

# THE REPUBLIC OF UGANDA Ministry of Education and Sports

## **Directorate of Industrial Training**



# **Assessment and Training**

**Package** 

For a

**COCOA FARMER** 

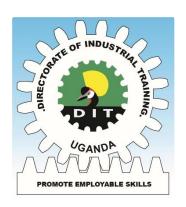
**Qualification Level: 1** 

**Occupational Cluster: Agriculture** 

# December 2020

### **Developed by:**

**Qualifications Standards Department Directorate of Industrial Training** 



# Assessment and Training Package For a COCOA FARMER

**Qualification Level: 1** 

**Occupational Cluster: Agriculture** 

Directorate of Industrial Training Plot 97/99 Jinja Road/ Corner 3<sup>rd</sup> Street, P.O Box 20050, Lugogo, Kampala, Uganda Tel: +256 414 253 704; +256 312 279 344

E-mail: uvqf.dit@gmail.com Web: www.dituganda.org

© Directorate of Industrial Training 2021

ISBN: 978-9913-626-01-9

ISO: 9001:2015 Certificate No.: UG92580A

All rights reserved. No reproduction or copy transmission of this publication may be made without written permission or in accordance with the provisions of the Copyright, Designs and Patents Act or under the terms of licence permitting limited copying issued by the licencing agency in Uganda. Any person who does any unauthorised act in relation to this publication may be liable to criminal prosecution and civil claims for damages.

Under BTVET Act, 2008, the functions of the Directorate of Industrial Training are:

- (a) To identify the needs of the labour market for occupational competencies that fall under the UVQF.
- (b) To regulate apprenticeship schemes.
- (c) To foster and promote entrepreneurial values and skills, as an integral part of the UVQF.
- (d) To secure adequate and sustainable financing for the efficient operations of the Directorate.
- (e) To accredit training institutions or companies as assessment centres.
- (f) To determine fees payable under the Act.
- (g) To develop, apply, expand and improve the purposeful application of Uganda vocational qualifications defined in the UVQF.
- (h) To assess and award Uganda Vocational Qualifications.
- (i) To promote on-the-job training in industry for apprenticeship, traineeship and indenture training and for other training such as further skills training and upgrading.
- (j) To prescribe the procedure for the making of training schemes.

Further to the above provisions, there is an established Uganda Vocational Qualifications Framework (UVQF), under part V of the BTVET Act, 2008. It is stated that:

The purpose of the UVQF is to:

- (a) Define occupational standards in the world of work.
- (b) Define assessment standards.
- (c) Award vocational qualifications of learners who meet the set standards of different studies.
- (d) Provide guidelines for modular training.

The UVQF shall follow principles of Competence Based Education and Training (CBET) which include:

- (a) Flexible training or learning modules.
- (b) Positive assessment and Certification.
- (c) Assessment of Prior Learning.
- (d) Recognition of formal and non-formal training.
- (e) Self-paced or individual learning.
- (f) Work place learning.

For award and recognition of certificates, the BTVET Act, 2008 provides that:

- (1) The Directorate and other examination boards established under the Act shall award certificates and diplomas for Business, Technical or Vocational Education and Training under the UVQF.
- (2) The Certificates and Diplomas to be awarded shall be in the form prescribed by the Minister on the recommendation of the Industrial Training Council.
- (3) The Certificates and Diplomas awarded under the Act shall be recognised in the Uganda education system and by the labour market.

Under the TVET Implementation Standards 2020, the proposed new mandate of the Directorate of Industrial Training shall be restricted to promoting the highest standards in the quality and efficiency of industrial training in the country and ensuring an adequate supply of properly trained manpower at all levels in the industry and the world of work.

The functions shall include:

- (a) Regulating Industrial Training and Trainers.
- (b) Developing Industrial Training Curricula.
- (c) Harmonising Curricula and Certificates of competence.
- (d) Assessing Industrial Training.
- (e) Development of Occupational Standards and Assessment and Training Packages (ATPs) for Trade Testing for the industry and world of work.
- (f) Awarding certificates in that respect.

At operational level in the Directorate, the Qualification Standards Department performs development tasks related to concepts, procedures and instruments for establishment of the UVQF in close collaboration with both public and private stakeholders in vocational training.

In particular, the Department organises and coordinates the development of Assessment and Training Packages for use in competence-based vocational training as well as standards-based assessment and certification.

The Directorate has therefore produced this Assessment and Training Package for use in implementing Competence-Based Education and Training mechanisms.

# **TABLE OF CONTENTS**

Wor	d from Permanent Secretary	iv
Exec	cutive Summary	vi
Ackı	nowledgement	viii
Abb	reviations and acronyms	ix
Key	definitions	X
1.0	ATP-PART I	1
	Occupational Profile for Cocoa Farmer	1
2.0	ATP-PART II	10
	Training Modules for Cocoa Farmer	10
	Training Modules for Cocoa Farmer UVQ Level 1	11
3.0	ATP-PART III	27
	Assessment Instruments for Cocoa Farmer	27
	Written Test Items (Samples)	29
	Performance Test Items (Samples)	37
4.0	ATP- PART IV	40
	Information on Development Process	40

#### **Word from Permanent Secretary**

The Kajubi Report (1989) and the Uganda Government White Paper on Education Review (1992) emphasised that the Uganda Secondary School Education should be vocationalised.

The World Bank Report on education in Uganda 2007 observed that although Uganda was experiencing steady economic growth on one hand, the secondary education curriculum was inadequately addressing the social and economic needs of the country on the other. The Report further noted that it is not the very top academic cadres that contribute most to the growth of the GDP but rather the competent middle level technicians that are flexible and technologically literate that the economy needs in the labour market at all levels.

Correspondingly, the NDP III 2020/21- 2024/5 highlights (i) low labour productivity (ii) high youth unemployment (38%) (iii) low transition rates from training to employment (35%) as some of the key challenges to Human Capital Development in Uganda.

In order to overcome these challenges, NDP III 2020/21- 2024/5, under objective 2 peaks the need to train the learners for the urgently needed skills and mainstream a dual education and training system. This paved way for the development of the lower secondary school vocational curriculum which supports both academic and vocational training.

The afore is in line with the Uganda Vision 2040. Under section 261, it emphasises that learners will be accorded opportunities to excel in the skills areas they are placed into. These will range from sports and cut to technical and vocational training. Hitherto, section 262 clearly states that the entire education system will be changed to emphasise practical skills, attitude and moral values.

Government of Uganda through the Ministry of Education and Sports rolled out the New Lower Secondary Curriculum in secondary schools countrywide during the first term of the academic year 2020. The overall goal of this curriculum is to produce graduates with employable skills and who are competitive in the labour market. It should be emphasised that vocational training will produce graduates who are employable. In the New curriculum, emphasis will be on equipping learners with employable skills and competencies. This will enable learners perform the requisite duties of the specified occupations. This is the reason why the lower secondary school vocational curriculum was tailored to the assessment requirements of the world of work.

Reading from the Curriculum Framework page 12, it is stated that the learners will be assessed by DIT. Upon assessment and certification, the graduates will be employable and competitive in the labour market. It's against this background that DIT, within its mandate vested in the BTVET Act, 2008 comes on board to take the lead in the development of the requisite Assessment and Training Packages (ATPs) for the various occupations that will be assessed under the Lower Secondary Curriculum.

The ATPs can be used by any training provider and/or those who wish to present themselves for Occupational Assessment and Certification.

Herewith, the Directorate of Industrial Training presents the Assessment and Training Package for training, assessment and certification of a **COCOA FARMER QUALIFICATION LEVEL 1.** 

Finally, I thank all individuals, organisations and review partners who have contributed and/or participated in the review of this noble document.

Alex Kakooza

**Permanent Secretary** 

## **Executive Summary**

This Assessment and Training Package is a Competence-Based Education and Training (CBET) tool and consists of three major parts:

- 0.1 PART I: The Occupational Profile (OP) of a COCOA FARMER. This Occupational Profile which was reviewed by Cocoa Farmers practicing in the world of work mirrors the duties and tasks that Cocoa Farmers are expected to perform.
- 0.2 PART II: Training Modules in the form of guidelines to train Cocoa Farmers both on the job as well as in training centres (or combinations of both venues of learning). The Training Modules herein have been reviewed basing on the Occupational Profile and hence are directly relevant for employment.
- 0.3 **PART III: Assessment Instruments** in the form of performance (Practical) and written (theory) test items that can and should be used to assess whether a person complies with the requirements of employment as a COCOA FARMER. These assessment instruments were reviewed jointly by job practitioners (Cocoa Farmers) and instructors based on the occupational profile and training modules.
- 0.4 While the Occupational Profile (OP) contained in PART I of this document provides the information on <u>WHAT a person is expected to do</u> competently in the world of work, the test items, - including performance criteria- of PART III qualify the <u>HOW</u> <u>and/or HOW WELL a person must do the job</u>.
- 0.5 The modular format of the curriculum (PART II) allows learners to acquire job specific skills and knowledge (i.e. competencies) module by module. A single module can be accomplished within a relatively short duration allowing flexibility for learners to move directly into an entry level job, go for further modules or advance to higher levels of training. Modular courses allow more learners to access the training system because training centres as well as companies can accommodate more learners in a given period of time.
- 0.6 In addition to improved access, equity and relevance of BTVET, the UVQF will also enable people who are convinced to have acquired competencies laid down in this ATP through prior training and on-the-job experience to access assessment and certification directly; be it on the basis of a single module, a group of modules or all modules pertaining to the occupation at once. This achievement will facilitate Recognition of Prior Learning (RPL).

# UVQF: Assessment and Training Package (ATP) for a COCOA FARMER QUALIFICATION LEVEL 1 December 2020

- 0.7 The parts of this Assessment and Training Package were sequentially reviewed as follows:
  - i Part 1: Occupational Profile: *August 2020* ii Part 2: Training Modules: *August 2020*
  - iii Part 3: Assessment Instruments (initial bank): August 2020

This ATP (or parts of it) may be periodically revised to match the dynamic trends in the occupation and hence issued in different versions.

DIT takes responsibility of any shortcomings that might be identified in this publication and welcomes suggestions for effectively addressing the inadequacies. The suggestion can be communicated to DIT through P.O. Box 20050, Kampala or through email uvaf.dit@gmail.com.

Patrick Byakatonda Ag. Director

# **Acknowledgement**

The Qualifications Standards Department of DIT acknowledges the valuable contributions to the review of this Assessment and Training Package by the following persons, Institutions and organisations:

- Members of the DIT Industrial Training Council.
- The Director and staff of DIT.
- Ministry of Education and Sports.
- The practitioners from the world of work.
- Teachers and instructors of rabbit farming from various secondary schools.
- Agriculture Curriculum Specialists from NCDC.
- Examination specialists from UNEB.
- The facilitators involved in guiding the development panels in their activities.
- The Government of Uganda for financing the development of this ATP.

•

## **Abbreviations and acronyms**

A&C Assessment and Certification

ATP Assessment and Training Packages

CBET Competency Based Education and Training

DIT Directorate of Industrial Training

ITC Industrial Training Council
GoU Government of Uganda

LWA Learning-Working Assignment

MC Modular Curriculum

MoES Ministry of Education and Sports

OP Occupational Profile

PEX Practical Exercise

PTI Performance (Practical) Test Item

QS Qualification Standards

RPL Recognition of Prior Learning

TIB Test Item Bank

TVET Technical, Vocational, Education and Training

UVQ Uganda Vocational Qualification

UVQF Uganda Vocational Qualifications Framework

WTI Written (Theory) Test Item

### **Key definitions**

**Assessment** Assessment is the means by which evidence is gathered and

judged to decide if an individual has met the stipulated assessment standards or not. Testing is a form of formal

assessment.

**Certification** Certification is a formal procedure to issue a certificate

(qualification) to an individual that has demonstrated during formal assessment that he/she is competent to perform the

tasks specified in the occupational profile.

Competence Integration of skills, knowledge, attitudes, attributes and

expertise in doing /performing tasks in the world of work to a

set standard.

Competency (Occupational) competency is understood as the ability to

perform tasks common to an occupation to a set standard.

CBET Competence-Based Education and Training means that

programmes:

1. have content directly related to work

2. focus is on 'doing something well'

3. assessment is based upon industry work standards, and

4. curricula are developed in modular form

Duty

A Duty describes a large area of work in performance terms. A

duty serves as a title for a cluster of related Tasks (see also:

TASK).

Learning-Working Assignment (LWA)

LWA are simulated or real job situations / assignments that are suitable for learning in a training environment (e.g. "small

projects"). In a working environment LWA are real work

situations/assignments.

Module Modules are part(s) of a whole curriculum. Modules can be

considered as "self-contained" partial qualifications which are described by learning outcomes or competencies and which

can be assessed and certified individually.

Occupational Profile

(OP)

An Occupational Profile is an overview of the duties and tasks a job incumbent is expected to perform competently in

employment.

Occupational Profiles developed by practitioners from the world of work enhance the relevance of training and learning to the

requirements of the world of work.

Occupational Profiles define what a person is supposed to do in performance terms. It also contains generic information regarding related knowledge and skills, attitudes/behavior, tools, materials and equipment required to perform as well as trends/ concerns in the occupation.

Occupational profiles are the reference points for developing modular curricular and assessment standards.

#### Qualification

A qualification is a formal reward for demonstrating competence, based on formal assessment against set standards and provided to the individual in the form of a certificate specifying the nature of the competence.

#### Task

Job tasks represent the smallest unit of job activities with a meaningful outcome. Tasks result in a product, service, or decision. They represent an assignable unit of work and have a definite beginning and ending point. Tasks can be observed and measured. (Also see: Duty)

## 1.0 ATP-PART I

# Occupational Profile for a COCOA FARMER

- 1.1 The OCCUPATIONAL PROFILE (OP) for "Cocoa Farmer" below defines the **Duties** and **Tasks** a competent Cocoa Farmer is expected to perform in the world of work (on the job) in Uganda and the East African region today.
- 1.2 Since it reflects the skill requirements of work life, the Occupational Profile is the reference document for the subsequent development of training modules and assessment instruments (test items) which are directly relevant to employment in Ugandan and the East African businesses and industries.
- 1.3 To ensure that the Occupational Profile is relevant for employment in Uganda and East Africa, the DIT used the method of "occupational/job profiling.
  - This approach involves the brainstorming of a panel of 8 to 12 competent job practitioners guided by trained and experienced facilitators. During a two-day workshop the panellists defined the duties and tasks performed in employment, as well as the prerequisite skills, knowledge, attitudes, tools and equipment, and the future trends and concerns in the occupation/job.
- 1.4 The panellists, facilitators and coordinators who participated in developing this Occupational Profile for COCOA FARMERS are listed on the following page.

<sup>&</sup>lt;sup>1</sup> The DACUM-method was used. DACUM is an acronym for 'Develop a Curriculum'

**Expert Panel** 

Masaha John Paul

St Peters S.S Nalya

Anyiko Agatha

Montag Logistics Ltd

**Ahimbisibwe Johnson** 

Numa Feeds Ltd

Mukaya Stephen Nabbaya

Budini S.S

Nampano Ronald

Bugema University Farm

Maseleka Rashid

Green Organic Cocoa cooperative society

**David Kissa Ocoma** 

National Agricultural Research organisation

Namyalo Jane

Baskavil Ngogwe (Examiner)

**Musimenta Herbert** 

Ministry of Agriculture Animal Industry and Fisheries

Namiiro Zerida

Nakabago Farmers organisation Buikwe

Kimbowa Abdallah

**Buikwe Cocoa Farmers Association** 

**Musisi Mathias** 

National Curriculum Development Centre

**Kasirye Linkon** 

Sky Tech Investments Ltd

**DIT Facilitators Ochwo Richard** 

**Ahimbisibwe Judith** 

Ainembabazi Faith

Directorate of Industrial Training

Co-ordinator

Patrick Byakatonda

Directorate of Industrial Training

Funded by

Government of Uganda



THE REPUBLIC OF UGANDA Ministry of Education and Sports

**Directorate of Industrial Training** 

Occupational Profile of

"A COCOA FARMER"

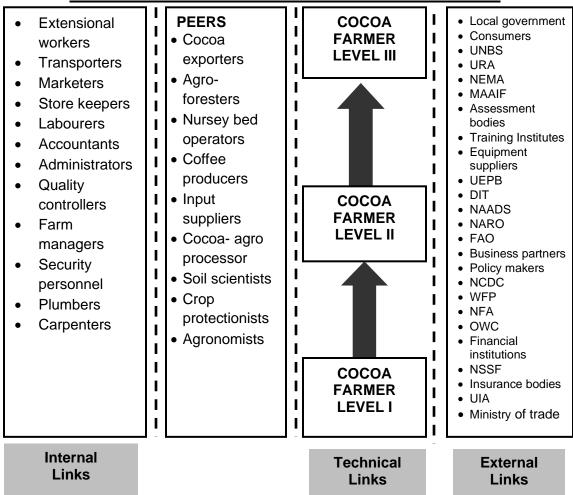
Developed by: Directorate of Industrial Training (Qualifications Standards)

Dates of workshop: 17th -21st August 2020

#### NOMENCLATURE FOR THE OCCUPATION OF A COCOA FARMER

**Definition:** A Cocoa Farmer is a person who grows Cocoa for commercial purposes.

#### JOB ORGANISATION CHART FOR A COCOA FARMER



Descriptions for the levels in the occupation of 'COCOA Farmer'

**UVQ Level I COCOA Farmer:** is a person who grows cocoa using basic agronomic

practices for commercial purposes.

**UVQ Level II COCOA Farmer:** is a person who grows cocoa and produces

propagation materials for cocoa farming on a

commercial level.

**UVQ Level III COCOA Farmer:** is a person who grows and breeds cocoa for

commercial purposes.

# **Duties and Tasks**

A. PLAN COCOA FARMING ACTITIVES	A1 Carryout feasibility study	A2 Determine farm location	A3 Prepare financial plan
ACTITIVES	A4 Determine site structural plan	A5 Determine factor inputs	A6 Determine cocoa varieties
	A7 Prepare work schedules	A8 Prepare procurement plan for inputs	A9 Determine production methods
B. SET UP COCOA NURSERY	<b>B1</b> Select site	B2 Clear area	B3 Level land
NONSERT	<b>B4</b> Demarcate	<b>B5</b> Construct	<b>B6</b> Enclose
	site	nursery bed	nursery bed
	B7 Sterilise soil	B8 Pot Soil	B9 Select seeds
	B10 Sow seeds	B11 Water nursery bed	B12 Graft propagation materials
	B12 Clone propagation materials	B13 Prune roots	B14 Harden off seedlings
	B15 Sort seedlings		
			T
C. ESTABLISH COCOA GARDEN	C1 Identify tools and equipment	C2 Prepare the land	C3 Line out and pit
	C4 Apply fertilisers	C5 Transplant seedlings	C6 Plant seedling

C8 Fence garden

C7 Conserve

soil and water

C9 Shade

seedling

D. MANAGE COCOA GARDEN	<b>D1</b> Gap fill	D2 Mulch garden	D3 Weed garden
GARDEN	D4 Stake cocoa trees	D5 Manage shades	D6 Train cocoa trees
	D7 Prune cocoa trees	D8 Remove epiphytes	D9 Stump cocoa trees
	D10 Control pests and diseases	D11 Erect farm structures	
E. HARVEST COCOA PODS	E1 Select tools and equipment	<b>E2 I</b> Identify ripe pods	E3 Pick cocoa pods
	E4 Gather cocoa pods	E5 Sort cocoa pods	E6 Transport cocoa pods
F. MANAGE POST HARVEST	F1 Cut open cocoa pods	F2 Extract beans	F3 Ferment beans
HANDLING OF COCOA	F4 Grade beans	F5 Dry cocoa beans	F6 Test moisture content
ACTIVITIES	F7 Store cocoa	F8 Bulk beans	F9 Pack cocoa
	beans	Fo Duik Dealis	beans
		Fo Bulk bealts	
G. MARKET COCOA PRODUCE		G2 Negotiate Price of cocoa produce	
	beans  G1 Identify	G2 Negotiate Price of cocoa	beans  G3 Pack cocoa

H. PERFORM OCCUPATIONAL HEALTH, SAFETY	H1	Ensure social safe guard guidelines	H2	Ensure environmental safety guidelines	Н3	Display safety signs
AND ENVIRONMENTAL PROTECTION PRACTICES	H4	Observe OHSE rules and regulations	H5	Train workers on health and safety measures	H6	Observe biosecurity
	H7	Observe HACCP	H8	Manage waste	H9	Maintain personal hygiene and sanitation
	H10	Provide protective gears	H11	Perform fire fighting	H12	Administer first Aid

I.	PERFORM ADMINISTRATIVE	I1	Recruit workers	12	Assign work	13	Pay Bills
	TASKS	14	Appraise workers	15	Build networks	16	Manage staff welfare
		17	Conduct quality assurance	18	Guide and counsel workers	19	Secure inputs
		I10	Train workers	<b>I11</b>	Formalise Business	l12	Keep business Records
		I13	Provide Security	I14	Supervise Works	I15	Manage tools and equipment
		I16	Pursue Continuous Professional Development				

#### **Additional Information**

#### Generic Knowledge & Skills

- 1. Quality of seeds/seedling
- 2. Proper use of tools and equipment
- 3. Maintenance of tools and equipment
- 4. Cocoa agronomy
- 5. Soil fertility
- 6. Cost management
- 7. Harvesting
- 8. Standards in cocoa production
- 9. Gap filling
- 10. Land preparation
- 11. Sowing seeds
- 12. Fire management
- 13. Extraction of beans
- 14. Drying
- 15. Bulking beans
- 16. Storage
- 17. Testing for moisture content
- 18. Cocoa marketing
- 19. Bean quality parameters
- 20. Food safety
- 21. Irrigation
- 22. Potting
- 23. Site selection

- 24. Transplanting
- 25. Line out and pitting
- 26. Cocoa shade management
- 27. Nursey bed construction
- 28. Fermentation boxes construction
- 29. Hardening off seedlings
- 30. Weed control
- 31. Pest and disease control
- 32. Identification of common pest and diseases
- 33. Pricking out
- 34. Grading
- 35. Pruning
- 36. Waste management
- 37. Safe pesticide use
- 38. Fermentation
- 39. Sorting cocoa beans
- 40. Packaging
- 41. Record keeping
- 42. Communication
- 43. Sterilise tools
- 44. Staking

# Tools, Equipment and Materials

- Panga
- Hoes
- Slashers
- Axe
- Knives
- Pruner
- Harvesting hook
- Wheelbarrow
- Potting tubes
- Trowel
- Planting ropes
- Moisture meter
- Harvesting crates
- Chairs
- Green house net
- Sanitizers

- Pallets
- Secateurs
- Sprayers
- Watering can
- Drivers
- Gum boots
- Head gears
- Overall
- Fermenting box
- Slasher
- Barbed wires
- Nails
- Weighing scale
- Trays
- Stationery
- Masks

- Blankets
- Fresh Banana leaves
- Pesticides
- Dry grass
- Seeds
- Buckets
- Poles
- Fertilisers
- Trucks
- Tape measure
- Tractors
- Hammers
- Water pump
- Computer and accessories
- Wooden platforms

#### Attitudes/Traits/Behaviour

- 1 Self-driven
- 2 Hardworking
- 3 Trustworthy
- 4 Respectful
- 5 Patience
- 6 Integrity
- 7 Trainability
- 8 Self esteem
- 9 Ethical
- 10 Entrepreneurial
- 11 Social
- 12 Empathetic
- 13 Approachable
- 14 Tolerant

- 15 Exemplary
- 16 Knowledgeable
- 17 Understanding
- 18 Clarity
- 19 Team player
- 20 Reliable
- 21 Kind
- 22 Creative
- 23 Innovative
- 24 Loyal
- 25 Analytical
- 26 A good listener
- 27 Competent
- 28 Flexible
- 29 Committed

#### **Future trends and Concerns**

- 1. Price fluctuation
- 2. Policy changes
- 3. Competition with synthetic flavours
- 4. Climatic and Weather changes
- 5. Labour mobility
- 6. Political Instability
- 7. Outbreak of pests and diseases
- 8. Market changes
- 9. Natural hazards e.g. corona
- 10. Technological advancement
- 11. Bankruptcy
- 12. Business progression
- 13. Population changes
- 14. Land tenure
- 15. Transportation

# 2.0 ATP-PART II

# **Training Modules for a COCOA FARMER**

- 2.1 A curriculum is a "guide / plan for teaching and learning" which provides a guide to teachers, instructors and learners. In the envisaged system of competence-based or outcome-oriented education and training (CBET), Curricula are no longer the benchmark against which assessment is conducted. It is rather the Occupational Profile and the related Test Items that provide the benchmark for assessment as well as for Curriculum development.
- 2.2 This modular format of the curriculum allows learners of the Cocoa farming occupation to acquire job specific skills and knowledge (i.e. competencies) module by module. A single module can be accomplished within a relatively short duration allowing learners to move directly into an entry level job, do further modules and advance to higher levels of training. Modular courses allow more learners to access the training system because training centres as well as companies can accommodate more learners in a given period of time.
- 2.3 The modules were developed jointly by both instructors from training centres and job practitioners. They were developed using the Occupational Profile as a reference point and taking into account the specifications of training and learning outcomes in the form of Test Items described in Part II.
- 2.4 The modules contain "Learning-Working Assignments" (LWAs) and related "Practical Exercises" (PEXs) as key elements.
  - LWAs are simulated or real job situations/assignments that are suitable for learning in a training environment (e.g. "small projects"). In a working environment, LWAs are real work situations.
  - PEXs are therefore sub-sets of a LWA.
- 2.5 In principle, and following the philosophy of Competence-Based Education and Training (CBET), the modules can be used as a guide for learning in a training centre or at the work place; or combinations of both.

#### WHO IS A COCOA FARMER QUALIFICATION LEVEL 1?

A Level I COCOA Farmer: is a person who grows cocoa using basic agronomic practices for commercial purposes.

#### TRAINING MODULES FOR COCOA FARMER UVQ LEVEL 1

Code	Module Title	Average duration		
Code	Wodule Title	Contact hours	Weeks	
UE/CF/M1.1	Establish a Cocoa Nursery Bed	160	4	
UE/CF/M1.2	Establish Cocoa Garden	160	4	
UE/CF/M1.3	Manage Cocoa Garden	240	6	
UE/CF/M1.4	Harvest and Post Harvesting Handling of Cocoa	200	5	
UE/CF/M1.5	Establish Cocoa Farming Enterprise	240	6	
Summary	5 Modules	1000 hours	25weeks	

#### Note: Average duration is contact time but NOT calendar duration

It is assumed that:

- 1 day is equivalent to 8 hours of nominal learning and
- 1 month is equivalent to 160 hours of nominal learning.

Information given on the average duration of training should be understood as a guideline. Quick learners may need less time than indicated or vice versa.

At completion of a module, the leaner should be able to satisfactorily perform the included Learning Working Assignments, their Practical Exercises and attached theoretical instruction, as the minimum exposure.

Prior to summative assessment by recognised Agencies, the users of these Module Guides are encouraged to carefully consider continuous assessment using samples of (or similar) performance (practical) and written test items available in part 3 of this ATP.

Code	UE/CF/M1.1
Module title	M1.1: Establish a Cocoa Nursery
Related Qualification	Part of Uganda Vocational Qualification (Cocoa Farmer UVQ 1)
Qualification Level	1
Module purpose	By the end of this module, a trainee shall be able to set up a functional cocoa nursery.
Learning-Working Assignments (LWAs)	LWA 1/1: Construct Nursey Bed LWA 1/2: Prepare Growth Media LWA 1/3: Prepare Seeds LWA 1/4: Manage Seedlings LWA 1/5: Perform Health Safety and Environmental Practices
	<ul> <li>Note:</li> <li>1. The learning exercises may be repeated until the trainee acquires targeted competences.</li> <li>2. The trainer is advised to deliver relevant theoretical instructions with demonstrations as required to perform each learning assignment.</li> </ul>
Related Practical Exercises (PEXs)	LWA 1/1: Construct Nursery Bed  PEX 1.1: Clear land  PEX 1.2: Level land  PEX 1.3: Demarcate sites  PEX 1.4: Set out nursery shade  PEX 1.5: Size poles  PEX 1.6: Fix poles  PEX 1.7: Thatch nursery  LWA 1/2: Prepare Growth Media  PEX 2.1: Sterilise soil  PEX 2.2: Apply fertilisers  PEX 2.3: Mix soils  PEX 2.4: Prepare pots  PEX 2.5: Pot media

	LWA 1/3: Prepare Propagation Materials			
	PEX 3.1: Select seeds			
	PEX 3.2: Sow seeds in pots			
	PEX 3.3: Clone propagation materials			
	PEX 3.4: Graft propagation materials			
	PEX 3.5: Water pots			
	LWA 1/4: Manage Seedlings			
	PEX 4.1: Weed nursery			
	PEX 4.2: Control pests and diseases			
	PEX 4.3: Water seedlings			
	PEX 4.4: Harden off seedlings			
	PEX 4.5: Sort seedlings			
	LWA 1/5: Perform Health Safety and Environmental Protection Practices.			
	PEX 5.1: Wear protective gear			
	PEX 5.2: Manage waste			
	PEX 5.3: Use recommended dosage of agro-chemical			
	PEX 5.4: Observe bio security measures			
	PEX 5.5: Administer first aid			
	PEX 5.6: Maintain personal hygiene and sanitation			
	PEX 5.7: Observe HACCP			
	PEX 5.8: Perform fire fighting			
	PEX 5.9: Display safety signs			
	PEX 5.10: Comply with regulation and policies			
Occupational health and safety	Precautions, rules and regulations on occupational health safety and environmental protection included in the listed related knowledge should be observed and demonstrated during LWAs and PEXs. e.g. wear protective gears			
Pre-requisite modules	None			
Related knowledge/ theory	For occupational theory suggested for instruction/demonstration, the trainer is not limited to the outline below. In any case related knowledge/theory may be obtained from various recognised reference materials as appropriate:  • Proper use of tools • Disinfecting tools and equipment • Potting • Soil sterilisation			

	<ul> <li>Weed control</li> <li>Hardening off</li> <li>Sorting seedlings</li> <li>Watering</li> <li>Pest and disease control</li> <li>OHSE</li> <li>Nursery bed operation standards</li> <li>First aid administration</li> <li>Growth media management</li> <li>Grafting techniques</li> <li>Cloning techniques</li> </ul>			
Average duration of learning	<ul> <li>160hours (20 days) of nominal learning suggested to include:</li> <li>5 days of occupational theory and</li> <li>15 days of occupational practice</li> </ul>			
Suggestions on organisation of learning	The acquisition of competencies (skills, knowledge, attitudes) described in this module may take place at a training centre or its equivalent provided all equipment and materials required for training are in place.			
Assessment	Assessment to be conducted according to the established regulations by a recognised assessment body using related practical and written test items from item bank			
Minimum required tools/ equipment/ implements or equivalent	polythene pots, spade, trowel, hand hoe, wheelbarrow, panga, watering can, protective gear, water pump, jerrycan, nails, hammer, measuring tape, steriliser, sprayer, pesticides, secateurs, grafting knives			
Minimum required materials and consumables or equivalent	seeds, fertilisers, water, growth media, rooting hormones			
Special notes				

Code	UE/CF/M1.2
Module title	M1.2: Establish Cocoa Garden
Related Qualification	Part of Uganda Vocational Qualification (Cocoa Farmer UVQ 1)
Qualification Level	1
Module purpose	By the end of this module, a trainee shall be able to successfully set up a cocoa garden.
Learning-Working Assignments (LWAs)	LWA 2/1: Prepare Land LWA 2/2: Transplant Seedlings LWA 2/3: Fence a Cocoa Garden LWA 2/4: Perform Health Safety and Environmental Protection Practices
	<ul> <li>Note:1.</li> <li>1. The learning exercises may be repeated until the trainee acquires targeted competences.</li> <li>2. The trainer is advised to deliver relevant theoretical instructions with demonstrations as required to perform each learning assignment.</li> </ul>
Related Practical Exercises (PEXs)	LWA 2/1: Prepare Land PEX 1.1: Clear vegetation PEX 1.2: Demarcate land PEX 1.3: Plough land PEX 1.4: Line out and make holes PEX 1.5: Apply fertilisers  LWA 2/2: Transplant Seedlings PEX 2.1: Water seedlings PEX 2.2: Transport seedlings PEX 2.3: Remove poly pot PEX 2.4: Place seedlings in holes
	PEX 2.4: Frace seedings in noies  PEX 2.5: Firm seedlings  PEX 2.6: Shade seedlings  PEX 2.7: Mulch garden  LWA 2/3: Fence Cocoa Garden  PEX 3.1: Measure garden  PEX 3.2: Line out and peg

QUALIFICATION LEVEL 1	December 2020			
	PEX 3.3: Dig holes			
	PEX 3.4: Place poles and firm			
	PEX 3.5: Fix wires and strain			
	LWA 2/4: Perform Occupational Health, Safety and Environmental Protection Practices			
	PEX 4.1: Wear protective gear			
	PEX 4.2: Manage waste			
	PEX 4.3: Use recommended dosage of agro-chemical			
	PEX 4.4: Observe bio security measures			
	PEX 4.5: Administer first aid			
	PEX 4.6: Maintain personal hygiene and sanitation			
	PEX 4.7: Observe HACCP			
	PEX 4.8: Perform fire fighting			
	PEX 4.9: Display safety signs			
	PEX 4.10: Comply with regulation and policies			
Occupational health and safety	Precautions, rules and regulations on occupational health safety and environmental protection included in the listed related knowledge should be observed and demonstrated during LWAs and PEXs. E.g. wear protective gears			
Pre-requisite	daning Evvite and 1 Exte. E.g. Wear protective goals			
modules	None			
Related knowledge/ theory	For occupational theory suggested for instruction/ demonstration, the trainer is not limited to the outline below. In any case related knowledge/theory may be obtained from various recognised reference materials as appropriate:			
	Seed bed preparation			
	Transplanting			
	Spacing			
	Fertilisers			
	Shade			
	Soil and water conservation			
	Soil pH & soil type			
	Soil structure			
	Soil fertility			
	Soil colour & soil texture			
	Soil organic matter			
	Soil water & soil air			
	Soli water & soli ali			
	Drainage			

# UVQF: Assessment and Training Package (ATP) for a COCOA FARMER QUALIFICATION LEVEL 1 December 2020

QUALIFICATION LEVEL 1	December 2020		
	Gap filling     Mulching		
Average duration of learning	160hours (20 days) of nominal learning suggested to include:  • 5 days of occupational theory and  • 15 days of occupational practice		
Suggestions on organisation of learning	The acquisition of competencies (skills, knowledge, attitudes) described in this module may take place at a training centre or its equivalent provided all equipment and materials required for training are in place.		
Assessment	Assessment to be conducted according to the established regulations by a recognised assessment body using related practical and written test items from item bank		
Minimum required tools/ equipment/ implements or equivalent	hand hoe, wheelbarrow, spade, gumboots, gloves, panga, field crates, trowel, watering can, sprayer, soil cutter, dibbers, head gears, masks, overalls, soil auger, wire strainer		
Minimum required materials and consumables or equivalent	pH indicator, fertilisers, pesticides, string, nails, fencing material		
Special notes			

Code	UE/CF/M1.3
Module title	M1.3: Manage Cocoa Garden
Related Qualification	Part of Uganda Vocational Qualification (Cocoa Farmer UVQ 1)
Qualification Level	1
Module purpose	By the end of this module, a trainee shall be able to maintain a healthy and productive cocoa garden successfully.
Learning-Working Assignments (LWAs)	LWA 3/1: Manage Cocoa Trees LWA 3/2: Conserve Soil and Water
	LWA 3/3: Control Pests and Diseases  LWA 3/4: Perform Health Safety and Environmental  Protection Practices
	<ol> <li>Note: 1</li> <li>The learning exercises may be repeated until the trainee acquires targeted competences.</li> <li>The trainer is advised to deliver relevant theoretical instructions with demonstrations as required to perform each learning assignment.</li> </ol>
Related Practical Exercises (PEXs)	LWA 3/1: Manage Cocoa Trees  PEX 1.1: Gap fill  PEX 1.2: Train cocoa trees  PEX 1.3: Stake cocoa trees  PEX 1.4: Remove epiphytes  PEX 1.5: Prune cocoa trees  PEX 1.6: Stump cocoa trees  PEX 1.7: Weed cocoa trees  PEX 1.8: Irrigate cocoa garden  LWA 3/2: Conserve Soil and Water  PEX 2.1: Construct soil and water conservation structures  PEX 2.2: Apply manure  PEX 2.3: Mulch cocoa garden
	PEX 2.4: Deep plough garden  LWA 3/3: Control Pests and Diseases  PEX 3.1: Scout garden  PEX 3.2: Determine control method

QUALIFICATION LEVEL 1	December 2020
	PEX 3.3: Apply control method
	PEX 3.4: Monitor effect
	LWA 3/4: Perform Occupational Health Safety and Environmental Protection Practice
	PEX 4.1: Wear protective gears
	PEX 4.2: Manage waste
	PEX 4.3: Use recommended dosage of agro-chemical
	PEX 4.4: Observe bio security measures
	PEX 4.5: Administer first aid
	PEX 4.6: Maintain personal hygiene and sanitation
	PEX 4.7: Observe HACCP
	PEX 4.8: Perform fire fighting
	PEX 4.9: Display safety signs
	PEX 4.10: Comply with regulation and policies
Occupational health and safety	Precautions, rules and regulations on occupational health safety and environmental protection included in the listed related knowledge should be observed and demonstrated during LWAs and PEXs. E.g. wear protective gears
Pre-requisite modules	None
Related knowledge/ theory	For occupational theory suggested for instruction/ demonstration, the trainer is not limited to the outline below. In any case related knowledge/theory may be obtained from various recognised reference materials as appropriate:  • Weeding  • Control pests and diseases  • Training  • Staking  • Remove epiphytes  • Soil and water conservation  • Pruning  • Manage shade  • Fertiliser application  • Irrigation  • Mulching
Average duration of learning	240hours (30 days) of nominal learning suggested to include:  • 05 days of occupational theory and  • 25 days of occupational practice
Suggestions on	The acquisition of competencies (skills, knowledge,
organisation of learning	attitudes) described in this module may take place at a training centre or its equivalent provided all equipment and materials required for training are in place.

# UVQF: Assessment and Training Package (ATP) for a COCOA FARMER QUALIFICATION LEVEL 1 December 2020

Assessment	Assessment to be conducted according to the established regulations by a recognised assessment body using related practical and written test items from item bank
Minimum required tools/ equipment/ implements or equivalent	hand hoe, wheelbarrow, slasher, spade, pruner, secateurs, sprayers, gum boots, head gear, masks, overalls, gloves, dibbers
Minimum required materials and consumables or equivalent	pesticides, fertilisers, water
Special notes	

Code	UE/CF/M1.4
Module title	M1.4: Harvest and Post-Harvest Handling of Cocoa
Related Qualification	Part of Uganda Vocational Qualification (Cocoa Farmer UVQ 1)
Qualification Level	1
Module purpose	By the end of this module, a trainee shall be able to harvest cocoa and perform post-harvest handling according to established standards.
Learning-Working Assignments (LWAs)	LWA 4/1: Harvest Cocoa Pods LWA 4/2: Ferment Cocoa Beans
	LWA 4/3: Dry Cocoa Beans
	LWA 4/4: Pack Cocoa Beans
	LWA 4/5: Perform Occupational Health Safety and Environmental Protection Practices
	<ol> <li>Note:1.</li> <li>The learning exercises may be repeated until the trainee acquires targeted competences.</li> <li>The trainer is advised to deliver relevant theoretical instructions with demonstrations as required to perform each learning assignment.</li> </ol>
Related Practical Exercises (PEXs)	LWA 4/1: Harvest Cocoa Pods PEX 1.1: Identify mature pods PEX 1.2: Cut cocoa pods from the tree PEX 1.3: Gather pods PEX 1.4: Sort pods PEX 1.5: Split pods PEX 1.6: Extract cocoa beans
	LWA 4/2: Ferment Cocoa Beans PEX 2.1: Make fermenter boxes PEX 2.2: Place beans in boxes PEX 2.3: Cover boxes PEX 2.4: Turn cocoa beans in boxes  LWA 4/3: Dry Cocoa Beans PEX 3.1: Construct drying platform PEX 3.2: Spread cocoa beans PEX 3.3: Turn cocoa beans PEX 3.4: Measure moisture content

	LWA 4/4. Pack Cocoa Beans
	PEX 4.1: Mobilise packing materials
	PEX 4.2: Stock cocoa beans in the materials
	PEX 4.3: Weigh cocoa
	PEX 4.4: Seal and store cocoa
	LWA 4/5: Perform Occupational Health Safety and Environmental Protection Practices
	PEX 5.1: Wear protective gear
	PEX 5.2: Manage waste
	PEX 5.3: Use recommended dosage of agro-chemical
	PEX 5.4: Observe bio security measures
	PEX 5.5: Administer first aid
	PEX 5.6: Maintain personal hygiene and sanitation
	PEX 5.7: Observe HACCP
	PEX 5.8: Perform fire fighting
	PEX 5.9: Display safety signs
	PEX 5.10: Comply with regulation and policies
Occupational health and safety	Precautions, rules and regulations on occupational health safety and environmental protection included in the listed related knowledge should be observed and demonstrated during LWAs and PEXs. e.g. wear protective gear
Pre-requisite modules	None
Related knowledge/ theory	For occupational theory suggested for instruction/ demonstration, the trainer is not limited to the outline below. In any case related knowledge/theory may be obtained from various recognised reference materials as appropriate:
	Moisture control
	Packaging materials
	Construction of platform
	Harvesting tools
	Identifying ripe pods
	Cutting and picking
	Sorting
	Grading
	Extraction of cocoa beans
	Disinfecting tools
	Fermentation management
	HACCP

# UVQF: Assessment and Training Package (ATP) for a COCOA FARMER QUALIFICATION LEVEL 1 December 2020

QUALIFICATION LEVEL 1	December 2020
	<ul><li>Drying techniques</li><li>Storage</li></ul>
Average duration of learning	200hours (25 days) of nominal learning suggested to include:
	<ul><li>5 day of occupational theory and</li><li>20 days of occupational practice</li></ul>
Suggestions on organisation of learning	The acquisition of competencies (skills, knowledge, attitudes) described in this module may take place at a training centre or its equivalent provided all equipment and materials required for training are in place.
Assessment	Assessment to be conducted according to the established regulations by a recognised assessment body using related practical and written test items from item bank
Minimum required tools/ equipment/ implements or equivalent	harvesting hooks, baskets, secateurs, panga, wheelbarrow, knives, moisture metre, wooden platforms, harvesting crates, pallets, fermenting boxes, gum boots, masks, head gear, gloves, overalls, solar drier
Minimum required materials and consumables or equivalent	water, timber, fresh banana leaves, tarpaulin
Special notes	

Code	UE/CF/M1.5	
Module title	M1.5: Establish Cocoa Farming Enterprise	
Related Qualification	Part of Uganda Vocational Qualification (Cocoa Farmer UVQ 1)	
Qualification Level	1	
Module purpose	By the end of this module, a trainee shall be able to manage and sustain a cocoa enterprise.	
Learning-Working Assignments (LWAs)	LWA 5/1: Perform Administrative Tasks LWA 5/2: Market Cocoa LWA 5/3: Perform Record Keeping LWA 5/4: Perform Occupational Safety, Health and Environmental Protection Practices	
	<ol> <li>Note:1.</li> <li>The learning exercises may be repeated until the trainee acquires targeted competences.</li> <li>The trainer is advised to deliver relevant theoretical instructions with demonstrations as required to perform each learning assignment.</li> </ol>	
Related Practical Exercises (PEXs)	LWA 5/1: Perform Administrative Tasks  PEX 1.1: Recruit workers  PEX 1.2: Secure inputs  PEX 1.3: Manage staff welfare  PEX 1.4: Perform record keeping  PEX 1.5: Supervise workers  PEX 1.6: Observe standards  PEX 1.7: Train workers  PEX 1.8: Formalise business  PEX 1.9: Communicate with stakeholders  LWA 5/2: Market Cocoa  PEX 2.1: Conduct market survey  PEX 2.2: Brand produce  PEX 2.3: Package produce  PEX 2.4: Label produce  PEX 2.5: Price produce	

	PEX 2.6: Promote produce
	PEX 2.7: Distribute produce
	PEX 2.8: Sell produce
	PEX 2.9: Communicate with clients
	LWA 5/3: Perform Record Keeping
	PEX 3.1: Prepare financial records
	PEX 3.2: Prepare inventory
	PEX 3.3: Prepare management records
	PEX 3.4: Prepare production records
	LWA 5/4: Perform Occupational Health Safety and Environmental Protection Practices
	PEX 4.1: Wear protective gears
	PEX 4.2: Manage waste
	PEX 4.3: Observe bio security measures
	PEX 4.4: Administer first aid
	PEX 4.5: Maintain personal hygiene and sanitation
	PEX 4.6: Observe HACCP
	PEX 4.7: Perform fire fighting
	PEX 4.8: Display safety signs
	PEX 4.9: Comply with regulation and policies
Occupational health and safety	Precautions, rules and regulations on occupational health safety and environmental protection included in the listed related knowledge should be observed and demonstrated during LWAs and PEXs. e.g. wear protective gear
Pre-requisite modules	None
Related knowledge/ theory	For occupational theory suggested for instruction/ demonstration, the trainer is not limited to the outline below. In any case related knowledge/theory may be obtained from various recognised reference materials as appropriate:
	<ul> <li>Human resource management</li> <li>Marketing skills, record keeping</li> <li>Quality assurance</li> <li>Resource mobilisation</li> <li>Packaging skills</li> <li>Drying and storage of cocoa beans</li> <li>Monitoring and evaluation</li> <li>Communication skills, ICT skills</li> <li>Financial management skills</li> </ul>
Average duration of learning	<ul> <li>200hours (25 days) of nominal learning suggested to include:</li> <li>05 days of occupational theory and</li> <li>20 days of occupational practice</li> </ul>

# UVQF: Assessment and Training Package (ATP) for a COCOA FARMER QUALIFICATION LEVEL 1 December 2020

Suggestions on organisation of learning	The acquisition of competencies (skills, knowledge, attitudes) described in this module may take place at a training centre or its equivalent provided all equipment and materials required for training are in place.
Assessment	Assessment to be conducted according to the established regulations by a recognised assessment body using related practical and written test items from item bank
Minimum required tools/ equipment/ implements or equivalent	panga, mobile phones, projector, computers.
Minimum required materials and consumables or equivalent	Books, pens, professional manuals, inventory books, vouchers, invoices, cash books
Special notes	

# 3.0 ATP-PART III

## **Assessment Instruments for a COCOA FARMER**

- 3.1 Assessment of occupational competence is the procedure by which evidence is gathered and judged to decide if an individual (candidate) has met the stipulated assessment standards or not. In this ATP the **standards** to assess occupational competences are reflected in the form of the Occupational Profile and related Test Items.
- 3.2 Assessment of occupational competence should comprise both practical (performance) testing and written (theory/knowledge) testing.
- 3.3 Based on the Occupational Profile, a combined panel of job practitioners and Instructors developed a substantial number of test items for assessing (practical) performance as well as items for assessing occupational knowledge (theory) all stored in an electronic Test Item Bank (TIB) at Directorate of Industrial Training.
- 3.4 Performance (Practical) Test Items (PTI) are closely related to typical work situations in Ugandan business and manufacturing enterprises. They comprise a test assignment for candidates and assessment criteria and/or scoring guides for assessors' use.
- 3.5 Written Test items (WTI) for written testing of occupational theory, (knowledge) are presented in different forms which include:
  - Short answer test items.
  - Multiple choice test items and,
  - Matching test items, These WTIs herein focus on functional understanding as well as trouble-shooting typically synonymous with the world of work.
- 3.6 Composition of assessment / test papers will always require good choices of different types of WTI in order to ensure the assessment of relevant occupational knowledge required of candidates to exhibit competence.
- 3.7 The test items contained in the Test Item Bank may be used for continuous / formative assessment during the process of training as well as for summative assessment of candidates who have acquired their competences non-formally/or informally.
- 3.8 In this document, the following samples of test items for assessing both performance (practical) and occupational knowledge (theory) of **COCOA FARMER** are included.

### 3.9 Overview of test item samples included:

No.	Type of Test Item	Numbers included
1	Written (Theory)- short answer	2
2.	Written (Theory)- multiple choice	2
3.	Written (Theory)- matching item- generic	2
4.	Written (Theory)- matching item (work sequence)	2
5.	Performance (Practical) test items	1
	Total	9

# WRITTEN TEST ITEMS (SAMPLES)

DIT/ QS	Test Item Database Written (Theory) Test Item- no. 1			
Occupational Title:	Cocoa Farmer			
Competence level:	1			
Code no.				
	Short answer		$\sqrt{}$	
	Multiple choice			
Test Item type:	Matching item	Generic	Cause- Effect	Work- sequence
Complexity level:	C2			
Date of OP:	August 2020			
Related module:	M 1.3			
Time allocation:	4 minutes			

Test Item	Give four cultural methods used to conserve soil and water in a cocoa garden.		
Answer spaces	(i)		
Expected key (answers)	<ul> <li>(i) Manure application</li> <li>(ii) Mulching</li> <li>(iii) Plant shade trees</li> <li>(iv) Intercropping</li> <li>(v) Deep ploughing</li> </ul>		

DIT/ QS	Test Item Database Written (Theory) Test Item- no. 2			
Occupational Title:	Cocoa Farmer			
Competence level:	1			
Code no.				
	Short answer		V	
	Multiple choice			
Test Item type:	Matching item	Generic	Cause- Effect	Work- sequence
Complexity level:	C2			
Date of OP:	August 2020			
Related module:	M 1.1			
Time allocation:	4 minutes			

Test Item	State at least four activities carried-out in seedling management in the cocoa nursery.		
	(i) (ii)		
Answer spaces	(iii)		
	(i) Hardening off		
Expected Key	(ii) Weeding (iii) Watering		
(answer)	(iv) Pests and disease control		
	(v) Trimming roots (vi) Sorting		

DIT/ QS	Test Item Database Written (Theory) Test Item- no. 3			
Occupational Title:	Cocoa Farmer			
Competence level:	1			
Code no.				
	Short answer			
	Multiple choice	V		
Test Item type:	Matching item	Generic	Cause- Effect	Work- sequence
Complexity level:	C2		<u>I</u>	
Date of OP:	August 2020			
Related module:	M 1.1			
Time allocation:	1 minutes			

Test Item	The following are tools used in nursery preparation EXCEPT		
Answer spaces	<ul><li>A. Hand hoe</li><li>B. Hand fork</li><li>C. Pruner</li><li>D. Hand rake</li></ul>		

Key (answer)	С
--------------	---

DIT/ QS	Test Item Database Written (Theory) Test Item- no.4			
Occupational Title:	Cocoa Farmer			
Competence level:	1			
Code no.				
	Short answer			
	Multiple choice	√		
Test Item type:	Matching item	Generic	Cause- Effect	Work- sequence
Complexity level:	C2			
Date of OP:	August 2020			
Related module:	M 1.1			
Time allocation:	1 minute			

Test Item	At which stage is the seedling ready for transplanting?	
Distractors and correct answers	<ul><li>A. Germination</li><li>B. Plotting</li><li>C. Hardening off</li><li>D. Pricking</li></ul>	

Key (answer)	С
--------------	---

DIT/ QS	Test Item Database Written (Theory) Test Item- no. 5			
Occupational Title:	Cocoa Farmer			
Competence level:	1			
Code no.				
	Short answer			
	Multiple choice			
Test Item type:	Matching item	Generic	Cause- Effect	Work- sequence
		$\checkmark$		
Complexity level:	C3			
Date of OP:	August2020			
Related module:	M 1.2			
Time allocation:	2 minutes			

	Match the following tools, equipment and materials with their
	functions in preparing a nursery bed.

Column A (Tools, equipment)		
1	Trowel	
2	Polly pods	
3	Watering can	
4	Sprayers	

Column B (Functions)		
Α	Application of pesticides	
В	Transplanting seedlings	
С	Watering seedlings	
D	Handling a planting media	

Key (answer)	1:B, 2:D, 3:C, 4:A
--------------	--------------------

DIT/ QS	Test Item Database Written (Theory) Test Item- no. 6				
Occupational Title:	Co	ocoa Farmer			
Competence level:	Le	vel 1			
Code no.					
		Short answer			
Test Item type:		Multiple choice			
		Matching item	Generic	Cause- Effect	Work- sequence
				$\sqrt{}$	
Complexity level:	C2				
Date of OP:	August 2020				
Related module:	M 1.2				
Time allocation:	3 minutes				

Test Item	Match the following seedling growth defects in Column A with their causes in Column B
-----------	---

	Column A (Growth Defect)		
1	Seedling wilting		
2	Etiolated seedling		
3	Seedling dumping off		
4	Downy Mildew		

Column B (Causes)		
Α	Overstayed mulches	
В	Poor site selection	
С	Un pulverised nursery bed	
D	Water stress	
Е	Poor drainage	
F	Poor field sanitation	
G	Poor irrigation	

Key (answer)
--------------

DIT/ QS	Test Item Database Written (Theory) Test Item- no. 7				
Occupational Title:	Cocoa Farmer				
Competence level:	1				
Code no.					
	Short answer				
	Multiple choice				
Test Item type:	Matching item	Generic	Cause- Effect	Work- sequence	
				$\checkmark$	
Complexity level:	C 2				
Date of OP:	August 2020				
Related modules:	M 1.1				
Time allocation:	4 minutes				

Column A (order)	Column B (work steps)		
1 <sup>st</sup>	А	Sterilise	
2 <sup>nd</sup>	В	Select site	
3 <sup>rd</sup>	С	Prepare land	
4 <sup>th</sup>	D	Prepare seeds and other planting materials	
5 <sup>th</sup>	E	Prepare seed bed	
6 <sup>th</sup>	F	Sow seeds	
7 <sup>th</sup>	G	Harden seedlings	
8 <sup>th</sup>	Н	Erect nursery shade	

Key (answer)	1:B, 2:C, 3:E, 4:A, 5: D, 6:F, 7:H, 8:G
--------------	---

DIT/ QS	Test Item Database Written (Theory) Test Item- no. 8			
Occupational Title:	Cocoa Farmer			
Competence level:	Level 1			
Code no.				
	Short answer			
	Multiple choice			
Test Item type:	Matching item	Generic	Cause- Effect	Work- sequence
				$\checkmark$
Complexity level:	C2			
Date of OP:	August 2020			
Related module:	M 1.2			
Time allocation:	5 minutes			

l est item	Re-arrange the steps followed when preparing a cocoa garden
------------	---

Column A (order)	Column B (work steps)		
1 <sup>st</sup>	Α	Till garden	
2 <sup>nd</sup>	В	Demarcate garden	
3 <sub>rd</sub>	С	Clear site	
4 <sup>th</sup>	D	Apply fertilisers	
5 <sup>th</sup>	Е	Fence garden	
6 <sup>th</sup>	F	Construct water drainage channels	

Key (answer)	1: C, 2: B, 3: A, 4: D, 5: F, 6: E
--------------	------------------------------------

# PERFORMANCE TEST ITEMS (SAMPLES)

DIT/ QS	Test Item Database Performance Test Item- no.9
Occupational Title:	Cocoa Farmer
Competence level:	Level 1
Code no.	
Test Item:	Prepare a nursery bed 3m x 1m and sow cocoa seeds
Complexity level:	P2
Date of OP:	August 2020
Related modules:	M1.1
Related skills and knowledge:	<ul> <li>Seed bed preparation</li> <li>Soil sterilisation</li> <li>Seed germinations</li> <li>Sources of water</li> <li>Plant propagation</li> <li>Measurements</li> <li>Fertiliser types and application techniques</li> <li>Weeds and their control</li> <li>Pests and disease control</li> <li>Soil types</li> <li>Soil and water conservation techniques</li> <li>Nursery bed establishment</li> </ul>
Required tools, materials and equipment:	hand hoe, panga, rake, garden fork, assorted nails, bow saw, wheelbarrow, wooden poles, papyrus mats, reeds, cocoa seeds, sisal rope, polythene material, pieces of ply wood, watering can, tape measure, organic matter, water, dry cloth, dry grass insecticide, land, container
Time allocation:	4 hours
Preferred venue:	Farm
Remarks for candidates	<ul><li>Avail protective wear</li><li>Observe health, safety and environmental precautions</li></ul>
Remarks for assessors	<ul> <li>Provide all the tools, equipment and materials listed above</li> <li>Provide cocoa seeds to learners</li> </ul>
Special notes	

#	Assessment	Scoring guide	Max. So	core
#	criteria	Scoring guide	Process	Result
1	Preparation	Wore protective gear:		1
	before task	Overall Gum boots		1
		Hand gloves		1
		Head gear		1
		Assembled tools, equipment and materials		2
2	Preparation of	Cleared site	2	
	nursery seed bed	A vegetation free site observed		2
		Measured nursery bed area	2	
		Ground specifications observed (3mx1m) and verified		2
		Pulverised site	3	
		Fine tilth observed		2
		Raised bed	2	
		Raised bed specification of 3mx1m observed		2
		Sterilised soils in nursery bed	3	
		Even distribution of ash observed		2
		Incorporated organic matter	3	
		Fine growth media in bed observed		2
		Made farrows in the bed	2	
		Parallel farrows observed		1
3	Sowing of seeds	Opened seed pack	2	
		Removed seeds from pack	1	
		Uniformly distributed seeds in farrowed rows	2	
		Seeds observed at 10cm interval spacing in farrow		2
		Covered seeds with a thin soil layer	2	
		Uniformly levelled nursery bed observed		1
		Levelled bed	2	

#	Assessment	Scoring guide	Max. Score	
"	criteria	ocorning guide	Process	Result
		Evenly spread mulch observed on bed		1
		Watered bed	3	
		Uniformly wetted mulch observed		2
4	Construction of shade	Measured and pegged fence post points	3	
	Snade	Pegs observed longitudinally at 1m spacing		2
		Measured and cut fence posts	3	
		Posts of 1.5m observed		1
		Dug holes	2	
		0.3m deep holes observed and verified		1
		Fixed posts in holes	2	
		Erect posts observed	2	
		Measured ties to specifications		2
		Nailed ties to posts	2	
		Fixed support reeds	3	
		Fixed papyrus mat on to ties	2	
		Labelled nursery		3
		A firm shade observed		4
7		Cleaned tools and equipment	2	
	Demobilisation of	Collected unused materials	2	
	resources	Returned tools, equipment and unused materials to store		2
		Cleared work area		1
		Disposed waste		2
		Removed protective gear		2
	TOTAL		52	45
	MAXIMUM SCORE (Y)	X/Y X100	9	7

### 4.0 ATP- PART IV

## **INFORMATION ON DEVELOPMENT PROCESS**

#### 4.1 Occupational Profile Development (August 2020)

The Occupational Profile was exclusively developed by job practitioners who were working in the COCOA FARMER occupation. The job expert panel, guided by UVQF Facilitators defined duties and tasks performed and provided additional generic information regarding the occupation.

#### 4.2 Training Module Development (August 2020)

Based on the <u>Occupational Profile</u> for a Cocoa Farmer of August 2020, Training Modules were developed by job practitioners, guided by UVQF Facilitators.

#### 4.3 Test Item Development (August 2020)

Based on the <u>Occupational Profile</u> for a Cocoa Farmer of August 2020, and Training Modules, Test Items were developed by combined panels of instructors and job practitioners, guided by UVQF Facilitators.

#### 4.4 Methodology

The rationale for the Assessment and Training Package Development was to link Vocational Education and Training to the real world of work by bridging Occupational Standards to Training Standards through industry-led Standards-Based Assessment.

Active participation of both instructors and job practitioners' panels consolidated the review philosophy.

The panellists worked as teams in workshop settings complemented by offworkshop field research and literature review activities including international benchmarking.

#### 4.5 Development Panel

The participating panel of job practitioners required for different stages of the assessment training package i.e. occupational profile, training modules, assessment instruments were constituted by members from the following organisations;

No.	Name	Institution/ Organisation
1.	Mr. Golomba Wilberforce	Tororo Girls School
2.	Mr. Wafula Moses	Kigulu College Namungalwe
3.	Mr. Ekwaro Benson	Kyambogo college
4.	Mr. Mutebi Mustafa	Local farmer
5.	Ms. NalwangaTeopista	Majo Mixed Farm
6.	Dr Ashaba Denis	NARO Kachwekano
7.	Mr. Muhindi Paul	Sheema Integrated Community Development Organisation
8.	Mr. Kahangangire Valerian	Local farmer
9.	Ms Nnyanzi Flavia	NCDC Kyambogo
10.	Mr. Atuhaire Francis	Local farmer
11.	Mr. Sserwanga Joseph	Bukalasa Agricultural College

#### 4.6 Quality Check Panel

No.	Name	Organisation
1.	Sendikaddiwa James Kajubi	NCDC
2.	Aryatuha Ronnet	DIT
3.	Ssentongo Simon Peter	DIT
4.	Sempala Patrick	MoES
5	Mugabe Brian	DIT

#### 4.7 Facilitator team

This Assessment and Training Package was Developed by a Facilitator team listed below:

1. **Team Leader**: Ms. Mukyala Ruth, Ag Deputy Director,

DIT

2. **Facilitators:** Mr. Ochwo Richard SQO DIT,

Ms. Ahimbisibwe Judith

Ms Ainembabazi Faith DIT QS

Ms Tukundane Bonnie

3. Quality check facilitator: Ms. Asiimwe Moreen

4. **DIT Data Entrants**: Namazzi Monica,

Matende Shamsi Ivan Nkalangwike

Nakafeero Susan qualification standards

Atai Sarah QS

Ninsiima Isabella QS

5. Compiled by: Ms. Ahimbisibwe Judith Data Entrants, DIT6. Edited by: Ms. Mukyala Ruth Ag. DD, DIT,

Qualification Standards Dept. DIT

7. Coordinated by: Mr Byakatonda Patrick, Ag. Director, DIT

and Ms. Mukyala Ruth Ag. DD, DIT,

Qualification Standards Dept. DIT

#### 4.6 Reference time:

The Assessment and Training Package was compiled in AUGUST-----2020 and may be periodically revised to match the dynamic trends in the occupation and hence issued in different versions:

#### References:

- 1. Tropical weeds by J. Ogbon
- 2. Principles of Horticulture. C. R. Adams, K. M. Bamford and M. P. Early
- 3. Pest and diseases of tropical crops Vol. I and II by D.S Hills and J. M.
- Pest and Diseases of tropical crops Vol. I and II by D. S. Hills and J. M. Walter
- 5. NARO (2001): Agriculture in Uganda Volume I, General Information, Fountain, Publishers (NARO).
- 6. Michael, A.M. (1989). *Land and water management engineering*. New Delhi: Vikas Publishing House Pvt. Ltd.
- 7. Michael, A.M. & Ojha, T.P. (2014). *Principles of agricultural engineering* (Vol. II). New Delhi: Jain Brothers Publishers.
- 8. Merrill, A. &Lembi, C. A. (2009). *Applied weed science: including the ecology and management of invasive plants*, 3<sup>rd</sup> Edition. Upper Saddle River (USA): Prentice Hall Publishers.
- 9. Merkebu, G. (2013). *Integrating the formal and informal seed supply system*. Saarbrücken, Germany: LAP LAMBERT Academic Publishing.
- 10. Mathew, I.P &Kakikari, S.K. (1990). *Horticultural Principles and Practices*. London: MacMillan Education.
- 11. Mal, B.C. (2005). *Introduction to soil and water conservation engineering*. New Delhi: Kalyani Publishers.
- 12. Introduction to soil science E. A. Fitz, Patrick 3<sup>rd</sup> edition Longman Scientific and Technical group U.K.
- 13. Dapriez, Hugues, De Leener& Philippe (1990). *African gardens and orchards: Growing vegetables and fruits*. London: Macmillan Education.
- 14. Crops of the drier regions of the tropics by D. Gibben and A. Pain
- 15. Crop pest of East Africa by J. M. De pury
- 16. Brown, J., Caligariand, P. & Hugo, C. (2014). *Plant breeding,* 2<sup>nd</sup> Edition. Hoboken (USA): Wiley-Blackwell Publishers.
- 17. Brady, C.N. (2008). *Nature and properties of soil* (Revised 14<sup>th</sup> Edition). London: Pearson Education Publishers, Inc.
- 18. Barber, R. G. and Thomas D. B. (1981). Infiltration, surface runoff and soil loss from high simulated rainfall in Kenya
- 19. Agriculture in the tropics Vol. II by C. C. Webster and P. N. Wilson
- 20. Agriculture in the tropics Vol. II by C. C. Webster and P. N. Wilson
- 21. Acquaah, G. (2012). *Principles of plant genetics and breeding,* 2<sup>nd</sup> Edition. Hoboken (USA): Wiley-Blackwell Publishers



