



THE REPUBLIC OF UGANDA
Ministry of Education and Sports

Directorate of Industrial Training



**Assessment and Training
Package**

**For a
BANANA FARMER**

Qualification Level: 1

Occupational Cluster: Agriculture

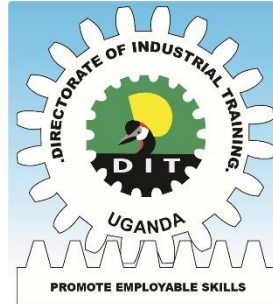
September 2020

Reviewed by:

**Qualifications Standards Department
Directorate of Industrial Training**

Supported by:

Government of Uganda



Assessment and Training Package

For a

BANANA 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 **BANANA 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 BANANA FARMER.** This Occupational Profile which was reviewed by Banana farmers practicing in the world of work mirrors the duties and tasks that Banana farmers are expected to perform.
- 0.2 **PART II: Training Modules** in the form of guidelines to train banana 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 BANANA FARMER. These assessment instruments were reviewed jointly by job practitioners (Banana 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 **WHAT a person is expected to do** competently in the world of work, the test items, - including performance criteria- of PART III qualify the **HOW 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.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 Banana 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
GAPs	Good Agricultural Practices
GMPs	Good Manufacturing Practices
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	(Occupational) competence is understood as the ability to perform tasks common to an occupation at an acceptable level.
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 programs: <ol style="list-style-type: none">1. have content directly related to work2. focus is on 'doing something well'3. assessment is based upon industry work standards, and4. 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)	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.
Modules	Modules are part(s) of a 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)	<p>An Occupational Profile is an overview of the duties and tasks a job incumbent is expected to perform competently in employment.</p> <p>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.</p>

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 recognition for demonstrating competence, based on formal assessment against set standards. A qualification is provided to the individual in 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 BANANA FARMER

- 1.1 The OCCUPATIONAL PROFILE (OP) for “Banana Farmer” below defines the **Duties** and **Tasks** a competent Banana 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.”¹

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 are listed on the following page.

Job Expert Panel

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Jinja College (UNEB Examiner)

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Babirye Pamela
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Funded by
The Government of Uganda



THE REPUBLIC OF UGANDA
Ministry of Education and Sports

Directorate of Industrial Training

Occupational Profile

For a

"BANANA FARMER"

**Developed by: Qualification Standards Department of
the Directorate of Industrial Training**

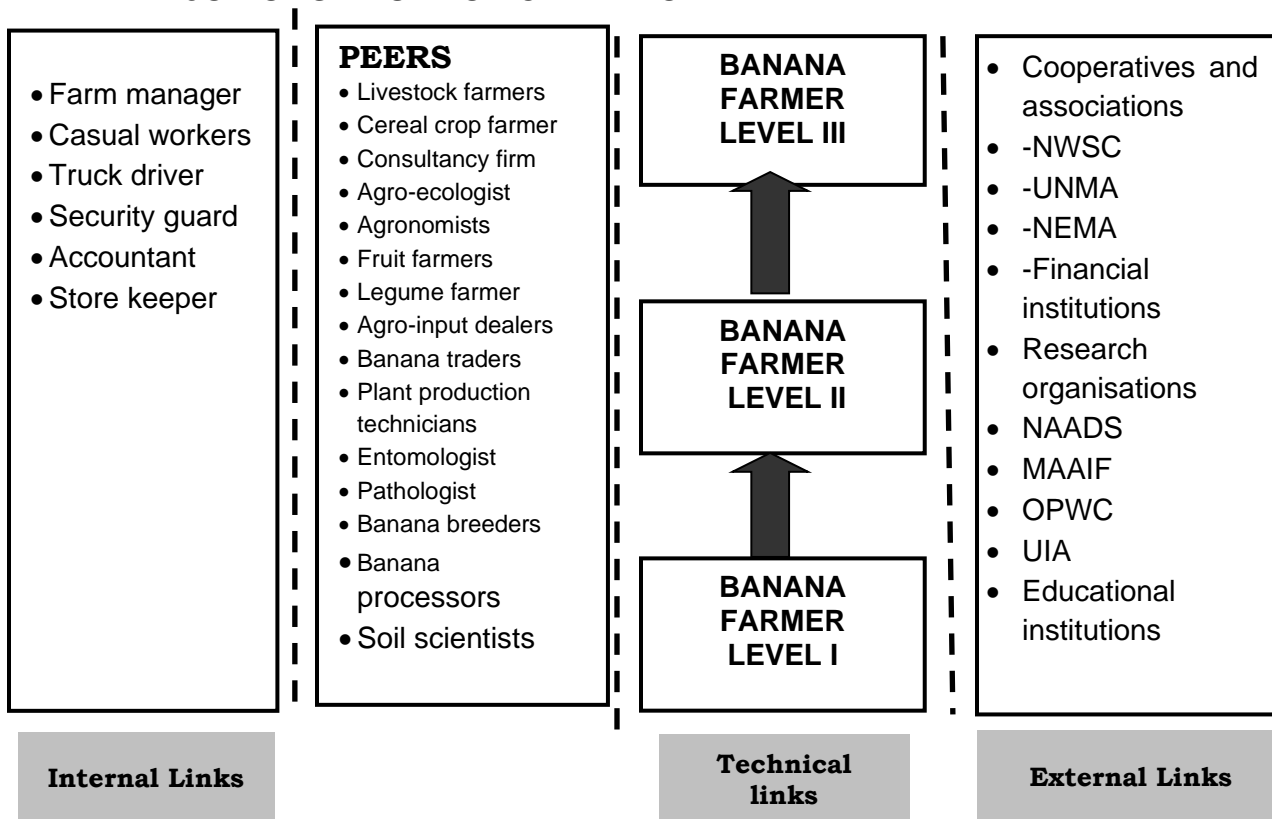
Dates of workshop:

24th August-4th September 2020

NOMENCLATURE FOR THE OCCUPATION OF BANANA FARMER

Definition: Is a person who grows and maintains banana plantation for domestic or commercial purposes.

JOB ORGANISATION CHART FOR A BANANA FARMER



Descriptions for the levels in the occupation of Banana Farmer

UVQ Level I Banana Farmer; Is a person who grows bananas using basic agronomic technologies and hand tools.

UVQ Level II Banana Farmer; Is a person who grows bananas using improved agronomic technologies and mechanised systems.

UVQ Level III Banana Farmer; Is a person who grows a specific species of bananas using advanced agronomic practices.

Duties and Tasks

A. PLAN BANANA FARMING WORKS	A1 Conduct research on bananas	A2 Determine market	A3 Determine resource needs
	A4 Prepare budget	A5 Determine resources	A6 Identify farm location
	A7 Prepare work schedules		

B. ESTABLISH BANANA PLANTATION	B1 Select site	B2 Clear site	B3 Identify banana cultivars
	B4 Plough site	B5 Set out site	B6 Dig holes
	B7 Acquire banana suckers	B8 Prepare suckers	B9 Plant suckers
	B10 Gap fill garden		

C. MAINTAIN BANANA PLANTATION	C1 Plant wind breaks	C2 Control weeds	C3 De-sucker bananas
	C4 Train suckers	C5 De-trash banana	C6 Remove male buds
	C7 Bag bananas	C8 Stake bananas	C9 Harvests banana products
	C8 Mattock banana	C9 Remove banana corms	C10 Chop banana corms and pseudo stems
	C11 Fork banana plantation	C12 Conserve soil and water	C13 Control pests and diseases

D. MARKET PRODUCTS	D1 Strip produce	D2 Clean produce	D3 Grade products
	D4 Package products	D5 Brand products	D6 Label products
	D7 Store products	D8 Advertise products	D9 Transport products
	D10 Sell products	D11. Participate in trade fares and exhibitions	

E. PERFORM OCCUPATIONAL SAFTY, HEALTH AND ENVIRONMNTAL PROTECTION PRACTICES	E1 Provide sanitary facilities	E2 Use protective gears	E3 Fence farm
	E4 Manage waste	E5 Sensitise workers on health issues	E6 Perform GAP and GMP
	E7 Prevent fires	E8 Display safety notices	E9 Administer first aid

F. PERFORM ADMINISTRATIVE TASKS	F1 Register banana enterprise	F2 Keep records	F3 Manage human resources
	H4 Manage finances	H5 Participate in meetings	H6 Insure banana enterprise
	H7 Visit model farms	H8 Upgrade skills	H9 Network with peers and other stakeholders

Additional Information

<p>Related knowledge & skills</p> <ol style="list-style-type: none"> 1. Operation and maintenance of tools and equipment 2. Waste management 3. Record keeping 4. Time management 5. Marketing skills 6. Resource mobilisation and management 7. Problem solving 8. First aid 9. Banana disease signs and symptoms 10. Leadership and human resource management 11. Banana cultivars and varieties 12. Planning skills 13. Training and mentoring 14. Banana growth and development stages 15. Fertiliser preparation and application 16. Harvesting of bananas 17. Soil and water conservation techniques 18. Environmental changes 19. Stock/Mat management 20. Planting techniques 21. Weed control 22. Forking 	<ol style="list-style-type: none"> 23. Farm structures e.g fencing 24. Suckers preparation and treatment 25. Selection of tools and Equipment 26. Corn removal 27. Interpersonal skills 28. Soil conservation, soil sampling and testing 29. Site selection 30. Business skills 31. Accounting skills 32. Hygiene and biosecurity 33. Good agricultural practices 34. Planting materials 35. Rooting media 36. Banana marketing skills 37. Sucker management 38. Identification of fertile indicators 39. Planning skills 40. Communication skills 41. Market trends 42. Soil types for banana growth 43. Seasons 44. Budding 45. De-trashing
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Tools, Equipment and Materials	
1. Wheelbarrow	18. Visitor's book
2. Pangas	19. Manure and fertilizers
3. First aid box	20. Tape measure
4. Knap sack sprayer	21. Spades
5. Hoes	22. Stakes
6. Packing materials	23. Sickles
7. Ropes and strings	24. Gloves
8. Gumboots	25. Watering can
9. Record books	26. Protective wears
10. Slashers	27. Trucks
11. Barbed wires	28. Axes
12. Nails	29. Tractor
13. Hammer	30. Pegs
14. Computer	31. Mulches
15. Knives	32. Pesticides and herbicides
16. Pruning knife	33. Suckers/Plantlets
17. Store	34. Irrigation system
	35. Trowel
	36. Rake
	37. Forks
	38. Cement
	39. Sand
	40. Water
	41. Builders square
	42. Spirit level
	43. Timber
	44. Stakes

Attitudes / Traits / Behaviour	Future Trends and Concerns
<ol style="list-style-type: none"> 1. Self-motivation 2. Trustworthy 3. Hardworking 4. Team work 5. Disciplined 6. Good time manager 7. Committed 8. Patient 9. Good listener 10. Confident 11. Respectful 12. Responsible 13. Exemplary 14. Trainable 15. Self-motivated 16. Passionate 17. Tolerant 18. Opportunistic 19. Emotional tolerance 20. Polite 21. Faithful 22. Cooperative 	<ol style="list-style-type: none"> 1. Climate change 2. Increased land pressure 3. Increased costs of banana production 4. Perish ability and lack of preservation techniques 5. Genetic erosion 6. Limited market 7. Price fluctuations 8. Rapid population 9. Limited capital 10. Political tension 11. Lack of land 12. Infertility of the soils 13. Limited research 14. Competition 15. Increased pests and diseases 16. Benchmarking with other banana farmers 17. Value addition 18. New emerging technologies 19. Self-criticism 20. Inadequate networking 21. Limited technology 22. Limited management skills 23. Sub-standard agricultural chemicals on market 24. Poor extension services

2.0 ATP – PART II

Training Modules for a BANANA 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 that provides the benchmark for Curriculum development as well as assessment.
- 2.2 This modular format of the curriculum allows learners of banana farmer 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 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.
- 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, at the workplace; or a combination of both.

WHO IS A BANANA FARMER LEVEL 1?

A **Banana Farmer level 1** is a person who selects land, prepares it, prepares planting materials, carries out routine banana plantation management practices and harvests bananas for domestic and commercial purposes.

TRAINING MODULES FOR BANANA FARMER LEVEL 1

Code	Module Title	Average duration	
		Contact hours	Weeks
UE/BF/M1.1	Establish Banana Farming Enterprise	160	4
UE/BF/M1.2	Establish Banana Plantation	400	10
UE/BF/M1.3	Maintain Banana Plantation	480	12
UE/BF/M1.4	Market Banana Products	240	5
Summary	4 Training Modules	1280	31weeks

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 160hours 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 learner should be able to satisfactorily perform the included Learning Working Assignments, their practical exercises and attached theoretical instructions, as the minimum exposure.

Prior to summative assessment by recognised Agencies, the users of these Modules 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/BF/M1.1
Module title	M1.1: Establish Banana Farming Enterprise
Related Qualification	<u>Part of</u> Uganda Vocational Qualification (Banana Farmer UVQ1)
Qualification Level	1
Module purpose	After the completion of this module the trainee shall be able to effectively plan and establish a banana enterprise.
Learning-Working Assignments (LWAs)	<p>LWA 1/1: Plan Enterprise LWA 1/2: Perform Administrative Tasks LWA 1/3: Perform occupational Safety, Health and Environmental Protection Practices</p> <p>Note:</p> <ol style="list-style-type: none"> 1. <i>The learning exercises may be repeated until the trainee acquires targeted competence;</i> 2. <i>The trainer/instructor is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.</i>
Related Practical Exercises (PEXs)	<p>LWA 1/1: Plan Enterprise</p> <p>PEX 1.1: Develop banana business idea PEX 1.2: Conduct research on bananas PEX 1.3: Determine market PEX 1.4: Determine human resource needs PEX 1.5: Determine financial resource needs PEX 1.6: Determine tools, equipment and materials needed PEX 1.7: Locate farm PEX 1.8: Make budget PEX 1.9: Determine the source of resources PEX 1.10: Prepare work schedules PEX 1.11: Determine land requirements</p>
	<p>LWA 1/2: Perform Basic Administrative Tasks</p> <p>PEX 2.1 : Manage finances PEX 2.2 : Recruit workers PEX 2.3 : Train workers PEX 2.4 : Supervise works PEX 2.5 : Motivate workers PEX 2.6 : Attend meetings PEX 2.7 : Keep records</p>

	<p>PEX 2.8: Remunerate workers PEX 2.9: Communicate with stakeholders PEX 2.10: Manage conflicts PEX 2.11: Audit business PEX 2.12: Procure farm inputs PEX 2.13: Insure business PEX 2.14: Maintain tools and equipment</p> <p>LWA 1/3: Perform Occupational Safety, Health and Environmental Protection Practices</p> <p>PEX 3.1: Wear protective gear PEX 3.2: Manage waste PEX 3.3: Sensitise workers on health PEX 3.4: Perform firefighting PEX 3.5: Display safety notices PEX 3.6: Administer first aid PEX 3.7: Maintain hygiene and sanitation PEX 3.8: Observe occupational health,safety and environmental rules and regulations</p>
Occupational health and safety	Precautions, rules and regulations on occupational health, safety and environmental protection, included in the listed should be observed and demonstrated during LWAs and PEXs
Pre-requisite modules	None
Related knowledge/ theory	<p><i>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:</i></p> <ul style="list-style-type: none"> • Basic entrepreneurship skills and knowledge • Budgeting • Basics of research, planning and resource allocation • Statutory bodies and regulations • Resource mobilisation • Financial literacy • Basics of construction • Store management • Waste management and disposal,
Average duration of learning	<p>160 hours (20 days) of nominal learning suggested to include:</p> <ul style="list-style-type: none"> • 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	calculator, computer, mobile phones, PPE, means of transport, first aid kit
Minimum required materials and consumables or equivalent	stationery, airtime and data, books of accounts, legal documents
Special notes	

Code	UE/BF/M1.2
Module title	M1.2: Establish Banana Plantation
Related Qualification	<u>Part of</u> Uganda Vocational Qualification (Banana Farmer UVQ1)
Qualification Level	1
Module purpose	At the end of this module a trainee shall be able to establish a banana plantation with related structures.
Learning-Working Assignments (LWAs)	<p>LWA 2/1: Construct Farm Structures</p> <p>LWA 2/2: Prepare Garden</p> <p>LWA 2/3: Prepare Planting Materials</p> <p>LWA 2/4: Plant Suckers/plantlets</p> <p>LWA 2/5: Protect Garden</p> <p>LWA 2/6: Perform Occupational Safety, Health and Environmental Protection Practices</p> <p><u>Note:</u></p> <p>1. The learning exercises may be repeated until the trainee acquires targeted competence;</p> <p>2. The trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.</p>
Related Practical Exercises (PEXs)	<p>LWA 2/1: Construct Farm Structures</p> <p>PEX 3.1: Construct store</p> <p>PEX 3.2: Fence land</p> <p>PEX 3.3: Construct sanitary facilities</p> <p>PEX 3.4: Construct workers houses</p> <p>PEX 3.5: Construct office</p> <p>PEX 3.6: Construct water reservoirs</p> <p>PEX 3.7: Construct access roads</p> <hr/> <p>LWA 2/2: Prepare Garden</p> <p>PEX 1.1: Select site</p> <p>PEX 1.2: Demarcate garden</p> <p>PEX 1.3: Sample soil</p> <p>PEX 1.4: Clear site</p> <p>PEX 1.5: Plough garden</p>

	<p>LWA 2/3: Prepare Planting Material PEX 3.1: Acquire planting materials PEX 3.2: Pare suckers PEX 3.3: Treat suckers</p> <p>LWA 2/4: Plant Suckers/Plantlets PEX 4.1: Dig planting holes PEX 4.2: Fertilise soil PEX 4.3: Fix plantlets/suckers PEX 4.4: Water plantlets/suckers PEX 4.5: Spot mulch suckers/plantlets</p> <p>LWA 2/5: Perform Occupational Safety, Health and Environmental Protection Practices PEX 5.1: Wear protective gear PEX 5.2: Manage waste PEX 5.3: Sensitise workers on health and safety issues PEX 5.4: Perform firefighting PEX 5.5: Display safety notices PEX 5.6: Administer first aid PEX 5.7: Plant wind breaks PEX 5.8: Observe rules and regulations</p>
Occupational health and safety	Precautions, rules and regulations on occupational health, safety and environmental protection, included in the listed should be observed and demonstrated during LWAs and PEXs
Pre-requisite modules	None
Related knowledge/ theory	<p><i>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:</i></p> <ul style="list-style-type: none"> • Soil fertility • Banana cultivars • Planting seasons of areas • Types of fertilisers • Soil sampling • Banana planting depth • Treatment of suckers • Water and soil conservation • Tools and equipment usage • Pests and disease control • Selection of planting materials

	<ul style="list-style-type: none"> • Methods of banana garden preparation (clearing bushes, Ploughing) • Herbicides • Preparation of planting materials • Agro forestry practices in banana growing • Waste management • First aid administration • Sanitisers and disinfectants • Planting techniques
Average duration of learning	400 hours (50 days) of nominal learning suggested to include: <ul style="list-style-type: none"> • 10 days of occupational theory and • 40 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	hoe, shovel, panga, sprayer, tractor, wheelbarrow, slashers, sucker treatment containers, PPE, first aid kit, axes, tape measure, knife, watering can, spade, fertiliser batching containers, means of transport, wheelbarrow, spades, water containers, hammer, wire strainers, tape measure, pliers, first aid kit, auger, shovel, axes, trowel, pangas, hoes,
Minimum required materials and consumables or equivalent	strings/ropes, planting materials, fertiliser, herbicides, mulches, pegs, pesticides, water, stationery, seeds/seedlings of hedge plants and wind breaks, cement, sand, bricks, aggregates, nails, roofing materials, poles, ladders, fencing materials
Special notes	<ul style="list-style-type: none"> • Procedure followed during soil sampling and the importance must be emphasised. • Importance of paring and treatment of suckers must be emphasised. • Proper handling and use of chemicals should be observed.

Code	UE/BF/M1.3
Module title	M1.3: Maintain Banana Plantation
Related Qualification	<u>Part of:</u> Uganda Vocational Qualification (Banana Farmer UVQ 1)
Qualification Level	1
Module purpose	At the end of this module, a trainee shall be able to maintain a banana plantation for maximum productivity
Learning-Working Assignments (LWAs)	<p>LWA 3/1: Conserve Water</p> <p>LWA 3/2: Conserve Soil Fertility</p> <p>LWA 3/3: Maintain Banana Mat</p> <p>LWA 3/4: Control Pests and Diseases</p> <p>LWA 3/5: Harvest Banana</p> <p>LWA 3/6: Weed Banana Plantation</p> <p>LWA 3/7: Maintain Records</p> <p>LWA 3/8: Perform Occupational Safety, Health and Environmental Protection Practices</p> <p>Note:</p> <ol style="list-style-type: none"> 1. The learning exercises may be repeated until the trainee acquires 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)	<p>LWA 3/1: Conserve Water</p> <p>PEX 1.1: Dig trenches</p> <p>PEX 1.2: Maintain trenches</p> <p>PEX 1.3: Irrigate banana plantation</p> <p>PEX 1.4: Mulch banana plantation</p> <hr/> <p>LWA 3/2: Conserve Soil Fertility</p> <p>PEX 2.1: Prepare fertilisers</p> <p>PEX 2.2: Apply fertilisers</p> <p>PEX 2.3: Fork garden</p> <p>PEX 2.4: Prepare biorationals</p> <hr/> <p>LWA 3/3: Maintain Banana Mat</p> <p>PEX 3.1: Desucker bananas</p>

	<p>PEX 3.2: Remove male buds</p> <p>PEX 3.3: Detrash banana plants</p> <p>PEX 3.4: Stake/prop bananas</p> <p>PEX 3.5: Perform gapfilling</p>
	<p>LWA 3/4: Control Pests and Diseases</p> <p>PEX 4.1: Bag banana</p> <p>PEX 4.2: Chop pseudo stem</p> <p>PEX 4.3: Observe quarantine</p> <p>PEX 4.4: Apply pesticides</p> <p>PEX 4.5: Rogue diseased plants</p> <p>PEX 4.6: Bury/burn diseased plants/ plant parts</p> <p>PEX 4.7: Disinfect tools and equipments</p> <p>PEX 4.8: Trap weavils</p> <p>PEX 4.9: Remove corms</p>
	<p>LWA 3/5: Harvest Bananas</p> <p>PEX 5.1: Harvest bunches</p> <p>PEX 5.2: Mattockbananas</p> <p>PEX 5.3: Uproot suckers</p> <p>PEX 5.4: Harvest fibres</p> <p>PEX 5.5: Harvest leaves</p> <p>PEX 5.6: Harvest male buds</p>
	<p>LWA 3/6: Weed Banana Plantation</p> <p>PEX 6.1: Perform manual weeding</p> <p>PEX 6.2: Apply herbicides</p> <p>PEX 6.3: Apply biological control agents</p> <p>PEX 6.4: Perform mechanical weeding</p>
	<p>LWA 3/7: Keep Records</p> <p>PEX 7.1: Keep production records</p> <p>PEX 7.2: Maintain inventory</p> <p>PEX 7.3: Maintain biosafety records</p> <p>PEX 7.4: Keep maintenance records</p>
	<p>LWA 1/8: Perform Occupational Safety, Health and Environmental Protection Practices</p> <p>PEX 8.1: Wear personnel protective gear</p> <p>PEX 8.2: Manage waste</p> <p>PEX 8.3: Sensitise workers on health issues</p> <p>PEX 8.4: Perform firefighting</p> <p>PEX 8.5: Display safety notices</p> <p>PEX 8.6: Administer first aid</p>

	<p>PEX 8.7: Maintain hygiene and sanitation</p> <p>PEX 8.8: Observe OHSE rules and regulations</p>
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	<p><i>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:</i></p> <ul style="list-style-type: none"> • Types of fertilisers and preparation (organic and inorganic) • Nutrition deficiency indicators and application of fertilisers • Pests, diseases and their control measures • Soil and water conservation practices, soil types and their suitability for bananas • Banana stool/mat management • Waste management • Storage and Maintenance of tools and equipment • Climatic conditions for banana growing • Irrigation methods • Topography • Physiology of banana plant • Weed control measures • Prevention of fire/fire fighting • Agroforestry in banana growing • Maturity indicators of bananas • Soil tests • Seasonal changes
Average duration of learning	<p>480 hours (60 days) of nominal learning suggested to include:</p> <ul style="list-style-type: none"> • 20 days of occupational theory and • 40 days of occupational practice
Suggestions organisation of learning	The acquisition of competencies (skills, knowledge, attitudes) described in this module may take place at a banana farm 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	hoe, shovels, panga, sprayer, wheelbarrow, PPE, first aid kit, tape measure, knife, spade, fertiliser batching containers, means of transport, A-frame, forked hoe, axes, detaching knife, forked stick, corm remover, desuckering tools, hammer, sickle, pliers, store
Minimum required materials and consumables or equivalent	stakes/props, bagging materials, fertilisers, pesticides, biorationals, nails, mulches,
Special notes	Handling and usage of fertilisers should follow the 4Rs i.e. Right (time, type, quantity and placement)

Code	UE/BF/M 1.4
Module title	M 1.4: Market Banana Products
Related Qualification	<u>Part of</u> Uganda Vocational Qualification (Banana Farmer UVQ1)
Qualification Level	1
Module purpose	At the end of this module, a trainee shall be able to prepare banana products and competitively sell them.
Learning-Working Assignments (LWAs)	<p>LWA 4/1: Add Value to Bananas LWA 4/2: Promote Banana Products LWA 4/3: Perform Occupational Safety, Health and Environmental Protection Practices</p> <p><u>Note:</u></p> <ol style="list-style-type: none"> 1. <i>The learning exercises may be repeated until the trainee acquires targeted competence;</i> 2. <i>The trainer is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment.</i>
Related Practical Exercises (PEXs)	<p>LWA 4/1: Add Value to Bananas PEX 1.1: Sort banana products PEX 1.2: Clean bananas PEX 1.3: Grade bananas PEX 1.4: Peel bananas PEX 1.5: Dry bananas PEX 1.6: Package banana products PEX 1.7: Brand banana products PEX 1.8: Label banana products</p> <p>LWA 4/2: Promote Banana Products PEX 2.1: Conduct market research PEX 2.2: Price products PEX 2.3: Advertise products PEX 2.4: Exhibit banana products PEX 2.5: Transport products PEX 2.6: Sell banana products PEX 2.7: Keep sales records</p>

	<p>LWA 4/3: Perform Occupational Health, Safety and Environmental Protection Practices</p> <p>PEX 3.1: Maintain hygiene and sanitation PEX 3.2: Manage waste PEX 3.3: Administer first aid PEX 3.4: Wear protective gear PEX 3.5: Observe quarantine PEX 3.6: Provide biosecurity measures PEX 3.7: Observe OHSE rules and regulations</p>
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	<p><i>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:</i></p> <ul style="list-style-type: none"> • Post harvest handling of bananas • GMPs • Marketing strategies • Branding and brand management • Pricing of products • Standardisation and certification of products • Transportation of banana products • Packaging of products • Record keeping • Financial literacy • Storage and preservation methods • Customer care • ICT
Average duration of learning	<p>240 hours (30 days) of nominal learning suggested to include:</p> <ul style="list-style-type: none"> • 10 days of occupational theory and • 20days 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	computer, telephone, means of transport, package sealers, dryers, weighing scale, printer, calculator, waste disposal units
Minimum required materials and consumables or equivalent	books of accounts, airtime, Internet, packaging materials, bank Account/MoMo, brochures, fliers and posters, stationery, stickers,
Special notes	

3.0 ATP- PART III

Assessment Instruments for a BANANA 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.
- 3.2 Assessment of occupational competence should comprise of both practical (performance) testing and written (theory/knowledge) testing.
- 3.3 Based on the Occupational Profile and Training Modules, 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 the Directorate of Industrial Training.
- 3.4 Performance (Practical) Test Items (PTI) are closely related to typical work situations in Ugandan business enterprises. They comprise of 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
 - 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, samples of test items for assessing both performance (practical) and occupational knowledge (theory) of a BANANA FARMER are included.

3.9 Overview of Test Item Samples Included

No	Type of test Items	Numbers included
1.	Written (Theory)- short answer	3
2.	Written (Theory)- multiple choice	3
3.	Written (Theory)- matching with generic	2
4.	Written (Theory)- matching with cause and effect	1
5.	Written (Theory)- matching with work-sequence	2
6.	Performance (Practical) test items	2
Total		13

WRITTEN TEST ITEMS (SAMPLES)

DIT/ QS	Test Item Database Written (Theory) Test Item- no. 1			
Occupational Title:	Banana Farmer			
Competence level:	Level 1			
Code no.				
Test Item type:	Short answer	√		
	Multiple choice			
	Matching item	Generic	Cause-Effect	Work-sequence
Complexity level:	C2			
Date of OP:	September 2020			
Related module:	M1.2			
Time allocation:	3 minutes			

Test Item	Give three reasons why a farmer would sample soil for testing before planting bananas in a new field
Answer spaces	(i) (ii) (iii)
Expected key (answers)	(i) Know nutrient content in the soil (ii) Plan for fertilisers (iii) Determine presence of disease-causing agents (iv) Determine the water holding capacity (v) Determine the soil PH (vi) Help correct nutrient deficiency

DIT/ QS	Test Item Database Written (Theory) Test Item- no. 2			
Occupational Title:	Banana Farmer			
Competence level:	Level 1			
Code no.				
Test Item type:	Short answer	√		
	Multiple choice			
	Matching item	Generic	Cause- Effect	Work- sequence
Complexity level:	C2			
Date of OP:	September 2020			
Related module:	M1.3			
Time allocation:	4 minutes			

Test Item	State any four signs of banana weevil infestation in banana plantation
Answer spaces	(i) (ii) (iii) (iv)
Expected key (answers)	(i) Splitting pseudo stems (ii) Die bark or dead heart (iii) Tunnelling of corms/pseudo stem (iv) Snapping of banana (v) Yellowing of leaves (vi) Rosetting of leaves

DIT/ QS	Test Item Database Written (Theory) Test Item- no. 3			
Occupational Title:	Banana Farmer			
Competence level:	Level 1			
Code no.				
Test Item type:	Short answer	√		
	Multiple choice			
	Matching item	Generic	Cause-Effect	Work-sequence
Complexity level:	C2			
Date of OP:	September 2020			
Related module:	M1.3			
Time allocation:	3 minutes			

Test Item	Give any three reasons why it is important to carryout mulching in a banana plantation
Answer spaces	(i) (ii) (iii)
Expected key (answers)	(i) Conserve soil moisture (ii) Suppress weed growth (iii) Maintain soil fertility (iv) Reduce soil erosion (v) Stabilise soil structures

DIT/ QS	Test Item Database Written (Theory) Test Item- no. 4			
Occupational Title:	Banana Farmer			
Competence level:	Level 1			
Code no.				
Test Item type:	Short answer			
	Multiple choice	√		
	Matching item	Generic	Cause-Effect	Work-sequence
Complexity level:	C2			
Date of OP:	September 2020			
Related module:	M1.3			
Time allocation:	2 minutes			

Test Item	Which one of the following is the main purpose of de-suckering in banana production?
Distractors and correct answer	<ul style="list-style-type: none"> A. Conserving moisture B. Decreasing population C. Conserving soil fertility D. Increasing yields

Key (answer)	D
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DIT/ QS	Test Item Database Written (Theory) Test Item- no. 5			
Occupational Title:	Banana Farmer			
Competence level:	Level 1			
Code no.				
Test Item type:	Short answer			
	Multiple choice	√		
	Matching item	Generic	Cause-Effect	Work-sequence
Complexity level:	C2			
Date of OP:	September 2020			
Related module:	M1.2			
Time allocation:	2 minutes			

Test Item	The main importance of observing quarantine in a banana enterprise is to.....
Distractors and correct answer	A. Protect environment B. Protect consumers C. Prevent disease spread D. Control losses

Key (answer)	C
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DIT/ QS	Test Item Database Written (Theory) Test Item- no. 6			
Occupational Title:	Banana Farmer			
Competence level:	Level 1			
Code no.				
Test Item type:	Short answer			
	Multiple choice	√		
	Matching item	Generic	Cause-Effect	Work-sequence
Complexity level:	C1			
Date of OP:	September 2020			
Related module:	M1.3			
Time allocation:	2 minutes			

Test Item is a process involved in harvesting bananas
Distractors and correct answer	A. Chopping bananas B. Bagging bananas C. Mattocking pseudo stem D. Uprooting corm

Key (answer)	C
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DIT/ QS	Test Item Database Written (Theory) Test Item- no. 7			
Occupational Title:	Banana Farmer			
Competence level:	Level 1			
Code no.				
Test Item type:	Short answer			
	Multiple choice			
	Matching item	Generic	Cause-Effect	Work-sequence
		√		
Complexity level:	C2			
Date of OP:	September, 2020			
Related module:	M1.3			
Time allocation:	4 minutes			

Test Item	Match the following practices with their purposes
------------------	---

Column A (practices)	
1	Desuckering
2	Removing male buds
3	Rogueing
4	Proping

Column B (purpose)	
A	Field hygiene
B	Disease and pest control
C	Maintain soil moisture
D	Improve banana finger size
E	Maintain optimum plant population
F	Prevent logging

Key (answer)	1-E, 2-D, 3-B, 4-F
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DIT/ QS	Test Item Database Written (Theory) Test Item- no. 8			
Occupational Title:	Banana Farmer			
Competence level:	Level 1			
Code no.				
Test Item type:	Short answer			
	Multiple choice			
	Matching item	Generic	Cause-Effect	Work-sequence
		√		
Complexity level:	C2			
Date of OP:	September, 2020			
Related module:	M1.3			
Time allocation:	4 minutes			

Test Item	Match the following activities done in the maintenance of banana garden with their purposes
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Column A (Activity)	
1	Bag bananas
2	Apply herbicides
3	Spacing
4	Dig trenches

Column B (purpose)	
A	Increase bunch size
B	Conserve manure
C	Conserve water
D	Control weeds
E	Control pests and diseases
F	Package bananas

Key (answer)	1-E, 2-D, 3-A, 4-C
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DIT/ QS	Test Item Database Written (Theory) Test Item- no. 9			
Occupational Title:	Banana Farmer			
Competence level:	Level 1			
Code no.				
Test Item type:	Short answer			
	Multiple choice			
	Matching item	Generic	Cause-Effect	Work-sequence
			√	
Complexity level:	C2			
Date of OP:	September, 2020			
Related module:	M1.3			
Time allocation:	4 minutes			

Test Item	Match the following effects with their causes in banana management
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Column A (Effects)	
1.	Snapping
2.	Doubling
3.	Topling
4.	Budding

Column B (Causes)	
A	Beetles
B	Nematodes
C	Nutrient deficiency
D	Banana weevil
E	Wind
F	Fusarium wilt

Key (answer)	1-D, 2-E, 3-B, 4-F
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DIT/ QS	Test Item Database Written (Theory) Test Item- no. 10			
Occupational Title:	Banana Farmer			
Competence level:	Level 1			
Code no.				
Test Item type:	Short answer			
	Multiple choice			
	Matching item	Generic	Cause-Effect	Work-sequence
				√
Complexity level:	C2			
Date of OP:	September 2020			
Related module:	M1.2			
Time allocation:	4 minutes			

Test Item	Arrange the following activities performed when preparing banana garden in a chronological order
------------------	--

Column A (chronology)	Column B (work steps) in wrong chronological order	
1 st	A	Plough garden
2 nd	B	Select site
3 rd	C	Clear bush
4 th	D	Sample soil
5 th	E	Identify tools and equipment
6 th	F	Demarcate garden

Key (answer)	1-B, 2-E, 3-F, 4-D, 5-C, 6-A
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DIT/ QS	Test Item Database Written (Theory) Test Item- no. 11			
Occupational Title:	Banana Farmer			
Competence level:	Level 1			
Code no.				
Test Item type:	Short answer			
	Multiple choice			
	Matching item	Generic	Cause-Effect	Work-sequence
				√
Complexity level:	C2			
Date of OP:	September 2020			
Related module:	M1.3			
Time allocation:	4 minutes			

Test Item	Arrange the steps followed to trap weevils in a banana plantation
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Column A (chronology)	Column B (work steps) in wrong chronological order	
1 st	A	Cut the banana pseudo stem into pieces of 30cm long
2 nd	B	Split pieces into two halves
3 rd	C	Lay cut halves around the banana mat with the cut part on the ground
4 th	D	Use 4-5 stem pieces around each banana mat
5 th	E	Check for weevils after 2-3 days
6 th	F	Hand pick the weevils and destroy them

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

DIT/ QS	Test Item Database Performance Test Item- no. 12
Occupational Title:	Banana Farmer
Competence level:	Level 1
Code no.	
Test Item:	Select a sword sucker, prepare it using hot water treatment and plant it
Complexity level:	P2
Date of OP:	August 2020
Related module:	M1.2
Related skills and knowledge:	<ul style="list-style-type: none"> • Treatment of suckers • Tools and equipment usage, • Health and safety practices, • Trimming sucker • Planting and sucker preparation
Required tools, Materials and Equipment:	De-suckering shovel, panga, knife, hand hoe, gumboots, overall, heavy duty disposable gloves, metallic treatment containers, source of fire, water, pesticides and nematodes, thermometers, stop clock
Time allocation:	2 hours
Preferred venue:	Banana garden
Remarks for candidates	Candidates wear protective wear
Remarks for assessors	<ul style="list-style-type: none"> • Provide all the required tools, equipment and materials for assessment • Provide banana mats with sword suckers and water suckers

#	Assessment criteria	Scoring guide	Max Score	
			Process	Result
1	Preparation for the task	Wore protective gear i.e. Overall, Gum boots, Hand gloves		3
		Heated water	1	
		Heated water with temperatures between 50-60°C verified.		3
		Assembled all required tools and equipment and materials for the task		2

UVQF: Assessment and Training Package(ATP) for BANANA FARMER

QUALIFICATION LEVEL 1

September 2020

2	Selecting banana sucker	Identified sword sucker	2	
		Sucker not in succession cycle identified		2
		Uprooted sword sucker	2	
		No damage caused on mother plant		1
		No damage caused on uprooted sucker		1
		Trimmed sucker	1	
		Trimmed sucker of pseudo stem height not more than 1.5ft verified		2
		Sucker trimmed to a chisel shape observed		2
3	Preparation of banana sucker	Pared corm	2	
		Root free corm observed		1
		Soil free corm observed		2
		Corm without any tunnels observed		2
4	Treatment of suckers	Immersed pared sucker in hot water	2	
		A time lag of 20-30 minutes verified		1
5	Planting of banana sucker	Placed the sucker in hole	1	
		Sucker observed in the center of the hole		3
		Sucker cushioned with sub soil	1	
		layer of subsoil is observed		1
		Buried sucker with top soil	2	
		Soil covering of thickness of 3-4cm observed		3
6	Perform post planting tasks	15cm depression of planting hole filled to $\frac{3}{4}$ way observed		4
		No compaction of top soil observed		2
		Recorded date of planting sucker		1
		Cleaned tools and equipment		1
		Stored tools and equipment		1
		Removed PPEs		1
TOTAL			14	39
Maximum score (Y)		(X/Y)	53	

DIT/ QS	Test Item Database Performance Test Item- no. 13
Occupational Title:	Banana Farmer
Competence level:	Level 1
Code no.	
Test Item:	You are provided with 6 mats of banana, train suckers, de-trash the mats, apply composite manure and harvest a bunch of cooking bananas for sale
Complexity level:	P2
Date of OP:	August 2020
Related module:	M1.3
Related skills and knowledge:	<ul style="list-style-type: none"> • Soil fertilisation • Mat management • Disease and pest control • Harvesting and post-harvest handling • Management of tools • Personal hygiene • Occupational health and safety,
Required tools, Materials and Equipment:	Forked hoe, de-suckering shovel, panga, knife, wheel barrow, compost manure, containers, disinfectant, PPE, spade, corm remover, de-trashing knife, A plot of six mats with mature cooking banana, corm due for removal, number of suckers and unkempt mats)
Time allocation:	4 hours
Preferred venue:	Banana garden
Remarks for candidates	Candidates wear protective wear
Remarks for assessors	Provide 6 banana mats with the following requirements <ul style="list-style-type: none"> • Mature cooking banana • Corm due for removal • A number of suckers due for de-suckering and kempt mats

#	Assessment criteria	Scoring guide	Max. Score	
			Process	Result
1	Preparation for task	Wore protective gear i.e. Overall Gum boots Hand gloves Mask		1 1 1 1
		Assembled all the required tools and materials		1
		Disinfected tools and equipment	3	
2	Harvesting of banana bunch	Identified a banana bunch to harvest	2	
		Banana bunch with pale green fingers without pronounced ridges identified		3
		Cut banana stem	2	
		No clean cut through the pseudo stem observed		2
		Supported the banana	3	
		No damage to the remaining suckers		3
		Cut the banana bunch from the stalk	1	
		The cut should be in the same line with the cluster		2
		Intact bunch observed		2
		Cleaned banana bunch	1	
		Bunch free from any foreign material observed		1
3	Removing of Corm	Identified corm due for removal	2	
		Corm not supporting the follower removed		4
		Removed corm	2	
		No remains of the corm observed in the soil		4
4		Identified suckers to be removed	2	

#	Assessment criteria	Scoring guide	Max. Score	
			Process	Result
	Training of suckers	Uprooted identified suckers	2	
		Only vigorous and healthy suckers retained		4
		All excess suckers removed		4
		Mat position maintained		4
		No injury observed on the remaining plants		3
		Backfilled the hole with soil	1	
5	Application of manure	Cleaned around the selected mat	1	
		Trash free area around the cleaned mat observed		2
		A radius of 1metre around the mat maintained		4
		Applied manure around the mat	2	
		A radius of 60cm away from the plants observed		4
		Forked manure into the soil	2	
		No damage caused on the roots		2
		Covered the manure	2	
		Mulches observed at a radius of 60cm away from the plants		4
6	De-trashing of mat	Removed trash from the mats	2	
		All dry fibers and leaves removed		2
		All hanging and discolored leaves removed		2
		No damaged caused on the banana plants		3
		Cut trash laid across the gradient at radius 60cm away from the banana plant		3
7	Demobilisation of resources	Assembled all the tools and equipment		2
		Cleaned and disinfected tools and equipment	2	

#	Assessment criteria	Scoring guide	Max. Score	
			Process	Result
		Dirt free tools and equipment observed		2
		Stored tools and equipment		1
		Handed over the harvested banana		1
TOTAL			34	74
Maximum score (Y)		(X/Y)	108	

4.0 ATP- PART IV

INFORMATION ON DEVELOPMENT PROCESS

4.1 Occupational Profile Development (August 2020)

The Assessment and Training Package was exclusively reviewed by job practitioners of the Banana Farmer occupation, Secondary school Teachers who double as examiners of Agriculture with the Uganda National Examinations Board (UNEB) and Curriculum Development Specialists working with the National Curriculum Development centre (NCDC).

The job expert panel, guided by UVQF Facilitators reviewed duties and tasks performed and provided additional generic information regarding the occupation.

4.2 Training Module Development (September 2020)

Based on the reviewed Occupational Profile for a Banana Farmer of August 2020, Training Modules were reviewed by job practitioners, guided by UVQF Facilitators.

4.3 Test Item Development (September 2020)

Based on the reviewed Occupational Profile for a Banana Farmer of August 2020, and Training Modules of September 2020, Test Items were reviewed by combined panels of Teachers 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 teachers and job practitioners' panels consolidated the development philosophy.

The panelists worked as teams in workshop settings complemented by off-workshop field research and literature review activities including international benchmarking.

4.5 Development Panels

The participating panels of Job Practitioners required at for the development exercise were constituted by members from the following organisations:

Development panel		
No.	Name	Institution/ Organisation
1.	Kyozaire B. Jolly	Kitante Hill School (UNEB Examiner)
2.	Ssentamu Pascal	St Joseph's Girls SS, Nsambya (NCDC)
3.	Tiberera Eve	Pearl Banana Farmers Association, Isingiro
4.	Luyima Jabaru	MOJCA, Local farmer, Ntungamo
5.	Chemutai Job Alunga	NARO, NACORI
6.	Tumusiime Geofrey	Pearl Banana Farmers, Mitooma
7.	Mwesigwa Peter	Kyabakuza Farmers
8.	Wasolo Nathan	Elgon View Farm, Manafwa
9.	Nkwatsibwe Adams	Nkwatsi Post harvest Consult, Mbarara
10.	Okurut Asher Wilson	NARO, Kawanda
11.	Ninsiima Bonita	St Patrick S.S. Ssembabule
12.	Elesu Moses	Buginyanya zonal research development institute (Bugizrdi), Mayuge
13.	Egwal Benson Victor	Jinja College (UNEB Examiner)
14.	Kanyesigye Adadi	PIBID-Bushenyi

4.6 Facilitator team

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

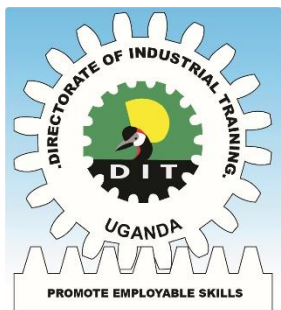
1. **Team Leader:** Ms. Mukyala Ruth, Ag Deputy Director, DIT
2. **Facilitators:** Ms. Kyarizi Lovance QO/DIT
Babirye Pamela DE/QS DIT.
3. **DIT Data Entrants:** Mr Mawata Grace
Ms. Turyasingura Yussuf
Ms Asimwe Janet
4. **Compiled by:** Babirye Pamela DE/QS DIT and
5. **Edited by:** Ms. Mukyala Ruth Ag. Deputy Director QS Dept. DIT
6. **Coordinated by:** Mr Byakatonda Patrick, Ag. Director, DIT;
Ms. Mukyala Ruth Ag. DD Qualification Standards Dept. DIT

4.7 Reference time:

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

References:

1. Abruna, F, Vicente- Channler, J, Irizarry, H, and Silva. S. (1980). *Eva transpiration with plantations and the effect of frequency irrigation on yields*
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