

THE REPUBLIC OF UGANDA Ministry of Education and Sports

Directorate of Industrial Training



Assessment and Training Package For a

TEA FARMER

Qualification Level: 1

Occupational Cluster: Agriculture

December 2020

Reviewed by:

Qualifications Standards Department Directorate of Industrial Training Funded by:

Government of Uganda



Assessment and Training Package

For a TEA FARMER

Qualification Level: 1 Occupational Cluster: Agriculture

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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.

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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 **TEA 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 TEA FARMER.** This Occupational Profile which was reviewed by Tea farmers practicing in the world of work mirrors the duties and tasks that Tea farmers are expected to perform.
- 0.2 **PART II: Training Modules** in the form of guidelines to train pig 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 TEA FARMER. These assessment instruments were reviewed jointly by job practitioners (Tea 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> and/or HOW WELL a person must do the job.
- 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).

- 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.¢it@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 Tea 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
HACCP	Hazard Analysis Critical Control Point
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
R & D	Research Development
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 / CBET (Occupational) competence is understood as the ability to perform tasks common to an occupation at an acceptable level.

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
- DutyA 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) 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/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** 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 which define what a person is supposed to do which become the reference points for developing assessment standards and modular curricula.

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.

TaskJob 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 TEA FARMER

- 1.1 The OCCUPATIONAL PROFILE (OP) for a "TEA FARMER" below defines the **Duties** and **Tasks** a competent TEA 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 define 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 are listed on the following page.

¹ The DACUM-method was used. DACUM is an acronym for 'Develop a Curriculum'

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

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Niwagaba Allan Kayonza growers Tea Factory

Mubangizi Seliano Kareema's Farm

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Funded by Government of Uganda



THE REPUBLIC OF UGANDA Ministry of Education and Sports

Directorate of Industrial Training

Occupational Profile of a "TEA FARMER"

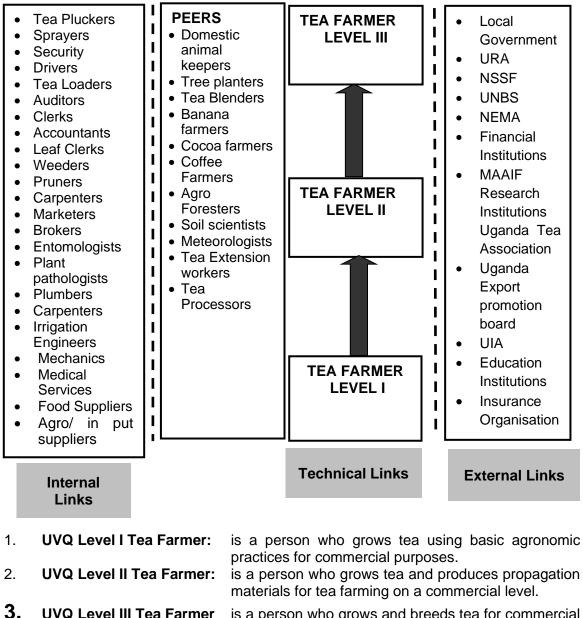
Developed by: Directorate of Industrial Training (Qualifications Standards)

Dates of workshop: 1st-11th September 2020

NOMENCLATURE FOR THE OCCUPATION OF TEA FARMER

Definition: A Tea Famer is a person who grows tea for commercial purposes.

JOB ORGANISATION CHART FOR TEA FAMER



UVQ Level III Tea Farmer is a person who grows and breeds tea for commercial purposes.

A. PLAN TEA FARMING WORKS	A1	Carry out feasibility study	A2 Determine farm location A3 Prepare financial plan	
	A4.	Determine site structural plan	A5. Determine factor inputs A6. Determine tea varieties	
		Prepare work schedules	A8. Prepare procurement plan for inputsA9. Determine production methods	

Duties and Tasks

B. ESTABLISH A TEA NURSERY BED	B1 Select site	B2 Clear land	B3 Demarcate land
	B4 Till land	B5 Sterilise soil	B6 Prepare growth media
	B7 Pot media	B8 Prepare seeds and other planting materials	B9 Prepare tea propagation materials
	B10 Pot vegetative propagation materials	B11 Pot seeds	B12 Pot seedlings
	B13 Prepare tissue culture plantlets	B14 Erect nursery shade	B15 Water seedlings
	B16 Control pests and diseases	B17 Monitor growth	B18 Prick out seedlings
	B19 Prune seedling roots	B20 Weed nursery	B21 Harden Seedlings
	B22 Cage Beds	B23 Apply rooting Hormone	

C. ESTABISH A TEA GARDEN	C1 Prepare land	C2 Sterilise garden	C3 Apply fertiliser
	C4 Dig planting holes	C5 Transplant seedlings	C6 Shade seedlings
	C7 Water plants	C8 Plant Shed Trees	C7 Fence garden

UVQF: Assessment and Training Package (ATP) for a TEA FARMER
QUALIFICATION LEVEL 1
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D. MAINTAIN TEA GARDEN	D1 Perform gap filling	D2 Mulch garden	D3 Control weeds
	D4 Decentre Tea Plant	D5 Prune Tea Bush	D6 Apply growth boosters
	D7 Construct support structures	D8 Maintain support structures	D9 Train tea plants
	D10 Conserve soil and water	D11 Apply Fertilisers	D12 Maintain Tools, Equipment and Machinery

E. PERFORM HARVESTING AND POST HARVEST	E1 Identify mature fields	E2 Prepare harvesting material and tools	E3 Pluck tea leaf
HANDLING PRACTICES	E4 Carry leaf to collection shade	E5 Weigh tea leaf	E6 Bulk tea leaf
	E7 Fluff tea leaf	E8 Sort tea leaf	E9 Grade tea leaves
	E10 Load in delivery bags	E11 Transport to processing plant	E12 Manage waste

F. MARKET TEA PRODUCE		Conduct market survey	F2	Brand tea produce	F3	Package tea produce
	F4	Label tea produce	F5	Price tea produce	F6	Promote tea produce
	F7	Distribute tea produce	F8	Sell tea produce		

G. PERFORM OCCUPTIONAL HEALTH, SAFETY, AND ENVIRONMENTAL	G1	Administer first aid	G2	Train workers on safety	G3	Sensitise workers on health, safety and environmental issues.
PROTECTION PRACTICES	G4	Perform fire fighting	G5	Manage waste	G6	Observe health, safety and environmental precautions
	G7	Observe (HACCP)	G8	Display safety signs		

UVQF: Assessment and Training Package (ATP) for a TEA FARMER
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H. PERFORM ADMISITRATIVE TASKS	H1	Secure factor in puts	H2	Formalise business	Н3	Manage human resources
	H4	Manage finances	H5	Pay bills	H6	Keep records
	H7	Pursue continuous professional development	H8	Network with stakeholders	H9	Comply with regulations and policies
	H10	Provide farm security	H11	Conduct meetings		

Additional Information

Generic Knowledge & Skills

- 1. Public relations
- 2. Entrepreneurship skills
- 3. Leadership skills
- 4. Administrative skills
- 5. Soil sampling and analysis
- 6. Knowledge of different tea clones
- 7. Nursery bed management and bed construction
- 8. Control of weeds
- 9. Types of fertilisers and their application
- 10. Research and Development
- 11. Integrated pest and disease management
- 12. Plucking methods
- 13. Land terrain
- 14. Tea oil and cream extraction
- 15. Preparing reports
- 16. Striking cuttings
- 17. Cage construction
- 18. Tipping opping tea bush
- 19. Bringing tea bush into bearing
- 20. Waste management
- 21. Transplanting techniques
- 22. Counselling workers

- 23. Post harvest handling
- 24. Occupational health and safety
- 25. Насср
- 26. Food safety guidelines
- 27. Market survey
- 28. Feasibility study
- 29. Propagation techniques
- 30. Tissue culture techniques
- 31. Irrigation techniques
- 32. Tea agronomy
- 33. Market skills and techniques
- 34. Financial literacy
- 35. Tea policies and regulations
- 36. Taxation policies
- 37. Labour laws
- 38. First aid administration
- 39. Fire fighting techniques
- 40. Agro forestry
- 41. Tea varieties/clones
- 42. Factor in puts in tea production
- 43. Human resource management
- 44. Tool maintenance
- 45. Climate change
- 46. Pruning
- 47. Mulching
- 48. Watering
- 49. Potting
- 50. Seasonal calendar

Trends and Concerns

- 1. Price fluctuations
- 2. New varieties of tea
- 3. Limited processing plants
- 4. Marketing of green leaf from farms
- 5. Lack of tea policy
- 6. Lack of regulatory authority
- 7. Limited research on tea
- 8. Low yielding clones
- 9. Low technology
- 10. Climate change issues
- 11. Leaf diversion
- 12. High cost of inputs
- 13. Limited extension services
- 14. Negative attitudes especially the youth
- 15. No instant tea shops

- 16. Limited government support
- 17. Limited knowledge in tea husbandry
- 18. Limited involvement of youth in tea farming
- 19. Limited involvement of women in tea farming
- 20. Limited product diversification
- 21. A threat to food security
- 22. Limited access to finance
- 23. High marketing costs
- 24. Product quality issues
- 25. High power tariffs
- 26. Low rates of tea consumption
- 27. Limited literature on tea
- 28. Product development
- 29. Involvement of middle men
- 30. Land tenure
- 31. Technological advancement
- 32. Ict
- 33. Limited value addition

Tools, Materials and Equipment

- 1. Hand hoe
- 2. Slasher
- 3. Hole digger
- 4. Fertiliser
- 5. Gum boots
- 6. Overall
- 7. Gloves
- 8. Potting bags
- 9. Polythene sheets
- 10. Wire cage
- 11. Poles
- 12. Sprayers
- 13. First aid kit
- 14. Herbicides
- 15. Pesticides
- 16. Pruning knives
- 17. Shears
- 18. Plucking baskets
- 19. Secateurs
- 20. Pangas
- 21. Axes
- 22. Green leaf sheets
- 23. Green leaf bag
- 24. Weighing scale
- 25. Nails
- 26. Measuring tapes
- 27. Jerrycans

- 28. Hammer
- 29. Face mask
- 30. Measuring tapes
- 31. Knives
- 32. Plucking capes
- 33. Watering cans
- 34. Basins
- 35. Spades
- 36. Trowel
- 37. Soil sieve
- 38. Soil auger
- 39. Reeds
- 40. Grass
- 41. Papyrus
- 42. Wheel barrows
- 43. Computers
- 44. Stationery
- 45. Mobile phones
- 46. Tape measure
- 47. Trucks
- 48. Sorting table
- 49. Tanks
- 50. Water pump
- 51. Fire extinguishers
- 52.

2.0 ATP-PART II

Training Modules for a TEA 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 competencebased 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 TEA FARMER 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 TEA FARMER QUALIFICATION LEVEL 1?

A **Tea Farmer Level 1** is a person who grows tea using basic agronomic practices for commercial purposes.

TRAINING MODULES FOR TEA FARMER UVQ LEVEL 1

Code	Module Title	Average duration	
		Contact hours	Weeks
UE/TF/M1.1	Establish Tea Garden	160	04
UE/TF/M1.2	Manage Tea Garden	240	06
UE/TF/M1.3	Perform Harvest and Post Harvest Handling of Tea Leaf	240	06
UE/TF/M1.4	Establish Tea Farming Enterprise	160	04
Summary	4 modules	800 hours	20 weeks

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.

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Code	UE/TF/M1.1
Module title	M1.1: Establish Tea Garden
Related Qualification	Part of: Uganda Vocational Qualification (TEA FARMER UVQ1)
Qualification Level	1
Module purpose	At the end of this module, the trainee shall be able to set up a tea garden successfully.
Learning-Working Assignments (LWAs)	 LWA 1/1: Prepare Garden LWA 1/2: Prepare Planting Materials LWA 1/3: Plant Seedlings LWA 1/4: Carryout Soil and Water Conservation Measures LWA 1/5: Perform Occupational Health, Safety and Environmental Practices <u>Note:</u> The learning exercises mat be repeated until the trainee acquires a targeted competence. The trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.
Related Practical Exercises (PEXs)	LWA 1/1: Prepare GardenPEX 1.1: Select sitePEX 1.2: Select tools and equipmentPEX 1.3: Clear landPEX 1.4: Till landPEX 1.5: Fence landPEX 1.6: Line and Peg fieldPEX 1.7: Dig planting holesPEX 1.8: Apply fertilisersLWA 1/2: Prepare Planting MaterialsPEX 2.1: Source planting materialsPEX 2.3: Assemble planting materialPEX 2.4: Water planting material

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	LWA 1/3: Plant Seedlings/Plantlets
	PEX 3.1: Remove polythene sleeves
	PEX 3.2: Place seedlings in holes
	PEX 3.3: Cover holes
	PEX 3.4: Shade seedlings
	PEX 3.5: Water seedlings
	LWA 1/4: Carryout Soil and Water Conservation
	Measures
	PEX 4.1: Identify tools, equipment and materials
	PEX 4.2: Select tools, equipment and materials
	PEX 4.3: Mulch garden PEX 4.4: Construct water ditches
	PEX 4.5: Construct contour bunds
	PEX 4.6: Plant agroforestry trees
	PEX 4.7: Plant cover crops
	LWA 1/5: Perform Occupational Health, Safety and
	Environmental Protection Practices
	PEX 5.1: Observe hygiene and sanitation
	PEX 5.2: Wear personnel protective gear
	PEX 5.3: Manage waste
	PEX 5.4: Administer first Aid
	PEX 5.5: Perform firefighting
	PEX 5.6: Display safety signs
	PEX 5.7: Comply with regulations 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.
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: Land preparation Tillage Transplanting Pegging and lining Soil fertility Tea clones Agronomic practice of tea

QUALIFICATION LEVEL 1	Assessment and Training Package (ATP) for a TEA FARMER December 2020
	 Fertiliser application Handling waste Soil and water conservation Seasons/weather pattern Geographical conditions Tea Plant requirements Tools and equipment for establishment of tea Soil properties Hazard analysis critical control points
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 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, slasher, panga knives, hole digger, forked hoe, plough, tape measure, watering can, first aid box, rake, fencing tools, survey tools, harrows, transport means, storage facility, seedling trays, personnel protective gears, watering can, hose tubes
Minimum required materials and consumables or equivalent	Strings, pegs, markers, fertilizers, seedlings grass(dry), water.
Special notes	The theory must be integrated into the practice during training

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Code	UE/TF/M1.2
Module title	M1.2: Manage Tea Garden
Related Qualification	Part of: Uganda Vocational Qualification (TEA FARMER UVQ1)
Qualification Level	1
Module purpose	At the end of this module, the trainee shall be able to care for the tea garden to produce market standard tea.
Learning-Working Assignments (LWAs)	LWA 2/1: Control Weeds LWA 2/2: Apply Fertilisers LWA 2/3: Maintain Soil and Water Conservation Structures LWA 2/4: Bring Tea Bush into Bearing LWA 2/5: Construct and Maintain Support Structures LWA 2/6: Control Pests and Diseases LWA 2/7: Carryout Gap Filling LWA 2/8: Perform Occupational Health Safety and Environmental Protection Practice
	 <u>Note:</u> 1. The learning exercises mast be repeated until the trainee acquires a targeted competence. 2. The trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.
Related Practical Exercises (PEXs)	LWA2/1: Control WeedsPEX 1.1: Identify WeedsPEX 1.2: Select control methodPEX 1.3: Select tools, materials and equipmentPEX 1.4: Apply control methodsPEX 1.5: Monitor control methodPEX 1.6: Generate recordsPEX 1.7: Demobilise tools, equipment and materialsLWA 2/2: Control Pests and DiseasesPEX 2.1: Scout for pests and diseasesPEX 2.2: Select control methodsPEX 2.3: Mobilise tools and equipmentPEX 2.4: Apply control methods

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PEX 2.5: Monitor control methods.
PEX 2.6: Demobilise tools, equipment and materials
PEX 2.7: Manage waste
LWA 2/3: Apply Fertilisers
PEX 3.1: Determine nutrient requirement
PEX 3.2: Determine required fertiliser
PEX 3.3: Select tools, materials and equipment
PEX 3.4: Apply fertilisers
PEX 3.5: Demobilise tools, equipment and materials
PEX 3.6: Monitor plant response
LWA 2/4: Maintain Soil and Water Conservation Structures
PEX 4.1: Scout conservation structures
PEX 4.2: Select tools, materials and equipment
PEX 4.3: Repair soil and water conservation structures
PEX 4.4: Mulch garden
PEX 4.5: Prune agroforestry trees
PEX 4.6: Perform replanting
PEX 4.7: Perform desilting
LWA 2/5: Bring Tea Bush into Bearing
PEX 5.1: Decentre tea plants
PEX 5.2: Perform tipping
PEX 5.3: Prune plants
PEX 5.4: Peg tea plant
PEX 5.5: Apply growth boosters
PEX 5.6: Irrigate tea bush
LWA 2/6: Construct and Maintain Support Structures
PEX 6.1: Identify tools and materials
PEX 6.2: Set up structures
PEX 6.3: Repair structures
PEX 6.4: Clean tools
PEX 6.5: Store tools
LWA 2/7: Carry Out Gap Filling PEX 7.1: Identify gaps PEX 7.2: Select tea seedlings PEX 7.3: Fill gaps PEX 7.4: Monitor establishment PEX 7.5: Apply growth enhancers

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	LWA 2/8: Perform Occupational Health, Safety and Environmental Protection Practices
	PEX 8.1: Manage waste
	PEX 8.2: Wear personnel protective gear
	PEX 8.3: Disinfect tools and equipment
	PEX 8.4: Maintain personal hygiene and sanitation
	PEX 8.5: Administer first aid
	PEX 8.6: Perform firefighting
	PEX 8.7: Comply with regulations and policies
	PEX 8.8: Display safety signs
	PEX 8.9: Maintain perimeter vegetation
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.
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: Types of trees Weed, pests and diseases of tea Types of fertilisers and application Methods of bringing tea plant into bearing Spacing of tea plant Tea clones Methods of weed control Knowledge on weather pattern Requirement for plant growth Labour management Soil and water conservations methods Pests and disease control Agronomic practices Maintenance of tools and equipment. Soil health management
Average duration of learning	 240 hours (30 days) of nominal learning suggested to include 5 days of occupational theory 25 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.

QUALIFICATION LEVEL 1	December 2020
Assessment	Assessment to be conducted according to established regulations by recognised assessment body using related practical and written test items from Item bank
Minimum required tools/ equipment/ implements or equivalent	hand hoes, slashes/Mowers, spray pumps, spade, rake, hole digger, first aid box, fire extinguisher, irrigation equipment
Minimum required materials and consumables or equivalent	seeds of cover crops, fertilisers, herbicides, pegs, wire mesh, Stones, grass splits, personnel protective gear, pest and snake repellents, water,
Special notes	The theory must be integrated into the practice during training

Code	UE/TF/M1.3
Module title	M1.3: Perform Harvest and Post-harvest handling Tea Leaf
Related Qualification	Part of: Uganda Vocational Qualification (TEA FARMER UVQ1)
Qualification Level	1
Module purpose	At the end of the module, the trainee shall be able to harvest, handle and store quality tea leaf.
Learning-Working Assignments (LWAs)	LWA 3/1: Prepare Material, Tools and Equipment LWA 3/2: Pluck Tea Leaf
	LWA 3/3: Manage Tea Leaf
	LWA 3/4: Transport Tea Leaf
	LWA 3/5: Perform Occupational Health, Safety and Environmental Protection
	 <u>Note:</u> 1. The learning exercises mast be repeated until the trainee acquires a targeted competence. 2. The trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.
Related Practical Exercises (PEXs)	LWA 3/1: Prepare Harvesting Tools and Equipment PEX 1.1: Identify tools and equipment PEX 1.2: Select tools and equipment PEX 1.3: Service tools and equipment PEX 1.4: Clean tools and equipment PEX 1.5: Mobilise tools and equipment
	LWA 3/2: Pluck Tea Leaf PEX 2.1: Identify mature field PEX 2.2: Mobilise labour PEX 2.3: Pick leaf PEX 2.4: Carry leaf LWA 3/3: Manage Tea Leaf
	PEX 3.1: Transfer leaf to shed PEX 3.2: Weigh leaf PEX 3.3: Spread leaf under shed PEX 3.4: Fluff leaf

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	PEX 3.5: Sort I
	PEX 3.6: Grade leaf
	PEX 3.7: Generate records
	LWA 3/4: Transport Tea Leaf
	PEX 4.1: Prepare means of transport
	PEX 4.2: Prepare delivery bags
	PEX 4.3: Load leaf in delivery bags
	PEX 4.4: Weigh leaf
	PEX 4.5: Load leaf on trucks
	PEX 4.6: Deliver leaf for processing
	PEX 4.7: Manage waste
	LWA 3/5: Perform Occupational Health, Safety and Environmental Protection Practices
	PEX 5.1: Observe personal hygiene and sanitation
	PEX 5.2: Wear personnel protective equipment
	PEX 5.3: Manage waste
	PEX 5.4: Administer first aid
	PEX 5.5: Perform fire fighting
	PEX 5.6: Display safety signs
	PEX 5.7: Comply with regulations and policies
	PEX 5.8: Sensitise workers on occupational health safety and environmental protection practices
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.
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:
	 Determining mature field Harvesting methods Tools and equipment Waste management Plucking standards Methods of plucking Tea leaf packing techniques Tea leaf grading

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	 ICT skills Literacy and numeracy Record keeping skills Occupational health safety and environmental protection
Average duration of learning	 240 hours (30 days) of nominal learning suggested to include 05days of occupational theory 25 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 established regulations by a recognised assessment body using related practical and written test items from Item bank
Minimum required tools/ equipment/ implements or equivalent	Pruning knife, motorised pruner, tea pruner, skiffing machine, tea harvesters, shears, plucking machine, plucking wand, weighing scale, fire extinguisher, first aid kit, waste bins, sanitary facility, collecting shed.
Minimum required materials and consumables or equivalent	baskets, sheets/tarpaulin, plucking cape, overalls, gum boots, hats, stationery, drinking water. sanitisers, sterilisers delivery bags, canvas bags, tarpaulin/sheet, ropes, poles
Special notes	The theory must be integrated into the practice during training

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Code	UE/TF/M1.4
Module title	M1.4: Establish Tea Farming Enterprise
Related Qualification	Part of: Uganda Vocational Qualification (TEA FARMER UVQ1)
Qualification Level	1
Module purpose	At the end of the module, a trainee shall be able to establish and sustain a tea farm enterprise.
Learning-Working Assignments (LWAs)	LWA 4/1: Plan a Tea farming Enterprise LWA 4/2: Market Tea Leaf LWA 4/3: Perform Basic Administrative Tasks
	LWA 4/4: Perform Occupational Health Safety
	and Environmental Protection Practices <i>Note:</i>
	 The learning exercises must be repeated until the trainee acquires a targeted competence. The trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.
Related Practical	LWA 4/1: Plan a Tea Farming Enterprise
Exercises (PEXs)	PEX 1.1: Conduct a feasibility study
	PEX 1.2: Select tea farm site
	PEX 1.3: Determine tea variety
	PEX 1.4: Source for farm inputs
	PEX 1.5: Identify labour requirements
	PEX 1.6: Develop site structural plan
	PEX 1.7: Prepare financial plan
	PEX 1.8: Prepare procurement plan
	LWA 4/2: Market Tea leaf
	PEX 2.1: Conduct market survey
	PEX 2.2: Brand leaf
	PEX 2.3: Bag leaf
	PEX 2.4: Label bags
	PEX 2.5: Negotiate price
	PEX 2.6: Promote produce

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	PEX 2.7: Deliver leaf		
	PEX 2.8: Sell leaf		
	PEX 2.9: Communicate with clients		
	LWA 4/3: Perform Administrative Task		
	PEX 3.1: Recruit workers		
	PEX 3.2: Participate in training of workers		
	PEX 3.3: Assign work		
	PEX 3.4: Supervise workers		
	PEX 3.5: Appraise workers		
	PEX 3.6: Keep records		
	PEX 3.7: Participate in trade shows		
	PEX 3.8: Pursue continuous professional development		
	PEX 3.9: Legalise business		
	PEX 3.10: Construct farm structures		
	PEX 3.11: Procure tools, equipment and materials		
	LWA 4/4: Perform Occupational Health, Safety and Environmental Protection Practices		
	PEX 4.1: Manage waste		
	PEX 4.2: Wear personnel protective gear		
	PEX 4.3: Disinfect tools and equipment		
	PEX 4.4: Maintain personal hygiene and sanitation		
	PEX 4.5: Administer first aid		
	PEX 4.6: Perform firefighting		
	PEX 4.7: Comply with regulations and policies		
	PEX 4.8: Display safety signs		
	PEX 4.9: Maintain perimeter vegetation		
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.		
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: Tools and equipment usage and handling. Tea market trends 		

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	 Tea production seasons Tea production policy Record keeping Quality assurance Human resource management Labour law Hazard analysis critical control points Food safety policies Tea varieties Soil health and fertility Pest and diseases in tea First aid administration Financial literacy Marketing techniques Growth conditions and topography/Land terrain ICT advancements Literacy and numeracy Construction and Building
Average duration of learning	 160 hours (20 days) of nominal learning suggested to include 05 days of occupational theory 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 established regulations by a recognised assessment body using related practical and written test items from Item bank
Minimum required tools/ equipment/ implements or equivalent	first aid box, stationery, tape measure, camera/phone, theodolite, construction tools, real time kinetics machine, computer, bags.
Minimum required materials and consumables or equivalent	first aid materials, papers and pens, markers, manila, masking tape, gumboots, umbrella, fuel
Special notes	The theory must be integrated into the practice during training

3.0 ATP-PART III

Assessment Instruments for a TEA 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 **TEA FARMER** are included:

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No.	Type of Test Item	Numbers included
1	Written (Theory)- short answer	3
2.	Written (Theory)-multiple choice	2
3.	Written (Theory)-matching (generic)	1
4.	Written (Theory)- matching (cause-effect)	2
5.	Written (Theory)- matching (work sequence)	1
6.	Performance (practical) test item	3
	Total	12

WRITTEN TEST ITEMS (SAMPLES)

DIT/ QS	Test Item Database Written (Theory) Test Item- no. 1			
Occupational Title:	Tea Farmer			
Competence level:	1			
Code no.				
	Short answer	\checkmark		
Test Item type:	Multiple choice			
	Matching item	Generic	Cause- Effect	Work-sequence
Complexity level:	C2			
Date of OP:	September 2020			
Related module:	M1			
Time allocation:	4 minutes			

Test item	Write down six tools used in land preparation for establishing a tea garden		
Answer space	(i) (ii) (iii) (iv) (v) (v) (v) (v)		
Expected Key (answer)	 (i) Hand hoe (ii) Panga (iii) Slasher (iv) Mower (v) Forked hoe (vi) Wheelbarrow (vii) Spade (viii) Disc plough (ix) Disc harrow (x) Mattock 		

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DIT/ QS	Test Item Database Written (Theory) Test Item- no. 2				
Occupational Title:	Tea Farmer				
Competence level:	1				
Code no.					
	Short answer	\checkmark	\checkmark		
Test Item type:	Multiple choice				
	Matching item	Generic	Cause- Effect	Work-sequence	
Complexity level:	C2				
Date of OP:	September 2020				
Related module:	M2				
Time allocation:	4 minutes				

Test itemState any four methods of soil and water conservation
measures in the tea garden.

	(i)			
A	(ii)			
Answer space	(iii)			
	(iv)			
	(i) Mulching			
Expected Key	(ii) Planting cover crops			
	(iii) Construct ditches			
	(iv) Construct contour bunds			
(answer)	(v) Construct diversion channels			
	(vi) Construct gabion			
	(vii) Construct Weirds			
	(viii) Construct barrage dams			

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DIT/ QS	Test Item Database Written (Theory) Test Item- no. 3				
Occupational Title:	Tea Farmer				
Competence level:	1				
Code no.					
	Short answer	\checkmark			
	Multiple choice				
Test Item type:	Matching item	Generic	Cause- Effect	Work-sequence	
Complexity level:	C2				
Date of OP:	September 2020				
Related module:	M3				
Time allocation:	2 minutes				

Test item	List the two methods of plucking leaf		
Answer space	(i) (ii)		
Expected Key (answer)	(i) Hand plucking(ii) Mechanical plucking		

DIT/ QS	Test Item Database Written (Theory) Test Item- no. 4				
Occupational Title:	Tea Farmer				
Competence level:	1	1			
Code no.					
	Short answer				
	Multiple choice	\checkmark			
Test Item type:	Matching item	Generic	Cause- Effect	Work- sequence	
Complexity level:	C2				
Date of OP:	September 2020				
Related module:	M2				
Time allocation:	2 minutes				

Test Item	Which of the following practices can be used in maintaining a flat tea table?	
	A. Pruning trees	
Distractors and correct answers	B. Pegging	
	C. Decentring	
	D. Skiffing	

Key (answer)	D
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DIT/ QS	Test Item Database Written (Theory) Test Item- no. 5			
Occupational Title:	Tea Farmer	Tea Farmer		
Competence level:	1			
Code no.				
	Short answer			
Test Item type:	Multiple choice	\checkmark		
rest tiem type.	Matching item	Generic	Cause- Effect	Work-sequence
Complexity level:	C1			
Date of OP:	September 2020			
Related module:	M3			
Time allocation:	2 minutes			

Test Item	Which of the following is a method of aerating tea leaf in a store?	
Distractors and correct answers	A. FluffingB. SortingC. WeighingD. Transporting	

Key (answer)	A
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DIT/ QS	Test Item Database Written (Theory) Test Item- no. 6				
Occupational Title:	Tea Farmer				
Competence level:	Level 1				
Code no.					
	Short answer	M2			
	Multiple choice				
Test Item type:	Matching item	Generic	Cause- Effect	Work- sequence	
	\checkmark				
Complexity level:	C2				
Date of OP:	August 2020				
Related module:	M2				
Time allocation:	5 minutes				

Test ItemMatch the listed items in column (A) to their functions in
Column(B)

Colu	umn A (Items)	Column B (Functions)	
1	Herbicides	A	Spraying
2	Ное	В	Control Weeds
3	Fungicides	С	Control Diseases
4	Pump	D	Dig Holes

Key (answer)	1 – B, 2 – D, 3 – C, 4 – A
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DIT/ QS	Test Item Database Written (Theory) Test Item- no. 7					
Occupational Title:	Tea Farmer					
Competence level:	Level 1					
Code no.						
	Short answer					
	Multiple choice					
Test Item type:	Matching item	Generic	Cause- Effect	Work- sequence		
Complexity level:	C3					
Date of OP:	August 2020					
Related module:	M2					
Time allocation:	5 minutes					

Test Item

Ma

Match the following symptoms with their causes.

Column A (Symptoms)		Column B (Causes)	
1	Defoliated leaves	А	Fungi
2	Sooty brown leaves	В	Nematodes
3	Roots knots	С	Leaf hoppers
4	Root rots	D	Aphids

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

DIT/ QS	Test Item Database Written (Theory) Test Item- no. 8					
Occupational Title:	Tea Farmer	Tea Farmer				
Competence level:	Level 1					
Code no.						
	Short answer					
	Multiple choice					
Test Item type:	Matching item	Generic	Cause- Effect	Work- sequence		
			\checkmark			
Complexity level:	Сз					
Date of OP:	September 2020					
Related module:	Μ					
Time allocation:	6 minutes					

Test Item

Match the following farm practices with their purpose

Column A (Farm Practice)		Column B (Effect)		umn B (Effect)
1	Gap filling	1	A	Control of soil erosion
2	Pruning	E	В	Increased production of tea leaf
3	Planting across the gradient	(С	Healthy growing tea leaf
4	Pest and disease control	ſ	D	Correct plant population per unit area
5		E	E	Improved soil nutrition

Key (answer)	1 – D, 2 – B, 3 – A, 4 – C
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DIT/ QS	Test Item Database Written (Theory) Test Item- no. 9				
Occupational Title:	Tea Farmer				
Competence 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:	September 2020				
Related module:	M1				
Time allocation:	5 minutes				

Test Item Arrange the following order when establish	g field operations in their chronological hing a tea garden
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Column A (chronology	Column B (work steps) in wrong chronological order	
1 st	А	Clear field
2 nd	В	Line and peg
3 rd	С	Plant seedlings
4 th	D	Dig out holes
5 th	Е	Prepare planting materials
6 th	F	Water
7 th	G	Cultivate soil

Key (answer)	1:A, 2:G, 3:E, 4:B, 5:D, 6:C, 7:F
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PERFORMANCE TEST ITEMS (SAMPLES)

DIT/ QS	Test Item Database Performance Test Item- no.10	
Occupational Title:	Tea Farmer	
Competence level:	1	
Code no.		
Test Item:	Prepare a 25m ² (5x5) garden for planting tea	
Complexity level:	P2	
Date of OP:	August 2020	
Related modules:	M1	
Related skills and knowledge:	land preparation, measurements and dimensions, cultivation of fields, tillage, lining and pegging, fertiliser application, soil and water conservation measures, waste management, ring barking of trees, seasonal calendar for tea, tools and equipment for preparing tea garden, weather pattern, soil properties, soil testing, soil pH	
Required tools, Materials and Equipment:	Hand hoe, slasher, A-frame, panga, hole digger, forked hoe, rake, first aid box, strings, pegs, markers, fertilisers, gumboots, overall, gloves, tape measures, stationery	
Time allocation:	6 hours	
Preferred venue:	Farm	
Remarks for candidates	Have personnel protective gearObserve occupational health safety	
Remarks for assessors	 Provide necessary tools, equipment and material Allocate each trainee a piece of land 	

# Assessment	Scoring guide	Max. Score		
п	criteria		Process	Result
1	Preparation	Wore personnel protective gear:		1
	before task	Overall		1
		Gum boots		1
		Hand gloves		1
		Head gear		
		Assembled tools, equipment and materials		1
2	Clear land	Cleared site	2	
		Removed debris from garden	2	
		Collected debris observed		2

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# Assessment		Scoring guide	Max.	Max. Score	
#	criteria	Scoring guide	Process	Result	
		cleared site observed		2	
		Tilled land	3		
		Coarse tilth observed		2	
3	Soil and water conservation	Constructed ditches	3		
	conservation	Ditches a cross gradient observed		2	
4	Lining and pegging of field	Measured field	4		
	pegging of heid	Demarcated field observed		2	
		Lined and pegged field along gradient	2		
		Lined and pegged field observed		2	
5	Dig planting holes	Dug planting holes	4		
	noies	40cm x 25cm holes observed		2	
6	Apply organic manure	Mixed manure in soil	3		
	manure	Black soil observed		2	
7	Demobilised resources	Cleaned tools and equipment	2		
	resources	Collected unused materials	2		
		Returned tools, equipment and unused materials to store		2	
		Cleared work area	2		
		Disposed waste	2		
		Removed protective gear		1	
	TOTAL		31	24	
	MAXIMUM SCORE (Y)	$\frac{x}{y}$ x 100	5	5	

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Test Item Database		
DIT/ QS	Performance Test Item- no.11	
Occupational Title:	Tea Farmer	
Competence level:	Level 1	
Code no.		
Test Item:	Plant tea seedlings in a block of 25m ² (5m x 5m)	
Complexity level:	P1	
Date of OP:	September 2020	
Related module:	M1.1	
Related skills and knowledge:		
Required tools, Materials and Equipment:	Hand hoe, razor blade, seedlings, water, watering can, palm leaves(dry), strings,	
Time allocation:	4 hours	
Preferred venue:	Farm	
Remarks for candidates	 Avail personnel protective gear Observe health, safety and environmental protection precautions 	
Remarks for assessors	 Provide all the tools, equipment and materials Provide seedlings Avail tilled garden Provide phosphate rich fertilisers 	

#	Assessment	Scoring guide	Max. Score	
"	criteria		Process	Result
1	Preparation before task	Wore protective gear Overall Gumboots Gloves Head gear Assembled tools and equipment		1 1 1 1 2
2	Prepare planting holes	Demarcated required area	2	

	Assessment	Max Sc	Max. Score		
#	criteria	Scoring guide	Process		
		5mx5m area verified		2	
		Marked out recommended spacing	2		
		Dug planting holes	2		
		Holes at recommended spacing and depth observed		4	
		Applied fertilisers in the hole		2	
3	Plant tea seedlings	Removed seedlings from sleeves	2		
		Seedlings with soil cylinder observed		2	
		Placed seedlings in holes	2		
		Seedlings placed in centre of hole observed		2	
		Refilled holes with top soil	2		
		Firmed the soil	2		
		³ ⁄ ₄ filled holes observed		3	
3	Demobilized	Collected rubbish and waste materials	2		
	resources	Remains of polythene pots collected observed		3	
		Cleaned tools and equipment	2		
		Collected unused materials	2		
		Stored tools, equipment and unused materials		2	
		Cleared work area	2		
		Disposed waste	2		
	TOTAL		24	26	
	MAXIMUM SCORE (Y)	$\frac{x}{y} \times 100$	5	50	

UVQF: Assessment and Training Package (ATP) for a TEA FARMER QUALIFICATION I FVFI 1

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

	Test Item Database	
DIT/ QS	Performance Test Item- no.12	
Occupational Title:	Tea Farmer	
Competence level:	Level 1	
Code no.		
Test Item:	Harvest and prepare 6kg tea leaf for marketing	
Complexity level:	P2	
Date of OP:	September 2020	
Related module:	M1.3	
Related skills and knowledge:	Tools and equipment usage and handling, waste management, Packing tea leaf	
	Fluffing, transportation, weighing and loading tea leaf, tools, management practices, determining mature field, harvesting methods, plucking standards, measurement and dimension, record keeping, sorting and grading tea leaf	
Required tools, Materials and Equipment:	Shears, plucking wand, Baskets, plucking cape, gumboots, hats, collecting sheds, weighing scales, tarpaulin, overall, packing bags	
Time allocation:	4 hours	
Preferred venue:	Farm	
Remarks for candidates	 Avail personnel protective gear Observe health, safety and environmental protection precautions 	
Remarks for assessors	 Provide all the tools, equipment and materials Provide plantlets Avail field for harvesting 	

Assessment criteria	Scoring guide	Max. Score	
		Process	Result
Preparation before task	 Wore protective gear Overall Gumboots Hats Plucking capes Assemble tools and equipment 		1 1 1 2
	criteria Preparation	criteriaScoring guidePreparation before taskWore protective gear• Overall • Gumboots • Hats • Plucking capes	CriteriaScoring guideProcessPreparation before taskWore protective gearImage: Constraint of the second

UVQF: Assessment and Training Package (ATP) for a TEA FARMER QUALIFICATION LEVEL 1 Dec

December 2020

#	Assessment criteria	Scoring guide		Max. Score	
			Process	Result	
2	Pluck tea leaf	Plucked tea leaf	4		
		Soft mature leaf observed in the basket		4	
		Uniform plucking table observed	2		
		Transported tea leaf to weighing shed	2		
		Weighed plucked leaf	2		
		Removed stalks	2		
		Removed coarse leaf	2		
		Heaped tea leaf on a clean surface in the shed		3	
		Young leaf observed in the shed		3	
3	Manage tea	Fluffed tea leaf	3		
	leaf	Spread tea leaf	2		
		Aerated tea leaf observed		1	
		Sorted tea leaf	3		
		Removed unwanted material	3		
		Clean sorted leaf observed		1	
		Loaded tea leaf in delivery bags		2	
		Weighed tea leaf	2		
		Delivered tea leaf	2		
		Cleaned weighing shed	2		
		Clean weighing shed observed		2	
4	Demobilized resources	Collected rubbish and waste materials	2		
		Remains of polythene pots collected observed		2	
		Cleaned tools and equipment		2	
		Collected unused materials		2	
		Stored tools, equipment and unused materials		2	
		Cleared work area		2	
		Disposed waste		2	
	Total		33	34	

UVQF: Assessment and Training Package (ATP) for a TEA FARMER

QUALIFICATION LEVEL 1		December 2020		
#	Assessment criteria	Scoring guide	Max. Score	
			Process	Result
	MAXIMUM SCORE (Y)	$\frac{x}{y} \times 100$	6	67

4.0 ATP- PART IV

INFORMATION ON DEVELOPMENT PROCESS

4.1 Occupational Profile Development (September 2020)

The Occupational Profile was exclusively developed by job practitioners who were working in the TEA 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 (September 2020)

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

4.3 Test Item Development (SEPTEMBER 2020)

Based on the <u>Occupational Profile</u> for Tea Farmer of September 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. Musinguzi Edward	Abamutsinguzi Tea Grower
2.	Mr. Mubangizi Seliano	Kareema's Farm
3.	Ms Nnyanzi Flavia	NCDC Kyambogo
4.	Mr.Oryem Richard	UNEB Examiner Mubende Light SS
5.	Mr. Bamutulaki Wilson	Tea Farmer
6.	Mr. Namande Josephine	Nkokonjeru Secondary School
7.	Mr. Mutambo Rodgers Wabuyobo	UNEB Examiner Cardinal Nsubuga SSS Nyenga
8.	Mr. Japheth Tugume	Freelance Tea Consults
9.	Mr. Ssemyalo Julius	SOLIDARIDAD
10.	Mr. Kaahwa Alex	Mpanga Growers Tea Factory Ltd
11.	Mr. Turinabo Godfrey	Igara Growers Tea Factory Ltd

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
6	Mulumba Mathais Mutema	NCDC

4.6 Facilitator team

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

- 1. Team Leader: Ms. Mukyala Ruth, Ag Deputy Director, DIT
- 2. Facilitators (Occupational Profile review):

Mr. Kibira Benjamin,

Ms. Tuhirirwe Doreen, DIT.

3. **Facilitators** (Training Modules review):

Mr. Kibira Benjamin,

Ms. Tuhirirwe Doreen, DIT.

4. **Facilitators** (Test Item review):

Mr. Kibira Benjamin

Ms. Tuhirirwe Doreen, DIT.

- 5. **Compiled by**: Mr. Tusubiira Samson Asiimwe
 - Ms. Mutonyi Sharon

Mr. Ssemakula Martin Data Entrant, DIT

Edited by Ms. Mukyala Ruth Ag. DD, DIT, Qualification

Standards Dept. DIT

6. **Coordinated by:**Mr. Byakatonda Patrick, Ag. Director, DIT.

4.7 Reference time:

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

References:

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



