

REPUBLIC OF KENYA

COMPETENCY BASED CURRICULUM

FOR

AGRIPRENEURSHIP

LEVEL 4



TVET CDACC P.O. BOX 15745-00100 NAIROBI First published 2018 © 2018, TVET CDACC

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FOREWORD

The provision of quality education and training is fundamental to the Government's overall strategy for social economic development. Quality education and training will contribute to achievement of Kenya's development blueprint and sustainable development goals.

Reforms in the education sector are necessary for the achievement of Kenya Vision 2030 and meeting the provisions of the Constitution of Kenya 2010. The education sector had to be aligned to the Constitution and this resulted to the formulation of the Policy Framework for Reforming Education and Training. A key feature of this policy is the radical change in the design and delivery of the TVET training. This policy document requires that training in TVET be competency based, curriculum development be industry led, certification be based on demonstration of competence and mode of delivery allows for multiple entry and exit in TVET programmes.

These reforms demand that Industry takes a leading role in curriculum development to ensure the curriculum addresses its competence needs. It is against this background that this curriculum has been developed.

It is my conviction that this curriculum will play a great role towards development of competent human resource for the Agriculture sector's growth and sustainable development.

PRINCIPAL SECRETARY
VOCATIONAL AND TECHNICAL TRAINING
MINISTRY OF EDUCATION

PREFACE

Kenya Vision 2030 aims to transform the country into a newly industrializing, "middle-income country providing a high quality life to all its citizens by the year 2030". Kenya intends to create a globally competitive and adaptive human resource base to meet the requirements of a rapidly industrializing economy through life-long education and training. TVET has a responsibility of facilitating the process of inculcating knowledge, skills and attitudes necessary for catapulting the nation to a globally competitive country, hence the paradigm shift to embrace Competency Based Education and Training (CBET).

The Technical and Vocational Education and Training Act No. 29 of 2013 on Reforming Education and Training in Kenya, emphasized the need to reform curriculum development, assessment and certification. This called for a shift to CBET in order to address the mismatch between skills acquired through training and skills needed by industry as well as increase the global competitiveness of Kenyan labour force.

TVET Curriculum Development, Assessment and Certification Council (TVET CDACC) in conjunction with Agripreneurship Sector Skills Advisory Committee (SSAC), German International Cooperation and Ministry of Agriculture, Livestock and Fisheries have developed this curriculum.

This curriculum has been developed following the CBET framework policy; the CBETA Standards and guidelines provided by the TVET Authority and the Kenya National Qualification framework designed by the Kenya National Qualification Authority.

This curriculum is designed and organized with an outline of learning outcomes, suggested delivery methods, training/learning resources and methods of assessing the trainee's achievement. The curriculum is competency-based and allows multiple entry and exit to the course.

I am grateful to the Council members, Council Secretariat, Agripreneurship SSAC, expert workers and all those who participated in the development of this curriculum.

CHAIRPERSON TVET CDACC

ACKNOWLEDGEMENT

This curriculum has been designed for competency-based training and has independent units of learning that allow the trainee flexibility in entry and exit. In developing the curriculum, significant involvement and support was received from various organizations.

I appreciate NEPAD Planning and Coordinating Agency (NPCA) of the Africa Union Commission and German Ministry of Economic Cooperation and Development (BMZ) through its implementing agency German International Cooperation (GIZ) GmbH which enabled the development of this curriculum through the CAADP ATVET project. I also appreciate the office of the National Coordinator of GIZ CAADP ATVET Project which was instrumental in the cooperation between the project team, Ministry of Agriculture, Livestock and Fisheries (MoALF) and Ministry of Education.

I recognize with appreciation the role of Agripreneurship Sector Skills Advisory Committee (SSAC) members for their contribution to the development of this curriculum.

I also thank all stakeholders in the Agriculture sector for their valuable input and all those who participated in the process of developing this curriculum.

I am convinced that this curriculum will go a long way in ensuring that workers in Agripreneurship acquire competencies to perform their work in an entrepreneurial manner

COUNCIL SECRETARY/CEO
TVET CDACC

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ABBREVIATION AND ACRONYMS

ATVET Agricultural Technical and Vocational Education and Training

AGR Agriculture

AP Agripreneurship

CAADP Comprehensive Africa Agricultural Development Programme

CBET Competency Based Education and Training

CDACC Curriculum Development Assessment and Certification Council

DACUM Develop a Curriculum

GDP Gross Domestic Product

GPS Global Positioning System

KCPE Kenya Certificate of Primary Education

KNQA Kenya National Qualifications Authority

KCSE Kenya Certificate of Secondary Education

MoALF Ministry of Agriculture Livestock and Fisheries

MoEST Ministry of Education Science and Technology

NOS National Occupation Standard

OS Occupational Standard

PPE Personal Protective Equipment

SSAC Sector Skills Advisory Committee

TVETA Technical and Vocational Education and Training Authority

KEY TO UNIT CODE

| | AGR /CU | AP | /BC | /01/ | 4/A |
|----------------------|---------|----------|-----|------|-----|
| Industry or sector | | | | | |
| Curriculum — | | | | | |
| Occupational area | | <u> </u> | | | |
| Type of competency | | | | | |
| Competency number — | | | | | |
| Competency level ——— | | | | | |
| Version control | | | | | |

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COURSE OVERVIEW

Agripreneurship qualification level 4 consists of competencies that an individual must achieve to operate an agri-enterprise. It entails developing an agrienterprise business plan, operating a small agri-enterprise, marketing agricultural products/services, supervising agrienterprise operations and marketing agricultural products/services online.

This course consists of the following basic and core units competence:

Basic Units of Learning

| Unit Code | Unit Title | Duration | Credit |
|---------------------|--------------------------------|----------|--------|
| | | in Hours | Factor |
| AGR/CU/AP/BC/01/4/A | Communication Skills | 20 | 2 |
| AGR/CU/AP/BC/02/4/A | Numeracy Skills | 25 | 2.5 |
| AGR/CU/AP/BC/03/4/A | Digital Literacy | 35 | 3.5 |
| AGR/CU/AP/BC/04/4/A | Entrepreneurship Skills | 60 | 6 |
| AGR/CU/AP/BC/05/4/A | Employability Skills | 30 | 3 |
| AGR/CU/AP/BC/06/4/A | Environmental Literacy | 20 | 2 |
| AGR/CU/AP/BC/07/4/A | Occupational Safety and Health | 20 | 2 |
| | Practices Total | 210 | 21 |

Core Units of Learning

| Unit Code | Unit Title | Duration | Credit |
|---------------------|---|----------|--------|
| | | in Hours | Factor |
| AGR/CU/AP/CR/01/4/A | Agri-Enterprise Business Plan | 40 | 4 |
| | Development | | |
| AGR/CU/AP/CR/02/4/A | Small Agri-Enterprise Operation | 40 | 4 |
| AGR/CU/AP/CR/03/4/A | Agri-Enterprise Products and Services Marketing | 40 | 4 |
| AGR/CU/AP/CR/04/4/A | Agri-Perineurial Operations Supervision | 40 | 4 |
| AGR/CU/AP/CR/05/4/A | Agricultural Products and Services Online Marketing | 40 | 4 |
| | Industrial Attachment | 300 | 30 |
| | Total | 500 | 50 |
| | Sub Total | 710 | 71 |

Entry Requirements

An individual entering this course should have any of the following minimum requirements:

a) Kenya Certificate of Secondary Education (KCSE) mean grade E

Or

b) National skills certificate (Level 3) in Agripreneurship

Or

c) Equivalent qualifications as determined by Kenya National Qualifications Authority (KNQA)

Trainer qualification

The trainer for these course must have a qualification higher than these course

Industrial Attachment

An individual enrolled in this course will undergo four (4) weeks industrial attachment in an agro processing firm.

An individual enrolled in one of the core units of learning will undergo a two weeks attachment in an agroprocessing firm.

Assessment

The course will be assessed at two levels: internal and external.

- a) **Internal assessment** conducted continuously by the trainer (internal assessor) who is monitored by an accredited internal verifier.
- b) **External assessment** conducted by an external assessor who is monitored by an accredited external verifier.

The assessors and verifiers are accredited by TVET CDACC which also coordinates external assessment.

Certification

A candidate will be issued with a Certificate of Competency on demonstration of competence in a unit of competency. To attain the National Agripreneurship Certificate Level 4, the candidate must demonstrate competence in all the units of competency as given in qualification pack. These certificates will be issued by TVET CDACC in conjunction with training provider.

BASIC UNITS OF LEARNING

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COMMUNICATION SKILLS

UNIT CODE: AGR/CU/AP/BC/01/4/A

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Demonstrate Communication Skills

Duration of Unit: 20 Hours

Unit Description

This unit covers the competencies required demonstrate communication skills. It involves obtaining and conveying workplace information, completing relevant work-related documents, communicating information about workplace processes, leading workplace discussion and communicating workplace issues.

Summary of Learning Outcomes

- 1. Obtain and convey workplace information
- 2. Complete relevant work-related documents
- 3. Communicate information about workplace processes
- 4. Lead workplace discussions
- 5. Identify and communicate issues arising in the workplace

| Learning Outcome | Content | Suggested |
|--|---|--|
| | | Assessment Methods |
| Obtain and convey workplace information | Communication process Modes of communication Medium of communication Effective communication Barriers to communication Flow of communication Sources of information Types of questions Organizational policies Workplace etiquette Ethical work practices in handling communication | Interview Third party reports |
| Complete relevant work-related documents | Types and purposes of workplace documents and forms | InterviewThird party reports |

| 3. | Communicate information about workplace processes | | Methods used in filling forms and documents Recording workplace data Process of distributing workplace forms and documents Report writing Types of workplace reports Communication process Modes of communication Medium of communication Effective communication Barriers to communication Flow of communication Sources of information Organizational policies Organization requirements for written and electronic communication methods Report writing Effective questioning techniques (clarifying and probing) Workplace etiquette Ethical work practices in | | • Interview • Portfolio |
|----|--|---|--|---|-------------------------------|
| 4 | T 111 | | handling communication | | T |
| 4. | Lead workplace discussion | • | Methods of discussion e.g. ✓ Coordination meetings ✓ Toolbox discussion ✓ Peer-to-peer discussion Solicitation of response | • | Interview Third party reports |
| 5. | Identify and communicate issues arising in the workplace | • | Identification of problems and issues Organizing information on problems and issues Relating problems and issues Communication barriers affecting workplace discussions | • | Interview Portfolio |

- Direct instruction
- Demonstration
- Practice assignment
- Discussion
- Role play
- Brainstorming

Recommended Resources

- Desktop computers/laptops
- Internet connection
- Projectors
- Telephone
- Report writing templates

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NUMERACY SKILLS

UNIT CODE: AGR/CU/AP/BC/02/4/A

Relationship to Occupational Standards:

This unit addresses the Unit of Competency: Demonstrate Numeracy Skills

Duration of Unit: 25 hours

Unit Description

This unit covers the competencies required to demonstrate numeracy skills. It involves identifying and using whole numbers and simple fractions, decimals and percentages for work, identifying, measuring and estimating familiar quantities for work, reading and using familiar maps, plans and diagrams for work, identifying and describing common 2D and some 3D shapes for work, constructing simple tables and graphs for work using familiar data and identifying and interpreting information in familiar tables, graphs and charts for work.

Summary of Learning Outcomes

- 1. Identify and use whole numbers and simple fractions, decimals and percentages for work
- 2. Identify, measure and estimate familiar quantities for work
- 3. Read and use familiar maps, plans and diagrams for work
- 4. Identify and describe common 2D and some 3D shapes for work
- 5. Construct simple tables and graphs for work using familiar data
- 6. Identify and interpret information in familiar tables, graphs and charts for work

| Learning Outcome | Content | Suggested |
|---|--|--|
| | | Assessment |
| 1. Identify and use whole numbers and simple fractions, decimals and percentages for work | Whole numbers Simple fractions Decimals Percentages Sizes Problem solving methods | MethodsWrittenPractice assignments |
| | Calculations using the 4 operations | |

| 2. Identify, measure and estimate familiar | Recording and communicating numerical information Measurement information Units of measurement | Written Practice |
|--|---|--|
| quantities for work | Estimate familiar and simple amounts Selection of appropriate measuring equipment Calculate using familiar units of measurement Check measurements and results against estimates Using informal and some formal mathematical and general language Record or report results | assignments |
| 3. Read and use familiar maps, plans and diagrams for work | Maps, plans and diagrams Locate items and places in familiar maps, plans and diagrams Recognize common symbols and keys in familiar maps, plans and diagrams Direction and location of objects, or route or places Use of informal and some formal oral mathematical language and symbols | Practical testWritten |
| 4. Identify and describe common 2D and some 3D shapes for work | Common 2D shapes and 3D shapes Classification of common 2D shapes and designs Description of Use informal and some formal language to describe common two-dimensional shapes and some common three-dimensional shapes | Written Practical test |

| 5. Construct simple tables and graphs for work using familiar data | Construction of common 2D shapes Match common 3D shapes to their 2D sketches or nets Types of graphs Determination of data to be collected Selection of data collection method Collection of data Determination of variables from the data collected Order and collate data Construct a table and enter data Construct a graph using data from table Check results Report or discuss graph information related to work using informal and some formal mathematical and general language | Written Practical test |
|--|--|--|
| 6. Identify and interpret information in familiar tables, graphs and charts for work | Tables construction and labeling i.e. title, headings, rows and columns Interpreting information and data in simple tables Relaying information of relevant workplace tasks on/in a table Identify familiar graphs and charts in familiar texts and contexts Locate title, labels, axes, scale and key from familiar graphs and charts Identify and interpret information and data in familiar graphs and charts | WrittenPractical test |

| Relate information to relevant workplace tasks | |
|--|--|
|--|--|

- Instructor led facilitation of theory
- Practical demonstration of tasks by trainer
- Practice by trainees/ role play
- Discussion
- Observations and comments and corrections by trainers

- Computers
- Stationery
- Charts
- Video clips
- Audio tapes
- LCD projectors
- Standard operating and/or other workplace procedures manuals
- Specific job procedures manuals
- Projectors
- Writing boards
- Mathematical tables

DIGITAL LITERACY

UNIT CODE: AGR/CU/AP/BC/03/4/A

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Demonstrate Digital Literacy

Duration of Unit: 35 hours

Unit Description

This unit covers the competencies required to demonstrate digital literacy in a working environment. It entails identifying computer software and hardware, applying security measures to data, hardware, software, applying computer software in solving task sand applying internet and email in communication at workplace.

Summary of Learning Outcomes

- 1. Identify computer software and hardware
- 2. Apply security measures to data, hardware and software
- 3. Apply computer software in solving tasks
- 4. Apply internet and email in communication at workplace

| Learning Outcome | Content | Suggested |
|---|--|--|
| | 0 | Assessment Methods |
| Identify computer hardware and software | Meaning of a computer Functions of a computer Components of a computer Classification of computers | Written testsOralObservation |
| 2. Apply security measures to data, hardware and software | Data security and control Security threats and control measures Types of computer crimes Detection and protection against computer crimes | Written testsOral presentationObservationProjects |
| 3. Apply computer software in solving tasks | Operating systemWord processingSpread sheetsData base | Oral questioningObservationProject |

| 4. Apply internet and | Computer networks | • | Oral questioning |
|-----------------------|----------------------------|---|-------------------|
| email in | • Uses of internet | • | Observation |
| communication at | • Electronic mail (e-mail) | • | Oral presentation |
| workplace | concept | • | Written report |

- Instructor led facilitation of theory
- Demonstration by trainer
- Practical assignment
- Viewing of related videos
- Project
- Group discussions

- Desktop computers
- Laptop computers
- Other digital devices
- Printers
- Storage devices
- Internet access
- Computer software

ENTREPRENEURIAL SKILLS

UNIT CODE: AGR/CU/AP/BC/04/4/A

Relationship to occupational standards

This unit addresses the Unit of Competency: Demonstrate Entrepreneurial Skills

Duration of unit: 60 hours

Unit description

This unit covers the competencies required for creating and maintaining small scale business, establishing small business customer base, managing and growing a micro/small-scale business.

Summary of Learning Outcomes

- 1. Create and maintain small scale business
- 2. Establish small scale business customer base
- 3. Manage small scale business
- 4. Grow/expand small scale business

| Learning Outcome | Content | Suggested Assessment |
|---|--|---|
| | | Methods |
| 1. Create and maintain small scale business | Starting a small business Legal regulatory requirements in starting a small business SWOT/ PESTEL analysis Conducting market/industry survey Generation and evaluation of business ideas Matching competencies with business opportunities Forms of business ownership Location of a small business Legal and regulatory requirement | Individual/group assignments projects Written Oral |

| | Resources required to start | |
|--------------------|---|--------------------------------------|
| | a small business | |
| | • Common terminologies in | |
| | entrepreneurship | |
| | • Entrepreneurship in | |
| | national development | |
| | • Self-employment | |
| | Formal and informal | |
| | employment | |
| | • Entrepreneurial culture | |
| | Myths associated with | |
| | entrepreneurship | |
| | Types, characteristics, | |
| | qualities & role of | |
| | entrepreneurs | |
| | History, development and | |
| | importance of | |
| | entrepreneurship | |
| | • Theories of | |
| | entrepreneurship | |
| | Quality assurance for small | |
| | businesses | |
| | Policies and procedures on | |
| | occupational safety and | |
| | health and environmental | |
| | concerns | |
| 2. Establish small | Good staff/workers and | Individual/group |
| scale business | customer relations | assignments |
| customer base | Marketing strategy | projects |
| | Identifying and maintain | • Written |
| | new customers and | Oral |
| | markets | |
| | • Product/ service | |
| | promotions | |
| | • Products / services | |
| | diversification | |
| | • SWOT / PESTEL analysis | |
| | Conducting a business | |
| | survey | |
| | Generating Business ideas | |
| | Business opportunities | |

| 3. Manage small | Organization of a small | • Oral |
|-----------------|--|------------------------------------|
| scale business | business | Individual/group |
| seare outsiness | Small business' business | assignments |
| | plan | projects |
| | Marketing for small | Written |
| | businesses | Willen |
| | Managing finances for small business | |
| | Production/ operation | |
| | process for goods/services | |
| | Small business records | |
| | management | |
| | Book keeping and auditing | |
| | for small businesses | |
| | Business support services | |
| | Small business resources | |
| | mobilization and | |
| | utilization | |
| | Basic business social | |
| | responsibility | |
| | Management of small | |
| | business | |
| | Word processing concepts | |
| | in small business | |
| | management | |
| | Computer application | |
| | software | |
| | Monitoring and controlling | |
| | business operations | |
| 4. Grow/expand | Methods of growing small | Individual/group |
| small scale | business | assignments |
| business | Resources for growing | projects |
| | small business | Written |
| | Small business growth | |
| | plan | |
| | Computer software in | |
| | business development | |
| | ICT and business growth | |

• Instructor led facilitation of theory

- Demonstration by trainer
- Practice by trainee
- Role play
- Case study

- Case studies for small businesses
- Business plan templates
- Lap top/ desk top computer
- Internet
- Telephone
- Writing materials



EMPLOYABILITY SKILLS

UNIT CODE: AGR/CU/AP/BC/05/4/A

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Demonstrate Employability Skills

Duration of Unit: 30 hours

Unit Description

This unit covers competencies required to demonstrate employability skills. It involves conducting self-management, demonstrating critical safe work habits, demonstrating workplace learning and workplace ethics.

Summary of Learning Outcomes

- 1. Conduct self-management
- 2. Demonstrate critical safe work habits
- 3. Demonstrate workplace learning
- 4. Demonstrate workplace ethics

| Learning Outcome | Content | Suggested Assessment Methods |
|-------------------------|--|--|
| Conduct self-management | Self-awareness Formulating personal vision, mission and goals Strategies for overcoming life challenges Emotional intelligence Assertiveness Expressing personal thoughts, feelings and beliefs Developing and maintaining high self-esteem Developing and maintaining positive self-image Articulating ideas and aspirations Accountability and responsibility | Written tests Oral questioning Portfolio of evidence Third party report |
| | Accountability and responsibilityGood work habits | |

| | Self-awareness | |
|-------------------------|--|--|
| | Self-awarenessSelf-development | |
| | - | |
| | • Financial literacy | |
| 2. Demonstrate critical | Healthy lifestyle practices | XX '44 |
| safe work habits | Stress and stress management | • Written tests |
| safe work flabits | Punctuality and time consciousness | • Oral |
| | • Interpersonal communication | questioning |
| | • Sharing information | Portfolio of |
| | • Leisure | evidence |
| | Integrating personal objectives into organizational objectives | Third party report |
| | Resources utilization | |
| | Setting work priorities | |
| | HIV and AIDS | |
| | Drug and substance abuse | |
| | Handling emerging issues | |
| 3. Demonstrate | Personal training needs | Written tests |
| workplace learning | identification and assessment | Oral questioning |
| | Managing own learning | Portfolio of |
| | Contributing to the learning | evidence |
| | community at the workplace | Third party |
| | Cultural aspects of work | report |
| | Variety of learning context | |
| | Application of learning | |
| | Safe use of technology | |
| | Identifying opportunities | |
| | Workplace innovation | |
| | Performance improvement | |
| | Handling emerging issues | |
| | • Future trends and concerns in | |
| | learning | |
| 4. Demonstrate | Meaning of ethics | • Written tests |
| workplace ethics | Ethical perspectives | Oral questioning |
| | Principles of ethics | Portfolio of |
| | Values and beliefs | evidence |
| | • Ethical standards | Third party |
| | Organization code of ethics | report |
| | Common ethical dilemmas | |
| | Organization culture | |

- Corruption, bribery and conflict of interest
- Privacy and data protection
- Diversity, harassment and mutual respect
- Financial responsibility/accountability
- Etiquette
- Personal and professional integrity
- Commitment to jurisdictional laws
- Emerging issues in ethics

- Simulation/Role play
- Group Discussion
- Presentations
- Q&A
- Case studies
- Assignments

- Computers
- Stationery
- Charts
- Video clips
- Audio tapes
- Radio sets
- TV sets
- LCD projectors

ENVIRONMENTAL LITERACY

UNIT CODE: AGR/CU/AP/BC/06/4/A

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Demonstrate Environmental Literacy

Duration of Unit: 20 hours

Unit Description

This unit specifies the competencies required to demonstrate environmental literacy. It involves controlling environmental hazard, controlling environmental pollution, demonstrating sustainable resource use and evaluating current practices in relation to resource usage.

Summary of Learning Outcomes

- 1. Control environmental hazard
- 2. Control environmental pollution
- 3. Demonstrate sustainable use of resources
- 4. Evaluate current practices in relation to resource usage

| | O'C | Suggested |
|------------------------------|--|---|
| Learning Outcome | Content | Assessment |
| | | Methods |
| Control environmental hazard | Purposes and content of Environmental Management and Coordination Act 1999 Purposes and content of Solid Waste Act Storage methods for environmentally hazardous materials Disposal methods of hazardous wastes Types and uses of PPE in line with environmental regulations Occupational Safety and Health | Written tests Oral questions Observation of work procedures |
| | Standards (OSHS) | |

| 2 0 1 1 1 1 1 | T 0 11 1 | *** |
|---------------------------|--|---------------------------------|
| 2. Control environmental | • Types of pollution | Written tests |
| Pollution | • Environmental pollution | • Oral |
| | control measures | questions |
| | Types of solid wastes | • Observation |
| | Procedures for solid waste | of work |
| | management | procedures |
| | Different types of noise | Role play |
| | pollution | |
| | Methods for minimizing noise | |
| | pollution | |
| 3. Demonstrate | Types of resources | Written tests |
| sustainable resource use | Techniques in measuring | • Oral |
| | current usage of resources | questions |
| | Calculating current usage of | Observation |
| | resources | of work |
| | Methods for minimizing | procedures |
| | wastage | |
| | Waste management procedures | |
| | • Principles of 3Rs (Reduce, | |
| | Reuse, Recycle) | |
| | Methods for economizing or | |
| | reducing resource consumption | |
| 4. Evaluate current | Collection of information on | • Written tests |
| practices in relation to | environmental and resource | • Oral |
| resource usage | efficiency systems and | questions |
| | procedures, | Observation |
| | Measurement and recording of | of work |
| | current resource usage | procedures |
| | Analysis and recording of | |
| | current purchasing strategies. | |
| | Analysis of current work | |
| | processes to access information | |
| | and data | |
| | • Identification of areas for | |
| | improvement | |
| 5. Identify Environmental | • Environmental issues/concerns | Written tests |
| legislations/conventions | • Environmental legislations | • Oral |
| for environmental | /conventions and local | questions |
| concerns | ordinances | • Observation |
| | Industrial standard | of work |
| | /environmental practices | procedures |

| International Environmental Protocols (Montreal, Kyoto) | |
|---|--|
| • Features of an environmental strategy | |

- Instructor led facilitation of theory
- Practical demonstration of tasks by trainer
- Practice by trainees/ role play
- Discussion
- Observations and comments and corrections by trainers

- Computers
- Stationery
- Charts
- Video clips
- Audio tapes
- Radio sets
- TV sets
- LCD projectors
- Standard operating and/or other workplace procedures manuals
- Specific job procedures manuals
- Machine/equipment manufacturer's specifications and instructions
- Personal Protective Equipment (PPE)

OCCUPATIONAL SAFETY AND HEALTH PRACTICES

UNIT CODE: AGR/CU/AP/BC/07/4/A

Relationship to Occupational Standards

This unit addresses the unit of competency: Demonstrate Occupational Safety and Health Practices

Duration of Unit: 20 hours

Unit Description

This unit specifies the competencies required to practice safety and health and comply with OSH requirements relevant to work. It involves adhering to workplace procedures for hazards and risk prevention and participating in arrangements for workplace safety and health maintenance.

Summary of Learning Outcomes

- 1. Adhere to workplace procedures for hazards and risk prevention
- 2. Participate in arrangements for workplace safety and health maintenance

| Learning Outcome | Content | Suggested Assessment |
|--|---|--|
| | 25 | Methods |
| 1. Adhere to workplace procedures for hazards and risk prevention | Arrangement of work area and items in accordance with Company housekeeping procedures Adherence to work standards and procedures Application of preventive and control measures, including use of safety gears/PPE Study and apply standards and procedures for incidents and emergencies. | Oral questions Written tests Portfolio of evidence Third party report |
| 2. Participate in arrangements for workplace safety and health maintenance | Participating in orientations on OSH requirements/regulations of tasks Providing feedback on health, safety, and security concerns to | Oral questions Written tests Portfolio of evidence Third party report |

- appropriate personnel as required in a sufficiently detailed manner
- Practice workplace procedures for reporting hazards, incidents, injuries and sickness
- OSH requirements/ regulations and workplace safety and hazard control procedures are reviewed, and compliance reported to appropriate personnel
- Identification of needed OSHrelated trainings are proposed to appropriate personnel

- Assigments
- Discussion
- Q&A
- Role play
- Viewing of related videos

- Computers
- Stationery
- Charts
- Video clips
- Audio tapes
- Radio sets
- TV sets
- LCD projectors
- Standard operating and/or other workplace procedures manuals
- Specific job procedures manuals
- Machine/equipment manufacturer's specifications and instructions
- Personal Protective Equipment (PPE) e.g.
 - Mask
 - Face mask/shield
 - Safety bootsn
 - Safety harness
 - Arm/Hand guard, gloves
 - Eye protection (goggles, shield)
 - Hearing protection (ear muffs, ear plugs)

- Hair Net/cap/bonnet
- Hard hat
- Face protection (mask, shield)
- Apron/Gown/coverall/jump suit
- Anti-static suits
- High-visibility reflective vest

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CORE UNITS OF LEARNING

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AGRI-ENTERPRISE BUSINESS PLAN DEVELOPMENT

UNIT CODE: AG/CU/AP/CR/01/4/A

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Develop agri-enterprise business plan.

Duration of Unit: 40 hours

Unit Description

This unit specifies the competencies required to develop an agri- enterprise business plan. It involves preparing to develop agri-enterprise business plan, developing agri-enterprise business plan, assessing agri-enterprise business plan and completing development of agri-enterprise business plan.

Summary of Learning Outcomes

- 1. Prepare to develop agri-enterprise business plan.
- 2. Develop agri-enterprise business plan
- 3. Assess agri-enterprise business plan
- 4. Complete development of agri-enterprise business plan

| Learning Outcome | Content | Suggested |
|--|--|--|
| | | Assessment Methods |
| 1. Prepare to develop agrienterprise business plan | Definition of Agripreneur and business plan Introduction Selection of markets Type of Customers Type of products Marketing channels Market mix (4Ps, 2Cs) Conducting Basic market and feasibility studies Basic data collection Data entry Basic data analysis | Written tests Oral questions Third party reports |

| | SWOT analysis | |
|------------------|-------------------------------------|------------------------------------|
| | Basic accounting principles | |
| | Budgeting | |
| | Cash book | |
| | Profit and loss | |
| | calculation | |
| | Basic procurement principles | |
| | Accountability | |
| | • Fairness | |
| | Relevant laws | |
| 2. Develop agri- | Types and categories of agri | • Written tests |
| enterprise | business e.g. formal or | Oral questions |
| business plan | informal MSME, SMEs | Third party |
| | Basic value chain analysis | reports |
| | Mapping and linkages | |
| | Elements of a business plan | |
| | Development of small | |
| | enterprise business plan. | |
| 3. Assess agri- | Business management | Written tests |
| enterprise | principles | Oral questions |
| business plan | Parameters for assessing | Third party |
| | viable business | reports |
| 4. Complete | Documentation of the process | Written tests |
| development of | e.g. | Oral questions |
| agri-enterprise | Data collection tools | Third party |
| business plan | • Photos | reports |
| | Collected data | |
| | • Elements of the Report e.g. | |
| | Introduction | |
| | • Objectives | |
| | Outcomes | |
| | Main body | |
| | • Conclusions | |
| | | |

- Demonstration by trainer
- Field trips

- Discussions
- Direct instruction
- Role play
- Mentorship program
- Apprenticeship

- Business planning template
- Value chain template
- Financial planning template
 - Cash flow analysis
 - Profit and loss chart



SMALL AGRI-ENTERPRISE OPERATION

UNIT CODE: AGR/CU/AP/CR/02/4/A

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Operate a small agri-enterprise.

Duration of Unit: 40 hours

Unit Description

This unit specifies the competencies required to operate a small agri-enterprise. It involves developing an entrepreneurial culture, preparing to start agrienterprise, implementing agrienterprise start up and operational processes, operating a small business, assessing agrienterprise start up and operational processes and completing starting agrienterprise

Summary of Learning Outcomes

- 1. Develop agripreneural culture
- 2. Prepare to start agri-enterprise
- 3. Implement agri-enterprise start up processes
- 4. Operate a small business
- 5. Assess agri-enterprise start up and operational processes
- 6. Complete starting agri enterprise

| Learning Outcome | Content | Suggested Assessment Methods |
|---------------------------------------|---|--|
| Develop agripreneural culture | Concept of Agripreneurship Common terminologies in Agripreneurship Agripreneurship in National development Agripreneurship and employment creation Formal and informal employment Agripreneural culture Agripreneural culture Innovation | Written tests Oral questions Third party reports |

| 2. Implement agrienterprise operations | Risk taker How, why, when and who to be an agripreneural Habits that promote agripreneural History and development of Agripreneurship Factors that inhibits Agripreneurship Managing factors that inhibit Agripreneurship development Factors to consider when starting a small agrienterprise Forms of business ownership Legal and regulatory requirement for starting a small business Procedure of starting a small business The dos and don'ts of starting a small business Challenges faced when starting a small business Locating the business Resources required to start a small business Launch of a small business | Written tests Oral questions Third party reports |
|--|--|--|
| 3. Evaluate agrienterprise business plan | Assessment of operations Enterprise performance appraisal Customer feedback Product improvement and innovation | Written testsOral questionsThird party reports |

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| 4. Complete starting agri- | Activity reporting Pavious of plans, strategies on | Written tests |
|----------------------------|--|----------------|
| enterprise | Review of plans, strategies or targets | Oral questions |

- Demonstration by trainer
- Field trips
- Discussions
- Direct instruction
- Role play
- Guided questions
- Case studies
- Mentorship program
- Apprenticeship

- Case studies for small businesses
- Writing materials
- Telephone /mobile phones.

AGRI-ENTERPRISE PRODUCTS AND SERVICES MARKETING

UNIT CODE: AGR/CU/AP/CR/03/4/A

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Market agri-enterprise products and services

Duration of Unit: 40 hours

Unit Description

This unit specifies the competencies required to market agricultural products and services. It involves preparing for marketing of agri-enterprise products and services, executing marketing of agri-enterprise products and services, establishing customer feedback mechanism, completing marketing of agri-enterprise products and services.

Summary of Learning Outcomes

- 1. Prepare for marketing of agri-enterprise products and services
- 2. Execute marketing of agri-enterprise products and services
- 3. Establish customer feedback mechanism
- 4. Complete marketing of agri-enterprise products and services

| Learning Outcome | Content | Suggested Assessment Methods |
|---|--|--|
| Prepare for marketing of agrienterprise products and services | Types of various agricultural products e.g. commodities, value added products Types of agricultural Services e.g. Artificial insemination services transportation Types of feasibility studies Market survey Quick scan Appraisal Interviews | Written tests Oral questions Third party reports |

| 2. Market Agrienterprise products and services | Basic economic principles in Agripreneurship Nature of products Seasonality Demand and supply Business competitors Pricing Legal and regulatory framework Agricultural Act, County government by-laws, Environment Management and coordination Act. Developing a product brand Packaging/ packing and labelling Product launch Distribution channels Promotion and advertisements Financial records Basic marketing strategy development | Written tests Oral questions Third party reports |
|---|---|--|
| 3. Establish and respond to customer feedback | Product penetration Customer satisfaction surveys Data collection Data analysis Product improvement and innovation | Written testsOral questionsThird party reports |
| 4. Complete marketing of agrienterprise products and services | Report writing and documentation Types of technical reports Elements of technical reports Type and nature of documentations | Written testsOral questions |

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| • Photos, | |
|---------------------------|--|
| charts, | |
| • tables | |

- Demonstration by trainer
- Field trips
- Discussions
- Direct instruction
- Role play
- Guided questions

- Report writing
- Case studies



AGRIPRENEURAL OPERATIONS SUPERVISION

UNIT CODE: AGR/CU/AP/CR/04/4/A

Relationship to Occupational Standards

This unit addresses the Unit of Competency: supervise agri-enterprise operations.

Duration of Unit: 40 hours

Unit Description

This unit specifies the competencies required to successfully supervise agripreneural operations; it involves preparation of agripreneural operations work plans, implementation of policies and procedures, record keeping, risk mitigation and assessing these operations.

Summary of Learning Outcomes

- 1. Prepare to supervise agripreneural operations
- 2. Supervise agripreneural operation
- 3. Evaluate supervision of agripreneural operations
- 4. Complete supervision of agripreneural operations

| Learning Outcome | Content | Suggested Assessment Methods |
|--|--|--|
| 1. Prepare to supervise agripreneural operations | Definition of work-plan Preparation of work plans Five helpers- What, why, when. For whom, and How. Business policies and procedures Team formation Conflict resolution | Written tests Oral questions Third party reports |
| 2. Supervise agripreneural operation | Production process Product quality and quantity Quality assurance Good Manufacturing Practices (GMP) Risk management | Written testsOral questionsThird party reports |

| | Types of risksRisk MitigationsTypes of agripreneural records | |
|---|---|--|
| 3. Evaluate supervision of agripreneural operations | Basic Monitoring and Evaluation Defining assessment indicators Developing measurable indictors Conducting assessment | Written testsOral questionsThird party reports |
| 4. Complete management of agri enterprise | Developing an assessment report Elements of the reports Change management Steps on change management Process evaluation | Written testsOral questions |

- Project
- Demonstration by trainer
- Field trips
- Discussions
- Direct instruction
- Role play

- Reporting templates
- Work-plans
- Ledger books
- Cash books

AGRICULTURAL PRODUCTS AND SERVICES ONLINE MARKETING

UNIT CODE: AGR/CU/AP/CR/05/4/A

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Market agricultural products/services on-line.

Duration of Unit: 40 hours

Unit Description

This unit specifies the competencies required to market agricultural products/services online. It involves preparing for marketing products online, selling agricultural products online, evaluating product online marketing and complete marketing product online.

Summary of Learning Outcomes

- 1. Prepare for Marketing products online
- 2. Sell agricultural products online
- 3. Evaluate product online marketing
- 4. Complete marketing product online

| Content | Suggested |
|--|--|
| Ø* | Assessment Methods |
| Computers and computer packages ICT and ICT applications Use of internet Agripreneural online template development Data collection for online marketing Online platform Design Licensing and user right Advertisements Branding | Written tests Oral questioning Third party reports |
| | Computers and computer packages ICT and ICT applications Use of internet Agripreneural online template development Data collection for online marketing Online platform Design Licensing and user right |

| 1. | Sell agricultural product and services online | Agripreneur Products repacking Online Communication Social media and apps Usage of mobile phones and mobile phone applications Networking Online quality assurance | Written tests Oral questioning Third party reports |
|----|---|---|--|
| 3. | Evaluate products and services online marketing | Customer satisfaction survey Questionnaire development On line data collection Data analysis Response to customer needs ICT System assessment | Written testsOral questioningThird party reports |
| 4. | Complete marketing products and services online | Developing an assessment report Elements of the reports Process of developing the report Change management Definition Steps on change management Process evaluation | Written tests Oral questioning Third party reports |

- Project
- Demonstration by trainer
- Discussions
- Direct instruction

- Software installation manuals
- Computers (desktops and laptops)
- Internet network
- Internet network infrastructure
- Smartphones

- GPS devices
- Applications software
- Satelite mapping software

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