a manageable size². As a result, unemployment in the Building and Construction Industry rose from 10% to about 19.4% in 2010.

In China's construction industry unemployment was caused by the sudden drop in the volume of world trade and financial activities. This led to unemployment rising to 13.4% from 2.3% in 2009. The GDP decreased by 2.6% in 2008, worse still, 7.8% in 2009. This made the

² (<http://www.physicsforums.com/showthread.php?t=375948>)

construction companies in 2009 to cut wages and even lay off some workers. However, the government intervened in the same year 2009 by launching an Internship Programme for civil engineer graduates and commenced some of the mega construction projects to boost their employment opportunities. A situation of improvement was anticipated but no statistical data were presented (Anson, Cheng, Chiang, Hui, Lam, & Mak, 2009, p. 2-4).

Unlike in UK and China, unemployment in Malaysia was as a result of the civil engineer graduates having been inexperienced and having inadequate skill to work in the construction industry (Tan, 2007). Some of the graduates lacked initiative and overrated their qualification vis-a-vis the existing employment in the construction industry (Khor, 2011).

In Africa, the case of unemployment of civil engineer graduates by Building and Construction Industry is not new either. In Nigeria, Aniekwu & Ozochi (2010, p. 68) reported that, the civil engineer graduates are not employed by the Building and Construction Industry because they are inexperienced, have inadequate building and construction skills and lacked life skills such as problem solving, interpersonal and teamwork skills. This explains why some of them remain unemployed by the Building and Construction Industry.

In Tanzania civil engineers are graduated yearly from vocational institutions but end up not getting employed in the building and construction industry. In 2010 the country produced 500 fresh graduates from various vocational institutions, in 2011, it produced 550 fresh graduates. However, 90% of these civil engineer graduates do not secure employment in the building and construction industry due to lack of professional exposure/experience/competence. Some potential employers have even gone to the extent of advising civil engineers graduate who

seek employment to go back to them once they have acquired the requisite experience (*Mukama, B. 2012*).

Unemployment of the civil engineers is caused by many factors such as economic recession, lack of experience, inadequacy and mismatch of skills acquisition. In relation to this study, the Republic of South Sudan trains civil engineers in order to participate in the development and reconstruction of the new country. Rostati & Guarcello (2011, p. 16) states that 89.55% of South Sudanese civil engineers are not employed in the construction and building industry. However, little information is known concerning employment of some of these graduates in the Building and Construction Industry in South Sudan. What is not clear are the reasons as to why they are not employed in the Building and Construction Industry in Juba County.

2.3 Civil Engineer Graduates Failure to create their own Employment

In the United States of America, job creation is integrated in the VET national curriculum. In addition to that, the public vocational institutions work closely with the building and construction industries to establish curriculum and programmes to meet the skill demand in the construction industry. These have helped the U.S.A civil engineer graduates to discover their talents and are able to create their own jobs in the building and construction industry (Heintz, Pollin, & Peltier, 2009, p. 4).

In Germany just like in U.S.A, emphases have been put on education that provides occupational skills that will enhance the potentials of individuals and improving quality of life. Civil engineer graduates from Universities and technical colleges are equipped with creativity skills that help them to build more sustainable societies (Bukola, 2011). This has helped the civil engineer graduates to discover their talents and be able to meet the labour market demand.

Unlike in America and Germany, in the past, job creation skills have not been encouraged by VET institutions in Nigeria. According to Kolawole, Zakari, & Ibrahim (2006), the VET curriculum had not put more emphasis on occupational skills to enhance the potentials of the graduates. This resulted in graduating many civil engineers who were job seekers rather than job creators (Nwangwu, 2007).

In Europe and United States of America, therefore, innovative and creativity skills are not separated from the normal TVET curriculum. In addition, more emphasis is put on education that will provide life and occupational skills that enhances the potentials of individuals to create their own jobs and thus improve their quality of life. However, creativity skills in Africa have not been properly included in the TVET curriculum. Hence, the culture of self-reliance that promotes pride in private work, self-discipline and creative thinking is not encouraged. In relation to this study, the experience of South Sudan is that, unemployed civil engineers find it very difficult to create their own jobs in the Building and Construction Industry³ (Rostati et al, 2011, p. 16). The reasons for their failure to create jobs are not known.

2.4 Employment of Foreign Civil Engineer Graduates

Civil and building engineer graduates usually get jobs in other countries where opportunities for their skills exist. However, this depends to a large extent on the country that is in need of them. In United States of America, foreign civil engineers are employed in the building and construction industry to perform tasks that the USA civil engineers cannot perform. This is done through the Immigration office and Department of Labour (DOL) which approve and give work permits to such relevant foreign civil engineers. Thus, the employment of such foreign civil

³ <http://www.newslook.com/videos/293758-job-creation-one-of-south-sudan-s-biggest-challenges>

engineers will not adversely affect the wages and working conditions of other employed USA civil engineers by the Building and Construction Industry ⁴(Wasem, 2010).

Trends in employment composition in both Singapore and Malaysia support the assertion that foreign labour policy effectively targets workers with skills at both extremes of the scale to fill gaps in labour demand unmet by nationals. This is done with highly regulated work permit systems that differentiate workers by nationality, skill level, and sector of activity (Ruppert, 1999).

Unlike in U.S.A, Singapore and Malaysia, India does not encourage the participation of foreign civil engineers in the Building and Construction Industry. Foreign civil engineers who force their ways to India often face difficulties with taxation, in interacting with sub-contractors and suppliers and in adjusting to the local work culture (Bandyopadhyay, Swaminathan, & Rohatgi, 2008, p. 2). This is a disturbing trend that again highlights an unattractive working environment. On the other hand, the performances of foreign civil engineers have also not been up to the mark, raising questions about the value they add to the construction industry. Hence, most of these foreign civil engineers quit India for other countries with favourable working conditions (Bandyopadhyay, et al, 2008, p. 2).

Nigeria unlike India employs many foreign civil engineers in its Building and Construction Industry (Shinn, 2008). Nigeria's oil industry needed civil engineers who could construct pipelines and build its tunnels for drilling the oil. Unfortunately, it is because of the poor training of civil engineers and builders in the country that they resort to employing foreign civil engineers.

⁴ wasem (2010) *Immigration of Foreign Workers*: Retrieved on the 19/2/2012 from www.crs.gov

The demand for immigrant workers is as a result of inadequate civil engineers in a given country. The employment trends in the various countries compose of foreign labour policies that target workers with very good skills to fill gaps in labour demand unmet by nationals. In relation to this study, the Republic of South Sudan as a new country has many employment opportunities in the Building and Construction Industry. This has attracted many foreign civil engineers. A report compiled by World Vision Sudan (2008) showed that the building and construction work in South Sudan is mostly done by foreign civil engineers. But what is unknown is why the Building and Construction Industry employers in South Sudan employ foreign civil engineers.

2.5 Solutions to Unemployment of Civil Engineer Graduates

In Tokyo, unemployment of civil Engineering graduates is reduced by training their graduates through experimentation, exploration and involvement in key projects in various academic fields and industries that give students crucial experience and skills needed for developing and integrating competencies necessary for participation on an international level in our expanding global world (Department of Civil Engineering at the University of Tokyo, 2011).

The Netherlands government is reducing the unemployment problem of its civil engineer graduates through the use of their universities programs. Faculties of Civil Engineering and Geo Science are creating an environment which stimulates civil engineer graduates students to fully realize their individual potentials and get employed in the private and public construction sector. And, the most valuable resource to offer is their human network, built with both current and future well recognized professionals (Streilein, 1999).

Getting work for new civil engineer graduates in China was one of the country's top priorities. Yearly, several job programs are launched to cater for the fresh civil engineer graduates. For example, jobs programs were launched from 2006-2009 by top political parties officials which gave about 78,000 civil engineer graduates to sign three-year contracts to participate in the program. In addition to getting civil engineer graduates off the unemployment rolls, the goal of the government of China through such programs was to build up local parties' organizations and gain more parties control in China (*Maureen, F. 2009*).

In Africa, Tanzania in particular, the unemployment of civil engineer graduates is minimised through introduction of programmes such as Apprenticeship Programme which is an internship programme for fresh graduates and the Continuing Professional Development (CPD) which is relevant for practicing professional Civil Engineers (*Mukama, 2012*).

According to Mjelde (2008, p. 2 & 1995, p. 125)⁵ graduates would have no difficulties in getting employed if they went through an institution that follows the Vocational pedagogical principles. Vocational pedagogy in her view is a field of knowledge focusing on teaching and learning oriented towards trades, occupations and professions. It stresses the relationship between teaching/learning/ training on one hand, and work and the labour market on the other. She believes that vocational pedagogy focuses on learning by doing, in relation to trades, occupations and professions; it stresses a dynamic relationship between the work of hand, the mind and the body that plays host to these activities. She further contends that the concept is broad and covers the pedagogical activities of teaching, learning and developmental work directed towards

⁵ Mjelde, L. (2008). *NOMA Masters Programmed in Vocational Pedagogy Kyambogo University, Kampala*

vocational/professional and technical disciplines, whether these are conducted in schools or through apprenticeships system in working life.

Yates (2007) defined pedagogy as the study and practice of teaching and learning, which involve a conscious use of particular instructional methods such as constructivism which focuses on the active role of learners in constructing new knowledge and understanding based on what they already know and believe. Mjelde (1995, p. 132; see also, 2006a, p.79) asserts that the advantage of vocational education has been a pedagogy based on learning inductively from practice (workshop learning) towards theory and back, reflectively, again to practice, so as to approximate learning in relation to working life. Here the understanding comes through action and personal experience and theory is learnt in close relationship to practical skills. Mjelde (2006a, p. 21) further contends that the core of vocational pedagogy is the relationship between workshop learning and learning from the classroom on one hand and learning in practical situations in working life on the other. However, prior to this study there was little knowledge about whether the training of civil engineer graduates in the TVET Centres in South Sudan was marked by a close relationship with the aim of avoiding mismatch in the skills provided and the labour market demands.

According to Lindgren (2006, p. 294), many social and behavioural scientists like Piaget, Homburg and Ericsson hold the view that an individual's cognitive and social development takes place through biological stages. In this light they have demonstrated the need for children's pedagogy. In view of this approach there is thus a need to understand the pedagogical approaches in any learning situation' in order to have a clear distinction between the general education and TVET as the master key to the world of work. In support of Lindgren, Malcolm Knowles cited in

Amutabi, Nafukho & Otunga (2005, p. 9) contend that pedagogical principles for learning as well as teaching should be taken very seriously for any success and development of a learner.

The TVET teacher for building and construction as an area of specialisation, whether in South Sudan or elsewhere, take up key vocational activities such as teaching, training, facilitating, managing, mentoring and research (Harris & Simons, 2004, p. 139). TVET educators have the responsibility for managing the content delivery and assessment processes; as well as the responsibility to develop curriculum materials and take the lead in entrepreneurial activity. To attain these skills and many more as demanded by the changes in the labour market, it calls for the 'special pedagogy' pointed out by Knowles (Amutabi, et al, 2005, p. 9).

As teachers/educators', the TVET Centres in South Sudan and Juba in particular needs to embrace the basic principles of vocational pedagogy (learning by doing, learner-centered approach to teaching and learning, learning activities related to work-based learning, close cooperation between the person in a teaching position and the person in the learning position, and a close relationship of learning to working life). Just as Mjelde, (1995) asserts, the interplay of institutional and workplace learning will help to create insight among the learners into real activity and development of work (Mjelde, 1995, p. 133). Like Mjelde, Lindeman, (cited in Amutabi, et al 2005) emphasizes the value of teaching adults through situations rather than subjects. He noted that 'experience is the adult learners' living textbook' (p. 11). This experience should be tapped if adults are to learn, but this can only be done using appropriate pedagogical approaches.

Apparently, there has been limited information as to whether there is a correlation between what is being taught and the occupational skills required of the TVET civil engineer graduates of South Sudan once they reach the workplace. Many times lecturers focus on the subject content within the curriculum while paying less attention to the specific human skill requirements that could enable students to function effectively outside the classroom such as teaching, mentoring and facilitation, administration/ management of projects, writing reports, and conducting workshops. This practice greatly contradicts the views given by Lindeman (cited in Amutabi, et al, 2005, p. 11) who believes in teaching adults through situations rather than subjects. Concentrating on subject matter at the expense of other abilities of the students to practically perform tasks in the situations that they encounter is bound to bring about a mismatch between what the institutions are offering students and the actual occupation skills required in the workplaces. This can be avoided if the special attention is paid to the pedagogical principles of teaching/learning in the school environment and learning at the workplace.

Learners are geared towards passing examinations and gaining better grades, they are seldom being encouraged to master the knowledge and skills required of them in workplaces. This is probably not their fault, but rather, they are not being mentored towards competence in eventual jobs. In support of this position, Egau (2002, p. 20), observes that, the training is still dominated by examinations at all stages without adequate provision for assessment of other objectives of the curriculum, such as promotion of moral values, cooperative work relations and practical skills that are equally important in these areas. One may refer to this as real competence within a particular vocational skill/trade.

According to the German Agency for Technical Cooperation (GTZ), (2009),⁶ the poor quality, old-fashioned teaching and learning system used in training institutions is often out of touch with the needs of the labour market. As trainers, we need to improve on our ways of handling the teaching and learning process if we are to maximize opportunities for learning. This is possible through following the principles of vocational pedagogy.

2.6 Summary

Available literatures revealed that, unemployment of civil engineer graduates is caused by different factors in different countries. In countries like UK and China unemployment of civil engineer graduates is caused by economic recession that causes a drop in many business activities, building and construction activities inclusive. However in other countries like Malaysia, Tanzania and Nigeria unemployment of civil engineer graduates is caused by the graduates not having building and construction work experience to work in the building and construction industry. “In South Sudan there are many unemployed civil engineer graduates”. However the factors responsible for their unemployment are unknown because there was no study done in this area. This study therefore sought to establish why the South Sudanese civil engineer graduates are not employed in the building and construction industry. The findings of this study will act as a stepping stone for the government to address the problem of unemployment of the TVET Civil engineer graduates. These findings will also serve as additional information to already existing literature on the causes of unemployment of the South Sudanese civil engineer graduates.

⁶ GTZ. (2009). *The Uganda Vocational Qualification Framework: Overview*

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter deals with the methodology of the study. It presents research design, target population, sampling procedure and sampling size of the study, it also gives data collection techniques and instruments, data quality management i.e. pilot testing, validity and reliability, data collection procedure, data analysis procedure.

3.2 Research Design

Wiersma (2000) in Odiya (2009, p. 135) considers a research design to be a plan for conducting research. This suggests a set of things to be done in order that a planned research can be conducted. In this study, the research was based on explorative case study design following a qualitative approach. The researcher chose the explorative case study design because he wanted to develop a general understanding of the problem in question. Amin (2005, p. 42-43) argues that qualitative research produces more holistic, discursive and detailed examination of the study situations or phenomena, mostly focusing on humans and human activity.

3.3 Target Population

Waterhouse, Muir, Correa and Powell (1976), recommend that the researcher declares the study population from which the study sample is taken. In this study, the main category of participants were the unemployed South Sudanese civil engineer graduates whose target population was 860. The key informants for this study were the Building and Construction employers whose target

population was 250 and Employed Foreign Civil Engineers whose target population was 100. Other categories of participants were Principals and Instructors from three TVET Centers whose target population was 20; TVET Directors in the Ministry of Education and Labor whose target population was 4 and Education Committee members from South Sudan Legislative Assembly whose target population was 10.

3.4 Sampling Techniques and size

3.4.1 Sampling Techniques

The main method of data collection in this study was interview. According to Carman (2004), the intensive nature of interviews warrants having smaller sample size. The researcher used sampling techniques that enabled him to select a study sample that was representative and valid as recommended by (Amin 2005; Odiya, 2009). In this study purposive sampling was used to select all the participants. This is because they were selected more for their relevance than their representativeness. Stratified sampling was used to ensure that both male and female participants were considered in the selection. In addition to purposive sampling, snowball⁷ sampling was used for tracing the unemployed South Sudanese civil engineer graduates.

3.4.2 Sample Size

The number of participants expected to be interviewed in this study was 4.8% (60) of the total target population (1246). However the actual number who participated in the study was 44

⁷ *Snowball sampling involves asking a key informant to name other people who should be conducted by the investigator in order to understand some aspects of a situation under study. It is normally used for locating individuals for the study where the researcher begins with few respondents who are difficult or impossible to locate using other means (Amin, 2005).*

(3.5%). According to Carman (2004), a smaller sample size is acceptable in qualitative research because the intensive nature of interviews warrants having a smaller sample size.

Table 3.4:

Sample size of the study population

Respondents	Target population	Expected number	Actual number	Selection method
Director for Technical and Vocational Education and Training TVET, Ministry of Labour and Public Service central Equatoria State	2	1	1	Purposive
Director for Establishment: Ministry of Labour and Public Service central Equatoria State.	2	1	1	Purposive
Director for Technical and Vocational Education and Training (TVET): Ministry of General Education and Instruction.	2	1	1	Purposive
Education Committee: Republic of South Sudan Legislative Assembly.	10	8	5	Purposive
Building and Construction Industry Employers	250	8	6	Stratified & Purposive
Unemployed South Sudanese Civil Engineer Graduates	860	20	12	Purposive and snowball
Employed Foreign Civil Engineers	100	15	12	Purposive & Stratified
Principals Technical Vocational Education and Training Centers	5	3	3	Purposive
Instructors Technical Vocational Education and Training Centers	15	3	3	Purposive
Total	1246	60	44	

Source: Author

3.5 Method of Data Collection

In this study, the data collection methods used were: Interview, direct observation, and documentary analysis.

3.5.1: Interview

Kvale & Brinkmann (2009, p. 3) defined an interview as a conversation that has a structure and purpose and involves a careful questioning and listening approach with the purpose of obtaining thorough knowledge. The researcher therefore used the interview method as an organized inquiry that involved the interviewer and the interviewee to share experiences. This was organised and guided by the research problem, purpose, objectives and the research questions.

The interview was semi structured as it was instrumental for obtaining in-depth data in the sense that respondents were encouraged to give detailed information based on their life experience. Sidhu (2007, p. 147) points out that interview stimulates the respondent to give an increasingly complete and valid set of responses that gives a broader foundation for the discussion.

3.5.2 Observation

The researcher used observation method to observe the tools and material used at VTC and workplace, the nature of the trainings and the nature of the work in the Building and Construction Industry.

A camera and a recorder as a complement to observation, were used to enable me capture some data in form of pictures that was analyzed once again from different point of view. Observation check list was used to help me record my observation on a daily basis in the form of data observed and to help assess the progress of the field work period. This technique cut across all the four objectives.

3.5.3 Documentary Analysis

Documentary analysis method was used in analyzing documents that were obtained from the MoEST, MoLPS. This is because the two Ministries are the key stakeholders in TVET and Employment in South Sudan. The technique also cuts across all the four objectives.

3.6 Data Collection Instruments

In relation to the method of data collection and in addition to the common tools such as pens and pencils, the researcher used recording instrument. The interview was recorded on a voice recorder. This allowed the researcher to avoid writing in the process, remain focused and to maintain the rapport.

To provide the general structure of the interviews, semi-structured open ended interview guide (see appendices) was used for flexibility and a casual manner in which the interview was conducted to encourage free expression (Sidhu, 2007, p. 148). This is also supported by (Wenden 1982) who asserts that a general interview guide allows in-depth probing while permitting the interviewer to keep the interview within the parameters traced out by the aim of the study.

3.7 Pilot Testing of the Research Instruments

The pilot testing of the research instruments was done to ensure the validity and reliability of the instruments.

3.7.1 Ensuring validity of the Instrument

Pre-testing the research instruments for validity was conducted in Kyambogo University Uganda with students and mentors who are experts in the field of vocational pedagogy. According to Amin (2005, p. 48), validity is the most important idea to consider when preparing or selecting an instrument for use. Mbaaga (1990, p. 122) further said, a valid instrument does not only

measure what it is constructed for but must also measure it accurately. In this case validity is the ability to produce findings that are in agreement with the objectives of the research. Interview guide was used to ensure the validity of the results. The researcher also consulted other mentors besides the supervisor to measure the validity of the research instruments. The researcher also discussed with his fellow cohort two masters' students on the use of the instruments before going to the field for pre-testing the instruments.

3.7.2 Ensuring the Reliability of the Instruments

According to Mbaaga (1990, p. 118), reliability of an instrument is the degree of consistency. A reliable instrument gives the same value if it is used a number of times to measure the same variable provided the variable does not change. In this case, to ensure the reliability of the instruments, a sample of purposively chosen respondents with similar characteristics of the study population was interviewed. An interview was conducted with these few chosen respondents to check their responses to the research questions. Again, reliability was also to be ensured by asking the same interview questions to different categories of the study population and their responses were checked. The instruments used were reliable because all the responses were answering the research questions.

3.8 Data Collection Procedure

The research started with proposal as a guide for the whole process of study. Research instruments were developed which were pretested in Kyambogo University in order to find out whether they were valid and reliable. Secondary data was collected before going for the primary data. An introductory letter was obtained from Kyambogo University to be presented to the study population. A first visit to research location was done for familiarity with the different research

locations. A research assistant was hired to help in translating from English to Arabic and Arabic to English. This marked the beginning of the collection of primary data. The data was stored in the voice recorder and log book. This helped the researcher in providing direction as he wrote the report and assisted him in remembering what he had observed and participated in.

3.9 Data Processing and Analysis

The data was processed qualitatively and by description. It was further processed by sorting the information received from the respondents for interpretation objective by objective. The researcher was daily reflecting on the data critically following the research objectives set. Cohen and Manion cited in (Okello, 2009) asserted that “the data collected is known to be raw information. It therefore has to be organized in various stages.” In this case, the data collected from the interviews was transcribed, sorted out according to the emerging themes, coded and analyzed.

CHAPTER FOUR:

PRESENTATION OF FINDINGS

4.1 Introduction

This chapter presents findings of the study according to the research questions. It provides information on the factors which were responsible for: unemployment of the South Sudanese civil engineer graduates, the inability of the South Sudanese civil engineers to create jobs for themselves and the reasons why employers prefer to employ foreign civil engineers. The chapter ends with suggestions given by the respondents so as to address unemployment of South Sudanese civil engineer graduates. The different categories of respondents that participated in the study are given in table 4.1 below.

Table 4.1

Respondents of the study.

Respondents	Expected number	Actual number	Percentage of Actual number
Director for TVET, MoLPS central Equatoria State	1	1	100
Director for Establishment: MoLPS central Equatoria State.	1	1	100
Director for TVET Ministry of General Education and Instruction.	1	1	100
Education Committee: Republic of South Sudan Legislative Assembly.	8	5	62
Building and Construction Industry Employers	8	6	75
Unemployed South Sudanese Civil Engineer Graduates	20	12	60
Employed Foreign Civil Engineers	15	12	80
Principals TVET Centers	3	3	100
Instructors TVET Centers	3	3	100
Total	60	44	73%

Source: Primary data from the field

As can be observed from table 4.1 above, all Directors who were selected took part in the study (100%). Out of eight (8) members of education committee of the parliament of South Sudan five (5) were interviewed (62%). Eight (8) building and construction employers were to be interviewed; however, only six (6) took part in the study (75%). Out of twenty (20) unemployed South Sudanese civil engineer graduates to be interviewed, 12 were available for interview (60%). The expected number for foreign civil engineer graduates who are employed was fifteen (15) but out of this, only 12 participated in the study. All the expected principals and instructors of vocational training Centres (100%) took part in the study.

4.2 Unemployment of South Sudanese Civil Engineer graduates

Research question one of the study sought to establish factors that were responsible for the unemployment of South Sudanese civil engineer graduates by the Building and Construction Industry in Juba County. The views of the respondents about the factors which were responsible for the unemployment of South Sudanese Civil Engineer Graduates are presented in Table 4.2

Table 4.2:

Summary of factors responsible for the unemployment of South Sudanese civil engineer graduates

Factor	Number of respondents	%
- Poor training in the TVET Centers	22	50
- Lack of experience	9	20
- Companies are foreign owned	7	16
- Not serious in looking for Jobs	4	9
- Expensive to hire	2	5
Total	44	100

Source: Primary data from the field

As seen from table 4.2, twenty two (22) respondents (50%) said that the South Sudanese Civil engineer graduates were not employed by the Building and Construction Industry because of poor training that they received at the TVET Centres. The respondents attributed the poor training to absence of qualified teachers at the TVET Centres, use of out-dated training tools and materials; training in the TVET Centres was more theoretical rather than practical. This view was expressed by one male unemployed South Sudanese civil engineer graduate where in his response he asked the following question “what do you expect from a graduate who went through a learning system where most of the teachers are not qualified, tools and materials used are out-dated, training was more theoretical?” Through observation, the researcher confirmed that most of the TVET Centres in Juba County did not have adequate tools for training learners. This observation was supported by the principal Juba Technical who said;

Juba technical gets its major support on tools from Plan International. The tools provided by Plan International are not enough to accommodate all the learners enrolled for the civil engineer programme. This made most of the lessons to be conducted theoretical.

The issue of not having enough tools and materials was also supported by an instructor from Multi Service Vocational training Centre (MTC) who said:

We get limited financial support from the government of the Republic South Sudan. Because of this enough tools cannot be purchased. The few tools we have here at MTC were provided by Japan International Co-operation Agency (JICA). As tools are not enough in the workshop, practical lessons are most often taught theoretical.

A principal of a TVET Center pointed out poor payment of teachers as an issue that led to the poor training of learners in the TVET Centers. In his words he said;

Teachers at the TVET Centers are paid very low salary by the government. This made most of the qualified teachers to leave teaching for other jobs with NGOs, the Army and Police Service. This however, made the TVET Centers to have fewer teachers where most of them were not qualified. This in turn has led to teaching in the TVET centers becoming more theoretical because the teachers cannot operate most of the traditional and modern tools.

The issue of low payment of TVET teachers leading to poor training was supported by Director of TVET at Ministry of General Education and Instruction who said;

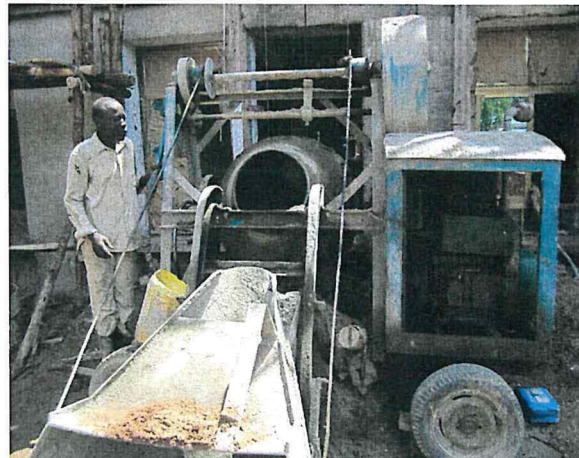
TVET receives only 5% of the education budget of the Republic of South. This 5% budget is not enough for establishing a single TVET institution in South Sudan. Because of this small budget given to TVET by the government, teachers' salary cannot be increased and new tools and materials cannot be purchased to aid the current existing TVET Centres. These in turn made teachers to either leave teaching for other well paid jobs with NGOs or underperform because they are poorly motivated. This finally affects the learners' performance at the end.

A review of a document produced by JICA (2006) on the analysis of the situation of Technical Vocational Education and Training (TVET) in South Sudan revealed that, the inadequate financial support to TVET Programmes was as a result of the two Ministries duplicating roles in the management of TVET in South Sudan .i.e. Labour and Public Service (MoLPS) and General Education and Instruction (MoGEI). This is a total complexity that contributes to the poor training and low competencies of the TVET learners.

A female unemployed South Sudanese civil engineer graduate viewed Poor training at TVET as a result of not using the same tools used at workplace. In her words she said;

The tools we used while at training were not the same with the tools that are used at the world of work. During our training we used manual tools but now at the place of work most of the tools used are electronically operated which we find it difficult to operate.

The above was supported by an observation made by the researcher on the tools used for mixing motor at the TVET Centers and at workplace. The researcher's observation revealed that, the tools used in the TVET Centers were manual while at workplaces they were electronically operated. This finding partly explains why graduates were not able to use modern tools in the work places.



(a) Tools used for mixing motor at one of the TVET Centers in Juba (b) Tools used for mixing motor at one the workplaces in Juba

Figure 4.2.1 Tools and Materials used in TVET Centre and workplace

Source: Primary

Further observation made by the researcher on the use of tools at the training Centers also revealed that, tools donated by Japan International Co-operation Agency (JICA) at MTC were kept in stores unused. This was because teachers on the ground were not able to operate them. This finding partly explains why graduates found it difficult to operate the modern tools at the work places.



Figure 4.2.2: Unused modern Tools at MTC kept in store in Juba

Source: primary data

From table 4.2, nine (9) respondents (20%) said that, South Sudanese civil engineer graduates were not employed by the Building and Construction Industry because they had no out of school experience on building and construction. During an interview with civil engineer employer this became clear when he said;

Building and construction is not a trial and error business where anyone can come in and claim to be a civil engineer without having proper interaction with tools and materials. For us, we are in business, therefore, need people who have experience in building and construction but not to train fresh graduates how to handle tools and materials.

In support of the above view, unemployed South Sudanese civil engineer graduate also said that;

During our training, we were not given the opportunity to go to Building and Construction Industry and to learn. Due to the short duration of the training which was three months, we only did our practicals within the training workshop which was not enough to qualify us master the tools.

The same issue of not having out of school experience in handling tools was also supported by another unemployed South Sudanese civil engineer graduate who said that;

We are not employed by the Building and Construction Industry because of not having out of school experience in handling the tools. The employers need people who have worked at any building and construction site before. But for us we are still fresh graduates who have not worked before.

The researcher got similar responses from two unemployed South Sudanese civil engineer graduates from Juba Technical and three from St. Vincent Vocational Training Centre on South Sudanese civil engineer graduates not having out of school experience in handling tools.

During the field work, the researcher was able to confirm the above through observation that, civil engineer learners in the TVET Centres were not given the opportunities to go out of school to get experience in the different building and construction sites in Juba. That is way when they graduate; they find it difficult to get employed by the Building and Construction Industry employers.

According to table 4.2, Seven (7) respondents (16%) also stated that South Sudanese civil engineer graduates were not employed by the Building and the Construction Industry because most of the building and construction companies were owned by foreigners who prefer to employ their fellow foreigners. One of the unemployed South Sudanese civil engineer graduate said;

If you move around Juba, 90% of the building and construction companies are owned by foreigners. And they prefer to employ people who can easily understand their language of instruction. The foreign civil engineers stand the high chance to work in these companies because of language.

The researcher observation confirmed the above statement that, most of the companies in Juba are owned by foreigners from different countries such as Uganda, Kenya, Egypt, Ethiopia and Lebanon, china and German. The most dominant communication language used is English language. This is a problem in terms of employment to most of South Sudanese civil engineer graduates who are literate only in Arabic language. This is evidence in figure 4.2.3 below;



(A) Foreign (Lebanese) employee at Al Salm Eng. Ltd in Juba



(B) Foreign (Ugandan) manager JOPHCO Eng. Ltd in Juba

Figure 4.2.3: Foreign Civil Engineer Employees and employers in Juba County

Source: primary

People who look for jobs who are well-trained are always interested in the jobs they look for and are serious. Table 4.2 reveals that South Sudanese civil engineer graduates are not serious job seekers. Four (4) respondents (9%) stated that, South Sudanese civil engineer graduates were not employed by the Building and Construction Industry because they were not serious in looking for jobs. The view that the graduates are not taking the initiative to look for jobs in the construction industry was exemplified by the managing director of JOPHCO Construction Company when he said that;

I have been managing this company for about three years from 2009 to date and have not seen South Sudanese civil engineer graduates who come to look for employment in my building and constructions sites. All my employees are foreign civil engineer graduates because they come to look for the job and I give them.

During the field work, the researcher observed that, the civil engineering training programmes in the TVET Centers were invariably focusing on basic vocational skills and not on skills for employability, including communications, inter-personal skills and other life-skills. That was why when the students graduate from the TVET Centers, they fear and find it very challenging to go out there to look for job.

From table 4.2 two (2) of the respondents (5%) said that, South Sudanese civil engineer graduates were not employed because their labour was expensive to hire. The South Sudanese Civil engineers charge high price when asked to do a piece of work. One of the employer in an interview said, “South Sudanese civil engineer graduates are expensive to hire because they ask for a lot of money for any small piece of work done”.

A female employer in the Building and Construction Industry confirmed this at an interview when she said;

South Sudanese civil engineer graduates over rate themselves despite the little knowledge and skills have. This makes it difficult for people to employ them. Foreign civil engineer graduates provide cheaper labour that is why most people go for them.

Observation during the field work confirmed that above when it revealed that, many building and construction businesses enterprises in Juba aim at maximizing profit. Therefore, they are not interested in employing the South Sudanese Civil engineer graduates expensively and moreover they yield poor quality work due to their inadequate training from the TVET Centers. This finding explains why foreign civil engineer graduates are employed in a large number by the Building and Construction Industry in Juba.

4.3 Inability of Unemployed South Sudanese Civil Engineer Graduates to Create Jobs

Research question two sought to establish why the South Sudanese civil engineer graduates were unable to create their own jobs in the Building and Construction Industry in Juba County.

A summary of the respondents' views is presented in table 4.3

Table 4.3:

Summary of factors responsible for inability to create jobs

Factor	Number of respondents	%
- No skills for job creation	20	45
- It is expensive	18	41
- No role model	6	14
Total	44	100

Source: primary data

As shown in table 4.3, twenty (20) participants (45%) said that, South Sudanese civil engineer graduates were failing to create jobs because they were not having skills for job creation. One of the unemployed South Sudanese civil engineer graduates said, “I was not taught how to create a Job for myself when I was doing my training at TVET Center. All I knew was to finish my training and get employed”.

The researcher’s observation confirmed the above statement that, the South Sudan civil engineer graduates are interested in readymade business and to get employed as managers.

Lack of self confidence in their ability to do the building and construction business was also acknowledged by the respondents during the interview. In support of the above view , one unemployed South Sudanese civil engineer graduate said;

The training I went through was not enough to qualify me to create my own job in Building and Construction Industry. This is because the training duration was very short, three months only and the skills that were taught were basic building skills not entrepreneurship skills and preparation for self-employment.

From table 4.3, twelve (18) respondents (41%) stated that, South Sudanese civil engineer graduates were failing to create their own jobs in the Building and Construction Industry because it was expensive to create jobs. A female unemployed South Sudanese civil engineer graduate said, “to start a small construction business needs some capital for buying working tools and materials. This is very difficult for us as fresh graduates”.

In support of the above view, one employer in the building and construction said,

It is expensive to start a construction business in terms of time, money and labour. One has to devote him/herself to it, spend long time in doing it and work hard.

The training we went through in the TVET Centers rarely facilitate access to financing or start-up capital. The South Sudanese civil engineer graduates are handicapped financially. That is why they are finding it very expensive to start a business in the Building and Construction Industry.

Having come from a prolonged war background, coupled with high inflation rate in the country, the researcher agrees with respondents that most of the graduates do not have the capital to set up a business in the Building and Construction Industry. Consequently, there is no civil engineer graduate in Juba who has owned a business in Building and Construction Industry.

In table 4.3, six (6) respondents (14%) stated that, South Sudanese civil engineer graduates were failing to create jobs because there were no successful civil engineer graduates (role models) who have created jobs in Building and Construction Industry. One of the unemployed South Sudanese civil engineer graduates said,

Since I started to train as a civil engineer in 2010 here in juba I have never heard or seen any South Sudanese civil engineer graduate from any TVET Center here in Juba creating his or her own Juba in Building and Construction Industry. Otherwise, if there was one it would have inspired us.

During the period of field work, the researcher observed and confirmed the absence of South Sudanese civil engineer graduates who had their own businesses in the Building and Construction Industry.

4.4 Employment of Foreign Civil Engineer Graduates

Research question three sought to establish factors that were responsible for the employment of foreign civil engineer graduates by the Building and Construction Industry in Juba County. Respondents were subjected to interviews in order to establish factors responsible for the employment of foreign civil engineer graduates.

A summary of the respondents' views about the factors that are responsible for the employment of the foreign civil engineer graduates by the Building and Construction Industry in Juba County is presented in table 4.4.

Table 4.4

Summary of factors responsible for the employment of foreign civil engineer graduates

Factor	Number of respondents	%
- They are very cheap	18	41
- No serious employment control over the foreign job seekers	9	20
- They are experienced in building and construction	7	16
- They are serious job seekers.	6	14
- Foreign owned companies employ fellow foreigners	4	9
Total	44	100

Source: Primary data from the field

From the table above, eighteen (18) respondents (41%) stated that, foreign civil engineer graduates were employed by the Building and Construction Industry because their labour was not expensive to hire. One of the employed foreign civil engineer graduates said, "When I am asked to do a simple work, I don't charge people a lot of money. That is why am always employed".

In an interview with another employed foreign civil engineer graduates, the fact that foreigners were not expensive was explained when he said;

We are employed by the Building and Construction Industry because we do not charge them high price to do work. We charge them according to the amount of the work given. We were also aware that most of the Building and construction companies in Juba are profit making companies. So for one to be employed, one need not to charge them very high.

The researcher through observation confirmed that all the Building and Construction companies in South Sudan were profit making enterprises; they aimed at making profit by employing cheap labour.

Table 4.4 indicates nine (9) respondents (20%) who were interviewed and responded that foreign civil engineer graduates were employed because there were no serious employment control over the foreign civil engineer graduates. In an interview with a member of South Sudan Legislative assembly, this factor was explained when he said;

Foreign investors are officially allowed by South Sudan laws to operate in South Sudan. The investors are given the freedom to employ or be employed by any one regardless of nationality. Because of this freedom to operate, foreign civil engineer graduates got the opportunity to be employed by the Building and Construction Industry at a large number because they have the skill in building and construction.

The researcher through observation was able to confirm that many foreign civil engineer graduates were working in the Building and Construction Industry in Juba freely without any interference from government. Since the time the Comprehensive Peace Agreement (CPA) was signed up to independence last year, there had been no serious control of the inflow of the foreigners to the Country because they government need them to help in the rebuilding and the reconstruction of the new nation in Africa.

In a documentary review of the Republic South Sudan legal labour Law 2008 by the researcher further revealed that, the Republic of South Sudan labour laws give the foreign investors right to employ any person regardless of nationality provided the employees portray competency in the workplace (South Sudan labour Law 2008, chapter VII, section 26, sub section 3&4,). This has contributed to large number of foreign investors and foreign civil engineer graduates employee in the country.

Building and Construction Industry needs experienced workers. This was brought up in interview with the subject of the study. Table 4.4 illustrates this. According to the table, seven (7) respondents (16%) stated that foreign civil engineer graduates were employed because they had enough experience in building and construction. In an interview with an employer in Building and Construction Industry in Juba town, the respondent said,

I employ foreign civil engineer graduates because they are well trained and are exposed to the different building plans and design. Unlike the South Sudanese civil engineer graduates who are half baked and not exposed to the use of the different tools and materials that are currently used in the world of work.

In another interview in Jebel market with an employer in the Building and Construction Industry, foreign civil engineer graduates were commended by the good work they do. The respondent said;

Foreign civil engineer graduates are the ones who built all these permanent nice houses in Juba. Everyone can see the good work done by the foreign civil engineer graduates. Because of these good work done, people have trust on them and prefer to employ them for any building and construction work in Juba.

Through observation, the researcher confirmed that Building and Construction Industry relies heavily on “hands on” experience which the South Sudanese civil engineer graduates are lacking. The researcher was able to observe the nice work done by the foreign civil engineers that gave them high chances for employment in the Building and Construction Industry in Juba.



Figure 4.4: Beautiful houses Built by foreign civil engineers graduates in Juba

Source: primary data from the field.

According to table 4.4, six (6) respondents (14%) stated that, the foreign civil engineers were employed because they were very serious in looking for jobs and were ready to do any work so

long as they were paid enough money. As such, they get easily employed. One of the employed foreign civil engineer graduates said, “much as I have the experience and the knowledge of building and construction, I still have to go around searching for work seriously”.

The seriousness of foreign civil engineer graduates in looking for jobs was put clearly by another foreign civil engineer graduate respondent who was interviewed. He said;

I came from Egypt to South Sudan to look for work in the Building and Construction Industry. While here in South Sudan, I move from door to door, any building and construction site where people are working asking for job. That is how I got employed. If you stay at home or just move in the streets waiting for an advert for employment you will not get employed.

From table 4.4, four (4) respondents (9%) stated that, the foreign civil engineer graduates were employed in the Building and Construction Industry because most of the construction and building companies in Juba were owned by foreigners who prefer to employ their fellow foreigners who speak the language of instruction they use at the work place. The respondents were able to give examples of companies such as Folcon, Savanna Electrical Engineering, ABMC, Civicon, Skyline, TIT Ubiet Investment, Al Sham, Al Alator, Alex, Hayat and Chinese Company, which are run by foreign investors from Egypt, Lebanon, China, Uganda, Kenya, Ethiopia and Eretria. During the field work, researcher was able to observe and confirm the existence of the different companies that were run by foreign investors from Egypt, Kenya, Lebanon, Isreal, German, Uganda, china, and Ethiopia whose language of instruction is English. These companies included ABMC, Civican, Alsham, Hayat and Chinese Company.

4.5 Solutions to the Problem of Unemployment of the South Sudanese Civil Engineer Graduates in the Building and Construction Industry

Research question four sought to establish the possible solutions to the factors affecting the employment of Sudanese civil engineer graduates by the Building and Construction Industry. Summary of suggested solutions for unemployment problem of the South Sudanese civil engineer graduates suggested by the respondents is presented in table 4.5.

Table 4.5

Summary of suggested solution for the unemployment problem of the South Sudanese civil engineer graduates

Suggestions	Number of respondents	%
- The government should increase the budget for vocational education and training	32	73
- That the vocational basic skills should be taught right from primary school up to the secondary schools	8	18
- Employment laws should be revised	4	9
Total	44	100

Source: primary data from the field

From the table 4.5 above, thirty two (32) respondents (73%) suggested that, the government of the Republic of South Sudan should increase the budget for Technical Vocational Education and Training from 5% to 20 or 25%. In acknowledgement of this view, Director TVET Ministry of General Education and Instruction said that;

Increasing TVET budget from 5% to 20% will pave way for hiring and training more qualified TVET teachers and provision of more infrastructures, tools and materials. By having good qualified teachers, enough tools and materials, then training will pick up and learners will be able to put hands on tools and materials and gain experiences. This in turn will pave way for quick employment in the Building and Construction Industry.

Teaching TVET basic skills from primary up to secondary schools was one of the suggestions given by eight (8) respondents (18%) during the study interview. In agreement with this view, one Principal of a TVET Centre said;

To change the attitudes of our children and the entire society to understand TVET, we need to include TVET components right from primary to secondary school. This will give the learners at least the basic understanding of TVET skills and grow up as they gain experience and understanding its importance.

From table 4.5, four (4) respondents (9%) suggested that, the government of the Republic of South Sudan should review the employment laws. One unemployed South Sudanese civil engineer graduate suggested that;

The government of the Republic of South Sudan should ensure that the Ministry of Public Service revises the Labour Laws and restrict the employment of foreign civil engineers and give high employment opportunities to the South Sudanese civil engineer graduates.

In a documentary review, the researcher was able to reveal that the labour laws of the Republic of South Sudan gives equal employment rights to foreigner and the South Sudanese (South Sudan labour Law 2008, chapter VII, section 26, sub section 3&4,). However, as suggested by the unemployed South Sudanese civil engineer graduate, if revised and the South Sudanese are given higher employment opportunities, more South Sudanese civil engineer graduates will get employed.

CHAPTER FIVE:

DISCUSSION AND ANALYSIS OF THE FINDINGS

5.1 Introduction

This chapter reflects on the analysis and discussion of findings about the factors affecting the employment of South Sudanese civil engineer graduates. The discussion is according to the objectives.

5.2 Unemployment of South Sudanese Civil Engineer Graduates.

Findings from the interviews with all the respondents in Juba County revealed that, the South Sudanese Civil engineer graduates are not employed by the Building and Construction Industry because of poor training in the TVET Centers. Teaching in the TVET Centers was said to be 90% theoretical with only 10% practical. Tools and materials used at the TVET Centers were few and outdated. In view of the above findings, it appears that classroom teaching was much more -preferred (given extra time) at the expense of the practice. This finding is in conformity with my personal experiences during the study of the TVET Centers. I also observed that all the TVET Centers have more time slated for vocational theory and general knowledge than for the practical. Regi Enerstvedt, (cited in Mjelde, 2009) agrees with this finding when he said; “lengthening the hours spent in conventional classroom schooling away from practical working life has become a common characteristic of present-day school reforms”.

John Dewey and Lev Vygotsky (cited in Mjelde, 2006a, p. 97 & 191) in their views are not in agreement with the current learning system existing in our TVET Centers in South Sudan. According to John Dewey and Lev Vygotsky, if learning is to take place, it is important as

educators to adopt pedagogical approaches that help learners to relate the theory to the practice (see also Mayes, 2007, pp. 2-3). Learning through activity and cooperation is very vital. This will help learners to see the connection between the two learning environments, just as Jorgensen (2008) observed. The theory learned ought to have been right within the proximity of the practice.

Nilsson (2011) also emphasised the importance of interweaving practical teaching with general theory when he said; “what characterizes the development of vocational education in school are that it has three components: practical (work technique), vocational theory and general education”. The practical component comprises of teaching the techniques of practical work. The vocational, or craft theory component has to do with teaching about materials used and how tools and machinery function. The general education component teaches general academic subjects such as English language and civics/social studies, maths, history, foreign language, chemistry, and biology. The acquisition of knowledge in relation to these three components within the framework of ‘professional knowledge’ has been regarded differently by society at different times. That is why today people are confused and graduates get out of school half-baked ending up in the streets not employed.

Nilsson’s view was also seconded by Mjelde (2006) who offered a model of traditional pedagogy in which the learner, teacher and knowledge (broadly defined as both theoretical and practical knowledge) are relationally located through three different related processes of teaching, training and learning.

The researcher through the experience and knowledge of vocational pedagogy is in agreement with Nilsson’s and Mjede’s views on the three components of vocational pedagogy. The researcher confirms that each of these relational processes bring with them a suite of pedagogical

practices supported by particular theories of learning (e.g. behavioral, cognitive, constructivist, etc.) which in turn have different assumptions about knowledge which learners acquire. The three components of vocational pedagogy lead to learners gaining the necessary knowledge and skills identified prior to learning and in subject/modules, competency standards, programs and courses of study.

The poor training in the TVET Centers can also be attributed to the inadequate support from the government of the Republic of South Sudan, employers and other stakeholders that take part in the development of Technical vocational education and training in the Republic of South Sudan. The government gives only 5% of the education budget to develop vocational education in South Sudan in general. Yet government is portrayed to be extremely interested in TVET as the quickest means of reconstructing the country. This 5% educational budget allocated to TVET is not enough for hiring and training more teachers, buying tools and materials in South Sudan as a whole. This in turn has resulted to vocational training centre hiring teachers with limited capacity, operating with few outdated manual tools and materials. This eventually have a great negative impact on the graduates that come out of these vocational training centres. The civil engineer graduates would end up not getting proper training and get difficulties of getting employed by the Building and Construction Industry of South Sudan.

Furthermore, respondents stated that South Sudanese civil engineer graduates were not employed by the Building and Construction Industry because they lacked experience in building and construction. This is not a problem to South Sudanese civil engineers alone; most countries in Africa have the same problem. For example in Malaysia and Nigeria, Civil engineer graduates

are not employed as a result of being inexperienced and having inadequate skill to work in the construction industry (Tan, 2007).

The foundation of the graduates' inexperience is the poor training. The graduates had no opportunities for practicing building and construction skills through industrial trainings. The theory was in most times a subject completely independent of practice and practical implementation. This is contrary to the assertion put forward by John Dewey (cited in Mjelde, 2006a) in which he accentuates the need to have the theory taught in relation to the practice. In my view, graduates were supposed to use the knowledge and skills acquired to enhance the development and reconstruction of the new country, and demonstrate ability of competency in civil engineering. There is need to view learning from the perspectives of situated learning, one that enhances the connection between the world of work and the training, one that has meaning from the perspectives of the learners, and one in which the learner is involved in making meaning of the new knowledge while reviewing the old knowledge during the training.

5.3 Inability of Unemployed South Sudanese Civil Engineer Graduates to Create jobs

The findings of this study showed that South Sudanese Civil engineer graduates were not able to create their own jobs because they were not having job creation skills. These skills could be of lobbying for funds, managing the little they got, marketing their business and saving. These skills could be learnt from school or outside school. However, the respondents of this study blamed TVET Centers for not having taught the graduates with such skills. Taking Europe and United States of America as an example of successful job creation skill educators, indeed TVET institutions had done a lot in modelling the learners to become job creators. Innovative and creativity skills were not separated from the normal TVET curriculum. In addition, more emphasis was put on education that would provide life and occupational skills that enhances the

potentials of individual to create their own jobs and thus improve their quality of life (Bukola, 2011). This is contrary to the case in South Sudan and other countries in Africa such as Nigeria, Uganda, Tanzania and others, where creativity skills are not properly included in the TVET curriculum (Kolawole, Zakari, & Ibrahim .2006) & (Nwangwu, 2007). Hence, the culture of self-reliance that promotes pride in private work, self-discipline and creative thinking is not encouraged in the TVET Centers South Sudan.

5.4 Employment of Foreign Civil Engineers by Employers in the Building and Construction Industry

Findings from the respondents revealed that foreign civil engineer graduates were employed by the Building and Construction Industry because their labour was very cheap to hire and equal employment rights are granted to the foreigners by the labour laws of South Sudan. As a result of this policy, a large number of foreign civil engineer graduates have come to juba in search of employment. Most of these foreign civil engineers come from East Africa, especially from Uganda and Kenya. Because of the competition for the limited available building and construction jobs, the foreign civil engineer graduates accept any reward given to them, hence lowering the employment charges in the Building and Construction Industry. The foreign civil engineer graduates accepted any reward given to them because south Sudanese pounds are relatively stronger than all the East African currency. For example, the current exchange rate is 600 Uganda shillings for 1 south Sudanese pound. Therefore, one who is paid in south Sudanese pounds or at best in US dollars would get more Uganda money than he would get if paid in Uganda money. This finding is in contrast with what happens in United States of America, Singapore and Malaysia where foreign civil engineers are highly paid based on their labour policy that effectively targets workers with skills at both extremes of the scale to fill gaps in

labour demand unmet by nationals. This is done with highly regulated work permit systems that differentiate workers by nationality, skill level, and sector of activity (Ruppert, 1999). This is not the case in South Sudan where foreign civil engineers are doing all kinds of jobs including those that can be done by the nationals. In South Sudan, the employment laws give freedom to foreign employees and employers to operate at the same level with the nationals.

The problem with the South Sudanese civil engineer graduates is that they are not serious in looking for jobs that is why foreign civil engineer graduates are dominating the employment in the Building and Construction Industry in Juba. The above assertion is true when taking into consideration the poor training in the TVET Centers. The South Sudanese civil engineer graduates might have got discouraged to look for jobs because they cannot compete in the employment market due to the inadequate skills they acquired from their training from the TVET Centers. This is not true of India where the participation of foreign civil engineer graduates in the Building and Construction Industry is not encouraged. Foreign civil engineers who force their ways to India often face difficulties with taxation, in interacting with sub-contractors and suppliers and in adjusting to the local work culture (Bandyopadhyay, Swaminathan, & Rohatgi, 2008, p. 2).

Nigeria like in South Sudan, the poor training of civil engineers and building and construction graduates also made proprietors to resort to employing foreign civil engineers to do the jobs (Shinn, 2008).

The Republic of South Sudan as a new country has many employment opportunities in the Building and Construction Industry. This has attracted many foreign civil engineers. My findings and observation concurs with a report compiled by World Vision Sudan (2008) that the building and construction work in South Sudan is mostly done by foreign civil engineers. But what was

unknown was why the Building and Construction Industry employers in South Sudan employ foreign civil engineers. The findings of this study were the answers to the uncertainty that people had that the Building and Construction Industry in South Sudan mainly employs foreign civil engineer graduates.

5.5 Solutions to Unemployment of the South Sudanese Civil Engineer Graduates in the Building and Construction Industry

People in the Republic of South Sudan had all their hopes in the government of South Sudan more seriously after the independence from the Khartoum government. The government is seen as a driver in the reconstruction and rebuilding of the new nation. From the study findings, the respondents suggested that the government should increase the budget for Technical Vocational Education and Training from 5% to 20 or 25%. This would pave way for hiring and training more qualified vocational education and training teachers and provision of more infrastructures, tools and materials. In light of that, the researcher is in support of the above assertion. Taking in to consideration the current state at which the Technical Vocational Education and Training in the Republic of South Sudan operates, there is really need for the government to inject more money to train more skilful man power to assist in the rebuilding and reconstruction of the new nation. Today in Juba, findings have shown that 90% of the building and construction employment is controlled by foreigners. The question is, for how long are the foreigners going to dominate in the rebuilding and reconstruction of the new nation? It is time for the government and all the citizens of the Republic of South Sudan to wake up and start taking necessary measures in the preparation of their manpower to participate in the development of this new nation. Otherwise, the nationals will not participate and benefit from the proceeds that accrue

from the development of their nation. They will thus not have pride of and identity of being part of the development progress of their country.

Further suggestion given by respondent during the field work that, TVET basic skills should be taught right from primary school up to the secondary schools. This will give the learners at least the basic understanding of TVET skills and grow up as they gain experience preferably in building and construction. The researcher is in agreement with this suggestion because looking at South Sudan war history; the citizens were kept blind of seeing the importance of Technical Vocational Education and Training. All they knew was sending their children to school. In the primary schools, no single component of vocational education is practice. That is perhaps explains why most people in South Sudan have less interests in vocational education and training.

Many respondents suggested that, the government of the Republic of South Sudan should review its labour laws. It gives freedom for foreign investors and employees(South Sudan labour Law 2008, chapter VII, section 26, sub section 3&4,). The researcher is in agreement with this suggestion. Therefore, the government should take the example of China, Japan, USA and Germany, Singapore and Malaysia where the development of their national skills and competence was given the first priority. Their foreign labour policies were developed in such as way that targets workers with skills at both extremes of the scale to fill gaps in labour demand unmet by nationals (Ruppert, 1999). This was done with highly regulated work permit systems that differentiate workers by nationality, skill level, and sector of activity. This is usually done within a stipulated period of time.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1. Summary

The purpose of the study was to establish factors causing unemployment of South Sudanese TVET civil engineer graduates in the Building and Construction Industry. The study was guided by the following specific objectives: to establish why South Sudanese civil engineer graduates are not employed by the Building and Construction Industry employers, to ascertain why South Sudanese civil engineer graduates are failing to create their own employment in the Building and Construction Industry, to determine why the Building and Construction Industry of South Sudan employs foreign civil engineers and to suggest possible solutions to the factors affecting the employment of South Sudanese civil engineer graduates by Building and Construction Industry. The South Sudanese civil engineer graduates were unemployed by the Building and Construction Industry because of poor training in the TVET Centres which came as a result of inadequate government support in terms of training tools, materials and TVET teachers training. The study also revealed that, the graduates lacked job creation skills and experience to work in the Building and Construction Industry. The study revealed that, foreign civil engineer graduates were employed by the Building and Construction Industry because they were; experienced, cheap to hire and serious job seekers. The methods of study were interviews, observation and documentary analysis.

The study established that the South Sudanese civil engineer graduates were unemployed by the Building and Construction Industry because of Poor training in the TVET Centres which came as a result of inadequate government support in terms of training tools, materials and TVET teachers training. The study also revealed that, the graduates lacked job creation skills and

experience to work in the Building and Construction Industry. The study further revealed that, foreign civil engineer graduates were employed by the Building and Construction Industry because they were; experienced, cheap to hire and serious job seekers.

6.2 Conclusion

Based on the findings, the following conclusions were made:

The study found the employment opportunities in the Building and Construction Industry were many. South Sudanese civil engineer graduates were found to be unemployed in the construction industry in South Sudan. Many factors were at play against them and they could not get job nor could they establish jobs for themselves. The study has established internal factors impinging on them ranging from inadequate training that they went through to their own individual weaknesses. The external factors that were established which included employment of foreign civil engineer graduates aggravated their situation in relation to employment and self-employment in the construction industry in South Sudan. There is therefore urgent need to reverse the situation so that South Sudanese who qualify as civil engineers are able to participate in the development of the country through the construction industry.

6.3 Recommendations

The following Suggestions were made as solutions to causes of the problem of unemployed South Sudanese civil engineer graduates in the Building and Construction Industry; government should increase the budget for vocational education and training, basic vocational skills should be taught right from primary school up to the secondary schools and the employment laws should be revised to limit the influx of foreign civil engineer graduates jobs seekers into South Sudan.

(a) Government

- Qualified teaching staff and a good environment that includes provision of adequate training tools and materials must be taken care of by the government in the planning and execution of policies on TVET in South Sudan. Thus, this must be the focus of any debate on the matter.
- Entrepreneurship as a core subject should be included in the TVET curriculum and used immediately by the institutions in the country. TVET graduates with this knowledge and skills will be able to function as members of the working community, proactive, conscientious, self-assured, resourceful workers and self-employed people or entrepreneurs who value their work.
- Building the capacity of current civil engineer training staff in South Sudan. Building the teachers capacity will enable them to effectively offer services that will meet international standards and therefore be able to effectively respond to the challenges of globalization.
- Establishing TVET component in all the school curriculum right from primary to tertiary level in order to give a basic understanding across all the educational levels in South Sudan.
- Strengthening the capacity for countries to adopt, disseminate and maximize rapid technological advances is dependent on adequate systems of Technical Vocational Education and Training.
- Review of TVET system, including introducing research centers. The review is to achieve the desired reform in the TVET system to address the mistakes of the past,

including opening of Technical Vocational Centers that have not undergone thorough feasibility studies.

The way forward is consolidation of the resources available for the reconstruction and staffing of these Institutions to an acceptable level.

Private TVET Institutions that satisfy rigorous conditions for accreditation can be allowed at this stage to absorb some of the students without expense from national budget.

The Government should increase its budget for TVET and also make use of the current good will of the donor community to urge them to include support for TVET in terms of funds, staff training, tools and material, transfer of technology and scholarships in their aid assistance.

The government of the Republic of South Sudan should review its labour laws. It gives freedom for foreign investors and employees. The government should take the example of China, Japan, USA and Germany, Singapore and Malaysia where the development of their national skills and competence was given the first priority. Their foreign labour policies were developed in such a way that targets workers with skills at both extremes of the scale to fill gaps in labour demand unmet by nationals (Ruppert, 1999). This was done with highly regulated work permit systems that differentiate workers by nationality, skill level, and sector of activity. This is usually done within a stipulated period of time.

(b) Ministry of General Education and Instruction

Given the necessity and the high potential demand for employees in the Building and Construction Industry, coupled with the poor training in the TVET Centers, a new unified curriculum should be developed with full support from various stakeholders who include civil engineer graduates, employers, TVET Institutions, government and Non governmental organization (NGOs). Each of these stakeholders has a unique role to play in promoting the development of South Sudan civil engineering. The Ministry of higher Education and Instruction has not done enough to develop TVET in South Sudan.

The Ministry of Education should take sole responsibility of TVET in South Sudan not to share responsibilities with the Ministry of Public Service. This will avoid duplication of roles and not having clear directives in the running of TVET in South Sudan.

Ministry of Education should set up standards of attainment in TVET Institutions, prescribing and enforcing the necessary required standards, coordinating the efforts of various stakeholders and setting policies and procedures to facilitate implementation of programmes.

(c) Principals TVET Centres

The principals TVET Centres should ensure that civil Engineering students should be trained through experimentation, exploration and involvement in key projects in various academic fields and industries that gives students crucial experience and skills needed for developing and integrating competencies necessary for participation on an international level in our expanding global world.

The principals TVET Centers and enterprises of placement should work hand in hand to design curriculum for training students who will become graduates with the right knowledge, skills and attitudes. This will help to avoid the mismatches between the training and the labour market requirements. Organizations of placement can help the department to develop a demand-driven curriculum, and also help in the training of practical skills.

Each principal of a TVET Center should sign a memorandum of understanding with a major organization (the ones that commonly take up the students for field work) for purposes of placement and supervision of students.

There is urgent need for each principal of a TVET Center to have all the teaching staff (lecturers) trained professionally in teaching skills. There should be organized on-job training in teaching skills. In this case a professional course like vocational Pedagogy comes in handy.

(d) Instructors TVET centers

Lecturers should vary their teaching methods by giving examples from real life situations. They should help learners to see the relevance of the theory that is being taught to the practice in real life situations. Methods that involve the students in active participation and not as passive participants should be used. Such methods as group discussion and project work would go a long way to help the learner understand their world.

(e) Unemployed South Sudanese Civil engineer Graduates

Unemployed South Sudanese civil engineers should not give up but look for workshops or building and construction companies and attach themselves to learn as apprentice. By doing that they will gain hands on experience through the interactions with the tools and builds up their capacity and competence in the building and construction work.

6.4 Areas for Further Research

In view of this study, the researcher has identified the following areas which could be taken up by researchers for further study.

There is need to carry out a study on the most effective way to develop competence and skills of civil engineer graduates by both employers and TVET Institutions. The researcher feels that such a study would provide insights for reforms and the transformation needed in the Republic of South Sudan for civil engineer graduates.

Now that the Government of the Republic of South Sudan is taking TVET as the best and the quickest way to rebuild the new nation, there is need to research on the attitude of South Sudanese towards the development of civil engineering in the country. In view of the findings of this study, the researcher believes that such a study would create awareness to the nationals on the importance of TVET in the development of a country.

REFERENCES

(a) Books

- Amin, E. M (2005). *Social Science Research: conception, methodology and analysis*.
Makerere University: Kampala Uganda.
- Amutabi, M,Nafukho,F , Otunga,R(2005).*Foundation of Adult education in Africa:
African perspectives on Adult learning*. Cape Town, Pearso Education, South
Africa .
- Arowolo, A, Zakari, & Ibrahim (2010) *Historical Factors That Influences Curriculum
Development in Industrial Technical Education in Nigeria*. Nigeria
- Bukola, A. (2011) *Entrepreneurship Education: An Imperative for Sustainable Development in
Nigeria*.
- Cohen, L., Manion, L., & Morrison, K. (2000). *The Research Methods in Education*. London and
New York: Routledge Falmer.
- Daly, R. & L. Mjelde. (2009). *learning at the Point of Production: New Challenges the Social
division of knowledge*. University of Oslo: Sociologisk tiskshrift.
- Egau, J. O. (2002). Meeting the Challenges of Technical/Vocational Education: The Ugandan
Experience. *Workforce Education Forum*, (p. 28). Penn State University.
- EMIS (2011& 2012) *South Sudan Educational Statistics*.

- Government of South Sudan, *Southern Sudan Vocational Training Policy*. (2008): Content and Processes of Vocational Training Programmes. Government of Southern Sudan, Ministry of Labour, Public Service and Human Resource Development. November 2008.
- Kimambo, I.N., Lema, N.M (2003) *Design and Operationalization of a Structured Engineers Apprenticeship Programme (SEAP)*, Dar-es-Salaam.
- Kirsten.L (2011) VET in Southern Sudan. *Literature reviews a final draft version*. South Sudan. Juba.
- Kvale, S. (2007) *Contradictions in assessments for learning in institutions of higher learning*. In D.Boud and N.Falchikov (eds). *Rethinking assessment in higher education: Learning for the longer term*. New York Milton Park Routledge.
- Kvale,S. & Brinkmann, S., (2009). *Interviews: Learning the Craft of Qualitative Research Interviewing*. 2nd edition, USA, sage publications
- Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. New York: Cambridge University Press.
- Lindgren, A. (2006). Adult Education, an Out-moded Concept, or What? In L. Mjelde, R. Daly, P. Gonon, & A. Heikkinen (Eds.), *Working Knowledge in Aglobalizing World: From Work to Learning and From Learning to Work* (Vol. III, pp. 293-311). Bern: Peter Lang.

Mbaaga, F. K (1990). Introduction to social research. *Validity and reliability of instrument*.
Makerere University. Kampala Uganda.

Meredith, O. (1983). *The Practice of Entrepreneurship*. Geneva: International Labour Office.

Mjelde, L. (1995). Activity Pedagogy: How does it really work? In A. Heikkinen (Ed.),
*Vocational Education and Culture: European Prospects from Theory and
Practice* (pp. 131-154). Erottajakatu.

Mjelde, L. (2005). *Vocational Pedagogy: From Work to Learning and Learning to Work*. Oslo:
Peter Lang Verlag.

Mjelde, L. (2006a). *The Margical Properties of Workshop Learning* (Vol. 2 in series).
(P. Gonon, A. Heikkinen, Eds., & R. Daly, Trans.) Bern: Peter Lang.

Mjelde, L. (2006b). Workshop learning in Vocation Education: Working Knowledge and the
Zone of Proximal Development. In L. Mjelde, R. Daly, P. Gonon, & A.
Heikkinen (Eds.), *Working Knowledge in a Globalising World: From work to
learning, from learning to work* (Vol. 3, pp. 117-139). Bern: Peter Lang.

Mjelde, L. (2009). *Great 20th Century Minds: Jean Piaget and Lev Vygotsky*. Akershus:
unpublished.

MLPSHRD (2008), *Analytical report for the South Sudan vocational training Policy
(final draft)*. Juba south Sudan.

- Mukama, B (2012) *engineers registration board capacity building programme for engineers after graduation in Tanzania.*
- Nilsson, L. (2008b). *Knowledge about knowledge and Knowledge about Vocational Learning.* unpublished.
- Nilsson, L. (2008b). *The human and the task; two main factors in Vocational Didactics.* Stockholm: University of Goteborg.
- Odiya.J.N (2009) *Research proposal and reports in a APA or MLA publication style: study design.* Gulu university .Uganda.
- Olu, A.(2011) *Graduate Employment and Employability Challenges in Nigeria: Nigeria.*
- Okello, B. (2009). *Complexity and Contradiction in vocational Education in Uganda: presentation to the postgraduate students of vocational pedagogy second cohort 2011.* Kyambogo University, Kampala Uganda.
- Rosatati .F, Lyon.S, Guarcello.L (2011) *Labour market in South Sudan*
- SAVOT (2008b) *Result of Interviews for Small Businesses (Workshops) in Juba Town, Unpublished researched report, Juba.*
- Sidhu, K. S. (2007). *Methodology of Research in Education.* New Delhi: Sterling Publishers.
- South Sudan labour Law (2008), *chapter VII, section 26, sub section 3&4.*

UNESCO (2007), *a multi-stakeholder approach to address graduate (un)employment:*

Bangkok. Thailand.

Wangusa, T. (2007). *Research Methodology*. Bow and Arrow publishers' ltd, Kampala.

Waterhouse, J, Muir, C.S., Correa, P., Powell, J. (1976). Cancer incidence in five continents

Lyon, IARC, (1976) (Vol.3, Pl 456)

Wenden, A. (1982). *The Process of Self-directed Learning: A Study of Adult Language Learners*.

Columbia University. Doctoral dissertation Un Published.

World Vision Sudan (2008) *Final Report – Technical and Vocational Education Training*

Inception Baseline Assessment Report. Juba.

World Bank (1998) *Alleviating unemployment and poverty under adjustment*. Report of an

ILO/JASPA Employment Advisory Mission, Addis Ababa.

Zinn, L.M (2004) *Exploring your philosophical orientation*. In M.Galbraith, *Adult Learning*

Methods. A guide for effective Instruction (P.39-58) Malabor, Florida: Krieger publishing

company.

(b) Internet links

Aniekwu, N & Ozochi, C. A. (2010) *Restructuring education, training and human-resource development in the Nigerian construction industry*. Civil Engineering Department, University of Benin, Benin City, Edo State, Nigeria.

Retrieved on 16/4/2012 from

<http://www.academicjournals.org/ijster/PDF/Pdf2010/Oct/Aniekwu%20and%20Ozochi.pdf>

Anson, M., Eddie Cheng, E., Chiang, Y., Hui, E., Lam, P. & Mak, S. (2009) *An Annual Report of the Construction Industry of China Hong Kong*: Kuala Lumpur, Malaysia.

Retrieved on 16/4/2012 from

http://www.asiaconst.com/past_conference/conference/15th/1Hong%20Kong.pdf

Bandyopadhyay, A., Swaminathan, A. K., Rohatgi, R. (2008) *Indian road construction industry capacity issues, constraints & recommendations*: New Delhi. India

<http://siteresources.worldbank.org>

Carman, B. (2004). Module 10B: Design of research instruments, interview guide of interview skills. Retrieved on 16/4/2012

http://www.idrc.ca/directory/employee_info.php.ID=2980

Deng, M, (2012). *Is south Sudan economic independence at risk?* SSTV screen news bulletin: Juba .South Sudan. Retrieved from

<http://www.southsudannation.com/isseconindepatriisk%20manyangdeng5>.

Department of Civil Engineering at the University of Tokyo (2011). Retrieved on 2/8/2012 from

URL: <http://www-e.civil.t.u-tokyo.ac.jp/>.

Ellen, M., & Mosel, I (2011) *the Humanitarian Policy Group (HPG) at the Overseas*

Development Institute : Juba . Southern Sudan. Retrieved from

<http://www.odi.org.uk/resources/docs/6511.pdf>

Heintz, J. Pollin, R., Peltier, H.G(2009) *How Infrastructure Investments Support the U.S.*

Economy: Employment, Productivity and Growth. America.

Retrieved from

http://americanmanufacturing.org/files/peri_aam_finaljan16_new.pdf

Herrmann, K., Bailey, B & Allman, A,. (2010) *Starting from Scratch: The Challenges of*

Including Youth in Rebuilding Southern Sudan. Women's Refugee Commission.

New York. Retrieved on 20th 9/2012 from

http://www.womenscommission.org/reports/cat_view/68-reports/70-youth

Khor, H.T. (2002). "*The employment of persons with disabilities in Malaysia*",

Retrieved on 20/2/2012 from <http://jobs4disabled.jobstreet.com/resources1.htm>

Maureen, F. (2009) *China's Solution for Unemployed College Grads: State Jobs in the Boonies.*

Washington Post Foreign Service. China. Retrieved on 3/8/2012 from

<http://www.washingtonpost.com/wpdyn/content/article/2009/01/29/AR2009012903730.html>

Mayes, P. T. (2007, september 28). *TESEP :The Pedagogical Principles*. Retrieved in October 2, 2010, from Transform Website: <http://www2.napier.ac.uk/transform/>

Olu, A (2011) Graduate Employment and Employability Challenges in Nigeria. *Presentation Given at the Association of Commonwealth Universities/ British Council Regional Policy Dialogue on Graduate Employability in Africa in Accra: Ghana*. Retrieved on 10/3/2012, from <http://olusfile.blogspot.com/2011/01/putting-nigerian-graduate-to-work.html>

Rachel .Z (2011) *Boom time in south Sudan: Juba, the capital of south Sudan*. http://findarticles.com/p/articles/mi_qa5327/is_348/ai_n31151624/?tag=content:coll

Rita, K. A & Reyes, A (2010). *The Investment in Job Training: Why are SMEs Lagging So Much Behind?* Retrieved from <http://issuu.com/world.bank.social.protection>

Rufus, A.I (2008) *Reducing Unemployment through the Informal Sector: Nigeria* Retrieved on the 30th ,3,2012 from <http://www.eurojournalsn.com>

Ruppert, E. (1999) labour market and employment. *Managing foreign labor in Singapore and Malaysia: are there lessons for GCC countries? Volume 1.East Asia and pacific*. Retrieved on 13/3/2012 from <http://econ.worldbank.org/external/default/main?pagePK>

Shinn, D. H. (2008) *African Migration and the Brain Drain*. Paper Presented at the Institute for African Studies and Slovenia Global Action. Ljubljana, Slovenia

Retrieved on 13/3/2012 from

<http://sites.google.com/site/davidhshinn/Home/african-migration-and-the-brain-drain>

Streilein, A. (1999) Delft University of Technology, *Faculty of Civil Engineering and Geo Sciences Thijsseweg 11*. The Netherlands. Retrieved 3/8/2012 on from

http://www.isprs.org/technical_commissions9600/tc_5.html

Tan, S.C (2007). *Be more prepared*. The Sunday star.

Retrieved on 20/3/2012 from : <http://thestar.com.my>

Wasem, R. E (2010) Specialist in Immigration Policy. *Immigration of Foreign Workers: Labor Market Tests and Protections*. Congressional Research Service.

Retrieved from www.crs.gov

Yates, L. (2007, February 24). *From Curriculum to Pedagogy and Back Again: Knowledge, the person and the changing world*. Retrieved October 20, 2010, from Pedagogy, Culture and Society Seminar,:

http://www.edfac.unimeb.edu.au/curriculum_policies

[project/pdf/yates_pcs_pedagogy_paper.pdf](http://www.edfac.unimeb.edu.au/curriculum_policies/project/pdf/yates_pcs_pedagogy_paper.pdf)

Appendix I:

Interview Guide for all respondents of the study

Dear Sir/Madam,

I am a master's student of Vocational Pedagogy and I am carrying out research on the factors affecting the employment of South Sudanese civil engineer graduates in the building and construction Industry. The data is intended to help me understand the factors affecting employment of South Sudanese civil engineer TVET graduates in Juba County. I would like to request you to give me some of your precious time and answer a few questions I have prepared. The information you are going to give will be treated with utmost confidentiality and used specifically for this study.

Thank you.

Date of interview:.....Name of interviewer:.....

Section 1:

Demographic Information

Sex: Male Female

Name of respondent:.....

Area of specialization:

Country of origin:.....

Occupation:.....Contact

Section 2

1. Do you know of any employer of civil engineers in the building and construction industry in Juba County? If yes about how many do you know?
2. In your opinion, why are some of the South Sudanese civil engineers not employed by any of the employers of the building and construction industry in Juba?
3. Why are the South Sudanese civil engineer graduates who are not employed unable to create their own jobs in the building and construction industry?
4. Do you know of any foreign civil engineers who are employed by the building and construction industry? If yes, how many and from which Country?
5. In your opinion, why are the foreign civil engineers employed by employers in the building and construction industry?
6. What can you suggest as possible solutions to solve the problem of Unemployment of civil engineer by the Building and Construction Industry?

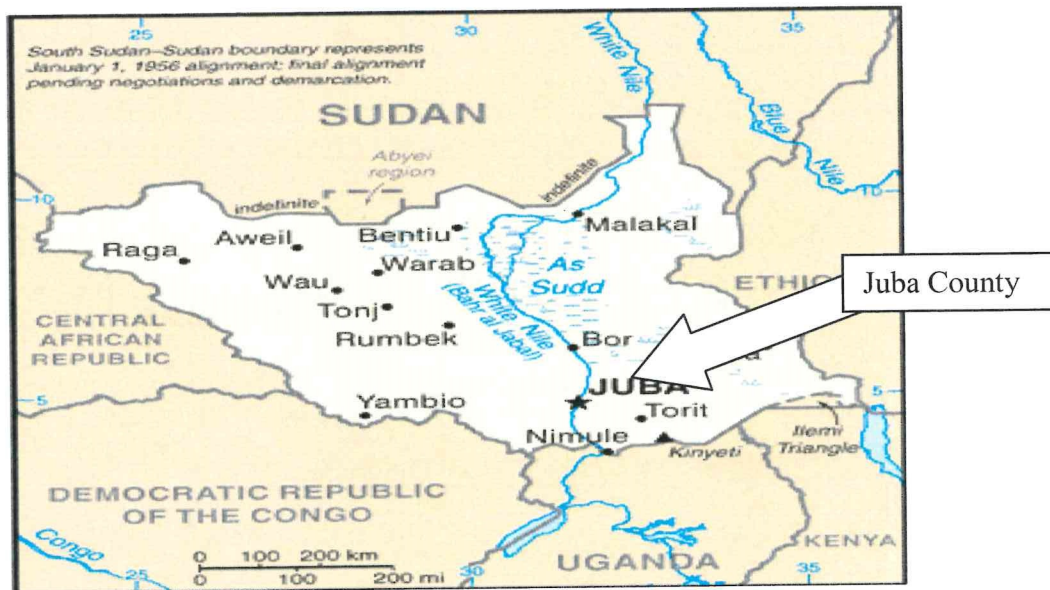
Thank you once again for you time

Appendix II:

Observation checklist

1. The equipment, tools and materials used by the employers and TVET
2. Number of foreign employers and employees in Building and Construction Industry
3. Nature of buildings Beult in Juba County
4. Employment opportunities in the Building and Construction Industry in Juba County

Appendix III : A map of the Republic of South Sudan Showing Juba County



Source: Google map of the Republic of South Sudan State

Appendix IV: Letter of introduction

KYAMBOGO



UNIVERSITY

P. O. BOX 1 KYAMBOGO
Phone: 041-285001/2 Fax: 041-220464, Kampala
Website: www.kyambogo.ac.ug
Kyambogo University Graduate School

Date: 1st May, 2012.....

To:
Director Technical Vocational Education and
Training, Ministry of general education and instruction
Juba South Sudan.....

RE: LETTER OF INTRODUCTION

This is to introduce T. Owonyo Leonard Make
Registration No. 2010/1.HD/2.1.6/MVP, who is a student of Kyambogo University pursuing
a Masters Degree in Vocational Pedagogy.

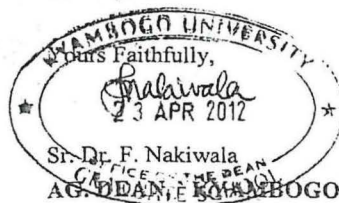
He/She intends to carry out a research on:

Factors affecting employment of South Sudan Technical
Vocational Education and Training graduates: A case study,
A Building and construction industry in Juba County.

as partial fulfillment of the requirements for the award of the Degree in Masters of Vocational
Pedagogy.

We therefore kindly request you to grant him/her permission to carry out this study in your organisation.
Any assistance accorded to him/her shall be highly appreciated.

Thank you.



AG. JUBA SOUTH SUDAN KYAMBOGO UNIVERSITY GRADUATE SCHOOL