

REPUBLIC OF SOUTH SUDAN

**TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING
NON-FORMAL COMPETENCY BASED TVET CURRICULUM**

**CERTIFICATE OF PROFICIENCY
IN
BUILDING AND CONSTRUCTION**

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DISCLAIMER

This training guide has been produced by the EMPOWER Project with financial support from the European Union. Its contents are the sole responsibility of the EMPOWER Consortium and do not necessarily reflect the views of the European Union.

FOREWORD

This Technical and Vocational Education and Training competence-based training syllabus is the product of a long consultative journey from a number of South Sudan TVET sector stakeholders. During this journey, I was privileged to officiate the opening and closing sessions of the first TVET sector stakeholders working group workshop that was held in August 2018. This workshop contributed to prioritization of seven trades, from a list of 32 trades those were identified by the Labour Market Assessment conducted jointly by UNESCO and EMPOWER Project in 2018.

The process involved consultations with different TVET stakeholders in South Sudan, including government ministries. The Subject Experts and other industry stakeholders participated in the review and validation of the Curriculum. Again, I was privileged to officiate the closing ceremony of the Curriculum Validation Workshop that was held in June 2019. This workshop approved the Curriculum for publication and launch. It is against this background, that I present this version of the Curriculum for the launch and use in South Sudan. This product illustrates the commitment of the TVET sector stakeholders in improving TVET in South Sudan.

Developing a competence-based curriculum is one of the milestone I transforming the education system of the country. This is because the competence-based curriculum guide planning, the conducting and the assessment of the flexible and modularized learning process that result in the provision of basic employable skills training. The MoGEI, MoLPSHRD and the MoYC&S are aware of the system requirements and the ecosystem for operating a competence-based education and training curriculum.

The Curriculum is available for use by all the TVET providers across South Sudan. These providers could be government, private sector, faith based organizations, NGOs, Community based vocational skills training and on the job training institutions. It is my wish that this Curriculum will be used by all the technical and vocational education and training providers across the Republic of South Sudan. The Curriculum is relevant for the DDR programmes and sustainable livelihood skills support programme. The Curriculum has been designed to ensure that the trainees of the programme acquire the necessary knowledge, skills, competencies, values and attitudes that will stimulate them to view lifelong training journey as part of livelihood skills development. The Curriculum is learner-centered and provides opportunities for the out-of- school youth as well.

The Curriculum has been supported with Learner's Books, Trainer's Guides and working life skills. We thank the European Union who funded this programme, the Consultant, EMPOWER Consortium, UNDP, UNESCO, the various subjects experts and all those who played a role in one way or the other in making this assignment come to fruition.



Hon. Deng Deng Hoc Yai
Minister of General Education and Instruction

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We wish to recognize the great involvement and participation of the Director Generals in the MoGEI, MoLPSHRD, Ministry of Culture, Youth and Sports and all the technical teams in the above ministries. We thank in a special way, contributions of trainers/instructors from Juba Multi-Purpose training centre (MTC), Juba Technical School, SSOPO, St Vincent and Don Bosco vocational centres all of whom played a key role in revising and making the curriculum module contents relevant to the South Sudan Context.

Appreciation is extended to development partners and private actors who participated throughout this curriculum development process. Specifically, we recognize the contributions from United Nation Development Programme (UNDP), EMPOWER Consortium members (NRC, FCA, ACROSS, Nile Hope, BBC Media Action & VOSDO), Academy for Professional Development, World Vision, Save the Children, AAH and Dorcas Aid International. Through this curriculum, we look forward to a great future for the South Sudanese youths.

CONCEPTS AND DEFINITIONS

Assessment:	The process of gathering and judging evidence in order to decide whether a person has attained a standard of performance.
Competence:	An underlying characteristic of a person that include cognitive elements (involving the use of theory, concepts or tacit knowledge), functional aspects (involving technical skills) as well as interpersonal attributes (e.g. social or organizational skills) and ethical values.
Core Modules:	Are major or compulsory units that form part of a given a course covered in a certain period of time. They normally go a long with optional or elective units at some stage of learning (UNESCO, 2011).
Credit:	The acknowledgement that a trainee has satisfied the requirements of a module.
Curriculum:	The teaching/learning content, structure and processes provided by teaching institutions or training centers to deliver courses or programs of study.
Industrial Attachment:	An opportunity for a learner to integrate career related experience by participating in planned / supervised work
Learning Hours:	Number of hours required to acquire the competence.
Learning Outcomes:	Are statements that indicate what trainees will know or be able to do as a result outcome is usually expressed as knowledge, skills, or attitudes or tangible products.
Learning Unit:	Any of the basic building blocks of the module.
Module:	A unit of education or training which corresponds to one competence qualification.
Performance Criteria:	Are descriptions of the kind of quality and quantity requirements of the result obtained in labor.

ACRONYMS AND ABBREVIATIONS

AAH	Action Africa Help International
ASK	Attitude Skills and knowledge
ACROSS	Association of Christian Resource Organisation Serving Sudan
APMC	Afri-Project Management Consultants
BBC MA	BBC Media Action
BEST	Based employable skill training
CBET	Competence Based Education and Training
CBT	Competency Based Training
COP	Certificate of Proficiency
DDR	Disarmament, Demobilization and Reintegration
EBTVET	Enterprise based Technical Vocational Education and Training
EST	Employable Skill training
EU	European Union
FCA	Finn Church Aid
IBTVET	Institution Based Technical and Vocational Education and Training
ILO	International Labor Organisation
JICA	Japan International Cooperation Agency
LAG	Japan International Cooperation Agency
MCCC	Module of competence completion certificate
MoA	Ministry Of Agriculture
MoCYS	Ministry of Culture, Youth and Sports
MoGEI	Ministry of General Education and Instruction
MoLPSHRD	Ministry of Labour, Public Service and Human Resource Development
MTTH	Module Theory Training Hours
MTC	Multi-Purpose Training Centre
NFTVET	Non Formal Technical and Vocational Education and Training
NFTVST	Non formal Technical and Vocational Skills Training
NFVSET	Non Formal Vocational Skills Education Training
NGO	Non-Governmental Organization
NRC	Norwegian Refugee Council
NVQF	National Vocational Qualifications Framework
OJTC	On Job Training Curriculum
OJTH	On Job Training Hours
PLAR	Prior Learning Assessment and Recognition
PLE	Prior Learning Experience
PTH	Practical training hours
RPLE	Recognition of Prior Learning Experience
SDG	Sustainable development Goals
SMoL	State Ministry of Labor
SSOPO	South Sudan Older People's Organization
SYB	Syllabus

JICA	Japan International Cooperation agency
TVT	Technical Vocational Training
TVST	Technical and Vocational Skill training
TTH	Theory training hours
TVET	Technical Vocational Education and Training
SMoL	State Minister of Labour
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
VOSDO	Vocational Skills Development Organization
VST	Vocational Skills Training
VSDT	Vocational skill development training

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1.0 SECTION ONE :GENERAL INTRODUCTION AND PHILOSOPHY OF COMPETENCY BASED CURRICULUM

Non Formal Technical and Vocational Education and Training (NFTVET) plays a very important role in sustainable skills for livelihood development programing. It has potentials of providing employment opportunities to a number of un employed people in the country. The program gives opportunity for the second chance education to those who might have missed entry or dropped out of a formal learning due to one reason or the other. Countries across the world are facing a challenge of lack of employable skills and tackling the growing rate of unemployment among its populations. This challenge is especially among the elderly, women, adolescents, ex-combatants, educated unemployed graduates, disable community, retirees, returnees, demobilised and out of school youths.

According to UNESCO (2018), 2.2 million children are out of school in South Sudan and the number is expected to rise due to the ongoing conflict. This is a wakeup call for South Sudan Technical and Vocational Education and Training (TVET) sector stakeholders. It calls for a need of looking for innovative and sustainable ways of developing and improving the Trade/occupational/vocational employable skills of the TVET systems trainees in South Sudan. The solution lies with the development of an inclusive Non formal TVET Competency-Based Education and Training (CBET) curriculum.

This model of curriculum delivery has emerged as one of the best models for developing skilled, knowledgeable and employable Technical and Vocational Education Skilled (TVES) graduates. The focus of CBET approach to technical and vocational skills training (TVST) lies on its concentration on learning outcomes that should be demonstrated by the trainees of the program. It focuses on development of the right Attitude, Skills and Knowledge (ASK) that is needed in the concerned industry of employment in practicing the acquired competencies. The challenge with this kind of approach is on the movement towards the definition of what the trainees need

to learn in order to perform to the standards required in an employment position. In this approach, there is a changing role of the teacher who serves as a coach, mentor, trainer and instructor. He is therefore a facilitator and motivator of learning in the students learning environment.

This document is the unified and harmonised Republic of South Sudan National Non Formal TVET CBET curriculum. The curriculum targets Non formal TVET system of skills development training across South Sudan. This has been developed as a complete package that has the associated trade module training syllabus, Teachers Guide and Learners guide for the training of modularized self-contained Basic Employable Skills training (BEST) short courses for technical and vocational skills development across South Sudan.

The curriculum can be used in offering those vocational skills development training programs that last for a period of one month, three months, six months, nine months and twelve months. On completion of these prescribed modules, the learners would qualify for Prior Learning Assessment and Recognition (PLAR) when joining higher level trainings in the trade of their vocational interest.

The curriculum modules have been designed to serve as the preparatory courses for lifelong learning journey that provides for short courses training certification. The successful completion of the prescribed modules qualifies the trainees for the award of certificate of proficiency in the given trade of study.

This Non-Formal Technical and vocational skills training (NFTVST) curriculum design is aimed at promoting BEST program. It gives opportunities for the second chance education to out of school youths through the lifelong learning journey. The successful completion of the learning certification helps in promoting decent work, development of portable skills and strengthening

the sustainable livelihood skills of the trainees.

1.1 PHILOSOPHY OF THE COMPETENCY BASED CURRICULUM

Globally, many technical and vocational skills development training programs do claim that their curricula are competency-based. A close examination of their structure do discover that they are not related or even touching on what an ideal competency based curriculum should be. The question is What is a competency-based approach to teaching and learning? What should be in the curriculum to ensure that it is competency-based and meets the needs of a competency based training curriculum? This section of the curriculum design is meant to inform the readers on what is a competency based teaching/training and what is a competency based training curriculum?

The term competency encompasses the what, how and why of learning materials that ensures that the learners gain competency in the module of study (UNESCO IBE 2018). This necessitates often multi-blended pedagogies and didactical training methods with correspondingly complex curriculum. A CBET curriculum is therefore seen as that curriculum that emphasizes the complex outcomes of a learning process that comprises of knowledge, skills and attitudes to be applied by learners rather than mainly focusing on what learners are expected to learn about in terms of traditionally-defined subject content.

In principle, such a curriculum is learner-centered and adaptive to the changing needs of learners, teachers and society. It implies that learning activities and environments are chosen so that learners can acquire and apply the knowledge, skills and attitudes to situations they encounter in everyday life as they practice their occupation of training. Competency-based training curricula are usually designed around a set of key competences/competencies that can be cross-curricular and/or subject-bound.

Competency-based learning therefore refers to systems of instruction, assessment, grading, and academic reporting that are based on students demonstrating that they have learned the knowledge, Attitude and skills that they are expected to learn as they progress through their education across their form of educational learning system. This learning system may be formal, informal or non-formal.

A competency based curriculum is therefore that curriculum document that covers the learning outcomes, goals and objectives that reflects on some breadth and balance of attributes that the learners should demonstrate. It provides for the information of the textbook(s) adopted in generating the learning contents and makes some recommendations on the teaching approaches that explains the learning out comes and provides activities and assessment tools that are compatible with the approaches suggested.

The basic tenets of a competency based education is often based to the writings of B.F. Skinner (1935, 1953, 1957, 1958, 1972, 1976 and 1979). The student is asked to complete step by step criterion based instruction. When a student who successfully completes a competency based course, the instructor will be sure that they have a working grasp of certain minimum competencies. They may be better, but they will at least be good and competent in practicing the learned module subject matter as per the industry and occupational standards requirement. This is often found in prerequisite courses that require specific skills to advance to a higher course or in courses that lead to a specific job certification. The trade skill in question is demand driven and not supply driven in market place.¹

In essence, a competency-based curriculum is one that

1 1 The UNESCO has a definition of competency-based curriculum in this reference site:
<http://www.ibe.unesco.org/en/glossary-curriculum-terminology/c/competency-based-curriculum>

focuses upon what learners are expected to carry out rather than on what they are expected to know. Competency based training and curriculum depends on the premise that there are specific measurable outcomes that students/trainees need to demonstrate before they are certified as competent.

The concept has been most widely used in technical and vocational education skills development and training. The approach is not without problems that are largely related to the context in which an outcome is demonstrated. However, when trying to establish national consistency in competency. It is difficult if not impossible to take all the factors into consideration.

The use of the term “competent” can mean different things to different people. Therefore, there must be an internationally or nationally agreed frame work or standards for defining what competencies are. These competencies define jobs profiles or occupational profile that the position holder should be able to demonstrate in the real work environment.

The term “competency” refers to the standard needed to perform a particular task. It doesn’t differentiate between different levels of skill beyond that benchmark. This can be seen as either a strength or a limitation of the competency based training system. Employers will therefore look beyond a statement of competency to where it was achieved and the type of work done by the graduating learners. In competency based learning and training, the learner is either competent or not yet competent. The skills gained are applicable internationally and can be equated within the frame work of the National Vocational Qualification framework (NVQF).

A challenging question is usually raised in terms of how many times do one need to demonstrate something to be considered competent. A single time is probably not sufficient. In areal competency based training, learning, assessment and certification environment, this begins

with learning outcomes stated in the curriculum with the use of action verbs.

The learners will do their own self-assessment of the competencies gained and if satisfactory will inform the trainer that they are ready for the assessment.

The module instructor will then prepare and administer the formative assessment to verify if the learner is competent or not yet competent. Once this is administered the learner will be taken to the Industry for on the Job Training and while on this learning assignment a summative assessment will be conducted by the recognized and registered industry assessors. They will confirm if the learner is competent as per the industry or trade occupation standards. This will further be verified by the internal verifiers and external verifiers. This is the ideal system of competency based training and certification system.

There will be a need for South Sudan to develop this system of competency certification and before this is developed, the MoGEL and MoLPSHRD will need to agree and advise the users of this curriculum on the minimum acceptable standards for competency assessment that will not compromise on the quality of the trainees and international performance requirement.

This follows the argument that competency should not just be about the skill for doing the job but should entail acquiring the right knowledge and attitude for performing jobs related to that occupation trade or vocational area. The background knowledge that allows the learners to cope with problems and contingencies is also important. The third important factor in a CBT is attitude.

There is no point in knowing about something and even being able to do it if you don't actually do it with your heart and motivation. The learners have to be taken through workplace health and safety procedures as well as knowledge of trade tools and equipment's.

So a competency based curriculum is one that leads to the development of the knowledge, skills and attitude that demonstrates a particular operation to industry standards in several contexts. This approach is therefore useful in some contexts like Technical and vocational education and training but not necessarily suitable in all contexts.



1.2 DIFFERENCE BETWEEN TRDITIONAL CURRICULUM AND COMPETENCY BASED CURRICULUM

The Competency based or the Learning Outcome based approach to TVET training and learning delivery differs from tradition didactic models of education. The following table summarises areas of fundamental difference between the two approaches to training and learning.

Table 1.1 Differences between Traditional based approaches and Competency Based Approaches to training and learning curriculum.

Elements of Differentiation	Traditional approaches to Learning	Learning Outcomes Approach
Focus of learning	Teacher centered Focus on inputs (resources)	Learner centered Focus on outcomes (what the learners know and can do)
Curriculum approach	Content driven curriculum Learning outcomes as driving force of curriculum Time-related (e.g. to a lesson period, a term or a year)	Credit based Use of measurable outcomes to be achieved as a result of the learning Accommodates Individually paced learning
Methodology	Passive role of learners	Active engagement of learners Self-reflection on part of learners Active learning methodologies
Learning delivery	Telling Instructing	Facilitating Self-discovery
Content	Important in and of itself	Content is seen as a vehicle to achieving specified outcomes
Role of educator	Educator as the focus of the learning process	Educator as the facilitator of learning
View of knowledge	Knowledge as an outcome of learning Knowledge without practical application	Application of knowledge in practical situations as an outcome of learning Includes attitudes and values
Assessment	Norm referenced (using comparability between learners as guidelines) Add-on to curriculum Rote learning is rewarded (memorisation) Assessment for summative purposes and decision-making only Considered the end of the didactic situation (Adedoyin and Shangodoyin, 2010:161) Lack of transparency Reassessment of all learning	Criterion-referenced (assessment against a set of criteria) also referred to as standards-referenced assessment Drives the curriculum Focus on what learners can do (skills) and application of learning Assessment for learning and development using feedback to improve performance Transparency about what has to be achieved to be successful Integrated assessment (applied competences over a range of outcomes)

Assessment methods	<p>“High stakes” final assessments</p> <p>Tests lower cognitive skills such as comprehension and recall</p> <p>Artificial and decontextualized assessment situations</p>	<p>Continuous assessment (circular assessment where learning leads to assessment, and assessment is again followed by learning)</p> <p>Tests higher cognitive skills such as analysis, synthesis and evaluation</p> <p>Various application-type methods</p> <p>e.g.</p> <ul style="list-style-type: none"> • Authentic learning situations • Simulations • Case studies
Grading	<p>Percentages (discrete)</p> <p>Quantitative</p>	<p>Broad bands (holistic)</p> <p>Qualitative</p> <p>Level / performance descriptors</p>
Evaluation methodology	<p>Limited to an assessment of student learning</p>	<p>Continual evaluation (e.g. formative and summative assessment)</p> <p>Various / multifaceted / holistic approach to evaluation of learning experience</p>



1.3 The curriculum development theory and rationale

Skills proficiency of a country's workers depends on the quality of its Technical and Vocational Skills Training (TVST) system. Globally there are three systems of pursuing vocational skills training program. These can be acquired through formal, informal and non-formal training. Each of these systems requires its own developed competency based curriculum that guides the development of competencies required in terms of knowledge, skills and attitude for effective learning delivery.

The thinking and idea of having a competency-based education and training (CBET) curriculum has been there in the key sources of TVET information and education materials for South Sudan. Curriculum for formal training in TVET exists with the Ministry of General Education and Instruction (MoGEI) and with the Ministry of Labor, Public Service and Human Resource Development (MoLP-SHRD). The level I training under the MoGEI formal TVET takes one year and is equal to Secondary School SI which is form one or first year of Secondary

School Education. The level I Curriculum of MoLP-SHRD is a combination of Level I and Level II of the MoGEI Curriculum. Their main target is the provision of formal TVST education with an entry criterion of being primary school leavers or those with alternative education system qualification and with the ability of having basic literacy and numeracy skills. This non formal TVET curriculum has no any prerequisites apart from the attainment of age of 14 years. It requires the willingness of the learners to learn and their motivation to go through the learning process to acquire the desired competencies.

The curriculum can be translated in mother tongue and the trainees be trained in their own mother tongue as long as this will be the best way of having them acquire the desired competencies and certification.

The informal TVET sector skills development is majorly being provided directly in the industry though on the job training. There is no proper system put in place to govern the provision of this important Enterprise-Based Technical and Vocation Education and Training (EBTVET)

in terms of the On-The-Job Training Curriculum (OJTC), the learning assessment guide (LAG), certification and recognition system. Very little data documents this system of TVET training in South Sudan. Thus, there is a need for developing on-the-job training curriculum that will harmonize recognition of the acquisition of technical and vocational skills through this direct industry-training model for TVET professionals.

This will also increase the role and participation of the private sector in the provision of technical and vocational skills training in South Sudan. Just like in other countries, South Sudan private sector through the Chamber of Commerce and Industry, MoGEI and MoLPSHRD should be supported to come up with South Sudan industry/occupational standards for each trade covering level I-VI.

This will make it easy in development of any curriculum, and for carrying out industry training and assessment. This is because curriculum development, training and assessment, depends on the stated elements of competency that will be indicated in the industry or occupational Standards elements and performance criteria for each of the trade under consideration.

Non-Formal Technical and Vocation Skills Training (NFTVST) is emerging as the most common system for delivering (TVST) in conflict, transition and post conflict countries. The independence of South Sudan on 9th July 2011 saw the emergence of a number of Non-Governmental Organizations (NGOs) and development partners coming in to provide sustainable livelihood skills. These are provided through vocational skills training in different states where these NGOs operate. Some NGOs issue certificates on their own, while others issue certificates that are endorsed by the State Ministries of Labor (SMoL).

At the time of developing this curriculum, there were over 120 NGOs offering Non-formal vocational skills development training programs across different state in

South Sudan. Many of them are offering similar programs with different content and curricula. This occurrence necessitated the need for developing a nationally unified and harmonised South Sudan (NFTVEST) curriculum with content that is agreeable with the 21 Line Ministries and Departments that engage in the provision of technical and vocational skills training in South Sudan.

This non-formal vocational skills education training (NFVSET) curriculum has been organised to allow for open entry with the minimum entry requirement being age of 14 years. The curriculum is competency-based and modularised with each module being a self-contained BEST. The trainees get continuous certification and on successful completion of each module, they are awarded with Module of Competency Completion Certificate (MCCC), while on completion of all the prescribed modules, they are then awarded with certificate of proficiency in the trade of training.

The curriculum design conforms with the South Sudan National Vocational Qualification framework as indicated in table 1.1. The completion of the prescribed modules for this curriculum leads to the award of Certificate of Proficiency in Agribusiness Trade. This certification arrangement gives the trainees strength to continue with their lifelong learning journey while getting engagement in decent work and sustainable livelihood. They may join the employment market to put in to practice their learnt skills, and could also wish to continue for further learning by progressing to level 2,3,4 of the formal, non-formal and informal TVET learning systems in South Sudan.

Those joining the formal and Informal TVET learning systems will benefit through Recognition of Prior Learning experience (RPLE). The admitting institution will recognise the competencies gained and be exempted from those modules where they are already competent in.

This Non-Formal TVET certificate of proficiency curriculum is wider in scope as it is meant to develop the

interest of the trainees in the profession. The other progressive levels will be narrowed down to single specialisation skills training areas using BEST principle. This will make the trainees to acquire specific skills in the trade area of interest within the larger sector of the trade.

Efforts have been made throughout this curriculum to acknowledge and recognise prior learning experience (PLE). This gives the opportunity for those who had been trained before on some modules and those who were trained on-the-job to join this program and get their skills and experience recognised and certified. The curriculum also gives opportunity for lifelong learning and obtaining decent work for all the trainees that is in line with ILO guidelines on decent work for all by 2030. Graduates of the program also gains from the benefits of labor mobility across the vocational skills market system.

The curriculum design proposes for a one-month industry training on the job experience on completion of each BEST Module. Alternatively, the trainees may opt for a 2-3 months on job industry training attachment on completion of all the prescribed modules for certificate of proficiency. Since a module is an employable skill training (EST), the trainees will be able to get job in the industry even on completion of only one module and then later on, he/she can proceed with the study of other modules to enable them acquire more skills, competencies and certification.

This curriculum is a public document and is freely available for use in offering TVET and Vocational Skills training (VST) across South Sudan. This being the first National Non-formal Competency Based TVET curriculum in South Sudan, it is open and can be used by the industry sector, 21 Ministries offering related TVET skills programs, Private TVET training providers, Non-Governmental Organisations, TVET sector skills development partners, Oil companies, as well as in Nile petroleum

training programs. The certificate obtained with the use of this training curriculum is nationally recognised as its content has been certified by the MoGEI Directorate for Curriculum Development, TVET Quality Assurance and Standards, TVET stakeholders working group, MoLPSHRD, MoCYS, and Ministry of Agriculture (MoA)

The development of this curricula took into consideration the recommendations of the UNESCO Rapid assessment report of 2018, EMPOWER project Report on South Sudan Labor Market Assessment conducted by NRC in 2018, the African Union TVET Strategy, regional similar curricula for the same trade from Kenya, Sudan, Ethiopia, South Africa, Rwanda, Uganda, Egypt, Morocco and Tanzania, MoLPSHRD Tracer Study of 2014 conducted by JICA, the Sustainable Development Goals (SDGs) and especially SDG Goal 4, and existing TVET curriculum and documents available with the MoGEI, MoLPSHRD, Ministry of Culture, Youth and Sports (MoCYS), Ministry of Agriculture (MoA), and those of other NGOs offering similar vocational skills training development programs in South Sudan.

The approach used in designing this curriculum is on the development of trade specific knowledge, skills and attitudes. During the skills development process, the training provider is encouraged to include the Employability and Working Life Skills module, which has also been developed as a standalone module, and further consult with the Ministry of Education for a curriculum on Literacy and Numeracy.

This curriculum gives weight to 80% Practical and 20% theory in total for the entire three training places of Module theory training hours (MTTH), Practical Session Training Hours (PSTH) and on job training hours (OJTH) per module. The curriculum design takes in to recognition the dual system of TVET training.

This is a training where the skills development takes place in both training institution and at the enterprise.

The training begins with the theory class at the IBTVET and is followed by Training Institution practical workshop training hours and On-the-job training hours at the EBTVET.

The ratio for Institution Based Technical and Vocational Education Training (IBTVET) is a portioned in the ration of 30% to 70% for Theory and practical training sessions. The time put here is just a guideline for completion of the training by an average learner. Since in CBET, the learning is learner centered and paced, the learners can take a shorter time or a longer time to demonstrate competency in the acquisition of the skill learned.

It is mandatory that at the end of each module of training, the trainees are expected to be attached to industry for 1-2 weeks in case of one module training and 1-3 months OJT in case of the completion of all the prescribed modules. This will enable them to acquaint themselves with the state of the art in the practice of those trades' modules related skills and task of performance.

The curriculum output has been influenced by the outcome based and employability theories of Vocational Education curriculum design and development. These have been used in developing modules as a self-contained employable skills training program and in setting the learning outcomes and elements with the use of blooms taxonomy action verbs. It is expected that the users of this curriculum will find it suitable and user friendly in developing sustainable livelihood skills among

the Non-formal TVET programs in vocational training centers across South Sudan.

The curriculum will be piloted for a complete cycle of three months. The experience and feedback of the curriculum users will then be used to adjust the content of the curriculum. This final product will be based on the expressed experiences of the users and its content will be adjusted accordingly. It is further recommended that this curriculum should be reviewed after every five years to make its content current with the rapidly changing technology that requires new skills development and practice.

1.4 Why a curriculum for building and construction?

South Sudan is a post conflict country with huge potential in infrastructure development. South Sudanese who have been away due to the conflict are now returning home. There is also an increase in population, expansion of towns, increase in the number of investors and visitors from the neighbouring countries. Coupled with these, housing is one of the universal basic needs and rights for an individual. This has created a higher demand for housing development for residential, hotels, hospitals, schools and colleges.

Over 80% of the workers in this sector are from the neighbouring countries. The development of this building and construction curriculum and its associated modules will help in providing opportunities for employment to the qualified youths with the required skills in Building and Construction.



1.5 AN OVER VIEW OF SOUTH SUDAN VOCATIONAL QUALIFICATION LEVELS AND DESCRIPTORS.

There is a set of descriptors that set out the expectations of each level as outlined in Table 1.4:

Table 1.2: South Sudan Vocational Qualification Levels and Descriptors

Level	Certificate Types	Level Descriptors			
		Problem Solving Capabilities/ Information Processing	Level of Accountability, Responsibility and Autonomy	Level of Knowledge and Skills	Level of Tasks/ Operational Environment
Short Term Training	Foundation	<ul style="list-style-type: none"> Carry out routine tasks 	<ul style="list-style-type: none"> Work under guidance 	<ul style="list-style-type: none"> Basic knowledge and skill 	<ul style="list-style-type: none"> No complexity of work, very routine level
	Intermediate				
1.	Proficient	<ul style="list-style-type: none"> Carry out simple tasks 	<ul style="list-style-type: none"> Work under direct supervision 	<ul style="list-style-type: none"> Basic general knowledge Ability to apply basic skills 	<ul style="list-style-type: none"> Competence to work on a defined range of activities under routine and predictable conditions Low value of complexity, interconnection, in-transparency and dynamics; high degree of stability
2.	Artisan	<ul style="list-style-type: none"> Use relevant information; solve routine problems using simple rules and tools 	<ul style="list-style-type: none"> Some autonomy; work under supervision 	<ul style="list-style-type: none"> Basic factual knowledge of a field of work Ability to apply basic cognitive and practical skills 	<ul style="list-style-type: none"> Competence to work on a range of varied activities in a clearly defined context Average value of interconnection; low value of dynamics
3.	Crafts person	<ul style="list-style-type: none"> Solve problems by selecting and applying basic methods, materials and information 	<ul style="list-style-type: none"> Responsibility for completion of work tasks; some leadership in solution of specific problems 	<ul style="list-style-type: none"> Knowledge of facts, principles, processes and general concepts in a field of work Ability to apply a range of cognitive and practical skills 	<ul style="list-style-type: none"> Competence to adapt own behaviour to circumstances in solving problems; competence to work in a range of roles in a variety of contexts High value of interconnection, in-transparency and dynamics
4.	Technician	<ul style="list-style-type: none"> Generate solutions to specific problems in a field of work 	<ul style="list-style-type: none"> Supervise the routine work of others; some responsibility for evaluation and improvement of work activities; leadership and guidance in organising activities of self and others 	<ul style="list-style-type: none"> Factual and theoretical knowledge in broad contexts within a field of work Ability to apply expertise in a range of cognitive and practical skills 	<ul style="list-style-type: none"> Competence in self-management within the guidelines of work contexts which are usually predictable, but subject to change; competence to work on a broad range of varied activities and in a wider variety of contexts, most of which are complex and non-routine Considerably high degree of interconnection, in-transparency and dynamics

1.5 ORGANISATION AND PRESENTATION OF THE CURRICULUM

This curriculum document is presented in six sections namely:

SECTION ONE:	INTRODUCTION AND PHILOSOPHY OF THE COMPETENCY BASED CURRICULUM
SECTION TWO:	OBJECTIVES AND STRUCTURE OF THE BUILDING AND CONSTRUCTION CURRICULUM
SECTION THREE:	ORGANIZATION OF THE TRAINING COURSE CONTENT
SECTION FOUR:	MODULES SYLLABUS FOR BUILDING AND CONSTRUCTION
SECTION FIVE:	CURRICULUM DEVELOPMENT PROCESS AND VALIDATION
SECTION SIX	KEY APPENDICES



2.0 SECTION TWO :CURRICULUM PROGRAM STRUCTURE

The construction industry is one of the leading sectors in South Sudan as well as the World. Builders play a vital role in the provision of construction infrastructure. The increased population in South Sudan has created a demand for housing units, which in turn has created high demand for skilled builders. The aim of this Basic Building and Construction certificate of proficiency training curriculum is to provide knowledge, right attitudes and practical skills to trainees who would like to enter the Construction industry as employees or self-employed in the occupation of Building and Construction. This certificate of proficiency qualification provides for basic skills for employment that makes the trainee employable but should work under supervision.

2.1 AIM OF COP TRAINING CURRICULUM IN BUILDING AND CONSTRUCTION

The main aim of this curriculum is to develop a holistic, multi-skilled, and proficient Building and Construction sector trades man. The course trains the learners in modularised competency based certification which will impact right knowledge, skills, and attitudes for BEST that will lead to the final award of certificate of proficiency in Building and Construction. The certificate holder will be able to work under supervision in Building and construction related work environment and be able to progress with learning across the Building and Construction trade to acquire higher levels of qualification in a progressive manner under the lifelong learning journey.

2.2 SPECIFIC OBJECTIVES OF THE COP TRAINING IN BUILDING AND CONSTRUCTION

- 1 To inculcate the right knowledge, skills and attitude for the practice of the occupation of Building and Construction as a potential entity for creating employment, generating income and supporting sustainable livelihood
- 2 To train the learners on fundamentals of CBET, its principles, assessment criteria, certification requirement and skills for trauma awareness and management in the practice of Building and Construction occupation.
- 3 To equip the trainees with trade theory, tools, equipment and occupational health and safety skills relevant to the practice of the Building and Construction trade within South Sudan and beyond.
- 4 To offer self-contained modularised job oriented skills and gradual certification where by each module is a certifiable employable skill training within the occupation of Building and construction offered under the premise of BEST program.
- 5 To offer a multi-purpose qualification journey from single module certification to the award of certificate of proficiency in Building and construction training curriculum.
- 6 To equip the trainees with Employability and working life skills that would be useful for them in their life after the training institution. This includes literacy, numeracy, basic English, communication skills, digital literacy, entrepreneurship and small business operation skills within the trade area of Building and Construction.

7 To Promote and give a recognition to prior learning experience within the Building and Construction technical and vocational skills training system and facilitate the trainees in engaging for the decent work, labour mobility and preparation for a lifelong learning journey in the practice of Building and Construction occupation within the Republic of South Sudan and across the region.

8 To equip the trainees of the COP training in Building and Construction trade with skills of making a contribution to the attainment of Sustainable Development Goals (SDGs) 1,2,3,4,5,6,7,8, 10 and 16 in South Sudan.

2.3 CODE

2.4 Qualification title

Certificate of proficiency in Building and Construction

2.5 Sector

Construction Industry

2.6 LEVEL OF QUALIFICATION

Level I

2.7 COURSE DURATION

940 Hours

2.8 MINIMUM ENTRY REQUIREMENTS

This course is open to all persons who have attained the age of 14 years.

2.9 TRAINING CENTERS REQUIREMENTS

- Training infrastructure (workshops, classrooms, offices and toilet facilities).
- Tools, equipment, machinery, materials, stationery reference materials and books as outlined in the course modules.
- Qualified trainers accredited by competent institution or body,

- Governance and management team
- Communication facility and Sustainable Source of water and power supply
- Security, Multipurpose hall, Workshop, First aid kit and Fire extinguisher

2.10 COURSE COMPETENCIES

After completion of the training, the trainees will be able to:

a. Core-Competencies: -

- Maintain Building and Construction tools and equipment's
- Practice Building and Construction as a business
- Perform basic planning and measurements in construction industry,
- Carry out basic plumbing and pipe fitting works in the construction sites
- Practice painting in Building and Construction sites
- Perform basic Carpentry and joinery works in the construction Industry

b. cross –Cutting Competencies: -

- Maintain occupational safety and health rules and regulations in the construction industry
- Undertake entrepreneurial activities
- Exhibit basic business management skills

2.11 TRAINING PROGRESSION

The person who qualifies at this Level can progress to the next Level of Level II Qualification training that leads to the award of artisan Certificate in Building and Construction trade.

2.12 JOB OPPORTUNITIES

The trainees of this course will be employed in the following sectors:

- Work in small & big construction sites as assistant masons,
- Work as assistant plumbers in the public sector and private sector
- Be self-employed as small time carpenters in small towns





3.0 SECTION THREE: STRUCTURE AND ORGANIZATION OF COURSE CONTENTS

The course comprises of basic theory, practical skills and industrial attachment. It is structured into Core Modules and Cross-Cutting Modules. Modules are subdivided into Units of Learning, which are further sub-divided into Learning Outcomes with Assessment Criteria. Each module is a comprehensive self-contained short course lasting approximately 240 assuming that the training sessions are organised for 4 hours a day for a duration of three Months. The target trainees for this program may come in the morning or in the afternoon sessions. This means half a day on either program and they will only be taught for 4 hours a day that translates to 20 Hours a week, 80 Hours a month and 240 Hours in three Months. These 240 Hours are for the time spent at the training institution with another 160 Hours' time spent on the Industry for practical on the job training industrial attachment.

3.1 TRAINING STRATEGIES IN A COMPETENCY-BASED APPROACH

Competency-based training is based on defined competency standards, which are established by the industry. The traditional role of a trainer changes and shifts towards facilitation of training. A facilitator encourages and assists trainees to learn by themselves. Trainees learn at their own pace. Individual differences are considered. Trainees present themselves for assessment only when they are ready. As trainees learn at different paces, they might well be at different stages in their learning, thus learning must be tailored to suit individual needs.

3.2 SEQUENCE OF DELIVERY OF THE MODULES

The curriculum for Basic Building and Construction Level I consists of seven (7) modules. The delivery of the modules (sequence) is outlined as follows:

Module 1:	Trade theory, tools, equipment and safety in Building and Construction
Module 2:	Building Foundation constructor (Masonry I)
Module 3:	Superstructure Wall Constructor (Brick layer)
Module 4:	Roofing Constructor
Module 5:	Domestic Plumber and Pipe Fitter
Module 6:	Housing Carpentry works fitter
Module 7:	Plastering, Painting and finishing

Compulsory On the job industrial attachment after each module or on the completion of all the modules.

Learning units within these modules can be delivered interchangeably as stand-alone modules or in an integrated approach.

3.3 ASSESSMENT

Trainees will be assessed through formative and summative assessment focusing on performance criteria. A variety of assessment methods will be applied as shown below. The trainee has to pass in continuous or formative assessment, which is conducted by an instructor. Each module has to be assessed and the trainee has to meet the required industry standard.

Trainee's assessment records will be kept in a trainee's logbook. The trainer can apply any of the following modes of assessment as deemed appropriate:

- Oral Questioning, Presentations by trainees, written tests (Short questions),
- Assessment of group work (small manageable groups),
- Performance Assessments and Observation.
- Observation
- Interviewing

The result of assessment is COMPETENT OR NOT YET COMPETENT. A trainee assessed as NOT YET COMPETENT repeats the process until the required Competency Standard is attained.

3.4 CERTIFICATION CRITERIA AND PROCEDURES

In Competence-Based Education and Training (CBET), assessment is criterion-based. The criteria of assessment are provided as learning elements alongside learning outcomes. A trainee will be assessed using learning elements and he/she has to prove that he/she is competent in each Learning Outcome in every Unit of Learning before he/she can be awarded Module Completion Certificate.

3.5 INTERNAL AND EXTERNAL QUALITY ASSURANCE

The relevant competent authority must accredit trainers implementing this curriculum for TVET. They will be responsible for both helping the trainees to learn and continuous assessment of their training progress.

Student achievement is evaluated against common learning standards and performance expectations that are consistently applied to all students regardless of whether they are enrolled in traditional courses or pursuing alternative learning pathways.



4.0 SECTION FOUR : MODULES OF COMPETENCY FOR BUILDING AND CONSTRUCTION LEVEL I

Table 4.1: Modules of Competency for certificate of proficiency in Building and construction

Code	Module Title	Elements of Competency	IBTVET		OJT	CMTH
			TTH	PTH		
4.1	Trade theory, Tools, Equipment and safety	4.1.1 Over view of Building and Construction trade. 4.1.2 General tools and Equipment 4.1.3 Safety issues in building and construction 4.1.4 Trauma awareness and healing 4.1.5 Assessment of Prior Learning Experience 4.1.6 Course delivery Assessment and certification criteria.	30	70	-	100
4.2	Brick and Concrete Block making	4.2.1 Knowledge of the concept of Bricks and Concrete making 4.2.2 Tools and equipment for Brick and concrete block making 4.2.3 Application of personal Protective devises in Bricks and concrete block making 4.2.4 Bricks and concrete Blocks making 4.2.5 Demonstration of an understanding of basic first aid skills relevant for brick and concrete making environment 4.2.6 Demonstration of the procedure for drying and burning bricks and concrete blocks. 4.2.7 Explain the concept of curing and treating bricks and concrete blocks 4.2.8 Practice sales and marketing for bricks and concrete blocks 4.2.9 Knowledge of challenges facing brick and concrete makers in South Sudan	30	70	20	120
4.3	Building Substructure Constructor (Building Foundation Constructor)	4.2.1 Substructure Construction tools and Equipment 4.2.2 Safety measures in Building and Construction 4.2.3 Bricks/block manufacturing (molding or production) 4.2.4 Construct a building foundation 4.2.5 Construct a sub structure wall	30	70	20	120
4.4	Building Superstructure (Building Wall Constructor)	4.3.1 Superstructure Construction tools and Equipment 4.3.2 Lay superstructure wall 4.3.3 Construct ring beam 4.3.4 Maintain occupational health and safety procedures	30	70	20	120
4.5	Roofing Constructor	4.4.1 Trade tools and Equipment. 4.4.2 Safety precautions 4.4.3 Assemble Timber roof members 4.4.4 Install roof covering on the building	30	70	20	120

4.6	Domestic Plumber and Pipe fitting	4.5.1 Trade tools and Equipment 4.5.2 Safety measures 4.5.3 Fixing of Plumbing water closets. 4.5.4 Fixing of Taps, shower Rose and wash Hand Basin 4.5.5 Disposal of Waste Water 4.5.6 Identify Professional development needs	30	70	20	120
4.7	Housing Carpentry Works fitter	4.6.1 Trade Tools and Equipment 4.6.2 Safety measures 4.6.3 Install door Fittings 4.6.4 Install Windows 4.6.5 Install other fixtures in the house such as wardrobes , kitchen	30	70	20	120
4.8	Painting and Finishing's	4.8.1 Assemble painting tools and Equipment 4.8.2 Prepare surface for painting 4.8.3 Perform white washing 4.8.4 Perform Color washing 4.8.5 Apply finish to wall openings 4.8.6 .Apply finish to walls	30	70	20	120
TOTAL			240	560	140	940





4.1 TRADE THEORY, SAFETY TOOLS AND EQUIPMENT'S

Table 4.2 Trade theory, safety tools and equipments module

Module Code:	4.1		
Module Level:	I		
Total Hours:	100		
Prerequisite	14 years of age		
MODULE DESCRIPTOR:	<p>This introductory module introduces the trainees to the occupation of Building and Construction and its benefits. The Trainees gets to know why he or she should take up a career in Building and Construction trade. It goes further to discuss the career profile and employment opportunities for the holder of Level I Certificate of proficiency in Building and Construction. The module discusses the issues surrounding trauma awareness and clear statement of the characteristic/ features of a traumatized person and gives skills on how to handle a traumatised person. It also trains the trainees on the practice of occupational health and safety as applicable to Building and Construction industry. It goes further to introduce the trainees to the tools, machines and equipment's for use in the practice of Building and Construction trade and their relevant uses. Through this module, assessment and recognition of any prior learning experience of the trainees is taken into consideration by the trainer. It also explains to the trainees, the scope of the course and trainees are given opportunity to raise up any concerns. The instructor would explain to the trainees the course learning and assessment requirement as well as the two levels of certification. That is each module level certification apart from module I and final certificate of proficiency on completion of all the prescribed modules of study. At the end of this module, the trainees are to be motivated and convinced that they are in the right profession and should have their interest improved.</p>		
Unit of Learning			
Learning Outcomes	Learning Elements	T	P
4.1.1.1 Introduction to Building and construction trade.	<ul style="list-style-type: none"> • Discussion of the Building and construction trade as profession of study. • Knowledge of Career opportunities for holder of Level I Certificate of Proficiency in Building and Construction . 	7	13
4.1.1.2 Tools, Machines and Equipment's used in Building and Construction	<ul style="list-style-type: none"> • Familiarity with Tools and Equipment for the use in Building and Construction trade. • Clear statement of relevant tools, equipment's and materials for Building and Construction. 	5	7
4.1.1.3 Occupational Health and Safety in Building and Construction	<ul style="list-style-type: none"> • Knowledge of risks issues in the practice of Building and Construction trade. • Observation and practice of occupational health and safety in Building and Construction. • Identify potential hazards in the occupation of Building and Construction. 	5	7

4.1.1.4 Trauma awareness	<ul style="list-style-type: none"> • Discussion and explanation of the concept of trauma. • Demonstration of skills of dealing with a traumatised person. • Identification of a traumatised person • Procedure of handling a traumatised person. 	3	7
4.1.1.5 Practice of Hygiene in Building and Construction.	<ul style="list-style-type: none"> • Explanation of the concept of Hygiene and its applicability to Building and Construction Industry. • Knowledge of the reasons for the practice of good Hygiene in Building and construction environment. • Demonstrate an understanding of the dangers of Hygiene in Building and construction. 	5	10
4.1.1.6 Training initial assessment and evaluation	<ul style="list-style-type: none"> • Awareness of Self-Competency Assessment • Performance of Assessment of prior learning experience if any. • Identification of learning challenges on the side trainees if any • Identification of Areas of learning needs 	3	5
4.1.1.7 Discussion on program delivery and Assessment.	<ul style="list-style-type: none"> • Discussion of the Concept of competency based training and learning • Clear understanding and demonstration of the concept of Formative and summative assessment. • Explanation of the Course progression ladder. • Statement of basic program delivery rules and regulations. • Demonstration on Proper usage of Learners guides. 	4	6
TOTAL MODULE TRAINING HOURS			
Resources	<ul style="list-style-type: none"> • Curriculum • Trainees guides, • teachers guide, • reference books • OHS guides • An established Hotel for demonstration 		
Teaching/Training Methodology	Lecture, demonstration, simulation, discussion, practical assignments		
Assessment Method	<ol style="list-style-type: none"> 1. Oral Questioning, 2. Presentations by Trainees, 3. Written tests (Short questions) 4. Simulation, 5. Performance Assessments, 6. Observation, 7. Projects 		



4.2 MODULE 4.2: BUILDING BRICKS AND CONCRETE MANUFACTURING

(BUILDING BRICK AND CONCRETE MAKER)

Table 4.3: Building bricks and concrete blocks making module

Module Code:	4.2		
Module Level:	I		
Total Hours:	120		
Prerequisite	Attainment of 14 years of age		
MODULE DESCRIPTOR:	<p>Building and construction works is carried out with the use various types of bricks namely clay bricks, concrete blocks, wooden blocks and plastic blocks. On completion of this module, the trainee will be able to demonstrate the following competencies according to the required occupational and industry standards and/or requirements:</p> <p>Knowledge of personal and protective equipment for use in building and construction, Knowledge of basic first aid in Building and construction sites, Knowledge of electrical safety in Building and Construction sites, skills of performing scaf folding, Knowledge of masonry materials, Knowledge of the concept of different types of building bricks and blocks, demonstrate brick making skills, Knowledge of drying and burring bricks, Modern methods of burning bricks, Types of fuel used in burning blocks, Annealing or cooling of bricks, Classification of Bricks, Identifying qualities of bricks, Knowledge of special shaped bricks, Different sizes of bricks, Different types of bricks, knowledge of depression in bricks, Culling bricks, wetting bricks , Challenges faced by brick makers in South Sudan, Brick pricing methods and methods for Sales and marketing of bricks and concrete blocks in South Sudan.</p>		
Unit of Learning	4.2.1 Concept of Building Bricks and Concrete Blocks making		
	Institutional Based training Hours (IBTH)		
Learning Outcomes	Learning Elements	T	P
4.2.1.1 Bricks and Blocks making	<ul style="list-style-type: none"> Define the term Bricks and blocks as used in building and construction industry Knowledge of different types and classification of bricks in Building and construction. Identify masonry materials used in building and construction profession. 	3	7
4.2.1.2 Explore the procedure for making bricks and concrete blocks	<ul style="list-style-type: none"> Knowledge of utilization of basic masonry materials. Identification of Brick and concrete block making tools and equipment. Knowledge of brick and concrete making materials. Identify correct ration for mixing bricks and concrete blocks making raw materials. Handling the manufacturing process for making bricks and concrete blocks. 	5	12
4.2.1.3 Understand Basic first aid skills relevant for Brick and concrete making.	<ul style="list-style-type: none"> Knowledge of basic first aid skills Awareness of potential dangers in brick and concrete making Demonstration pf basic contents of the first aid kit 	5	12

4.2.1.4 Explore the procedure Drying and Burning bricks blocks	<ul style="list-style-type: none"> • Demonstrate skills for handling of the raw manufactured clay bricks and concrete blocks. • Explanation of the concept of treatment of the produced clay bricks and concrete blocks. • Drying of clay Bricks and concrete blocks. • Handling male and female blocks • Knowledge of different types of brick and concrete block designs. • Knowledge of modern methods of burning bricks • Identification of different types of fuel used in burning bricks. • Practice of environmental protection and conservation during the process of handling brick making. 	5	12
Unit of Learning	4.2.2 Perform Brick and Concrete curing and treatment		
Learning Outcomes	Learning Elements	T	P
4.2.2.1 Understand the concept of curing and treating bricks and concrete blocks	<ul style="list-style-type: none"> • Explanation of the concept of curing and treatment in bricks and concrete making • Correct annealing or cooling of bricks. • Identification of qualities of good bricks and concrete blocks • Grading and classification of bricks and blocks • Knowledge of making of special shaped bricks 	5	11
4.2.2.2 Practice sales and marketing for bricks and concrete blocks	<ul style="list-style-type: none"> • Demonstration of an understanding of the concept of sales and marketing • Knowledge of Entrepreneurship and Small Business management for Bricks and concrete block making business. • Identify different strategies for marketing bricks and concrete blocks. • Practice customer care services for the bricks and concrete blocks client. • Maintain total quality management in brick and concrete block manufacturing • Explanation of the concepts of depression, culling and wetty in bricks and concrete blocks making. • Knowledge of challenges facing bricks and concrete block makers in South Sudan 	5	11
A.TOTAL IBTEVET TRAINING HOURS		30	70
B.ON JOB TRAINING HOURS AT THE INDUSTRY OF ATTACHMENT FOR THOSE TAKING SINGLE MODULE		20	
TOTAL NOTIONAL MODULE COMPLETION TRAINING HOURS A+B		120	
Resources	Non-Consumable <ul style="list-style-type: none"> • Trowel • Push-pull tape • Manilla string • Concrete • Shovel • Hoe • Mason's square • Nails • Saw 	<ul style="list-style-type: none"> • Spirit level, boat level or host pipe • Poker vibrator • Wooden/ square tube straight edge • Hammer • Plumb bob 	Consumable <ul style="list-style-type: none"> • Cement • Sand • Water • Hard core stones • Marram blinding • DRC 142 mesh • 1x12 timber • Wooden poles • Concrete spacer blocks

Teaching/Training Methodology	<ul style="list-style-type: none">• Practical demonstration• Self-paced instructions• Group discussion
Assessment Method	<ul style="list-style-type: none">• Oral• Written• Performance Assessments and Observation.• Assessment of group work (small manageable groups)



4.3 MODULE 4.3: MASONRY 1: BUILDING SUBSTRUCTURE ELEMENTS CONSTRUCTOR

Table 4.4: Building Substructure Elements Constructor Module

Module Code:	4.3		
Module Level:	I		
Total Hours:	120		
Prerequisite	Attainment of 14 years of age		
MODULE DESCRIPTOR:	<p>On completion of this module, the trainee will be able to demonstrate the following competencies according to the required occupational and industry standards and/or requirements:</p> <ul style="list-style-type: none"> • Construct a building foundation • Construct a substructure wall. 		
Unit of Learning	4.3.1 Construct a Building Foundation		
	Institutional Based training Hours (IBTH)		
Learning Outcomes	Learning Elements	T	P
4.3.1.1 Set out building foundation by the 3:4:5 method or mason's square method	<ul style="list-style-type: none"> • Drive in corner pegs • Drive in nails on the corner pegs • Tying string on the corner pegs • Using the method of 3:4:5 or mason's square on the string to set out right angles and re-set the corner pegs accordingly • Checking for the two diagonals to ensure that they are equal • Inserting all the required profile boards • Tying strings on the profile boards to indicate foundation width, which should be 600mm wide (three times the wall thickness) • Pouring lime/white chalk powder on the strings to show the foundation outline 	5	12
4.3.1.2 Explore the procedure of excavating foundation trench out	<ul style="list-style-type: none"> • Utilization of hoes and mattocks to excavate the foundation outline along the white line to the required depth • Removal of all dugout soil using spades 	5	12
4.3.1.3 Understand the procedure of leveling the foundation trench	<ul style="list-style-type: none"> • Driving steel pegs all around the dugout trench with the use of white chalk, mark off levels for the blinding and foundation thickness 	5	12
4.3.1.4 Explore the procedure of casting the foundation concrete	<ul style="list-style-type: none"> • Preparation of a concrete mix of ratio 1:4:8 (cement: sand: ballast) for the foundation blinding • Pouring the blinding all around the foundation trench to the required level as shown by the steel profile levels. • Allowing the blinding to cure for at least two days by pouring water • Preparing a concrete mix of ratio 1:3:6 for the foundation concrete • Pouring the concrete all around the foundation trench to the required level as shown by the steel profile levels • Levelling off the concrete by use of a wooden or square tube straight edge, using the tops of the steel pegs as the gauge • Allowing the concrete to cure for at least seven days by pouring water 	5	12

Unit of Learning	4.3.1 Construct a Building Foundation		
Learning Outcomes	Learning Elements	T	P
4.3.2.1 Understand the procedure for preparing cement- sand mortar and setting out the substructure masonry units	<ul style="list-style-type: none"> • Preparation of mortar of ratio 1:3 (cement: sand) • Mixing of the mixture six times dry and six times wet until the mixture is uniform • Pouring the mortar at the corners of the foundation trench • Leveling of the mortar to a thickness of 10mm • Overlaying the masonry unit on the mortar • Tying manila string on the corners of the masonry units • Using a mason's square for horizontal alignment of the masonry units • Using a plumb bob for vertical alignment of the corner masonry units • Pouring mortar on the rest of the foundation trench • Overlaying masonry units on the mortar along the manila string for horizontal alignment • Using a plumb bob on each of the masonry units for vertical alignment • Filling the joints between the masonry units • Putting mortar on top of all the laid masonry units • Overlaying the mortar with another course of masonry units • Repeating of the process until the masonry units are at a level of 150mm above the general ground 	5	12
4.3.2.1 Practice the procedure for laying the ground floor slab	<ul style="list-style-type: none"> • Digging out soil between the walls to a depth of at least 600mm (depth determined by type of soil at the site) • Replacing dugout soil with 300mm thick wall compacted broken stone hardcore • Pouring 50mm well compacted marram blinding on top of the hardcore • Fixing wooden formwork all round the outer perimeter of the substructure wall using 1x12 timber members, to form a 100mm framing • Firm securing of the formwork with wooden struts • Placing polythene damp proof membrane (DPM) of gauges 500, 750 or 1000 on top of the marram blinding • Placing a DRC 142 reinforcement mesh on top of the DPM • Placing concrete spacers below the DRC mesh • Preparation of concrete of mixture of ratio 1:3:6 • Pouring of contents in a concrete mixer • Pouring the mixed concrete on the space between the formwork to form a 100mm thick concrete slab • Vibration of the concrete well using a poker vibrator • Cure ring the concrete slab for at least 1 week 	5	12
A.TOTAL IBTEVET TRAINING HOURS		30	70
B.ON JOB TRAINING HOURS AT THE INDUSTRY OF ATTACHMENT FOR THOSE TAKING SINGLE MODULE		20	

TOTAL NOTIONAL MODULE COMPLETION TRAINING HOURS A+B		120
Resources	Non-Consumable <ul style="list-style-type: none"> • Trowel • Push-pull tape • Manilla string • Concrete • Shovel • Hoe • Spirit level, boat level or host pipe • Poker vibrator • Wooden/square tube straight edge • Nails • Saw • Hammer • Plumb bob • Mason's square 	Consumable <ul style="list-style-type: none"> • Cement • Sand • Water • Hard core stones • Marram blinding • DPM • DRC 142 mesh • 1x12 timber • Wooden poles • Concrete spacer blocks • Assorted nails
Resources Teaching/ Training Methodology	<ul style="list-style-type: none"> • Practical demonstration • Self-paced instructions • Group discussion 	
Assessment Method	<ul style="list-style-type: none"> • Oral • Written • Performance Assessments and Observation. • Assessment of group work (small manageable groups) 	



4.4 MODULE 4.4: SUPERSTRUCTURE WALL CONSTRUCTOR (Brick layer).

Table 4.5: Superstructure Wall Constructor (Brick layer) Module

Module Code:	4.4		
Module Level:	I		
Total Hours:	120		
Prerequisite	Attainment of 14 years of age		
MODULE DESCRIPTOR:	<p>On completion of this module, the trainee will be able to demonstrate the following competencies according to industry standards and/or requirements:</p> <ul style="list-style-type: none"> • Lay superstructure wall • Construct ring beam • Maintain occupational health and safety procedures 		
Unit of Learning	4.4.1 Lay Superstructure Wall		
Learning Outcomes	Learning Elements	T	P
4.4.1.1 Demonstrate the procedure for setting out the substructure wall	<ul style="list-style-type: none"> • Indication of the wall positions on the profile boards by driving nails on the board, 200mm apart • Tying manila string on the wall position nails, to give the position of the superstructure wall • Preparation of mortar of mix 3:1 • Laying the mortar on the edge of the slab, and use the manila string positions to provide the mortar width on the slab, all around wall positions on the entire slab • Placing a 200mm bituminous felt damp proof course (DPC) along the laid mortar positions, all around the slab • Placement of mortar on the damp proof course to a thickness of 10mm, and allow the mortar to harden for at least two days • Setting out stones at all wall junctions throughout the slab • Tying of manila string for horizontal alignment and use a plumb bob for vertical alignment • Filling in spaces between the already laid in masonry units with fresh masonry units, using the manila string as horizontal alignment and plumb bob for vertical alignment, leaving out spaces for door openings • Placing mortar on top of the laid masonry units, for laying of the next masonry course. Repeat process up to the fourth course • Fixing timber/steel scaffolding all around the building, to allow for laying of subsequent masonry courses • Placing another five masonry unit courses, allowing spaces for window openings as appropriate • Allowing of at least two days for curing before fixing formwork for ring beam 	6	14

Unit of Learning	4.4.2 Construct Ring Beam		
Learning Outcomes	Learning Elements	T	P
4.4.2.1 Describe procedure for fixing of ring beam formwork	<ul style="list-style-type: none"> Provision of all the necessary timber sizes for erection of the formwork Provision of the necessary shoring for the formwork 	6	14
4.4.2.2 Demonstrate the procedure for placing reinforcement to ring beam	<ul style="list-style-type: none"> Preparation of reinforcement for the ring beam on the ground as appropriate Lifting the reinforcement cage and place between the formwork Fixing of the hoop iron 	6	14
Unit of Learning	4.4.1 Maintain Occupational Health and Safety Procedures		
Learning Outcomes	Learning Elements	T	P
4.4.3.1 Maintain safety and cleanliness of the work place	<ul style="list-style-type: none"> Identification of the occupational Health and Safety issues and concerns for the construction site. Proper selection of Tools, equipment and Personal Protective Equipment (PPE). 	6	14
4.4.3.2 Perform basic occupational first aid.	<ul style="list-style-type: none"> Correct identification and selection of first Aid tools and equipments. Correct Identification of types of accidents and injuries. Demonstration of artificial respiration procedure. 	6	14
4.4.3.2 Perform basic occupational first aid.	<ul style="list-style-type: none"> Correct identification and selection of first Aid tools and equipments. Correct Identification of types of accidents and injuries. Demonstration of artificial respiration procedure. Attending to minor injuries. Sterilizing first aid tools. Observation of safety precautions. Correct storage of first aid kit 	6	14
A.TOTAL IBTEVET TRAINING HOURS		30	70
B.ON JOB TRAINING HOURS AT THE INDUSTRY OF ATTACHMENT FOR THOSE TAKING SINGLE MODULE		20	
TOTAL NOTIONAL MODULE COMPLETION TRAINING HOURS A+B		120	

Resources	Non-Consumable <ul style="list-style-type: none"> • Manilla string • Plumb bob • Poker vibrator • Wheel barrows • spade/shovel • Crow bar 	Consumable <ul style="list-style-type: none"> • Handouts on safety procedures • Assorted timber sizes for formwork and scaffold • Reinforcement bars of appropriate sizes • Masonry units • Cement • Sand • Ballast/coarse aggregate • DPC • Binding wire
Teaching/Training Methodology	<ul style="list-style-type: none"> • Practical demonstration • Self-paced instructions • Group discussion 	
Assessment Method	<ul style="list-style-type: none"> • Oral • Written • Performance Assessments and Observation. • Assessment of group work (small manageable groups) 	



4.5 MODULE 4.4: ROOFING CONSTRUCTOR

Table 4.6: Roofing Constructor Module

Module Code:	4.5		
Module Level:	I		
Total Hours:	120		
Prerequisite	Attainment of 14 years of age		
Unit Descriptor	On completion of this module, the trainee will be able to demonstrate the following competencies according to industry standards and/or requirements: <ul style="list-style-type: none"> Assemble timber roof members Install roof covering on the building 		
Unit of Learning	4.5.1 Assemble Timber Roof Members		
Learning Outcomes	Learning Elements	T	P
4.5.1.1 Explore the procedure for fixing wall plate	<ul style="list-style-type: none"> Joining 100x50 timber to run along the entire perimeter of the superstructure wall Tie the wall plate with hoop irons and secure with nails as appropriate 	10	24
4.5.1.2 Demonstrate the procedure of fixing roof trusses	<ul style="list-style-type: none"> Preparation of roof trusses, consisting of king post, hangers and struts Joining the timber junctions by means of timber connectors Lifting the trusses to the wall plate level Fixing the trusses at 1.8m centres and fix with nails as appropriate Fixing timber rafters between trusses at 600mm centres Fixing fascia boards as appropriate 	10	23
Unit of Learning	4.5.2 Install Roof Covering on the Building		
Learning Outcomes	Learning Elements	T	P
4.5.2.1 Demonstrate the procedure for fixing galvanized corrugated iron (GCI) sheets on the roof	<ul style="list-style-type: none"> Fixing purlins at 900mm centres Fixing the roofing covering / sheets starting from the fascia board towards the ridge Assembling requirements 	10	23
A.TOTAL IBTEVET TRAINING HOURS		30	70
B.ON JOB TRAINING HOURS AT THE INDUSTRY OF ATTACHMENT FOR THOSE TAKING SINGLE MODULE		20	
TOTAL NOTIONAL MODULE COMPLETION TRAINING HOURS A+B		120	
Resources	Non-Consumable <ul style="list-style-type: none"> Saw Hammer Push-pull tape 	Consumable <ul style="list-style-type: none"> Timbers of assorted sizes Nails Hoop iron Lifting ropes Timber connectors Different types of sheets 	

Teaching/Training Methodology	<ul style="list-style-type: none">• Practical demonstration• Self-paced instructions• Group discussion
Assessment Method	<ul style="list-style-type: none">• Oral• Written• Performance Assessments and Observation.• Assessment of group work (small manageable groups)



4.6 MODULE 4.6: DOMESTIC PLUMBER AND PIPE FITTER

Table 4.7: Domestic Plumber and Pipe Fitter Module

Module Code:	4.6		
Module Level:	I		
Total Hours:	120		
Prerequisite	Life Skills, Numeracy and Basic English		
Unit Descriptor	<p>On completion of this module, the trainee will be able to demonstrate the following competencies according to industry standards and/or requirements:</p> <ul style="list-style-type: none"> • Fix plumbing water closets • Fix taps, shower roses and wash hand basins • Dispose waste water 		
Unit of Learning	4.6.1 Fixing of Plumbing Water Closets (W/C)		
Learning Outcomes	Learning Elements	T	P
4.6.1.1 Practice the procedure of Placing water closet points Explain the purpose of visual inspection	<ul style="list-style-type: none"> • Fixing of water closet points in the hardcore prior to concreting • Holding the points firm with concrete • Closing the point openings with paper to prevent floor slab concrete from clogging the point openings <p>Damage identification</p> <ul style="list-style-type: none"> - Cracks - Disorders (shape & structure) - broken parts 	6	10
4.6.1.2 Explore the procedure of Fixing the water closet fixtures complete with flushing cisterns	<ul style="list-style-type: none"> • Placing the water closets on top of the existing points • Fixing of the W/C on the floor with screws 	6	10
Unit of Learning	4.5.2 Install Roof Covering on the Building		
Learning Outcomes	Learning Elements	T	P
4.5.2.1 Demonstrate the procedure for fixing galvanized corrugated iron (GCI) sheets on the roof	<ul style="list-style-type: none"> • Fixing purlins at 900mm centres • Fixing the roofing covering / sheets starting from the fascia board towards the ridge Assembling requirements 	10	23
Unit of Learning	4.6.2 Fixing of Taps, Shower Rose and Wash-hand Basin		
Learning Outcomes	Learning Elements	T	P
4.6.2.1 Demonstrate the procedure of Fixing of taps	<ul style="list-style-type: none"> • Chisel wall to fix pipes 1 1/2 or 1 1/4 PVC pipes as appropriate • Placing of the GI or PPR pipes to chiseled wall • Proper covering of the chasing with mortar • Fixing the taps and shower rose as appropriate 	6	15
4.6.2.2 Practice Fixing of wash hand basins	<ul style="list-style-type: none"> • Fitting wash hand basins complete with bottle traps 	6	15

Unit of Learning	4.6.3 Disposal of Waste Water		
Learning Outcomes	Learning Elements	T	P
4.6.3.1 Explore the procedure of Fitting of pipes to dispose waste water Discuss professional development needs	<ul style="list-style-type: none"> Excavate trench for laying waste pipes Lay pipes to dispose waste Construct manholes at appropriate locations Reasons for professional development 	10	23
A.TOTAL IBTEVET TRAINING HOURS		30	70
B.ON JOB TRAINING HOURS AT THE INDUSTRY OF ATTACHMENT FOR THOSE TAKING SINGLE MODULE		20	
TOTAL NOTIONAL MODULE COMPLETION TRAINING HOURS A+B		120	
Learning Resources	Non-Consumable <ul style="list-style-type: none"> Hoes or mattocks Hack saw Spade Wheelbarrow Mortar pan Trowel Spirit level 	Consumable <ul style="list-style-type: none"> GI/PPR pipes PVC pipes of appropriate sizes Water closets Wash hand basins Cement Sand Ballast Taps Shower roses 	
Resources	Non-Consumable <ul style="list-style-type: none"> Multi media Projector Dice Sound system White Board 	Consumable <ul style="list-style-type: none"> Flip Chart Writing pad Lead pencil High lighter White board marker 	
Teaching/Training Methodology	<ul style="list-style-type: none"> Practical demonstration Self-paced instructions Group discussion 		
Assessment Method	<ul style="list-style-type: none"> Oral Written Performance Assessments and Observation. Assessment of group work (small manageable groups) 		

4.7 MODULE 4.7: HOUSING CARPENTRY AND JOINERY WORKS FITTER.

Table 4.8: Housing Carpentry and Joinery Works Fitter Module

Module Code:	4.7		
Module Level:	I		
Total Hours:	120		
Prerequisite	14 years		
Module Descriptor:	<p>On completion of this module, the trainee will be able to demonstrate the following competencies according to the prevailing industry and Occupational standards and/or requirements:</p> <ul style="list-style-type: none"> • Install door frames • Install doors 		
Unit of Learning	4.7.1 Construction of door and door frame		
Learning Outcomes	Learning Elements	T	P
4.7.1.1 Knowledge of Constructing door and door frame.	<ul style="list-style-type: none"> • State the importance of door in a building • Explain the procedure of making door frame and construction of different types of doors. • Knowledge of classification of door frame. • Demonstrate methods of fixing door frame to the wall • Identification of different types of door and window • Demonstrate fixing of door and window hardware-(ironmongery) 		
Unit of Learning	4.7.2 Install Door Fittings and Joinery		
Learning Outcomes	Learning Elements	T	P
4.5.2.1 Demonstrate the procedure for fixing galvanized corrugated iron (GCI) sheets on the roof	<ul style="list-style-type: none"> • Chisel wall jambs to accommodate door frame lags • Fixing lags to frame jambs • Fixing door frame to door opening • Knowledge of importance and different types of joinery • Demonstrate different methods of cutting joints 	15	35
4.7.2.2 Describe the procedure for the installation of doors	<ul style="list-style-type: none"> • fitting door to door opening • Fixing door furniture to door Dependent on sun light 	15	35
A.TOTAL IBTEVET TRAINING HOURS		30	70
B.ON JOB TRAINING HOURS AT THE INDUSTRY OF ATTACHMENT FOR THOSE TAKING SINGLE MODULE		20	
TOTAL NOTIONAL MODULE COMPLETION TRAINING HOURS A+B		120	
Resources	Non-Consumables	Consumables	
	<ul style="list-style-type: none"> • Saw (various types) • Hammer (various types) • Try Square • Wheelbarrow • Spade • Mortar pan • Mallet • Trowel • Chisel • Mason chisel • Spirit level • Plumb bob 	<ul style="list-style-type: none"> • Pencil • Eraser • Pointers • Highlighter • Stationary • Relevant Book • Doors • Frame lags • Door furniture • Cement • Sand • Ballast/coarse aggregate 	

Teaching/Training Methodology	<ul style="list-style-type: none">• Practical demonstration• Self-paced instructions• Group discussion
Assessment Method	<ul style="list-style-type: none">• Oral• Written• Performance Assessments and Observation.• Assessment of group work (small manageable groups)



4.8 MODULE 4.8: PLASTERING, RENDERING, PAINTING AND FINISHING WORK

Table 4.8: Housing Carpentry and Joinery Works Fitter Module

Module Code:	4.8		
Module Level:	I		
Total Hours:	120		
Prerequisite	14 years		
Module Descriptor:	<p>On completion of this module, the trainee will be able to demonstrate the following competencies according to industry standards and/or requirements</p> <ul style="list-style-type: none"> • Prepare tools, Equipment's and Materials used in painting • Preparing a surface for painting • Perform white washing • Perform Color washing • Install windows • Apply finish to walls 		
Unit of Learning	4.8.1 Apply Finish to Wall Openings		
Learning Outcomes	Learning Elements	T	P
4.8.1.1 Install windows	<ul style="list-style-type: none"> • Chiseling window jambs • Placing window into position • Aligning window for horizontality and verticality • Firmly securing of window with cement mortar 	6	14
Unit of Learning	4.8.2 Apply Finish to Walls		
Learning Outcomes	Learning Elements	T	P
4.8.2.1 Apply Rendering to wall	<ul style="list-style-type: none"> • Preparation of cement sand mortar of mix 1:4 for brick wall or 1:3 for block and stonework • Application of the mortar in two layers • Curing the rendered wall for at least one week 	6	14
4.8.2.2 Apply Floor screeding	<ul style="list-style-type: none"> • Hacking surface of floor for levelness • Preparation of cement sand mortar of mix 1:3 • Applying the mortar in two layers 	6	14
4.8.2.3 Apply Plastering to walls	<ul style="list-style-type: none"> • Hacking of surface of wall for levelness • Preparation of cement sand mortar of mix 1:4 for brick wall or 1:3 for block and stonework • Applying the mortar in three layers • Curing of plastered wall for at least one week 	6	14
4.8.2.4 Apply Painting to walls	<ul style="list-style-type: none"> • Roughening the wall surface by sanding with appropriate sand papers • Applying undercoat paint to walls by using appropriate application tools e.g. normal paint brushes or paint rollers • Applying finishing coats to walls using appropriate application tools e.g. normal paint brushes or paint rollers 	6	14

A.TOTAL IBTEVET TRAINING HOURS		30	70
B.ON JOB TRAINING HOURS AT THE INDUSTRY OF ATTACHMENT FOR THOSE TAKING SINGLE MODULE		20	
TOTAL NOTIONAL MODULE COMPLETION TRAINING HOURS A+B		120	
Resources	<ul style="list-style-type: none"> • Cement • Sand • Water • Window • Sand paper • Wheelbarrow • Roller and brushes • Manilla string • Plum bob • Straight age • Spade and hoes • Trowels • Push-pull tape • Hammer • Mason chisel • Steel flood • Turpentine • Paints • Pain tray 		
Teaching/Training Methodology	<ul style="list-style-type: none"> • Practical demonstration • Self-paced instructions • Group discussion 		
Assessment Method	<ul style="list-style-type: none"> • Oral • Written • Performance Assessments and Observation. • Assessment of group work (small manageable groups) 		

5.0 SECTION FIVE : CURRICULUM DEVELOPMENT PROCESS AND VALIDATION TEAM MEMBERS

5.1 CURRICULUM DEVELOPMENT PROCESS

Table 5.1: Stages for the Curriculum Development process.

S No.	Stage	Activity	Key Deliverables
1.	Stage 1	Review of the curriculum land scape in South Sudan	TVET curriculum training and delivery system in South Sudan established.
	Stage 2	TVET Stakeholders Consultation	Consultation with TVET sector stakeholders. They Included the industry, TVET working group, MoGEI, MoLPSHRD, EMPOWER project. The team jointly selected seven priority trades to be considered in developing curriculum. These priority trades are: <ol style="list-style-type: none"> 1. Hair Dressing and Beauty therapy 2. Catering and Hospitality Service 3. Tailoring and Dress making 4. Auto mechanic 5. Building and Construction 6. Agribusiness 7. Electrical Installation
3.	Stage 3	Consultation with 4 TVET training institutions in Juba	Rapid training needs assessment undertaken to establish the gaps in the existing curriculum that needs to be addressed in the new curriculum being developed.
4.	Stage 4	Review of regional TVET curricular for the Seven Trades	First draft of the TVET curriculum developed and shared with the local subjects' experts.
5.	Stage 5	Curriculum review workshop held in November 2018 to obtain the input of the Industry and local TVET teachers.	Second draft version developed by incorporating the issues raised from the industry and subject's experts.
6	Stage 6	Sharing of the Second Draft version with the South Sudan TVET Sector working group for comments to be incorporated	Comments received from South Sudan TVET Sector working group and incorporated to produce the third draft version.
7.	Stage 7	Sharing of the third draft version with MoLPSHRD and UNDP for comments	Views received from UNDP and MoLPSHRD and incorporated to form the Fourth Version of the Curriculum.
8.	Stage 8	Sharing of the Fourth Draft Version with the MoGEI Directorate for TVET and Curriculum development for quality assurance.	Views from MoGEI Obtained that formed the fifth version of the draft curriculum.
9.	Stage 9	Draft curriculum shared with MoGEI and MoLPSHRD for their final feedback before validation.	Comments received from MoGEI, MoLPSHRD, UNDP, EMPOWER project Consortium in corporate to produce the sixth version.

10	Stage 10	Validation of the sixth version of the curriculum	Subjects' experts from the TVET training institutions provide their feedback to produce the seventh draft.
11	Stage 11	Lunching of the curriculum.	Seventh version of the draft curriculum Launched

5.2 CURRICULUM DEVELOPMENT AND VALIDATION TEAM MEMBERS

Table 5.2: CURRICULUM DEVELOPMENT AND VALIDATION TEAM MEMBERS

S No	Name	Trade Area	Institution of representation
1.	Joseph Odhiambo Ndaga	Lead Consultant and CBET Expert	Afri-Project Management Consultants APMC
2.	Juach Agok	Director TVET Qualification and Standards	MoGEI
3.	Scopus Lubang	Director for Curriculum Development	MoGEI
4.	Taban Kozo	Deputy Director TVET	MoGEI
5.	Ochieng David	Instructor	MTC
6.	Aida Christopher	Principal, MTC	MoLPSHRD
7.	Chistopher Awii Emilio	Deputy Director for Curriculum development	MOGEI
8.	Kelly Owillah	Associate Consultant	APMC
9.	Isaac Otieno	Education Project Manager	Nile Hope
10.	Okey Christopher	Building and Construction Instructor-Juba MTC	MoLPSHRD
11.	Busi Jackson Modi	Master trainer	FCA South Sudan
12.	Obama James	Master Trainer	FCA South Sudan
13.	Okello Dominic Oliya	Project Manager	ACROSS
14.	Omony David	Instructor- Juba Technical	MoGEI

6.0 SECTION SIX : APPENDICES

6.1 APPENDIX 1: INDUSTRIAL ATTACHMENT

Table 6.1: On the job training Assessment guide

Module Code:	4.8	
Module Level:	I	
Total Hours:	120	
Prerequisite	All Modules of Level I	
Module Descriptor:	<p>On completion of this module, the trainee will be able to demonstrate the following competencies according to industry standards and/or requirements</p> <ul style="list-style-type: none"> • Set out buildings • Excavate foundation trenches and cast foundation concrete • Construct substructure wall • Cast ground floor slab • Construct superstructure wall • Apply various floor and wall finishes 	
Unit of Learning	2.7.1 Practice of all Learnt Skills	
Learning Outcomes	Learning Elements	Assessment Criteria
2.7.1.1 Setting out buildings	Exposure to tools for setting out buildings like the 3:4:5 and mason square methods	<ul style="list-style-type: none"> • Direct observation • Practical demonstration
2.7.1.2 Excavating foundation trenches and casting foundation concrete	<p>Exposure to methods of excavating foundations</p> <p>Exposure to methods of leveling trench bottom surfaces</p> <p>Exposure to methods of mixing concrete</p>	<ul style="list-style-type: none"> • Direct observation • Practical demonstration
2.7.1.3 Construction of substructure wall	<p>Exposure to methods of bonding masonry walling units</p> <p>Selection of materials to be used as hardcore filling materials</p> <p>Learning methods of producing quality cement-sand mortar</p>	<ul style="list-style-type: none"> • Direct observation • Practical demonstration
2.7.1.4 Casting of ground floor slab	Obtaining experience in casting of ground floor slab	<ul style="list-style-type: none"> • Direct observation • Practical demonstration
2.7.1.5 Construction of building superstructure wall	<p>Obtaining experience in installation of scaffoldings</p> <p>Obtaining experience in installation of shoring</p> <p>Exposure to using different masonry unit types</p>	<ul style="list-style-type: none"> • Direct observation • Practical demonstration
Application of various floor and wall finishes	<p>Exposure to proper plastering procedures</p> <p>Exposure to various rendering procedures</p> <p>Exposure to different methods of applying screeds</p> <p>Exposure to various paint types for painting operations</p>	<ul style="list-style-type: none"> • Oral Questioning, • Presentations by trainees,

<p>Sessional assessment will be adopted and the following guidelines should be followed regarding Industrial attachment marks;</p> <ol style="list-style-type: none"> 1. Participation 25% 2. Attendance 10% 3. Time Management 10% 4. Log book: 15% 5. Safety 5% 6. Communication skills 5% 7. Creativity 5% 8. Customer care 5% 9. Cleanliness and hygiene 5% 10. Readiness to be corrected 5% 11. Team work 5% 12. General conduct 5% 	
<p>Internal Evaluation & Marks: Total internal marks are 100. Marks shall be awarded at the end of every module of the attachment</p>	

6.2 APPENDIX 2: ASSESSMENT PRINCIPLES AND PROCESS

Assessment principles	<p>Trainers shall only conduct assessment and instructors who are in turn are experts in the module or course and preferably have adequate training and industrial experience in PLAR Assessment. The following are key aspects proposed to be followed when assessing trainees:</p> <p>Following the review of all the assessment components (Portfolios of Evidence, Competency Interviews and/or practical tasks), the assessor decides whether evidence presented provides full and ample proof that the unit standards have been met;</p> <ul style="list-style-type: none">• The assessor records assessment marks and makes recommendation to the moderator;• All PLAR assessment procedures should be consistent with national assessment procedures. <p>To ensure assessment are of high quality and integrity, assessors and moderators must diligently apply the following accepted assessment principles:</p> <ul style="list-style-type: none">* Systematic: Assessment activities must follow a practical and natural sequence, be easy to administer and easy for the trainee to follow.* Consistent: Assessment is consistent where, given similar evidence and circumstances, an assessor would make the same judgements again; or where assessment by other assessors would lead to the same judgement;* Open: Trainees are given the opportunity to contribute to the assessment planning and collecting of evidence. The assessment process is transparent;* Flexible: Flexible assessment allows for easy entrance into appropriate levels of education and training and for multiple pathways to the same learning ends in a manner, which facilitates progression. It also uses a variety of assessment approaches, methods and instruments;* Appropriate: The method of assessment is suited to the competencies being assessed as stipulated in the registered unit standard;* Manageable: The assessment must be easy to arrange, cost-effective and practical. It should take into consideration available facilities, equipment and time;* Fair: Assessment must be unbiased and not hinder or advantage a trainee in any way. Assessors must make sure that the chosen approach, methods and instruments support the principle of fairness. They must avoid influences not related to the matters being assessed; for example, arising from differences related to race, gender and assessment method.
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<p>Assessment principles</p>	<p>* Integrated: Assessment should be an integral part of standard setting and curriculum, not something added on afterwards. The teaching and learning elements of each program should be designed in the light of the types of assessment trainees undertake and evidence required, and vice versa, so that trainees can demonstrate what they have learned and provide the evidence required by the unit standard(s). The assessment must be in line with what the trainee has to do at work. (Ideally, the assessment takes place during normal working processes.)</p> <p>* Valid: Validity in assessment refers to an assessment measuring what it is supposed to. If a unit standard requires observation as evidence of performance, then a written examination alone will not be valid</p> <p>Assessment procedures, methods, instruments and materials have to match what is being assessed. To be fit for its purpose, assessment must use evidence directly related to the type and level of performance required in a specified standard;</p> <p>* Authentic: The assessor must be satisfied that the work being assessed is the trainee’s own work. In the case of PLAR, evidence like certificates and testimonials may have to be referenced for authenticity.</p> <p>* Current: The evidence must reveal what the trainee is currently able to do. The evidence, standards and training material must be up to date with current technology and other industry-specific developments.</p> <p>* Sufficient: ‘Sufficient means that the assessor must make sure that the evidence collected meets all requirements of the performance criteria of the unit standard. Sufficient evidence also implies that the trainee can repeat the required performance consistently;</p> <p>* Reliable: ‘Reliable’ evidence is evidence that will be acceptable by all assessors and which can be repeated in various circumstances. Reliability in assessment is about consistency.</p>
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NB: Note: Where evidence gaps in the Portfolio of Evidence of a trainee are evident, assessors should, during the competency interview and the practical assessments, determine if the evidence gaps still exist. If they still exist, trainees will be declared not yet competent in these unit standards. All the gaps identified should be recorded and detailed in the final assessment report

Post-Assessment Review

Moderation:	<p>The “Post Assessment Review” process comprises of moderation and external verification. Moderation of trainee assessment is a process aimed at ensuring that marks and grades are as valid, reliable, and fair as possible for all trainees and all markers.</p> <p>Moderation strategies may differ depending on the number of trainees studying the unit and the number of training staff involved. However, the process usually involves collaborative decision making by trainers/assessors about assessment criteria and expectations. Double assessment is usually carried out when a trainee received a fail grade. Moderation is more than the checking of assessment marks; it is the checking of assessments to ensure that the whole assessment process is fair, valid and reliable enabling equivalence and comparability.</p> <p>Assessments conducted are moderated with the aim of enhancing the quality and integrity of assessment in the TVET sector.</p> <p>Registered moderators need to validate that assessments were done consistently based on approved guidelines, best practices and principles of assessment.</p> <p>The moderator should indicate through a form provided in the portfolio of evidence that the assessment outcomes are a clear reflection of the trainees’ competence and either endorse, or adapt the assessment of the assessor. In extreme circumstances, a moderator could request re-assessments or additional assessments.</p>
External Verification:	<p>External verification is done to ensure that the approved standards for awarding a qualification are met. External verification is also organized to maintain the overall credibility of the Assessment practices and processes in compliance with a competent authority.</p> <p>External verifiers determine whether the moderator has correctly evaluated the evidence supplied by the assessor.</p> <p>Once the verifier has established that the moderation process was adequately conducted, he or she endorses the trainee’s achievement. However, if the verifier identifies irregularities in the moderation and/assessment process, the trainees’ achievement may not be endorsed. Some examples of irregularities are:</p> <ul style="list-style-type: none">• Insufficient or no records of trainee’s achievement are available, due to missing records;• Insufficient evidence of assessment or learning was supplied;• Assessor incorrectly interpreted the evidence supplied by trainee and judged the trainee to be competent when unit standards or specific outcomes have not been met.

Certification (Issuing of certificates)

Moderation:	<p>After the moderator and external verification processes have been completed, the trainee is informed of the outcome of the assessment by the Certification Agencies following the Prior Learning Assessment and Recognition (PLAR) procedure.</p> <p>Trainees will be found competent (C) if they comply with the competency requirements specified by the Certification Agencies for all the unit standards of a particular qualification.</p> <p>If trainees are found competent in some or none of the unit standards, they will be declared Not Yet Competent (NYC). However, trainees will receive credits for those unit standards in which they were found competent.</p>
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Appeal Procedures

Legal instruction:	<ul style="list-style-type: none"> • Trainees should be informed of their right to appeal during their induction or mentoring. Trainees may appeal if they do not agree with the outcome of their assessments. The appeal should be lodged within 15 days after having been notified of the assessment results.
Mitigation:	<ul style="list-style-type: none"> • It is recommended that trainees first discuss their concerns with the assessor and if still not satisfied, follow the Certification Agencies appeal procedures.

Gap (Top-up) Training

- Trainees, who want to, should be given an opportunity to receive gap (top-up) training in those unit standards where they were found not yet competent to enable them to achieve a full qualification.

Re-assessment

Once trainees have successfully completed the top-up training, they will be re-assessed in the unit standards, which they were found not yet competent and certified.

Record Keeping

- Certification Agencies will maintain a national database of trainee records and assessment results;
- Assessment providers should keep record of all assessment information in line with the Certification Agencies procedures;
- Portfolios of Evidence and other relevant assessment documents should be kept in a safe place;
- These documents should be made available to a competent authority on request;
- Records and marks should be handled in accordance to the Certification Agencies policies and procedures