



THE REPUBLIC OF UGANDA
Ministry of Education and Sports

Business, Technical, Vocational Education and Training [BTJET] Sub sector Reform



**Assessment and Training
Package**

For

IRISH POTATO FARMER

Qualification Level : 1

**Occupational Cluster : Agriculture, Natural
Resources And
Environment**

JANUARY 2022

Developed by:

Qualifications Standards Department

Directorate Of Industrial Training

Funded by:

Government of Uganda

DIRECTORATE OF INDUSTRIAL TRAINING

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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; and
- (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 define:

- (a) Occupational standards in the world of work;
- (b) Assessment standards;
- (c) 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 and
 - (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) Harmonizing 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 and
- 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 organizes 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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TABLE OF CONTENTS

WORD FROM PERMANENT SECRETARY	iv
EXECUTIVE SUMMARY	vi
ACKNOWLEDGEMENTS	viii
ABBREVIATIONS AND ACRONYMS	ix
KEY DEFINITIONS	x
1.0 ATP-PART I	1
OCCUPATIONAL PROFILE FOR AN IRISH POTATO FARMER	1
2.0 ATP-PART II	8
TRAINING MODULES FOR IRISH POTATO FARMER	8
3.0 ATP-PART III	25
ASSESSMENT INSTRUMENTS FOR IRISH POTATO FARMER	25
4.0 ATP- PART IV	36
INFORMATION ON REVIEW PROCESS	36

Word from Permanent Secretary

The Kajubi report (1989) and the Uganda Government White Paper on Education Review (1992) emphasized 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 force at all levels.

Correspondingly, the NDP III 2020/21- 2024/5 highlights (i) low labour productivity ;(ii) high youth unemployment (38%) and (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 students 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 emphasizes that students 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 emphasize practical skills, attitude and moral values.

Government of Uganda through the Ministry of Education and Sports rolled out the lower secondary school education 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 emphasized that vocational training will produce graduates who are employable. In the lower secondary school vocational 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 for the various occupations that will be assessed under the Lower Secondary Curriculum.

The ATP 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 developed “Assessment & Training Package (ATP)” for training, assessment and certification of an **IRISH POTATO FARMER-QUALIFICATION LEVEL 1**.

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

Ketty Lamaro

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 an **IRISH POTATO FARMER**. This Occupational Profile which was developed by Irish potato Farmers practicing in the world of work, mirrors the duties and tasks Irish Potato Farmers are expected to perform in the world of work.
- 0.2 **PART II: “Training Modules”** in the form of guidelines to train **Irish Potato Farmers** both on the job as well as in training centres (or combinations of both venues of learning). The Training Modules herein have been developed 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 an **Irish Potato Farmer**. These assessment instruments were developed jointly by job practitioners (Irish potato Farmer) and teachers 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 of time 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 students 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).

In this document, only sample test items for assessing (practical) performance and occupational knowledge (theory) are included. A larger selection of test items can be obtained from an electronic Test Item Bank at Directorate of Industrial Training.

1.7 The parts of this Assessment and Training Package were sequentially developed as follows:

- i Part 1: Occupational Profile: January 2022
- ii Part 2: Training Modules: January 2022
- iii Part 3: Assessment Instruments (initial bank): January 2022

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

Patrick Byakatonda
Ag Director

Acknowledgements

The Qualifications Standards Department of DIT wishes to sincerely acknowledge the valuable contributions to the review of this Assessment and Training Package by the following persons, Institutions and organizations:

- 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 of Agriculture in various Secondary schools;
- Agriculture Curriculum Specialists from NCDC;
- Examination Specialists from UNEB;
- The facilitators involved in guiding the development practitioners in their activities;
- The Government of Uganda for financing the development of this ATP;

Abbreviations and acronyms

A&C	Assessment & Certification
ATP	Assessment & Training Packages
BTVET	Business, Technical and Vocational Education and Training
CBET	Competency Based Education and Training
DIT	Directorate of Industrial Training
ITC	Industrial Training Council
GoU	Government of Uganda
LWA	Learning-working Assignment
MC	Modular Curriculum
MoES	Ministry of Education and Sports
OP	Occupational Profile
PEX	Practical Exercise
PTI	Performance (Practical) Test Item
QS	Qualification Standards
RPL	Recognition of Prior Learning
TIB	Test Item Bank
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	<p>(Occupational) competence is understood as the ability to perform tasks common to an occupation at an acceptable level.</p> <p>Competence-based education and training means that programmes:</p> <ol style="list-style-type: none"> 1. have content directly related to work 2. focus is on 'doing something well' 3. assessment is based upon industry work standards, and 4. curricula are developed in modular form
Duty	A Duty describes a large area of work in performance terms. A duty serves as a title for a cluster of related Tasks (see also: TASK).
Learning-Working Assignment (LWA)	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 LWA are real work situations/assignments.
Module	Modules are part(s) of a whole curriculum. Modules can be considered as "self-contained" partial qualifications which are described by learning outcomes or competencies and which can be assessed and certified individually.
Occupational Profile (OP)	<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> <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,</p>

tools, materials and equipment required to perform as well as trends/ concerns in the occupation.

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

Qualification

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

Task

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

1.0 ATP-PART I

Occupational Profile for an IRISH POTATO FARMER

- 1.1 The OCCUPATIONAL PROFILE (OP) for “an Irish Potato Farmer” below defines the **Duties** and **Tasks** a competent Irish Potato 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 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 reviewing this Occupational Profile for an Irish Potato FARMER are listed on the following page.

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

Expert Panel

Siima Sheilla Baitwabusa

Annette

Ministry of Education and Sports
(MoES)

Hope Namara

UNEB Examiner – Mbarara High
school

Kuluse Paul

Naalya S.S Namugongo

Nkugwa Edward

City High School

Movadi Naturinda

Masaka S.S.S

Bbosa Derrick

St. Joseph's S.S Naggalama

Birungi Albert

Kafhambya Irish Potato farm

Turyahikayo Hosea

Agriculture Cluster Development
Project – Min of Agriculture
(Ntungamo)

Muhumuza Innocent

Farmer

Ngabirano Caleb

Agriculture Cluster Development
Project – Min of Agriculture
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Elizabeth Ruth Mukyala

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Orikiriza Andrew

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Funded by

Government of Uganda



THE REPUBLIC OF UGANDA
Ministry of Education and Sports

**Business, Technical, Vocational Education and Training
(BTVET) Sub sector Reform**

**Occupational Profile
For a**

“IRISH POTATO FARMER”

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

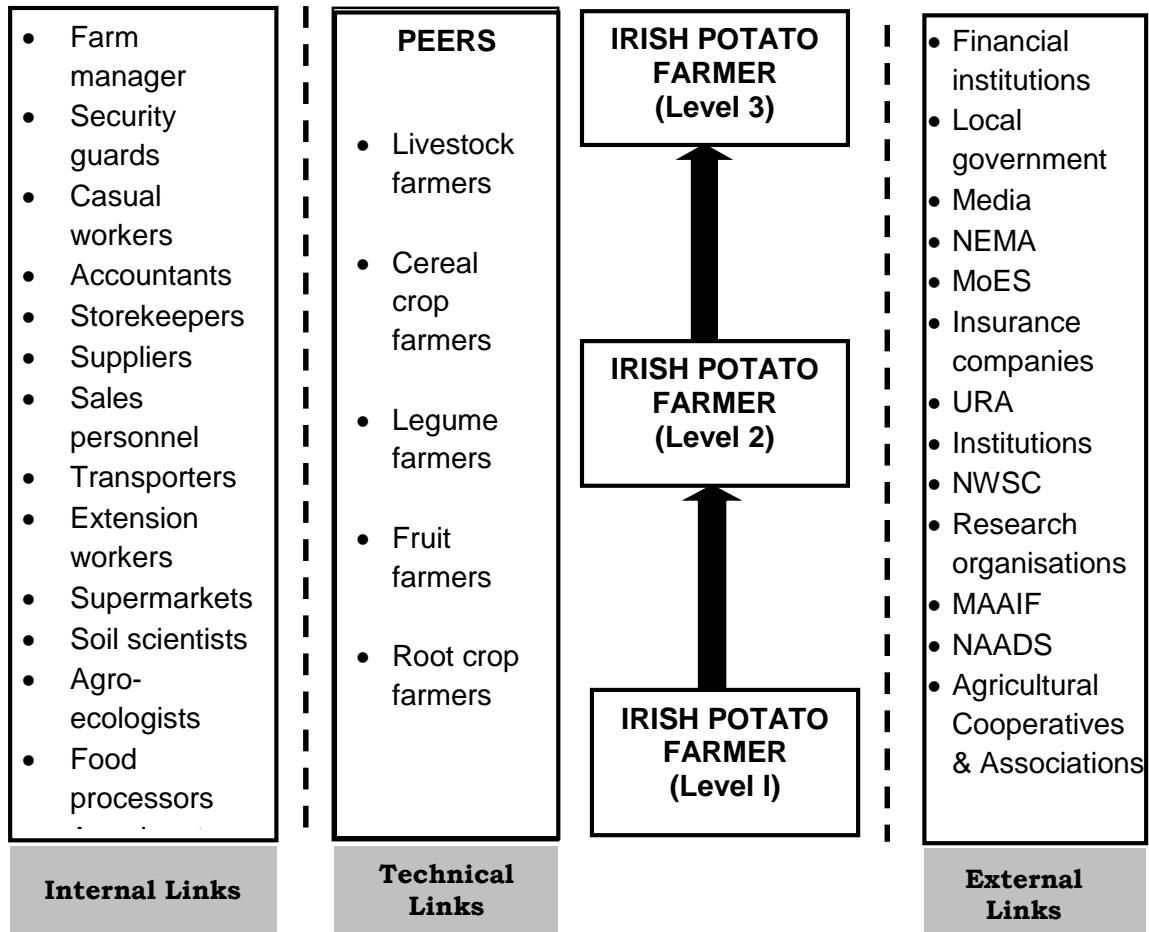
Dates of workshop: 17th– 21st January, 2022

NOMENCLATURE FOR THE OCCUPATION OF AN IRISH POTATO

Definition of an Irish Potato Farmer

This is a person who grows Irish potatoes both for home and commercial purpose.

JOB ORGANISATION CHART FOR AN IRISH POTATO FARMER



Descriptions for the levels in the occupation of a ‘Irish Potato Farmer’

UVQ Level 1 Irish Potato Farmer is a person with the ability to use traditional methods of farming to establish an Irish potato enterprise.

UVQ Level 2 Irish Potato Farmer is a person who has the ability to use minimum technology to manage an Irish potato enterprise.

UVQ Level 3 Irish Potato Farmer is a person with the ability to plan and manage an Irish potato enterprise using improved technology.

Duties and Tasks

A. PLAN FARM ACTIVITIES	A1. Carryout feasibility study	A2. Determine location	A3. Prepare crop calendar
	A4. Determine labour	A5. Prepare budget	A6. Source for funds
	A7. Source for inputs	A8. Plan for farm structure	A9. Prepare work schedules
B. ESTABLISH POTATO GARDEN	B1. Select site	B2. Test soil	B3. Clear Land
	B4. Plough Land	B5. Hallow land	B6. Practice soil & water conservation
	B7. Prepare seed tubers	B8. Apply fertilisers	B9. Plant seed tubers
C. MANAGE IRISH POTATO GARDEN	C1. Replant seeds	C2. Irrigate Crops	C3. Weed garden
	C4. Earth up Irish potatoes	C5. Control Pests & diseases	C6. Perform Dehaulming
D. PERFORM HARVEST & POST HARVEST HANDLING	D1. Prepare store.	D2. Uproot mature tubers	D3. Clean Produce
	D4. Sort tubers	D5. Bag produce	D6. Transport Tubers pests
	D7. Control storage	D8. Store produce	

E. MARKET IRISH POTATOES & THEIR PRODUCTS	E1. Conduct market survey	E2. Package products	E3. Brand products Advertise products
	E4. Cost Irish & its products	E5. Advertise products	E6. Transport products
	E7. Offer Customer care services	E8. Display products	

F. PERFORM OCCUPATIONAL HEALTH, SAFETY & ENVIRONMENTAL PROTECTION PRACTICES	F1. Sensitise workers on work risks & hazards	F2. Display safety signs	F3. Use PPE
	F4. Store farm chemicals	F5. Terrace land	F6. Fence water source
	F7. Dig trenches	F8. Administer first aid	F9. Perform fire fighting
	F10. Observe health & Safety regulations	F11. Manage waste	

G. PERFORM ADMINISTRATIVE TASKS	G1. Recruit workers	G2. Pay bills/taxes	G3. Appraise workers
	G4. Assign work	G5. Purchase inputs	G6. Hold site meetings
	G7. Maintain farm records	G8. Supervise work	G9. Train workers
	G10. Network with peers	G11. Prepare farm reports	G12. Conduct farm visits

ADDITIONAL INFORMATION

Generic Knowledge & Skills	
<ol style="list-style-type: none"> 1. Construction of farm structures 2. Seed tubers 3. Marketing skills 4. Chemical usage/ pipes 5. Soil and water conservation 6. Pest and disease control 7. Harvesting 8. Caring for tools and equipment used 9. Processing of product 10. Budget preparation 11. Customer care 12. Planting methods 13. Transportation 14. Communication skills 15. Guidance and counselling 16. Business plan writing 	<ol style="list-style-type: none"> 17. Problem solving skills 18. Managerial skills 19. Critical thinking skills 20. Reading and writing skills 21. Store management skills 22. Public relations 23. Observational skills 24. Financial management skills 25. Simple calculations 26. Fertilizers and their application 27. Usage of tools and equipment 28. Firefighting /control 29. Analytical skills 30. Negotiation skills 31. Time management 32. Computer literacy skills 33. Decision making skills 34. Soil conditions

Tools, equipment and materials	
<ol style="list-style-type: none"> 1. Panga 2. Hoes 3. Slashes 4. Axe 5. Tape measure 6. Ropes 7. Gumboots 8. Overall 9. Wheelbarrows 10. Containers 11. Weighing scale 	<ol style="list-style-type: none"> 12. Head mask/ helmet 13. Jerrycan 14. Sacks 15. Pens, books and pencils 16. Pegs 17. Sisal strings 18. Soil sampling Computer 19. Telephone 20. Files 21. Gloves 22. kit 23. Spade

Attitudes/traits/Behaviour	Future Trends & concerns
<ol style="list-style-type: none"> 1. Self-motivated 2. Time management 3. Patience 4. Observance 5. Trust worthy 6. Honesty 7. Tolerant 8. Hardworking 9. Customer care 10. Discipline 11. Good time management 12. Committed 13. Good listener 14. Flexible 15. Responsible 16. Physically fit 17. Knowledgeable 18. Polite 19. Sociable 20. Intelligent 21. Respectful 22. Trainable 23. Cooperative 24. Creative 25. Sharing skills 26. Quality of output 27. Team player 28. Curious 29. Attention to detail 30. Kind 31. Approachable 32. Integrity 33. Hard working 34. High self esteem 35. Friendly 36. God fearing 	<ol style="list-style-type: none"> 1. Computer literacy 2. Mechanization of all farm operations 3. Time management 4. Value addition at farm before marketing 5. Formation of associations 6. Pests and diseases 7. Climate change 8. Changes in prices/ price fluctuation 9. Land shortage 10. Land conflicts 11. Land fragmentation 12. Change in technology 13. Global competition 14. Bench marking in other countries 15. Insecurity 16. Inadequate networking

2.0 ATP-PART II

Training Modules for IRISH POTATO FARMER

- 2.1 A curriculum is a “guide / plan for teaching and learning” which provides a guide to teachers, instructors and learners. In the envisaged system of competence-based or outcome-oriented education and training (CBET), Curricula are no longer the benchmark against which assessment is conducted. It is rather the Occupational Profile and the related Test Items that provide the benchmark for assessment as well as for Curriculum development.
- 2.2 This modular format of the curriculum allows learners of the IRISH POTATO 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 of time 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 students 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.
- 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 AN IRISH POTATO FARMER QUALIFICATION LEVEL1?

AN IRISH POTATO FARMER level 1 is a person with the ability to use traditional methods of farming to establish an Irish potato enterprise.

TRAINING MODULES FOR IRISH POTATO FARMER UVQ LEVEL 1

Code	Module Title	Average duration	
		Contact hours	Weeks
UE/IPF/M1.1	Establish an Irish Potato Enterprise	96	3
UE/IPF/M1.2	Establish an Irish Potato Garden	112	3
UE/IPF/M1.3	Manage Irish Potato Garden	112	3
UE/IPF/M1.4	Perform Harvest & Post Harvest handling of Irish Potatoes	112	3
UE/IPF/M1.5	Market Irish Potato Produce	120	3
Summary	5 Training modules	552 hours	15 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 learner 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 for **IRISH POTATO FARMER**.

UVQF LEVELS 1- 3 QUALIFICATION DESCRIPTORS

In the Uganda Vocational Qualifications Framework, persons with qualifications **Levels 1, 2 and 3** are understood as **IMPLEMENTERS** in an occupation.

Level 1 Qualification shall mean that the individual is a **Semi-Skilled Implementer**;

Level 2 Qualification shall mean that the individual is a **Skilled Implementer**;

Level 3 Qualification shall mean that the individual is a **Highly Skilled Implementer (Working Supervisor)**.

The qualification descriptors for Levels 1-3 are described as follows:

Dimension of Qualification	Level1: Descriptor	Level2: Descriptor	Level3: Descriptor
Scope of work (duties and tasks)	Narrow range	Moderate range	Broad range
Work environment and context	Uniform	Some variety	Variety
Complexity of tasks (work sequence)	Simple	Sometimes complex	Complex
Predictability of tasks	Routine tasks	Non-routine tasks	Occasionally unpredictable
Teamwork	Usually works in a team	Works in a team with some autonomy	Works with teams
Leadership	None	Intermediate Supervisor of subordinates	Supervisor of subordinates
Autonomy (Supervision)	Under direct supervision	Under supervision by superiors	Some autonomy but checked on results by superiors
Financial and physical Resources Control	None	Limited control	Moderate control
Creation of concepts and solutions	None	None	None but may make proposals

Code	UE/IPF/M1.1
Module title	M1.1: ESTABLISH AN IRISH POTATO ENTERPRISE
Related Qualification	<u>Part of:</u> Uganda Vocational Qualification (Irish Potato Farmer UVQ 1)
Qualification Level	1
Module purpose	After completion of this module, the trainee should be able to set up an Irish Potato Enterprise.
Learning-Working Assignments (LWAs)	<p>LWA 1/1: Develop an Irish Potato Enterprise plan</p> <p>LWA 1/2: Mobilise resources</p> <p>LWA 1/3: Construct farm structures</p> <p>LWA 1/4: Perform Administrative duties</p> <p>LWA 1/5: Perform occupational health, safety, and environmental protection</p> <p>Note:</p> <ol style="list-style-type: none"> 1. The learning exercises must be repeated till 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)	<p>LWA 1/1: Develop an Irish potato enterprise plan</p> <p>PEX 1:1: Survey market</p> <p>PEX 1:2: Identify labour requirements</p> <p>PEX 1:3: Prepare budget</p> <p>PEX 1:4: Develop site structural plans</p> <p>PEX 1:5: Develop procurement plan</p> <p>PEX 1:6: Determine source of inputs</p> <p>PEX 1:7: Prepare work schedule</p> <p>LWA 1/2: Mobilise resources</p> <p>PEX 2:1: Source for funds</p> <p>PEX 2:2: Acquire land</p> <p>PEX 2:3: Recruit workers</p> <p>PEX 2:4: Purchase tools and equipment</p>

	<p>LWA 1/3: Construct farm structure PEX 3:1: Select site PEX 3:2: Procure materials, tools & Equipment PEX 3:3: Erect farm structures (store, fence, water source) PEX 3:4: Make soil & Water conservation structures (terraces, gabions, ridges)</p>
	<p>LWA 1/4 Perform Administrative duties PEX 4:1: Keep records PEX 4:2: Supervise workers PEX 4:3: Monitor farm activities PEX 4:4: Allocate work PEX 4:5: Evaluate workers PEX 4:6: Motivate workers PEX 4:7: Pay bills PEX 4:8: Insure Enterprise</p>
	<p>LWA 1/5: Perform occupational health, safety, and environmental protection PEX 5:1: Use protective gear PEX 5:2: Administer first aid PEX 5:3: Maintain personal hygiene PEX 5:4: Manage waste PEX 5:5: Clean tools and equipment PEX 5:6: Store tools and equipment PEX 5:7: Perform fire fighting PEX 5:8: Display safety signs</p>
<p>Occupational health and safety</p>	<p>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.</p>
<p>Pre-requisite modules</p>	<p>None</p>

<p>Related knowledge/ theory</p>	<p>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:</p> <ul style="list-style-type: none"> • Construction of farm structures • terracing • farm record management • store measurements • environmental protection • tools and equipment and their usage • pests and disease control • location of farm structures
<p>Average duration of learning</p>	<p>96 hours (12 days) of nominal learning suggested to include:</p> <ul style="list-style-type: none"> • 9 days of occupational theory and • 3 days of occupational practice
<p>Suggestions on organization of learning</p>	<p>The acquisition of competencies (skills, knowledge, attitudes) described in this module may take place at a training centre or its equivalent provided that all equipment and materials required for this module training are in place.</p>
<p>Assessment</p>	<p>Assessment to be conducted according to established regulations by recognized assessment body using related Practical and Written Test Items from Item Bank.</p>
<p>Minimum required tools/ equipment/ implements or equivalent</p>	<p>Hand hoe, Panga (machete), Wheelbarrow, Shovel, Garden trowel, Rake, Hand fork, Watering can, Basin, Spray pump, Tarpaulin,</p>
<p>Minimum required materials and consumables or equivalent</p>	<p>Fertilizers, Strings, Water, Chemical, stationary. Wood</p>
<p>Special notes</p>	

Code	UE/IPF/M1.2
Module title	M1.2: ESTABLISH AN IRISH POTATO GARDEN
Related Qualification	<u>Part of:</u> Uganda Vocational Qualification (Irish Potato Farmer UVQ1)
Qualification Level	1
Module purpose	By the end of this module, a trainee should be able to establish an Irish Potato Garden
Learning-Working Assignments (LWAs)	<p>LWA 2/1: Prepare site</p> <p>LWA 2/2: Prepare seed tubers</p> <p>LWA 2/3: Prepare planting tools and equipment</p> <p>LWA 2/4: Plant seed tubers</p> <p>LWA 2/5: Perform occupational health, safety and environment protection practices</p> <p>Note:</p> <ol style="list-style-type: none"> 1. The learning exercises may be repeated till the trainee acquires targeted competence 2. The trainee is advised to deliver relevant theoretical instruction with demonstrations as required to perform each learning working assignment
Related Practical Exercises (PEXs)	<p>LWA 2/1: Prepare site</p> <p>PEX 1:1: Select site</p> <p>PEX 1:2: Demarcate site</p> <p>PEX 1:3: Clear land</p> <p>PEX 1:4: Measure area</p> <p>PEX 1:5: Plough land</p> <p>PEX 1:6: Harrow land</p> <p>PEX 1:7: Apply fertilisers</p> <p>LWA 2/2: Prepare seed tubers</p> <p>PEX 2:1: Determine seed tuber variety</p> <p>PEX 2:2: Sort seed tubers</p> <p>PEX 2:3: Treat seed tubers</p> <p>PEX 2:4: Pre-germinate seed tubers</p>

	<p>LWA 2/3: Prepare planting tools and equipment PEX 3:1: Fix tools & Equipment PEX 3:2: Clean tools & Equipment PEX 3:3: Sharpen tools & Equipment PEX 3:4: Disinfect Tools & Equipment</p> <p>LWA 2/4: Plant seed tubers PEX 4:1: Dig ridges PEX 4:2: Apply fertilisers PEX 4:3: Sow seed tubers</p> <p>LWA 2/5: Perform occupational health, safety and environment protection practices PEX 5:1: Perform fire fighting PEX 5:2: Store chemicals PEX 5:3: Manage waste PEX 5:4: Administer first aid PEX 5:5: Manage soil and water PEX 5:6: Use PPE PEX 5:7: Display safety signs</p>
<p>Occupational health and safety</p>	<p>Precautions, rules and regulations of applications safety and environmental protection, included in the listed related knowledge should be observed and demonstrated during LWAs and PEXs.</p>
<p>Pre-requisite modules</p>	<p>None</p>
<p>Related knowledge/ theory</p>	<p>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:</p> <ul style="list-style-type: none"> • Spacing of root tubers • Making ridges & furrows • soil types • Types of fertilisers • Weather patterns • Tool and equipment usage • Seed quality • Test of soil (soil sampling etc) • Control of pests and diseases

Average duration of learning	112 hours (14 days) of nominal learning suggested to include: <ul style="list-style-type: none"> • 11 days of occupational theory and • 3 days of occupational practice
Suggestions on organization of learning	The acquisition of competencies (skills, knowledge, attitudes) described in this module may take place at a training centre or its equivalent provided that all equipment and materials required for this module training are in place.
Assessment	Assessment to be conducted according to established regulations by recognized assessment body using related Written Test Items from Item Bank.
Minimum required tools/ equipment/ implements or equivalent	Hoes, pangs, slashes, ploughs, spades, soil auger, soil testing kit, gumboots, saw, gloves, forked hoe, containers (buckets)
Minimum required materials and consumables or equivalent	Irish potato seeds, sacks, fertilisers, water
Special notes	

Code	UE/IPF/M1.3
Module title	M1.3: Manage Irish Potato Garden
Related Qualification	<u>Part of:</u> Uganda Vocational Qualification (Irish Potato Farmer UVQ 1)
Qualification Level	1
Module purpose	After completion of this module, the trainee should be able to manage an Irish potato garden.
Learning-Working Assignments (LWAs)	<p>LWA 3/1: Conserve soil and water LWA 3/2: Weed Garden LWA 3/3: Control pests and diseases LWA 3/4: Perform dehauling LWA 3/5: Perform occupational health, safety, and environmental protection</p> <p>Note:</p> <ol style="list-style-type: none"> 1. The learning exercises must be repeated till 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)	<p>LWA 3/1: Conserve soil and water PEX 1:1: Construct terraces PEX 1:2: Construct ridges PEX 1:3: Carryout irrigation PEX 1:4: Drain land PEX 1:5: Construct gabions PEX 1:6: Plant trees</p> <p>LWA 3/2: Weed Garden PEX 2:1: Inspect Garden PEX 2:2: Uproot weeds PEX 2:3: Perform Earthen up</p> <p>LWA 3/3: Control pests and diseases PEX 3:1: Inspect Garden PEX 3:2: Procure chemicals PEX 3:3: Spray chemicals</p>

	<p>LWA 3/4: Perform dehauling PEX 4:1: Inspect Garden PEX 4:2: Cut stems</p> <p>LWA 3/5: Perform occupational health, safety, and environmental protection PEX 5:1: Use protective gear PEX 5:2: Administer first aid PEX 5:3: Maintain personal hygiene PEX 5:4: Manage waste PEX 5:5: Clean tools and equipment PEX 5:6: Store tools and equipment</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>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:</p> <ul style="list-style-type: none"> • Soil & water conservation • Earthening up • tool and equipment usage • Identification of mature Irish potatoes • Methods of weeding • Agro –Chemicals and herbicides • Weather patterns • Crop calendar • Dehauling • Waste management • Requirements for plant growth
Average duration of learning	<p>112 hours (14 days) of nominal learning suggested to include:</p> <ul style="list-style-type: none"> • 11 days of occupational theory and • 3 days of occupational practice
Suggestions on organization of learning	The acquisition of competencies (skills, knowledge, attitudes) described in this module may take place at a training centre or its equivalent provided that all equipment and materials required for this module training are in place.

Assessment	Assessment to be conducted according to established regulations by recognized assessment body using related Practical and Written Test Items from Item Bank.
Minimum required tools/ equipment/ implements or equivalent	Hand hoe, Panga (machete), Wheelbarrow, Shovel, Garden trowel, Rake, Hand fork, Watering can, Basin, Spray pump, Tarpaulin, rain gauge, garden fork
Minimum required materials and consumables or equivalent	Fertilizers, Strings, Water, Agro-Chemicals, stones, calendar
Special notes	

Code	UE/IPF/M1.4
Module title	M1.4: PERFORM HARVEST & POST HARVEST HANDLING OF IRISH POTATOES
Related Qualification	<u>Part of:</u> Uganda Vocational Qualification (Irish Potato Farmer UVQ1)
Qualification Level	1
Module purpose	After completion of this module, the trainee should be able to perform harvest and post-harvest activities of Irish potatoes
Learning-Working Assignments (LWAs)	<p>LWA 4/1: Prepare harvesting tools & equipment</p> <p>LWA 4/2: Harvest Irish Potato Tubers</p> <p>LWA 4/3: Prepare produce for storage</p> <p>LWA 4/4: Store produce</p> <p>LWA 4/5: Perform occupational health, safety and environmental protection practices</p> <p>Note:</p> <ol style="list-style-type: none"> 1. The learning exercises must be repeated till 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)	<p>LWA 4/1: Prepare harvesting tools & equipment</p> <p>PEX 1:1: Fix tools & Equipment</p> <p>PEX 1:2: Clean tools & Equipment</p> <p>PEX 1:3: Sharpen tools & Equipment</p> <p>PEX 1:4: Disinfect tools & Equipment</p>
	<p>LWA 4/2: Harvest Irish potatoes Tubers</p> <p>PEX 2:1: Identify mature tubers</p> <p>PEX 2:2: Uproot Irish potatoes</p>
	<p>LWA 4/3: Prepare produce for storage</p> <p>PEX 3:1: Clean produce</p> <p>PEX 3:2: Sort produce</p> <p>PEX 3:3: Grade produce</p> <p>PEX 3:4: Bag produce</p> <p>PEX 3:5: Transport produce</p>

	<p>LWA 4/4: Store produce PEX 4:1: Clean store PEX 4:2: Disinfect store PEX 4:3: Prepare pallets PEX 4:4: Repair/amend damaged store parts PEX 4:5: Pack produce PEX 4:6: Secure store</p> <p>LWA 4/5: Perform occupational health, safety, and environmental protection practices PEX 5:1: Observe health and safety regulations PEX 5:2: Use protective gear PEX 5:3: Administer first aid PEX 5:4: Maintain personal hygiene PEX 5:5: Manage waste PEX 5:6: Clean tools and equipment PEX 5:7: Store tools and equipment</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	For Occupational theory suggested for instruction/ demonstration, the Trainer is not limited to the outline below. In any case, related knowledge/ theory may be obtained from various recognised reference materials as appropriate: <ul style="list-style-type: none"> • Packaging • Pallets • Farm structure designs (store) • Preservation of Irish potatoes • Maintenance of tools& Equipment • Maturity stage of Irish potato • Sorting of Irish potato • Means of transportation
Average duration of learning	112 hours (14 days) of nominal learning suggested to include: <ul style="list-style-type: none"> • 11 days of occupational theory and • 3 days of occupational practice

Suggestions on organization of learning	The acquisition of competencies (skills, knowledge, attitudes) described in this module may take place at a training centre or its equivalent provided that all equipment and materials required for this module training are in place.
Assessment	Assessment to be conducted according to established regulations by recognized assessment body using related Practical and Written Test Items from Item Bank.
Minimum required tools/ equipment/ implements or equivalent	Hand hoe, Panga (machete), Wheelbarrow, Shovel, Garden trowel, Rake, Hand fork, Basin
Minimum required materials and consumables or equivalent	Strings, Water, chemicals, Sacks, calculator
Special notes	

Code	UE/IPF/M1.5
Module title	M1.5: MARKET IRISH POTATO PRODUCE
Related Qualification	<u>Part of:</u> Uganda Vocational Qualification (Irish Potato Farmer UVQ 1)
Qualification Level	1
Module purpose	After completion of this module, the trainee should be able to market Irish potato produce.
Learning-Working Assignments (LWAs)	<p>LWA 5/1: Cost Irish Potatoes</p> <p>LWA 5/2: Package produce</p> <p>LWA 5/3: Promote Produce</p> <p>LWA 5/4: Perform occupational health, safety and environmental protection practices</p> <p>Note:</p> <ol style="list-style-type: none"> 1. The learning exercises must be repeated till 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)	<p>LWA 5/1: Cost Irish Potatoes</p> <p>PEX 1:1: Conduct market research</p> <p>PEX 1:2: Weigh produce</p> <p>PEX 1:3: Price produce</p> <p>PEX 1:4: Negotiate for price</p>
	<p>LWA 5/2: Package produce</p> <p>PEX 2:1: Sort produce</p> <p>PEX 2:2: Weigh produce</p> <p>PEX 2:3: Bag produce</p> <p>PEX 2:4: Grade produce</p> <p>PEX 2:5: Brand produce</p>
	<p>LWA 5/3: Promote Produce</p> <p>PEX 3:1: Conduct market research</p> <p>PEX 3:2: Advertise produce</p> <p>PEX 3:3: Offer customer care services</p> <p>PEX 3:4: Perform value addition</p>

	<p>LWA 5/4: Perform occupational health, safety, and environmental protection practices</p> <p>PEX 4:1: Use protective gear PEX 4:2: Administer first aid PEX 4:3: Maintain personal hygiene PEX 4:4: Mange waste PEX 4:5: Clean tools and equipment PEX 4:6: Store tools and equipment PEX 4:7: Perform fire fighting</p>
Occupational health and safety	<p>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.</p>
Pre-requisite modules	<p>None</p>
Related knowledge/ theory	<p>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:</p> <ul style="list-style-type: none"> • Quality improvement • Weighing • Marketing • Costing • Communication skills • Product promotion • Transportation • Market research • Record keeping • Branding • Customer care • Advertising • Packaging
Average duration of learning	<p>120 hours (15 days) of nominal learning suggested to include:</p> <ul style="list-style-type: none"> • 11 days of occupational theory and • 4 days of occupational practice
Suggestions on organization of learning	<p>The acquisition of competencies (skills, knowledge, attitudes) described in this module may take place at a training centre or its equivalent provided that all equipment and materials required for this module training are in place.</p>

Assessment	Assessment to be conducted according to established regulations by recognized assessment body using related Practical and Written Test Items from Item Bank.
Minimum required tools/ equipment/ implements or equivalent	Gumboots, Overalls, Gloves, Wheel barrow, weighing scale, truck, knife, basins, tins, sewing needle, phone
Minimum required materials and consumables or equivalent	Water, lubricants, Nails, tarpaulin, strings, stationary
Special notes	

3.0 ATP-PART III

Assessment Instruments for IRISH POTATO 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.
- 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 the 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 an **IRISH POTATO FARMER** are included:

3.9 Overview of test item samples included:

No	Type of test items	Numbers included
1	Written (theory) –short answer	2
2	Written (theory)- multiple choice	2
3	Written (theory)- matching with generic	2
4	Written (theory)- matching with work sequences	1
5	Performance (practical)test item	1
Total		8

WRITTEN TEST ITEMS (SAMPLES)

DIT/ QS	Test Item Database Written (Theory) Test Item- No. 1			
Occupational Title:	Irish potato farmer			
Competence level:	Level 1			
Code no.	UE/IPF/M1.4			
Test Item type	Short answer	√		
	Multiple choice			
	Matching item	Generic	Cause-Effect	Work-sequence
Complexity level:	C 1			
Date of OP:	January 2022			
Related modules:	M1.4			
Time allocation:	2 minutes			

Test Item	List six equipment needed during harvesting of Irish potato tubers.
Answer spaces	i. ii. iii. iv. v. vi.

Expected answers	i. Wheel barrow ii. Containers iii. Buckets iv. Gumboots v. Gloves vi. Overall vii. Basket
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DIT/ QS		Test Item Database Written (Theory) Test Item- No. 2		
Occupational Title:	Irish potato farmer			
Competence level:	Level 1			
Code no.	UE/IPF/M1.3			
Test Item type	Short answer	√		
	Multiple choice			
	Matching item	Generic	Cause- Effect	Work- sequence
Complexity level:	C 1			
Date of OP:	January 2022			
Related modules:	M1.3			
Time allocation:	2 minutes			

Test Item	Mention three ways of conserving soil and water in an Irish potato garden.
Answer spaces	I. II. III.

Expected answers	i. By constructing Terraces ii. By constructing Gabions iii. By constructing Ridges iv. By carrying out Irrigation v. By Draining land vi. By planting trees
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Test Item Database	
Written (Theory) Test Item- No. 3	
DIT/ QS	
Occupational Title:	Irish potato farmer
Competence level:	Level 1
Code no.	UE/IPF/M1.4
Test Item type	Short answer
	Multiple choice
	Matching item
	Generic
	Cause-Effect
	Work-sequence
Complexity level:	C 2
Date of OP:	January 2022
Related modules:	M1.4
Time allocation:	1 minute

Test Item	A practice of cutting stems in an Irish potato garden shortly before harvesting is.....
Distractors and correct answer	A. Thinning B. Uprooting C. Dehaulming D. Steming

Key (Answer)	C
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DIT/ QS	Test Item Database Written (Theory) Test Item- No. 4			
Occupational Title:	Irish potato farmer			
Competence level:	Level 1			
Code no.	UE/IPF/M1.5			
Test Item type	Short answer			
	Multiple choice	√		
	Matching item	Generic	Cause-Effect	Work-sequence
Complexity level:	C 1			
Date of OP:	January 2022			
Related modules:	M1.5			
Time allocation:	1 minute			

Test Itemis the activity that increases awareness of Irish potato produce on the market.
Distractors and correct answer	A. Storage B. Advertising C. Branding D. Sorting

Key (Answer)	B
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Test Item Database Written (Theory) Test Item- No. 5			
DIT/ QS			
Occupational Title:	Irish potato farmer		
Competence level:	Level 1		
Code no.	UE/IPF/M1.5		
Test Item type	Short answer		
	Multiple choice		
	Matching item	Generic	Cause-Effect
		√	Work-sequence
Complexity level:	C2		
Date of OP:	January 2022		
Related modules:	M1.5		
Time allocation:	4 minutes		

Test Item	Match the following marketing functions in column A with their purposes in column B.
------------------	--

Column A (marketing functions)	
1	Package
2	Store
3	Advertise
4	Transport
5	Brand

Column B (purposes)	
A	Increases awareness about the existence of the product
B	Identify customers
C	Makes a product unique
D	Eases transportation
E	Prevents spoilage of produce while waiting for customers
F	Makes a product accessible in areas of scarcity
G	Increase weight

Key (answer)	1-D,2-E,3-A,4-F,5-C
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DIT/ QS		Test Item Database Written (Theory) Test Item- No. 6			
Occupational Title:	Irish potato farmer				
Competence level:	Level 1				
Code no.	UE/IPF/M1.2				
Test Item type	Short answer				
	Multiple choice				
	Matching item	Generic	Cause-Effect	Work-sequence	
		√			
Complexity level:	C2				
Date of OP:	January 2022				
Related modules:	M1.2				
Time allocation:	4 minutes				

Test Item	Match the following tools in column A with their functions in column B in establishing an Irish potato garden
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Column A (tools)	
1	Hand hoe
2	Rake
3	Axe
4	Spade

Column B (functions)	
A	Felling big trees
B	Spread manure in the garden
C	Tilling land
D	Carry manure
E	Measure garden
F	Gather cut grass and debris

Key (answer)	1-C, 2-F, 3-A, 4-B.
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DIT/ QS	Test Item Database Written (Theory) Test Item- No. 7			
Occupational Title:	Irish potato farmer			
Competence level:	Level 1			
Code no.	UE/IPF/M1.4			
Test Item type	Short answer			
	Multiple choice			
	Matching item	Generic	Cause-Effect	Work-sequence
				√
Complexity level:	C2			
Date of OP:	January 2022			
Related modules:	M1.4			
Time allocation:	4 minutes			

Test Item	Outline the steps taken when preparing tools and equipment for setting up an Irish potato store
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Column A (chronology)	Column B (work steps) in wrong chronology order	
1 st	A	Sharpen tools
2 nd	B	Identify tools and equipment
3 rd	C	Disinfect tools and equipment
4 th	D	Fix tools and equipment
5 th	E	Clean the tools and equipment
6 th	F	Oil and grease tools and equipment
7 th	G	Amend and repair tools and equipment

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

DIT/ QS	Test Item Database Performance Test Item- no.8
Occupational Title:	Irish Potato Farmer
Competence level:	1
Code no.	UE/IPF/M1.2
Test Item:	Establish an Irish potato Garden of 10m x 4 m
Performance level:	P2
Date of OP:	17 th January 2022
Related Module:	M1.2
Related skills and knowledge:	<ul style="list-style-type: none"> • Measurement/spacing of root tubers • Making of fallows • Application of fertilizers • Equipment usage • Seed quality • Pests and disease control • Soil testing • Tools and equipment usage
Required tools, materials and equipment:	Hand hoe, panga, String, tape measure, spade, Gum boots wheel barrow, Gloves, baskets, tins, soil testing kit, pegs, stop clock, pre-germinated Irish potato seed tubers
Time allocation:	6 hours
Preferred venue:	Irish Potato Garden
Remarks for candidates	Trainees must have personal protective equipment
Remarks for assessors	<ul style="list-style-type: none"> ❖ Provide all the required tools, equipment and materials for assessment ❖ Provide candidates with pre germinated Irish potato seed tubers

#	Assessment criteria	Scoring guide	Max. Score	
			Process	Result
1.	Preparation for assignment	wore PPE (Gloves, Gumboots, head gear,)		2
		Assembled tools and equipment	1	

		Assembled tools and equipment verified (hoe, Slasher, Forked hoe, Panga, Wheel burrow, Spade, Axe, tape measure, Strings, Pegs, hand trowel,		3
2.	Measuring of the plot	Measured the plot	3	
		Measured plot of 10mx4m verified		2
		Identified corners using pegs.		1
3.	Clearing of the plot	Cleared the bush	1	
		Removed tree stumps and other obstacles like stones	2	
		Cleared plot observed		2
4.	Ploughing of the plot	Carried out primary cultivation	2	
		Soil depth of 60-70cm observed		3
		Carried out secondary cultivation	2	
		Plot free from obstacles observed		3
5.	Making of ridges	Measured the spacing of ridges	1	
		Dug ridges	2	
		mounted ridges of height 15cm -25cm and width 60cm to 75cm observed		3
6.	Planting of seed tubers	Selected seed tubers	2	
		Sprouted seed tubers with three to four sprouts observed.		2
		Measured 4gm of fertilizers and applied in furrow	3	
		Placed seed tubers at a depth of 15cm to 20cm a furrow.	2	
		Covered seed tuber with soil.	2	
		A fully established Irish potato garden verified.		4
7.	Post planting	Cleaned tools and equipment.	1	
		Cleaned tools and equipment observed in store		2
		Disposed off waste materials.		2
			23	29
	Total		52	

4.0 ATP- PART IV

INFORMATION ON DEVELOPMENT PROCESS

4.1 Occupational Profile Development (January 2021)

The Assessment and Training Package was exclusively developed by job practitioners of the Irish Potato 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 developed duties and tasks performed and provided additional generic information regarding the occupation.

4.2 Training Module Development (January 2021)

Based on the developed Occupational Profile for Irish Potato Farmer of January 2021, Training Modules were developed by job practitioners, guided by UVQF Facilitators.

4.3 Test Item Development (January 2021)

Based on the developed Occupational Profile for Irish Potato Farmer of January 2021, and Training Modules of January 2021, Test Items were developed 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 for the development exercise were constituted by members from the following organizations:

Development Panel		
No.	Name	Institution/Organization
1.	SIIMA SHEILA BAITWABUSA ANNET	MOES
2.	NAMARA HOPE	UNEB EXAMINER - MBARARA HIGH SCHOOL
3.	BBOSA DERRICK	ST. JOSEPH'S S.S NAGGALAMA
4.	KULUSE PAUL	NAALYA S,S.S NAMUGONGO
5.	NKUGWA EDWARD	CITY HIGH SCHOOL
6.	NATURINDA MOVADI	MASAKA SSS
7.	BIRUNGI ANNET	KAFHAMBYA IRISH POTATO FARM
8.	NGABIRANO CALEB	AGRICULTURE CLUSTER DEVELOPMENT PROJECT- MINISTRY OF AGRICULTURE (RUBANDA DISTRICT)
9.	TURYAHIKAYO HOSEA	AGRICULTURE CLUSTER DEVELOPMENT PROJECT- MINISTRY OF AGRICULTURE (NTUGAMO)
10.	MUHUMUZA INNOCENT	FARMER

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. Nakimuli Patra , DIT; Mr. Orikiriza Andrew, DIT.
3. **Compiled by** Ms. Kyokolera Dinansi, Data Entrant, DIT and edited by Ms. Mukyala Ruth Ag. DD Qualification Standards Dept. DIT
4. **Coordinated by** – Mr. Byakatonda Patrick, Ag. Director, DIT; and Ms. Mukyala Ruth Ag. DD Qualification Standards Dept. DIT

4.7 Reference time:

The Assessment and Training Package was compiled in February 2022 and may be periodically revised to match the dynamic trends in the occupation and hence issued in different versions.

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3. AB Bainempaka & H.Kato, B.D Mulere volume 1; Principles of Crop production (1990)
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