

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY

INSTITUTE OF ADULT EDUCATION



**THE ENHANCEMENT OF ACCESS AND QUALITY TO SECONDARY EDUCATION THROUGH
ALTERNATIVE EDUCATION PATHWAY (ASEP)**

**AGRICULTURE SYLLABUS
FOR ALTERNATIVE SECONDARY EDUCATION PATHWAY**

STAGE I & II

2026

Designed and prepared by:
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1.0 Introduction

Agriculture Syllabus for Alternative Secondary Education Pathway comprises of both Stage One (Equivalent to Form One and Two) and Stage Two (Equivalent to Form Three and Four) written in a modular format. It has integrated components that originate from formal education syllabus. The integrated syllabus has been prepared to allow learners to complete the ordinary secondary education course in two years' time. It is designed for learners outside the formal education system to enable them sit for Ordinary Certificate of Secondary Education Examinations, using acquired competences, both competently and professionally in their daily undertakings. The syllabus uses Competence Based Education and Training (CBET) approach which is result-based indicating what a learner is expected to do after completing the course.

2.0 Objectives of Education in Tanzania

The objectives of education in Tanzania are to:

- a) Guide the development and improvement of the personalities of the citizens of Tanzania, their human resources and effective utilization of their resources in bringing about individual and national development;
- b) Promote the acquisition and appreciation of culture, customs and traditions of the people of Tanzania;
- c) Promote the acquisition and appropriate use of literary, social, scientific, vocational, technological, professional and other forms of knowledge, skills and understanding for the development and improvement of man and society;
- d) Develop and promote self-confidence and an inquiring mind, an understanding and respect for human dignity and human rights and readiness to work hard for self-advancement and national improvement;
- e) Promote and expand the scope of acquisition, improvement and upgrading of mental, practical, productive and other skills needed to meet the changing needs of industry and the economy;
- f) Enable every citizen to understand and uphold the fundamentals of the National Constitution as well as the enshrined human and civil rights, obligations and responsibilities;

- g) Promote love and respect for work, self and wage employment and improved performance in the production and service sectors;
- h) Inculcate principles of national ethics and integrity, national and international cooperation, peace and justice through the study, understanding and adherence to provisions of the national constitution and other international basic charters; and
- i) Enable a rational use, management and conservation of the environment.

3.0 Objectives of Secondary Education in Tanzania

The objectives of Secondary Education in Tanzania are to:

- a) Consolidate and broaden the scope of baseline ideas, knowledge, skills and principles acquired and developed at primary education level;
- b) Enhance further development and appreciation of national unity, identity and ethical personal integrity, respect for and readiness to work, human rights, cultural and moral values, customs, traditions and civic responsibilities and obligations;
- c) Promote the development of competency in linguistic ability and effective use of communication skills in Kiswahili and at least one foreign language;
- d) Provide opportunities for the acquisition of knowledge, skills, attitudes and understanding in prescribed or selected fields of study;
- e) Prepare students for tertiary and higher education; vocational, technical and professional training;
- f) Inculcate a sense and ability for self-study, self-reliance and self-advancement in new frontiers of science and technology, academic and occupational knowledge and skills; and
- g) Prepare the student to join the world of work.

4.0 Objectives of Secondary Education through Alternative Education Pathway in Tanzania

The objectives of Secondary Education through Alternative Education Pathway are to:

- a) Provide equivalent education to children, youth and adults who could not get the opportunity in the formal education system;
- b) Complement government efforts of achieving Education for All (EFA) objectives;

- c) Cater for youths and adults who dropped out of school due to various reasons; and
- d) Provide education to disadvantaged and marginalized groups including girls.

5.0 Competences to be gained in stage I and stage II of the Syllabus

5.1 Main competences

1. Demonstrate mastery of the concepts, principles and processes of Agriculture;
2. Using agricultural skills of scientific investigation and experimentation in producing agricultural products ; and
3. Conduct projects in agriculture.

5.2. Specific competences

1. Demonstrate an understanding of the principles of agriculture;
2. Apply basic principles of husbandry in crop production;
3. Apply basic principles of husbandry in animal production;
4. Apply basic principles of husbandry in aquaculture;
5. Carry out a project in Agriculture.

6.0 The syllabus for Agriculture comprises the following:

i) Name of the Module

This implies set of separate units that can be joined together to form a part of a subject course of study.

ii) Main competence

Main competence is the ability of the learner to perform a certain task accurately and efficiently after learning a subject course.

iii) **Specific competence**

Specific competence is the ability of the learner to perform various activities in specific period.

iv) **Learning Activities**

These are the observable tasks to be done by facilitator and learners in realizing the specific competence.

v) **Suggested learning/facilitation strategies**

This part indicates what a facilitator and learners are expected to do in the process of facilitation and learning. This includes self-learning and face to face session.

vi) **Assessment criteria**

Assessment criteria are specific standards or guidelines that outline what is expected of a learner in particular assessment task.

vii) **Facilitation/learning resources**

These are learning and facilitation materials which are used to support the process of facilitation and learning.

viii) **Estimated time of study**

These are proposed hours of learning which can be used for self-study and face to face facilitation.

7.0 Number of modules

This syllabus has two stages which makes a total of nine modules as shown.

Stage I

Module 1: Demonstrating an understanding of concepts of agriculture and soil science.

Module 2: Applying basic principles and practices of husbandry in production of amaranth, Chinese-cabbage, onion and tomato as horticultural crops in real life

Module 3: Applying husbandry principles and practices in production of banana, cassava, sweet and round potato crops

Module 4: Applying basic husbandry principles and practices in poultry production

Module 5: Applying husbandry principles and practices in production of pig and rabbit in daily life

Stage II

Module 1: Employing principles and practices of husbandry in production of cereal and pulse crops

Module 2: Using principles and practices of production of aquaculture (fish, cucumber and seaweed) in real life

Module 3: Applying principles and practices of husbandry in production of diary and beef cattle.

Module 4: Using basic husbandry principles and practices in production of nut/oil seed crops (sunflower, simsim and groundnut)

8.0 Further readings

Several books have been suggested for further reading in each module at the end of the syllabus.

STAGE I
AGRICULTURE SYLLABUS

COMPETENCES FOR AGRICULTURE SUBJECT STAGE I

Upon completion studying Stage I Modules of Agriculture subject, a learner should be able to:

1. Demonstrate mastery of the concepts, principles and processes of animal and crop production;
2. Use of agricultural skills of scientific investigation and experimentation in producing agricultural products; and
3. Conduct projects in agriculture.

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
1.0 DEMONSTRATING AN UNDERSTANDING OF CONCEPTS OF AGRICULTURE AND SOIL SCIENCE	1.1 Demonstrate mastery of the principles of agriculture	1.1.1. Demonstrate an understanding of the principles of agriculture	a) Describe the meaning, importance, branches of agriculture and the relationship between agriculture and other science subjects	i) Library search: A learner should search on the meaning, terminologies and importance of studying agriculture ii) Internet search: A learner should use internet to search for information about the relationship between agriculture and other subjects.	i) Group discussion: Guide learners in manageable groups to discuss meaning of agriculture, importance and branches of agriculture ii) Brainstorm: Guide learners to explore uses of various crops and livestock (animals) iii) Jigsaw: Guide learners in manageable groups to explain the relationship of Agriculture with other subjects through jigsaw method	The basic concepts of agriculture and its branches are clearly described	Charts depicting various agricultural activities, charts showing branches of agriculture, wall pictures/ charts illustrating the relationship between Agriculture and other subjects, wall charts and examples depicting the application of agriculture in daily life, different actual crop and animal farms	5 Hours	3 Hours

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
			b) Describe soil, its formation, physical, chemical and biological properties and soil health.	<p>i) Internet search: A learner should search relevant materials on soil, its formation, physical, chemical and biological properties.</p>	<p>iv) Field work: Guide learners in groups or whole class to explore how soil is formed, take soil samples and discuss the importance of soil in crop production</p> <p>v) Think Pair Share: Guide learners to describe the meaning and importance of soil in agriculture, its formation and constituents and properties of soil, then summarise the discussion</p> <p>vi) Experimentation: Guide learners to carry out simple experiments on physical, chemical and biological properties of soil in relation to crop</p>	Concept of the soil, its formation, physical, chemical and biological properties described	<p>Various parent rocks, soil pits, actual landscape or cross section depicting various soil profile and horizons, wall charts, pictures or slides showing soil profile and horizons</p> <p>Samples of different soils, relevant tools or equipment and materials</p>		

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
					production				
2.0 APPLYING BASIC PRINCIPLES AND PRACTICES OF HUSBANDRY IN PRODUCTION OF AMARANTH, CHINESE-CABBAGE, ONION AND TOMATO AS HORTICULTURAL	1.2 Demonstrate mastery of the principles of agriculture	1.1.2 Demonstrate an understanding of the principles of agriculture	c) Describe the principles and practices for the production of horticultural crops (the concept of horticultural crops, principles and practices for production of horticultural crops: amaranth, Chinese, cabbage, onions and tomato)	i) Library search: A learner should search on the meaning of the concepts of horticulture	i) Field visit: Organise learners in groups and visit a school farm and/ near a horticultural garden to study on husbandry practices involved in production of the selected horticultural crops and write a report. ii) Brainstorm: Guide learners to brainstorm on concept of horticulture iii) Group discussion: Guide learners to present	Principles and practices for production of the selected horticultural crops (amaranth, Chinese cabbage, onion, tomato) clearly described	Varieties of horticultural crops. charts on major groups of horticultural crops	2 Hours	1 Hour

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
CROPS IN REAL LIFE					<p>their group work and discussion on different types of selected areas and other related vegetable crops grown in surrounding areas.</p> <p>iv) Field practicals: Guide learners in groups or individually to apply the recommended practices to produce the selected horticultural crops, prepare a report and share it in class</p>				
	2.2 Use basic agricultural skills	2.1.2 Apply basic principles of husbandry in crop production	b) Perform husbandry practices in the production of horticultural crops (amaranth, Chinese	<p>i)Internet search: A learner should use internet to search for the relevant practices in the production of horticultural crops</p>	<p>i) Field practicals: Guide learners in groups or individually to apply the recommended husbandry practices,</p>	husbandry practices in the production of horticultural crops (amaranth,	School farm and / nearby horticultural gardens/plots, common garden tools/equipment, materials/supplies	4 Hours	2 Hours

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
			cabbage, onion, tomato		<p>raise the selected poultry; Prepare a report and present in class</p> <p>ii) ICT based-learning: Prepare relevant videos showing basic principles and recommended practices on poultry production</p> <p>iii) Group discussion Guide students in groups to summarize, present and discuss on different types of poultry kept in their areas, importance of poultry, major husbandry practices involved and importance of each practice in poultry production.</p>	Chinese cabbage, onion, tomato performed clearly	used in production of the selected crops		

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
					<p>iv) Guest speaker: Invite a resource person to describe the recommended principles and practices for poultry production</p>				
<p>3.0 APPLYING HUSBANDRY PRINCIPLES AND PRACTICES IN PRODUCTION OF BANANA, CASSAVA, SWEET AND ROUND POTATO CROPS</p>	<p>3.1. Demonstrate mastery of the principles of agriculture</p>	<p>3.1.1 Demonstrate an understanding of the principles of agriculture</p>	<p>a) Describe the principles and practices for the production of banana and common root/ stem/ tuber crops (conceptualisation of production of banana and the selected common root/stem/tuber crops: cassava, sweet and round potato)</p>	<p>i) Internet search: A learner should use internet to obtain information on respective topic</p> <p>i) Library search: A learner should use internet to search for the relevant information on recommended practices for production of banana and selected common root/stem/ tuber crops (cassava, sweet and round potato)</p>	<p>i) Field visit: Guide learners in groups or whole class to visit a school and/ nearby farm to study husbandry practices involved in production of banana and the selected common root and stem tuber crops and other related crop (s) grown in their area. Then, write a report</p>	<p>The principles and practices for the production of banana and common root/ stem/ tuber crops (conceptualisation of production of banana and the selected common root/stem/ tuber crops: cassava,</p>	<p>Charts/photographs showing various selected field crops</p> <p>Various species of field crops.</p>	4 Hours	2 Hours

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
					<p>ii) Group discussion: Guide learners to discuss their findings from the field works and literature searches on used and recommended practices involved in the production of banana and the selected common root and stem tuber crops; importance of each practice; common tools/ equipment used</p>	sweet and round potato clearly described			
	3.2 Use basic agricultural skills	3.2.2 Apply basic principles of husbandry in crop production	a) Perform husbandry practices in the production of banana, common root and stem tuber crops (cassava, sweet and round potato)	<p>i) ICT-Based learning: A learner should use the internet to watch videos that explains on how husbandry practices in the production of banana, common root, stem, tuber crops (cassava, sweet and round potato)</p>	<p>i) Brainstorming: Guide learners to brainstorm on the different methods of cultivating banana and cassava</p> <p>ii) Field trip: Guide learners to visit nearby farm of banana and cassava and observe the way they are cultivated and then write a</p>	Husbandry practices for the production of bananas and the selected root, stem and tuber crops (cassava, sweet and round potatoes) well	School garden/ plots, tools/equipment and materials/ supplies for production of banana and selected common root and stem tuber crops, production guides on the crops	5 Hours	3 Hours

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
				<p>ii) Library search: A learner should use books to read on the husbandry practices in the production of banana, common root and stem tuber crops (cassava, sweet and round potato)</p>	<p>report.</p> <p>iii) ICT-Based learning: Guide learners to explain various methods employed in cultivation of banana and cassava</p> <p>iv) Group discussion: Guide learners in groups to discuss principles and practices in production banana and cassava</p> <p>v) Field practical: Guide learners in groups or individually, to apply the recommended farming practices to produce/ maintain banana and the selected</p>	performed			

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
					root, stem and tuber crops; and write a report				
4.0 APPLYING BASIC HUSBANDRY PRINCIPLES AND PRACTICES IN POULTRY PRODUCTION	4.1.0 Demonstrate mastery of the principles of agriculture	4.1.1. Demonstrate an understanding of the principles of agriculture	a) Describe the principles and practices for the production of poultry (conceptualisation of poultry production; principles and practices for production of chicken (layers, broilers and dual purpose) and duck	i) Library search: A learner should search from books about the principles of production of layers and broilers ii) ICT based learning A learner should prepare relevant videos showing basic principles and recommended practices on poultry production	i) Questions and answers: Guide learners to explain on how layers and broilers are managed ii) ICT based learning: Guide learners to explain basic principles and recommended practices for poultry production through simulation/animation iii) Field visit: Guide learners in groups to apply the recommended husbandry practices to raise broilers and layers. Prepare a report and present in class	The principles and practices for the production of poultry (conceptualisation of poultry production; principles and practices for production of chicken (layers, broilers and dual purpose) and duck clearly described	Poultry unit, different types of poultry feeders, drinkers, cages, poultry feeds, insecticides and medicines	4 Hours	3 Hours

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
	4.1.0 Use basic agricultural skills	4.1.2 Apply basic principles of husbandry in animal production	b) Perform husbandry practices in the production of poultry (local, layer, broiler and dual purpose chicken) and duck	<p>i) ICT based Learning: A learner should use internet to explain the principles of duck/chicken production</p>	<p>i) Brainstorm: Guide learners to brainstorm on various ways of rearing of poultry (local, layer, broiler and dual-purpose chicken) and duck</p> <p>ii) ICT-based learning: Guide learners to explain various breeds of poultry (local, layer, broiler and dual-purpose chicken) and duck</p> <p>iii) Group discussion: Guide learners in manageable groups to discuss on; different types of poultry kept in their areas, importance of poultry, major</p>	Husbandry practices for the production of bananas and the selected root, stem and tuber crops (cassava, sweet and round potato) well performed	School garden/plots, tools/equipment and materials/supplies for production of banana and selected common root and stem tuber crops, production guides on the crops	6 Hours	4 Hours

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
					<p>husbandry practices involved and importance of each practice in poultry production</p> <p>iv) Guest speaker: Invite guest speaker to share with learners on various principles and practices for poultry production.</p> <p>v) Field practical: Guide learners in groups or individually to apply the recommended husbandry practices to produce/ maintain sunflower, simsim and groundnut crops; and write a report</p>				

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
5.0. APPLYING HUSBANDRY PRINCIPLES AND PRACTICES IN PRODUCTION OF PIG AND RABBIT IN DAILY LIFE.	5.1. Demonstrate mastery of the principles of agriculture	5.1.1. Demonstrate an understanding of the principles of agriculture	a) Describe the principles and practices for the production of pig or rabbit (conceptualisation of pig and rabbit production, principles and practices for production of pig and rabbit)	i) Internet and library search: A learner should search for relevant information on recommended principles and practices involved in production of pig and rabbit; and write a report	i) Field visit: Organise learners in groups or individually to visit a school/ nearby pig or rabbit farm to study husbandry practices involved and write a report ii) Group discussion: Guide learners to present their literature searches and field works and discuss on importance of the visited kind of animal; the used and recommended husbandry practices involved in pig/ rabbit production and importance of each practice. Provide a summary on the above discussion	Principles and practices for the production of pig and rabbit clearly described	Relevant pictures/ wall charts, reports, and production guides on pig/rabbit, Piggery/ rabbit units, tools/equipment and materials/ supplies for pig or rabbit production	2 Hours	1Hours

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
					iii) Guest speaker; Invite a resource person to describe the recommended principles and practices for pig or rabbit production				
	5.2 Use basic agricultural skills	5.1.2 Apply basic principles of husbandry in animal production	Perform husbandry practices in the production of pig or rabbit	i) Internet and library search: A learner should search for relevant information on recommended principles and practices involved in production of pig/rabbit; and write a report	Field practical: Guide learners in groups or individually to apply the recommended husbandry practices in production of pig/rabbit; and write a report	Husbandry practices for the production of pig or rabbit clearly described	Piggery or rabbit units, tools/ equipment and materials/supplies used in production of pig/rabbit, production guides	5Hours	3Hours

AGRICULTURE SYLLABUS STAGE II

COMPETENCES OF AGRICULTURE SUBJECT - STAGE II

Upon completion Stage II Modules learner should be able to:

1. Demonstrate mastery of the concepts, principles and processes of animal and crop production;
2. Use agricultural skills of scientific investigation and experimentation in producing agricultural products; and

3. Conduct projects in Agriculture.

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
1.0 EMPLOYING PRINCIPLES AND PRACTICES OF HUSBANDRY IN PRODUCTION OF CEREAL AND PULSE CROPS	1.1 Demonstrate mastery of the principles of agriculture	1.1.1 Demonstrate an understanding of the principles of agriculture	(a) Describe the principles and practices for the production of cereals (maize, sorghum, paddy) and pulses (common bean/ pea, cow pea and pigeon pea) (conceptualisation of cereals and pulses; principles and practices for production of selected cereals (maize, sorghum, paddy) and pulses	i) Internet and library search: A learner should search for relevant information on recommend practices for production of the selected cereals and pulses	i) Internet search: Guide learners in groups or individually, to search relevant information on recommended practices for production of the selected cereals and pulses ii) Field visit: Organise learners in groups or the whole class visit a school and/ nearby farm, to study husbandry practices involved in production of the selected common cereal and pulse	The principles for production of selected common cereals (maize, sorghum, and paddy), and pulses (common bean/pea, cow pea and pigeon pea) clearly described	Appropriate farming tools, implements, equipment and machines, respective crop farms, charts showing various farm practices	8 Hours	4 Hours

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
			(common bean/ pea, cow pea and pigeon pea		<p>crops grown in their area; and write a report</p> <p>iii) Group discussion: Guide learners to present their findings from literature searches and field works, and discuss on the used and recommended practices involved in the production of the selected cereals and pulses; importance of each practice in production of the crops</p> <p>iv) Guest speaker: Invite a resource personnel/guest speaker to describe the recommended principles and practices involved in production of the</p>				

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
					selected cereals and pulses				
	1.2 Use basic agricultural skills	1.2.1 Apply basic principles of husbandry in crop production	Perform basic husbandry practices in the production of cereals (maize, sorghum and paddy); pulses (common bean/pea, cow pea and pigeon pea)	i) Internet and library search: A learner should search for relevant information on recommended practices for production of the selected cereals (maize, sorghum and paddy and pulses (common bean/pea, cow pea and pigeon pea)	i) Field practical: Guide learners in groups or individually to apply the recommended husbandry practices, to produce/ maintain the selected cereal and pulse crops; and write a report	Husbandry practices for production of the selected cereals and pulses, well performed	Farm workshop, respective crop fields in school/nearby community	6 Hours	3 Hours

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
2.0 USING PRINCIPLES AND PRACTICES OF PRODUCTION OF AQUACULTURE (FISH, CUCUMBER AND SEAWEED) IN REAL LIFE	2.1 Demonstrate mastery of the principles of agriculture	2.1.1 Demonstrate an understanding of the principles of agriculture	(b) Describe the principles and practices for aquaculture (conceptualisation of aquaculture; principles and practices for production of fish, sea cucumber and seaweed farming)	<p>i) Internet and Library search; A learner should search for relevant information on recommended production practices for aquaculture farming practice</p> <p>ii) ICT based-learning: A learner should prepare relevant videos on aquaculture farming</p>	<p>i) Field visit: Organise learners in groups or the whole class visit any aquaculture site to learn on practices involved in aquaculture farming; write a report</p> <p>ii) Group discussion: Guide learners to present their findings from literature searches and field works and discuss on importance of aquaculture, favourable conditions for aquaculture, used and recommended principles and practices involved in aquaculture farming; and importance of each</p>	The principles for aquaculture practices clearly described	Aquaculture production sites, aquarium, wall charts with various aquaculture practices	4Hours	2 Ho

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
	2.2 Use basic agricultural skills	2.2.2 Apply basic principles of husbandry in aquaculture production	Perform husbandry practices in aquaculture (fish, sea cucumber and seaweed farming)	<p>i) Internet and Library search: A learner should search for relevant information on recommended production practices for aquaculture farming (fish, sea cucumber and seaweed farming) farming; and importance of each practice</p> <p>ICT based-learning: Prepare relevant videos on aquaculture farming</p> <p>Guest speaker: Invite a resource person/guest speaker to describe the recommended practices involved in aquaculture production</p>	<p>i) Field practical: Guide learners in groups or individually to apply the recommended aquaculture practices in production of fish, sea cucumber and sea weeds; write a report and present in class</p> <p>ii) Guest speaker: Invite a resource person/guest speaker to describe the recommended practices involved in aquaculture production</p> <p>iii) Group discussion: Guide learners to present their findings from literature searches and field works and</p>	Husbandry practices for aquaculture well carried out	Production sites, aquarium, common tools/equipment and materials/supplies used in aquaculture	6hours	3hours

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
					discuss on importance of aquaculture, favourable conditions for aquaculture, used and recommended principles and practices involved in aquaculture				
3.0 APPLYING PRINCIPLES AND PRACTICES OF HUSBANDRY IN PRODUCTION OF DIARY AND BEEF CATTLE	3.1. Demonstrate mastery of the principles of agriculture	3.1.1 Demonstrate an understanding of the principles of agriculture	Describe the basic principles and practices for the production of cattle (conceptualisation production of cattle; principles and practices for production of dairy and beef cattle	i) Internet and library search: A learner should search for relevant information on production of dairy and beef cattle	i) Field visit: Organise learners in groups or the whole class visit a school and nearby farms dealing with production of dairy and beef cattle; to study husbandry practices used and write a report ii) Group discussion: Guide learners to present their findings from literature searches and field works	Basic principles and practices for the production of dairy and beef cattle clearly described	Dairy and beef cattle units, grazing lands, various types of feeds, documentaries	6 Hours	2 Hours

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
					then, discuss on importance of dairy and beef cattle, used and recommend husbandry practices involved, importance of each practice in production of dairy and beef cattle Provide a summary on the above discussion. iii) Guest speaker: Invite a resource person to describe the recommended principles and practices for production of dairy and beef cattle				
	3.2 Use basic agricultural skills	3.2.2 Apply basic principles of husbandry in animal production	Perform basic husbandry practices in the production of dairy and beef cattle	i) Internet and library search: A learner should search for relevant information on production of dairy and beef cattle	i) Field practical: Guide learners in groups or individually to apply the recommended husbandry practices to raise/ manage dairy and beef	Basic husbandry practices for dairy and beef cattle well performed	Dairy and beef cattle units, feeds, grazing lands, tools/ equipment and materials for production of dairy and beef	4 Hours	3 Hours

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
	3.3 Conducting a project in Agriculture	3.2.3 Carry out a project in Agriculture.	Complete the crop/animal-based production project and submit a report	ii) Field visit Visit nearby animal/crop related farm and gather some information for project	cattle; and write a report ii) Project work: Guide learners to accomplish the project work and submit a report	The project work completed and report submitted	production, production guides School farm/nearby farm enterprise tools, equipment and materials/supplies appropriate to the project		
4.0. USING BASIC HUSBANDRY PRINCIPLES AND PRACTICES IN PRODUCTION OF NUT/OILSEED CROPS (sunflower, simsim and	4.1. Demonstrate mastery of the principles of agriculture	4.1.1 Demonstrate an understanding of the principles of agriculture	(a) Describe the principles and practices for the production of nut/ oil seed crops (conceptualisation of nut/oil seed crops; principles and practices for production of sunflower,	i) Internet and library search: A learner should search for relevant information on recommended principles and husbandry practices for production of sunflower, simsim and groundnut	i) Field visit: Organise learners in groups or the whole class visit a school and/ nearby fields for the selected nut/oil seed crops farms, to study husbandry practices involved; and write a report ii) Group discussion: Guide learners to present their	Basic principles and husbandry practices for production of the selected nut/oil seed crops well described	School and/ nearby fields of nut /oil seed crops, documentaries	5 Hours	3 Hours

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
groundnut)			simsim and groundnut)		findings from field works and literature searches and discuss on used and the recommended husbandry practices for production of the selected nut/oil seed crops grown in their area; importance of each husbandry practices in production of the selected crops iii) ICT based-learning: Prepare relevant videos on recommended husbandry practices in production of the selected nut/oil seed crops iv) Guest speaker: Invite a resource person/guest speaker to describe the recommended husbandry practices				

NAME OF MODULE	MAIN COMPETENCES	SPECIFIC COMPETENCES	LEARNING ACTIVITIES	SUGGESTED FACILITATION AND LEARNING STRATEGIES		ASSESSMENT CRITERIA	FACILITATION/LEARNING RESOURCES	TIME (HOURS)	
				SELF LEARNING	FACE TO FACE			SELF LEARNING	FACE TO FACE
					for production of the selected nut/oil seed crops				
	Use basic agricultural skills	Apply basic principles of husbandry in crop production	Perform basic husbandry practices for the production of nut/oil seed crops (sunflower, simsim and groundnut)	i) Internet and library search: A learner in groups or individually to search relevant information on recommended principles and husbandry practices for production of sunflower, simsim and groundnut	i) Field practical: Guide learners in groups or individually, to apply the recommended husbandry practices to produce/ maintain sunflower, simsim and groundnut crops; and write a report	Each husbandry practice of selected nut/oil seed crops is carried out accordingly	School and/ nearby fields of selected nut/ oil seed crops, appropriate production tools/ equipment and materials/ supplies used in production of the crops	6 Hours	4 Hours

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