

**NATIONAL OCCUPATIONAL STANDARDS (NOS)**

**FOR**

**PASTURE AND RANGE PRODUCTION (PRP)**

**DESIGNED FOR**

**LEVEL 1                      NSQ 1**

**LEVEL 2                      NSQ 2**

**LEVEL 3                      NSQ 3**

**2019**

**LEVEL 1**

**TITLE: PASTURE AND RANGE PRODUCTION (PRP)**

**SECTOR: AGRICULTURE (AG)**

**UNIT CODE: PRP/AG/Unit Number/Level**

**LEVEL: 1**

**National Occupation Standard (Job Functions)**

1. Occupational Safety in Pasture Production
2. Communication System in workplace
3. Site Selection 1
4. Land Preparation 1
5. Pasture Protection 1

The level 1 NSQ Award in Pasture and Range Production is designed for learners working within the livestock industry and Agriculture sector. This is a work-based qualification that will enable a learner display competence from developed skills, knowledge and understanding to assist in pasture production. **This award is targeted at producing Range assistant**  
**In order to obtain this award, 14 credit units is required.**

**Summary of Job Functions under Pasture and Range Production for level 1**

S/N	UNIT TITLE	UNIT CODE	Credit Unit	Guided Learning Hour
1	Occupational Safety in Pasture Production	PRP/AG/001/L1	2	20
2	Communication	PRP/AG/002/L1	1	10
3	Site Selection 1	PRP/AG/003/L1	4	40
4	Land Preparation 1	PRP/AG/004/L1	4	40
5	Pasture Protection 1	PRP/AG/005/L1	3	30
TOTAL			14	140

# Occupational Safety in Pasture Production

Unit reference number: **PRP/AG/001/L1**

QCF level: **1**

Credit value: **2**

Guided learning hours: **20**

Unit Purpose: This unit provides the basic skills, knowledge and understanding on occupational safety in pasture production. It focuses on regulations and safety requirements with regards to pasture production for Range Assistants.

NOS evidence requirements

NOS	Occupational Safety in Pasture Production
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)

**OCCUPATIONAL SAFETY IN PASTURE PRODUCTION - PRPS/AG/001/L1**

LO (Learning outcome)	Criteria:-	Evidence Type	Evidence Ref Page number
L01 Know the regulations and safety requirements in Pasture production	1. Explain the basic safety rules in pasture production		
	2. List personal protective equipment (PPE)		
	3. Explain how to use the PPE		
L02 Know the hazards involved in Pasture Production	1. List the common hazards associated with pasture production		
	2. List the causes of hazards in pasture production		
	3. Explain how to preventive hazards in pasture production		
L03 Know protection measures against hazards in pasture production	1. Explain precautionary measures against - Fire - Predators		
	2. Describe common safety signs used in pasture production		
	3. Explain importance of safety signs to prevent hazards in pasture production		
	4. Explain first aid procedures against fire accident and predators attack		
L04 Demonstrate the use of safety equipment	1. Identify the PPE		
	2. Wear the PPE		
	3. Select the protective equipment for use against hazards such as - Fire - Predators		
	4. Carry-out precautionary measures against hazards in pasture production		
	5. Carry-out a simple drill exercise		
	6. Carry-out a simple first aid drill		

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

## COMMUNICATION SYSTEM IN A WORK ENVIRONMENT

Unit reference number: **PRP/AG/002/L1**

QCF level: **1**

Credit value: **1**

Guided learning hours: **10**

Unit Purpose: This unit deals with basic communication that is effective and timely in such a way that Rangers contributes to the team's efficiency. It focuses on using words, body language and symbols to communicate with the people in pasture and range environment. It involves identifying sources of information needed for an efficient pasture production activity and passing on information clearly and effectively by Range Assistant in pasture production.

Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)
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**Communication System in a Work Environment**

**PRPS/AG/002/L1**

LO (Learning outcome)		Criteria:-	Evidence Type				Evidence Ref Page number			
LO1 Use a simple Communication System in a pasture and range environment	1.	Use simple verbal means to pass on necessary information								
	2.	Use sign and symbols means to pass on necessary information								
	3.	use symbols and signs appropriately								
LO2 Develop the ability to identify the source of information in a pasture and range environment	1	Identify the Source of information in an organization or range Environment								
	2	Communicate appropriately with the source of information								
	3	Use the simple information flow systems in a range environment								
	4	Use information to avoid challenges in Identifying a work situation								
	5	Communicate findings in accordance to procedure in a range environment								
LO3 Demonstrate the various use of means of communication in pasture and range environment	3.1	Identify the various communication equipment in the range								
	3.2	Use effectively the various simple communication equipment in a range environment								
	3.3	Share information effectively to the right personnel								
	3.4	Communicate effectively using symbols, signs and codes								
	3.5	Follow instructions in line with ethics of the range environment								

<b>Learners Signature:</b>	<b>Date:</b>
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
<b>EQA Signature (if sampled)</b>	<b>Date:</b>

## SITE SELECTION 1

Unit reference number: **PRP/AG/003/L1**

QCF level: **1**

Credit value: **4**

Guided learning hours: **40**

Unit Purpose: This unit provides details on how to locate suitable land for pasture production. It provides basic information on land ownership system, topography and rainfall pattern of the area. It also gives clear information on the vegetation type of the site to enable Range Assistants select suitable site for pasture production.

### NOS evidence requirements

NOS	Site Selection 1
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)



**SITE SELECTION 1 - PRP/AG/003/L1**

LO (Learning Outcome)	Criteria:-	Evidence Type				Evidence Ref Page number			
L01 Know land ownership system	1. List the land ownership system in Nigeria								
	2. Explain the land ownership system in the area								
	3. State the importance of land ownership for pasture production								
	4. Recognize the status of the land								
L02 Know the topography of the site	1. Explain the following land features: - Rocky land - Hilly land - Water logged - Flat land - Undulating land								
	2. State the importance of flat land in Pasture Production								
	3. State the factors for determining a suitable site for Pasture Cultivation								
L03 Know the rainfall pattern of the area	1. Describe the rainfall pattern of the area								
	2. Explain the regularity of the rainfall								
	3. Explain the importance of rainfall pattern in pasture production								
L04 Know the vegetation type of the site	1. Explain whether vegetation is grass dominant, trees, shrubs, sparse and dense								
	2. Identify soil types								
	3. Describe suitable soil for pasture production								
L05 Select a suitable site for Pasture Production	1. Carryout physical observation of site								
	2. Obtain information on the rainfall pattern of the area								
	3. Observe whether vegetation is grass dominant, trees, shrubs, sparse and dense								
	4. Observe the nature of land								
	5. Use rainfall information from nearest whether station								
	6. Obtain information on the status of the land								
	7. Select site for a particular pasture seed								

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)    Date:	

# LAND PREPARATION 1

Unit reference number: **PRP/AG/004/L1**

QCF level: **1**

Credit value: **4**

Guided learning hours: **40**

Unit Purpose: This unit provides the basic skills, knowledge and understanding on how to prepare land for pasture production. It provides basic information on land clearing and land preparation methods. This will enable Range Assistant select tools and assist in land preparation operations

## NOS evidence requirements

NOS	Land Preparation 1
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Learner's Personal Statement (LPS) Work Product (WP) Witness Statement Witness Testimony (WT) Assignment (ASS)

**LAND PREPARATION 1 - PRP/AG/004/L1**

<b>LO (Learning Outcome)</b>	<b>Criteria:-</b>	<b>Evidence Type</b>				<b>Evidence Ref Page number</b>			
L01 Knowland clearing methods	1. Explain the type of vegetation in the area								
	2. Explain the types of clearing methods								
	3. List the types of equipment and tools used for land clearing								
	4. Explain the precautionary measure for this exercise								
L02 Know land preparation methods	1. List the operations involved in land preparation								
	2. Explain the term ploughing								
	3. Explain the term harrowing								
	4. List tools and equipment in land preparation								
L03 Select tools for land preparation	1. Identify tools for clearing operation								
	2. Identify the equipment and tools for ploughing operation								
	3. Identify equipment and tools for harrowing operation								
	4. State the precautionary measures in applying each of the equipment and tools								
L04 Prepare the land for Pasture Cultivation	1. Carryout physical inspection of the land								
	2. Carryout land clearing operations								
	3. Carry-out land preparation using animal traction								
	4. Carry-out cleaning operations of the tools used								

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

# PASTURE PROTECTION 1

Unit reference number: **PRP/AG/005/L1**

QCF level: **1**

Credit value:**3**

Guided learning hours: **30**

Unit Purpose: This unit provides basic skills, knowledge and understanding on how to protect an established pasture. It enables the Range Assistant to assist in fencing and fire tracing of the established pasture. It also enables the learner to gain competence in the use suitable materials for fencing and fire tracing

## NOS evidence requirements

NOS	Pasture Protection 1
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)

**PASTURE PROTECTION 1 - PRP/AG/005/L1**

<b>LO (Learning Outcome)</b>	<b>Criteria:-</b>	<b>Evidence Type</b>				<b>Evidence Ref Page number</b>				
L01 Knowthe fencing methods for Pasture Protection	1.	Explain the importance of fencing in Pasture Protection								
	2.	Explain the types of fencing for Pasture Protection								
	3.	State the types of materials used in fencing for Pasture Protection								
L02 Know fire tracing for Pasture Protection	1.	Explain the importance of fire tracing in Pasture Protection								
	2.	Explain the methods in fire tracing								
	3.	Explain the timing for fire tracing								
L03 Carryout a simple fencing exercise	1.	Identify the suitable fencing type								
	2.	Select the materials to be used for the fencing type								
	3.	Identify the precautionary measures to be applied								
	4.	Carryout the fencing								
L04 Carryout fire tracing exercise	1.	Choose the fire tracing method								
	2.	Carryout a simple fire tracing exercise								
	3.	State the precautionary measures to be applied								
L05 Protect an established pasture	1.	Mention the reasons for pasture protection								
	2.	Carryout physical observation of site								
	3.	Carryout fencing using appropriate methods								
	4.	Carryout fire tracing operations								

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

## **LEVEL 2**

**TITLE: PASTURE AND RANGE PRODUCTION (PRP)**

**SECTOR: AGRICULTURE (AG)**

**NOS CODE: PRP/AG/Unit Number/Level**

**LEVEL: 2**

### **National Occupation Standard (Job Functions)**

1. Health and Safety in Pasture Production
2. Communication and Team Work
3. Site Selection 2
4. Land Preparation 2
5. Pasture Protection 2
6. Pasture Seeds Production
7. Sowing and Vegetative Propagation

The level 2 NSQ Award in Pasture and Range Production is designed for learners working within the livestock industry and Agriculture sector. This is a work-based qualification that will enable a learner display competence from developed skills, knowledge and understanding to assist in pasture production.

**This award is targeted at producing Assistant Range Officer**

**In order to obtain this award, 29 credit units is required.**

**Summary of Job Functions under Pasture and Range Production for level 2**

S/N	NOS TITLE	NOS CODE	Credit Unit	Guided learning Hour
1	Health and Safety in Pasture Production1	<b>PRP/AG/001/L2</b>	<b>2</b>	<b>20</b>
2	Communication System in a range environment	<b>PRP/AG/002/L2</b>	<b>2</b>	<b>20</b>
3	Site Selection 2	<b>PRP/AG/003/L2</b>	<b>5</b>	<b>50</b>
4	Land Preparation 2	<b>PRP/AG/004/L2</b>	<b>5</b>	<b>50</b>
5	Pasture Protection 2	<b>PRP/AG/005/L2</b>	<b>4</b>	<b>40</b>
6	Pasture Seeds Production	<b>PRP/AG/006/L2</b>	<b>6</b>	<b>60</b>
7	Sowing of Pasture Seeds	<b>PRP/AG/007/L2</b>	<b>5</b>	<b>50</b>
<b>Total</b>			<b>29</b>	<b>290</b>



# Health and Safety in Pasture Production 1

Unit reference number: **PRP/AG/001/L2**

QCF level: **2**

Credit value: **2**

Guided learning hours: **20**

Unit Purpose: This unit provides the skills, knowledge and understanding for Assistant Range Officers on health and safety requirements in pasture production. It focuses on regulations, safety requirements and hazards in order to safeguard against risk associated with agro-chemical, predator, fire and farm machinery

## NOS evidence requirements

NOS	Health and Safety in Pasture Production 1
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)



	3	State the precautionary measures against risk and hazards in pasture production													
	4	Identify safety signs													

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)    Date:	

## COMMUNICATION SYSTEM IN A RANGE ENVIRONMENT

Unit reference number: **PRP/AG/002/L2**

QCF level: **2**

Credit value: **2**

Guided learning hours: **20**

Unit Purpose: This unit deals with communication that is effective and timely in such a way that a Ranger contributes to the team's effectiveness.

It focuses on using signs, body language and terminology used in pasture and range for efficient pasture production. It involves identification of sources of information needed for efficient work flow and reporting clearly and effectively by Assistant Range Officers.

Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Learner's Personal Statement (LPS) Assignment (ASS)
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**Communication System in a Range Environment**

**PRP/AG/002/L2**

LO (Learning outcome)		Criteria:-	Evidence Type				Evidence Ref Page number			
LO1 Communicate effectively in pasture and range environment	1.	Attend daily routine meetings.								
	2	Identify safety signage, posters and labels in a range environment.								
	3	Use symbols and signs appropriately								
	4	Carryout instruction on the daily safety drill								
LO2 Develop the ability to identify the source of information in a Range Environment										
	1	Identify the direct sources information								
	2	Identify direct supervisors in the work place								
	3	identify tasks to perform in order to carryout instruction								
	4	Identify channels of communication								
LO3 Demonstrate the various uses of means of communication in pasture and range environment										
	1	Recognise the various communication system in the work environment								
	2	Comply instructions from the supervisors								
	3	Pass information effectively to the right personnel								
	4	Use signs symbols and codes to relay information effectively.								
	5	Comply with instructions in line with ethics of the work environment								

<b>Learners Signature:</b>	<b>Date:</b>
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
<b>EQA Signature (if sampled)</b>	<b>Date:</b>

## Site Selection2

Unit reference number: **PRP/AG/P003/L2**

QCF level: **2**

Credit value:**5**

Guided learning hours: **50**

Unit Purpose: This unit is aimed at providing skills, Knowledge and understanding for Assistant Range Officers in pasture production. It focuses on the relevant sections on the Land Use Acts, Topography, rainfall pattern and vegetation types applicable to site selection

NOS evidence requirements

NOS	Site Selection 2
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)

**SITE SELECTION 2 - PRP/AG/003/L2**

<b>LO (Learning outcome)</b>	<b>Criteria:-</b>	<b>Evidence Type</b>				<b>Evidence Ref Page number</b>			
L01 Know the topography of the site	1. Explain the relevant sections of the land use Act in Nigeria								
	2. Discuss the following land features as it relates to pasture production: - Rocky land - Hilly land - Water logged - Flat land - Undulating land								
	3. Discuss why a well-drained flat land is suitable for pasture production								
	4. State the characteristics of a suitable site for Pasture Cultivation								
L02 Know the rainfall pattern of the area	1. Explain the rainfall distribution of the area								
	2. Discuss the regularity of the rainfall								
	3. Determine total rainfall of the area								
L03 Know the vegetation type of the site	1. Determine whether vegetation is grass dominant, trees, shrubs, sparse and dense								
	2. Identify soil types								
	3. Select suitable soil for pasture production								
L04 Know relevant sections Nigeria Land use Act	1. Discuss the relevant sections of the Nigeria Land Use Acts								
	2. Explain the importance of the Act								
	3. State the relevance of the Act for pasture production								
	4. Discuss land ownership								
L05 Select a suitable site for Pasture Production	1. Carryout physical observation of site								
	2. Determine the nature of land								
	3. Obtain rainfall information from the nearest weather station								
	4. Determine vegetation type								
	5. Select site								

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:

EQA Signature (if sampled)    Date:



## Land Preparation 2

Unit reference number: **PRP/AG/004/L2**

QCF level: **2**

Credit value:**5**

Guided learning hours: **50**

Unit Purpose: This unit provides skills, knowledge and understanding on land preparation for Assistant Range Officers in pastureproduction. It provides information on land clearing, ploughing, harrowing and the selection, use and maintenance of equipment and tools in land preparation.

NOS evidence requirements

NOS	Land Preparation 2
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)

**LAND PREPARATION 2 -**

**PRP/AG/004/L2**

<b>LO (Learning outcome)</b>	<b>Criteria:-</b>	<b>Evidence Type</b>				<b>Evidence Ref Page number</b>			
L01 Know Land clearing methods	1. Discuss the type of vegetation in the area								
	2. Discuss the most suitable method of land clearing								
	3. State the types of equipment and tools used for land clearing								
L02 KnowLand ploughing methods	1. Explain the need for ploughing in land preparation								
	2. State the types of ploughing methods								
	3. State the types of ploughing equipment								
L03 Know Land harrowing methods	1. Explain the need for harrowing in land preparation								
	2. State the types of harrowing equipment								
	3. Explain the importance of timing in harrowing operations								
L04 Select equipment and tools for land preparation	1. Select the equipment and tools for clearing operation								
	2. Select the equipment and tools for ploughing operation								
	3. Select equipment and tools for harrowing operation								
	4. Show how to maintain and care for each of the equipment and tools								
	5. State the precautionary measures in applying each of the equipment and tools								
L05 Prepare the land for Pasture Cultivation	1. Carryout physical inspection of the land								
	2. Carryout clearing operations using tools								
	3. Plough the land using tools								
	4. Harrow the land using tools								
	5. Carry-out maintenance of tools and equipment								

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)    Date:	

## Pasture Protection 2

Unit reference number: **PRP/AG/005/L2**

QCF level: **2**

Credit value:**4**

Guided learning hours: **40**

Unit Purpose: This unit is aimed at providing skills, knowledge and understanding for Assistant Range Officers on how to protect an established pasture. It focuses on fencing methods, fire tracing and chemical treatment for pasture protection.

### NOS evidence requirements

NOS	Pasture Protection 2
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)

**PASTURE PROTECTION 2**

**- PRP/AG/005/L2**

LO (Learning outcome)	Criteria:-	Evidence Type				Evidence Ref Page number				
L01 Knowthe fencing methods for Pasture Protection	1.	Discuss the objective of fencing in Pasture Protection								
	2.	Explain the spacing requirements for fencing operation								
	3.	Discuss the characteristics of materials used in fencing for Pasture Protection								
L02 Knowfire tracing for Pasture Protection	1.	Explain fire tracing as a means of Pasture Protection								
	2.	Explain the steps involved in fire tracing operation								
	3.	Explain the timing for fire tracing								
L03 Know the Agro-chemical treatment for Pasture Protection	1.	Explain the importance of Agro-chemical treatment in pasture protection								
	2.	Explain the methods of chemical treatment								
	3.	List the precautionary measures in applying chemical treatment								
L04 Carryout a simple fencing exercise	1.	Identify the suitable fencing type								
	2.	Select the materials to be used for the fencing type								
	3.	Identify the precautionary measures applied								
	4.	Carryout the fencing								
L05 Carryout fire tracing exercise	1.	Choose the fire tracing method								
	2.	Carryout a simple fire tracing exercise								
	3.	State the precautionary measures applied								
L06 Carryout aAgro-chemical treatment exercise	1.	Select the type of chemical treatment required								
	2.	Select the chemical treatment to be used								
	3.	Carryout the chemical treatment exercise								
	4.	State the precautionary measures applied								
L07										

Protect an established pasture	1.	Mention the reasons for pasture protection											
	2.	Carryout physical observation of site											
	3.	Carryout fencing using appropriate methods											
	4.	Carryout fire tracing operations											
	5.	Carryout chemical treatment in an established Pasture											

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)    Date:	

## Pasture Seeds Production

Unit reference number: **PRP/AG/006/L2**

QCF level: **2**

Credit value:**6**

Guided learning hours: **60**

Unit Purpose: This unit provides Skills, knowledge and understanding for Assistant Range Officers on how to source or prepare seeds for pasture cultivation. It focuses on sourcing of pure seeds varieties, methods of breaking seeds dormancy, sowing and appropriate period for seeds harvesting for pasture production.

### NOS evidence requirements

NOS	Pasture Seeds Production
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Work Product Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)

**PASTURE SEEDS PRODUCTION - PRP/AG/006/L2**

LO (Learning outcome)	Criteria:-	Evidence Type				Evidence Ref Page number			
L01 KnowPasture Seeds	1. Explain the types of pasture seeds								
	2. List varieties of pasture seeds								
	3. Explain the importance of purity of seeds in pasture production								
	4. Discuss the characteristics of different types of pasture seeds								
L02 Knowgrowth characteristics of pasture seeds									
	1. Explain whether the pasture seeds are annual or perennial species								
	2. Explain the nature of pasture grasses, legumes and browse plant								
	3. Explain maturity time for pasture seeds								
	4. State the methods of planting of pasture seeds								
	5. Explain the spacing requirements for seeds								
L03 Prepare seeds for cultivation									
	1. Select quality and pure pasture seeds								
	2. Break seeds dormancy using appropriate techniques								
	3. Identify the suitable planting method								
	4. Identify the spacing requirements								
L04 Carryout pasture seeds production									
	1. Source for quality seeds								
	2. Prepare the seed bed								
	3. Choose the appropriate planting methods								
	4. Determine the plant spacing								
	5. Plant the seeds								
	6. Carryout fertilizer application								
	7. Carryout weeding exercise								
8. Determine time for harvest									

	9	Harvest the seeds											
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Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:



## Sowing of Pasture Seeds

Unit reference number: **PRP/AG/007/L2**

QCF level: **2**

Credit value:**5**

Guided learning hours: **50**

Unit Purpose: This unit is aimed at providing skills, Knowledge and understanding for Assistant Range Officers on sowing of pasture seeds. It focuses on how to sow pasture seeds, characteristics, quality and purity of pasture seeds

NOS evidence requirements

NOS	Sowing of Pasture Seeds
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Work Product (WP) Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)

**SOWING OF PASTURE SEEDS - PRP/AG/007/L2**

LO (Learning outcome)	Criteria:-	Evidence Type				Evidence Ref Page number			
L01 Knowthe pasture seeds to be sown	1. Explain the varieties of pasture seeds available								
	2. Explain the importance of quality and purity in pasture seeds								
	3. Discuss the various sources of obtaining good quality seeds								
L02 Know the growth characteristics of the pasture seed plants and vegetative materials	1. Explain the maturity time of pasture seeds								
	2. Explain the growth habit of pasture seed plants								
	3. Explain the planting distance (spacing) of pasture seed plants								
	4. Explain disease resistance of pasture seeds								
	5. State the fertilizer requirements of pasture seed plants								
	6. Explain seed hardedness in pasture seeds								
L03 Carryout sowing of pasture seeds to develop the pasture	1. Prepare the seed bed								
	2. Choose the appropriate planting method								
	3. Determine the plant spacing								
	4. Sow the pasture seeds								
	5. Carryout fertilizer application								
	6. Carryout weeding exercise								
	7. Determine time for harvest								
	8. Harvest the pasture								

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)    Date:	

### **LEVEL 3**

**TITLE: PASTURE AND RANGE PRODUCTION (PRP)**

**SECTOR: AGRICULTURE (AG)**

**NOS CODE: PRP/AG/ Unit Number/Level**

**LEVEL: 3**

#### **National Occupation Standard (Job Functions)**

1. Health and Safety in Pasture Production 2
2. Communication and Team Work
3. Site Selection 3
4. Land Preparation 3
5. Pasture Protection 3
6. Seeds and Vegetative Cuttings Production
7. Sowing and Vegetative Propagation
8. Fertilizer Application
9. Pasture Management
10. Seed and Pasture Harvesting
11. Pasture Conservation
12. Pasture Products Marketing

The level 3 NSQ Award in Pasture and Range Production is designed for learners working within the livestock industry and Agriculture sector. This is a work-based qualification that will enable a learner display competence from developed skills, knowledge and understanding to in pasture production.

**This award is targeted at producing Range Officer**

**In order to obtain this award,44 credit units is required.**

**Summary of Job Functions under Pasture and Range Production for level 3**

S/N	NOS TITLE	NOS CODE	Credit Unit	Guided Learning Hour
1	Health and Safety in Pasture Production 2	<b>PRP/AG/001/L3</b>	<b>2</b>	<b>20</b>
2	Communication and Team Work	<b>PRP/AG/002/L3</b>	<b>2</b>	<b>20</b>
3	Site Selection 3	<b>PRP/AG/003/L3</b>	<b>3</b>	<b>30</b>
4	Land Preparation 3	<b>PRP/AG/004/L3</b>	<b>5</b>	<b>50</b>
5	Pasture Protection 3	<b>PRP/AG/005/L3</b>	<b>3</b>	<b>30</b>
6	Seeds and Vegetative Cuttings Production	<b>PRP/AG/006/L3</b>	<b>5</b>	<b>50</b>
7	Sowing and Vegetative Propagation	<b>PRP/AG/007/L3</b>	<b>5</b>	<b>50</b>
8	Fertilizer Application	<b>PRP/AG/008/L3</b>	<b>5</b>	<b>50</b>

9	Pasture Management	<b>PRP/AG/009/L3</b>	<b>4</b>	<b>40</b>
10	Seed and Pasture Harvesting	<b>PRP/AG/010/L3</b>	<b>4</b>	<b>40</b>
11	Pasture Conservation	<b>PRP/AG/011/L3</b>	<b>3</b>	<b>30</b>
12	Pasture Products Marketing	<b>PRP/AG/012/L3</b>	<b>3</b>	<b>30</b>
<b>Total</b>			<b>44</b>	<b>440</b>

## Health and Safety in Pasture Production 2

Unit reference number: **PRP/AG/001/L3**

QCF level: **3**

Credit value: **2**

Guided learning hours: **20**

Unit Purpose: This unit provides the skills, knowledge and understanding for Range Officers on health and safety requirements in pasture production. It focuses on regulations, safety requirements and hazards in order to safeguard against risk associated with agro-chemical, predator, fire and farm machinery

### NOS evidence requirements

NOS	Health and Safety in Pasture Production 2
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)

**HEALTH AND SAFETY IN PASTURE PRODUCTION 2 - PRP/AG/001/L3**

LO (Learning outcome)	Criteria:-	Evidence Type				Evidence Ref Page number			
LO1 Knowthe regulations and safety requirements in Pasture production	1. Explain the general rules and regulations governing health and safety aspect of pasture production								
	2. List personal protective equipment (PPE)								
	3. State the importance of PPE								
	4. State how to use the PPE								
	5. Explain how to care and maintain the PPE								
	6. Explain how to service PPE								
	7. Explain how to guard against allergic reaction								
eLO2 Know the hazards and risk involved in Pasture Production									
	1. Outline the hazards associated with pasture production								
	2. List the hazards associated with the use farm machinery and implements								
	3. Explain fire hazards in pasture production								
	4. Discuss the risks associated with use of Agro-chemicals in pasture production								
5. Explain waste disposal procedure in pasture production									
LO3 Know protection measures against hazards in pasture production									
	1. Discuss precautionary measures against <ul style="list-style-type: none"> <li>- Fire</li> <li>- Chemical injury</li> <li>- Predators</li> <li>- Injury from farm machinery and implements</li> </ul>								
	2. Explain importance of safety label to prevent hazards in pasture production								
	3. Explain hazards from plant diseases								
	4. Discuss ways to guard against intrusion by animal and man								
5. Discuss how to carry-out first aid.									
LO4 Demonstrate the use of									
1. Wear the PPE									

safety equipment	2.	Select the protective equipment for use against hazards such as <ul style="list-style-type: none"> <li>- Fire</li> <li>- Chemical injury</li> <li>- Machinery and implements</li> <li>- Predators</li> </ul>								
	3.	State the precautionary measures against risk and hazards in pasture production								
	4	Identify safety signs								
	5	observe hygienic waste disposal procedure								
	6	Carry-out first aid drill								

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)    Date:	



## Communication System in a Work Environment

Unit reference number: **PRP/AG/002/L3**

QCF level: **3**

Credit value: **2**

Guided learning hours: **20**

Unit Purpose: This unit provides the skills, knowledge and understanding for Range Officers on complex communication systems that is effective and timely in such a way the one contributes to the team's effectiveness.

It focuses on the use complex communication system and the ability to identify the sources of information, including the demonstration of the various means of communication in pasture and range environment.

### NOS evidence requirements

NOS	Communication System in a Work Environment
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)

## Site Selection 3

Unit reference number: **PRP/AG/003/L3**

QCF level: **3**

Credit value:**3**

Guided learning hours: **30**

Unit Purpose: This unit is aimed at providing skills, Knowledge and understanding for Range Technical Officers in pasture production. It focuses on the relevant sections on the Land Use Acts, Topography, rainfall distribution, irrigation system and vegetation types applicable to site selection. It also involves obtaining rainfall information from the nearest weather station for planning purposes

NOS evidence requirements

NOS	Site Selection 3
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)

**SITE SELECTION 3 - PRP/AG/003/L3**

LO (Learning outcome)	Criteria:-	Evidence Type				Evidence Ref Page number			
LO1 Know the topography of the site	1. Explain the relevant sections of the land use Act in Nigeria								
	2. Discuss the following land features as it relates to pasture production: <ul style="list-style-type: none"> <li>- Rocky land</li> <li>- Hilly land</li> <li>- Water logged</li> <li>- Flat land</li> <li>- Undulating land</li> </ul>								
	3. Discuss why a well-drained flat land is suitable for pasture production								
	4. State the characteristics of a suitable site for Pasture Cultivation								
LO2 Know the rainfall pattern of the area	1. Explain the rainfall distribution of the area								
	2. Discuss the regularity of the rainfall								
	3. Determine total rainfall of the area								
LO3 Know the use of irrigation system in pasture production	1. Explain the importance of irrigation in pasture production								
	2. Explain the relationship between soil types and the irrigation system to employed								
	3. Discuss the source of water for irrigation								
	4. Explain types of irrigation methods								
LO4 Know the vegetation type of the area	1. Determine whether vegetation is grass dominant, trees, shrubs, sparse and dense								
	2. Identify soil types								
	3. Select suitable soil for pasture production								
	4. Discuss the characteristics agro-ecological zones of the area								
LO5 Select a suitable site for Pasture Production	1. Carryout physical observation of site								
	2. Determine the nature of land								
	3. Obtain rainfall information from the nearest weather station								
	4. Apply rainfall information								

	5	Determine vegetation type								
	5	Determine the suitable irrigation system								
	6	Test soil								
	7	Select site								
LO6										
Use the relevant sections of the Nigerian land use Act	1.	Select the relevant sections of the Land Use Act								
	2.	Apply the relevant sections								
	3.	Mention other local laws concerning land acquisition								

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)    Date:	

## Land Preparation 3

Unit reference number: **PRP/AG/004/L3**

QCF level: **3**

Credit value:**5**

Guided learning hours: **50**

Unit Purpose: This unit provides skills, knowledge and understanding on land preparation for Range Technical Officers in pasture production. It provides information on land clearing, ploughing, harrowing and for the selection, use and maintenance of equipment and tools in land preparation.

### NOS evidence requirements

NOS	Land Preparation 3
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)

**LAND PREPARATION 3 - PRP/AG/004/L3**

<b>LO (Learning outcome)</b>		<b>Criteria:-</b>	<b>Evidence Type</b>				<b>Evidence Ref Page number</b>			
L01 Know Land clearing methods	1.	Discuss the vegetation type and soil texture in the area								
	2.	Discuss the suitability of the land clearing operation considering the rainfall and vegetation type								
	3.	Explain how to maintain the land clearing equipment and tools								
L02 Know different ploughing operation	1.	State the importance of ploughing in pasture production								
	2.	Discuss the most suitable method of ploughing considering the soil texture								
	3.	Describe the operations of various ploughing equipment and tools								
L03 Know different harrowing operation	1.	State the importance of ploughing in pasture production								
	2.	Discuss the most suitable method of ploughing considering the soil texture								
	3.	Describe the operations of various ploughing equipment								
L04 Use equipment and tools for land preparation	1.	Carry-out the clearing operation using suitable equipment and tools								
	2.	Carry-out the ploughing operation using suitable equipment and tools								
	3.	Carry-out the harrowing operation using suitable equipment and tools								
	4.	Service each of the equipment and tools								
	5.	Discuss the precautionary measures in applying each of the equipment and tools								
L05 Prepare the land for Pasture Cultivation	1.	Carry-out physical inspection of the land								
	2.	Carryout clearing operations								
	3.	Plough the land								
	4.	Harrow the land								
	5.	Carry-out servicing of tools and equipment for clearing, ploughing and harrowing								

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)    Date:	

## Pasture Protection 3

Unit reference number: **PRP/AG/005/L3**

QCF level: **3**

Credit value:**3**

Guided learning hours: **30**

Unit Purpose: This unit is aimed at providing skills, knowledge and understanding for Range Technical Officers on how to protect an established pasture. It focuses on fencing methods, fire tracing and chemical treatment for pasture protection.

### NOS evidence requirements

NOS	Pasture Protection 3
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)



**PASTURE PROTECTION 3**

**- PRP/AG/005/L3**

<b>LO (Learning outcome)</b>		<b>Criteria:-</b>	<b>Evidence Type</b>				<b>Evidence Ref Page number</b>			
LO1 Knowfencing as a means of Pasture Protection	1.	Discuss the factor that determine type of fencing to be used								
	2.	Discuss the importance of protection in Pasture Protection								
	3.	State the steps involved in fence maintenance								
LO2 Know fire tracing	1.	Explain fire tracing as a means of pasture protection								
	2.	Discuss the factor that determine the suitability for fire tracing operation								
	3.	Discuss the ideal time when facing tracing is carried out								
LO3 Know the chemical treatment for Pasture Protection	1.	Discuss why of chemical treatment is necessary in pasture protection								
	2.	Compare the various methods of chemical treatment								
	3.	List chemicals used to control common pest and disease								
	4.	List the precautionary measures in applying chemical treatment								
LO Carryout a simple fencing exercise	1.	Select the suitable fencing type								
	2.	Select the materials to be used for the fencing type								
	3.	Identify the precautionary measures applied								
	4.	Carryout the fencing exercise								
LO5 Carryout fire tracing exercise	1.	Choose the fire tracing method								
	2.	Carryout a simple fire tracing exercise								
	3.	State the precautionary measures applied								
LO6 Carryout aAgro-chemical treatment exercise	1.	Select the type of chemical treatment required								
	2.	Select the chemical treatment to be used								
	3.	Carryout the chemical treatment exercise								
	4.	State the precautionary measures applied								

	5	Carry-out waste disposal										
LO7 Protect an established pasture												
	1.	Mention the reasons for pasture protection										
	2.	Carryout physical observation of site										
	3.	Carryout fencing using appropriate methods										
	4	Carryout fire tracing operations										
	5	Carryout chemical treatment in an established Pasture										
	6	Carry-out a simple drill to protect an established pasture										

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)    Date:	

## Seeds and Vegetative Cuttings Production

Unit reference number: **PRP/AG/006/L2**

QCF level: **3**

Credit value:**5**

Guided learning hours: **50**

Unit Purpose: This unit provides Skills, knowledge and understanding for Range Technical Officers on how to source or prepare seeds and vegetative cuttings for pasture cultivation. It focuses on sourcing of pure seeds varieties and vegetative cuttings, methods of breaking seeds dormancy, sowing of seeds, transplanting of vegetative cuttings. It includes appropriate period for seeds harvesting for pasture production.

### NOS evidence requirements

NOS	Seeds and Vegetative Cutting Production
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Work Product Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)

**SEEDS AND VEGETATIVE CUTTINGS PRODUCTION**

**PRP/AG/006/L3**

LO (Learning outcome)	Criteria:-	Evidence Type			Evidence Ref Page number
L01 KnowSeeds and Vegetative Cuttings Used for pasture production	1. Explain the types of seeds				
	2. Explain types of vegetative cuttings				
	3. List varieties of seeds and vegetative cuttings				
	4. Discuss the purity of seeds and vegetative cuttings				
L02 Know the growth characteristics of seed plants and vegetative cuttings	1. Explain whether the seed plants and vegetative cuttings are annual or perennial species				
	2. Explain nature of grasses, legumes and browse plant				
	3. Explain maturity time for seeds				
	4. State the methods of planting of seeds and vegetative cuttings				
	5. Explain the spacing requirements for seeds and vegetative cuttings				
L03 Prepare seeds for cultivation	1. Select quality and pure seeds				
	2. Break seeds dormancy using appropriate techniques				
	3. Identify the suitable planting method				
	4. Explain the methods of preservation of prepared seeds				
L04 Prepare vegetative cuttings for cultivation	1. Select matured stems				
	2. Cut matured stems into equal sizes (25cm-30cm)				
	3. Ensure that there are 2 to 3 internodes				
	4. Explain the node theory of propagation				
L05 Carryout seeds and Vegetative Cuttings Production	1. Source for quality seeds				
	2. Prepare the seed bed				
	3. Choose the appropriate planting methods				
	4. Determine the plant spacing				
	5. Plant the seeds/vegetative cuttings				
	6. Carryout fertilizer application				

7.	Carryout weeding exercise									
8	Determine time for harvest									
9	Harvest the seeds									
10	Carry-out a simple drill exercise									

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)    Date:	

## Sowing and Vegetative Propagation

Unit reference number: **PRO/AG/007/L3**

QCF level: **3**

Credit value:**5**

Guided learning hours: **50**

Unit Purpose: This unit is aimed at providing skills, Knowledge and understanding for Range Technical Officers on sowing of pasture seeds. It focuses on how to sow pasture seeds and carry-out vegetative propagation it also involves the characteristics, quality and purity of pasture seeds.

NOS evidence requirements

NOS	Sowing and Vegetative Propagation
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Work Product (WP) Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)

**SOWING AND VEGETATIVE PROPAGATION**

**- PRP/AG/007/L3**

LO (Learning outcome)	Criteria:-	Evidence Type	Evidence Ref Page number
L01 Know the pasture seeds to be sown	1. Explain the varieties of pasture seeds available		
	2. Explain the importance of quality and purity in pasture seeds		
	3. Discuss the various sources of obtaining good quality seeds		
L02 Know the vegetative materials for the pasture production	1. List vegetative materials that are used pastures establishment		
	2. Explain how to prepare vegetative cuttings		
	3. Explain the importance of vegetative cuttings		
L03 Know the growth characteristics of the pasture seed plants and vegetative materials	1. Explain the maturity time of pasture seeds and vegetative materials		
	2. Explain the growth habit of pasture seed plants and vegetative materials		
	3. Explain the planting distance (spacing) of pasture seed plants and vegetative materials		
	4. Explain disease resistance of pasture seeds and vegetative cuttings		
	5. State the fertilizer requirements of pasture seed plants and vegetative materials		
	6. Explain seed hardedness in pasture seeds		
L04 Carryout sowing of pasture seeds to develop the pasture	1. Prepare the seed bed		
	2. Choose the appropriate planting method		
	3. Determine the plant spacing		
	4. Sow the pasture seeds		
	5. Carryout fertilizer application		
	6. Carryout weeding exercise		
	7. Determine time for harvest		
	8. Harvest the pasture		
L05			

Carryout vegetative propagation using the vegetative materials	1.	Prepare the pasture seed bed											
	2.	Choose the appropriate methods											
	3.	Determine the plant spacing											
	4.	Carryout the propagation exercise											
	5.	Carryout fertilizer application											
	6.	Carryout weeding exercise											
	7.	Determine time for harvest											
	8.	Harvest the pasture											

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)    Date:	



## Fertilizer Application

Unit reference number: **PRP/AG/008/L3**

QCF level: **3**

Credit value:**5**

Guided learning hours: **50**

Unit Purpose: This unit is aimed at providing skills, Knowledge and understanding for Range Technical Officers on how to apply fertilizers in pasture production. It focuses on selection of fertilizers for various uses, the characteristics and the methods of application in pasture production. It also includes when to apply the fertilizers and precautionary measures.

### NOS evidence requirements

NOS	Fertilizer Application
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Work Product (WP) Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)

**FERTILIZER APPLICATION - PRP/AG/008/L3**

LO (Learning outcome)	Criteria:-	Evidence Type			Evidence Ref Page number
LO1 Know the characteristics of fertilizers	1. List the types of fertilizers				
	2. List the forms of fertilizers available				
	3. Explain the composition of fertilizers				
	4. State the sources of fertilizers				
	5. The importance of fertilizers in pasture production				
LO2 Know the methods of application of fertilizers in pasture production	1. List the different methods of applying fertilizers				
	2. Explain the rate of applications				
	3. Discuss the frequency of applications				
	4. Explain how to apply fertilizers				
LO3 Know when to apply fertilizers	1. Explain the timing procedure for different pasture seeds				
	2. State the factors that will determine when fertilizers should be applied for different pasture seeds and vegetative materials				
	3. Discuss the fertilizer requirement per hectare				
LO4 Select fertilizers for various use	1. Identify various types of fertilizers used in pasture production				
	2. Select for fertilizer: - Legumes - Grass - Browse Plants				
	3. Determine the quantity to be used per land size				
	4. Carry-out application exercise of an hectare				
LO5 Carryout fertilizer application for pasture production	1. select the fertilizer				
	2. Choose the appropriate method of application				
	3. Determine the quantity of application				
	4. Determine the frequency of application				

	5	Carryout fertilizer application in an established pasture								

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)    Date:	

## Pasture Management

Unit reference number: **PRP/AG/009/L3**

QCF level: **3**

Credit value:**4**

Guided learning hours: **40**

Unit Purpose: This unit is aimed at providing skills, Knowledge and understanding for Range Technical Officers on pasture management. It focuses on the control of weeds, pests and diseases in an established pasture. It also provides information on the difference between pasture seedlings and weeds and the types of herbicides in weeds control.

### NOS evidence requirements

NOS	Pasture Management
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Work Product (WP) Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)

**PASTURE MANAGEMENT - PRP/AG/009/L3**

<b>LO (Learning outcome)</b>	<b>Criteria:-</b>	<b>Evidence Type</b>				<b>Evidence Ref Page number</b>			
L01 Know the difference between pasture seedlings and weeds	1. List the types of pasture seedlings								
	2. List the types of weeds								
	3. State the difference between pasture seedlings and weeds								
L02 Know the types of herbicides in weeds control	1. Explain the importance of weed control in Pasture Production								
	2. List the common types of herbicides used in weed control								
	3. Explain time for herbicides application								
L03 Know the common types of pests and diseases in pasture cultivation	1. List the common types of pests in pasture cultivation								
	2. List the common types of diseases in pasture cultivation								
	3. Explain the effect of pests and diseases in pasture cultivation								
L04 Control weeds in an established pasture	1. select the type of weeds control method to be used								
	2. Determine the best time to control weeds in an established pasture								
	3. Select the equipment to be used in weed control								
	4. Carryout weeds control								
L05 Control pests and diseases in an established pasture	1. Identify the pests and diseases in an established pasture								
	2. Select the types of pesticides to be used								
	3. Select the appropriate equipment to be used in pest and disease control								
	4. Carryout the spraying of the pesticide to control the pests								
	5. Carry-out practical drill exercise								

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)    Date:	

## Seed and Pasture Harvest

Unit reference number: **PRP/AG/010/L3**

QCF level: **3**

Credit value:**4**

Guided learning hours: **40**

Unit Purpose: This unit is aimed at providing skills, Knowledge and understanding for Range Technical Officers on the different way to harvest seeds and pasture. It provides information on time of harvest, selection of matured pasture and seeds, the harvesting methods and the various harvesting equipment.

### NOS evidence requirements

NOS	Seed and Pasture Harvest
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Work Product (WP) Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)

**SEED AND PASTURE HARVEST - PRP/AG/010/L3**

LO (Learning outcome)		Criteria:-	Evidence Type				Evidence Ref Page number			
L01 Know the time of harvest	1.	Explain when the pasture and seeds are ready for harvest								
	2.	Explain signs used to determine maturity of pasture seeds								
	3.	Explain the maturity period of various pasture seeds								
L02 Know the methods of harvest	1.	Explain the different harvesting methods								
	2.	List the factors to be considered in determining the harvesting methods to be used								
	3.	State the advantages and disadvantages of the different harvesting methods								
L03 Know the various harvesting equipment	1.	List the various harvesting equipment								
	2.	Describe the operational features of the common harvesting equipment								
	3.	Explain the safety, precaution and care for harvesting equipment								
L04 Select mature pastures and seeds for harvest	1.	Inspect pastures and seeds								
	2.	Identify mature pastures and seeds								
	3.	Select appropriate method for the harvest								
L05 Use appropriate harvesting equipment	1.	Get the equipment ready for use								
	2.	Carryout harvesting operations								
	3.	Carryout cleaning operations								
	4.	Service the equipment and store.								
	5.	Carry-out a drill exercise								

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)    Date:	

## Pasture Conservation

Unit reference number: **PRP/AG/011/L3**

QCF level: **3**

Credit value:**3**

Guided learning hours: **30**

Unit Purpose: This unit is aimed at providing skills, Knowledge and understanding for Range Officers on how to conserve pasture for future use. It focuses on conservation of harvested pasture, methods and appropriate time for pasture conservation

### NOS evidence requirements

NOS	Pasture Conservation
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Work Product (WP) Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)



**PASTURE CONSERVATION - PRP/AG/011/L3**

<b>LO (Learning outcome)</b>	<b>Criteria:-</b>	<b>Evidence Type</b>					<b>Evidence Ref Page number</b>			
LO1 Know the methods of pasture conservation	1.	Explain the importance of pasture conservation								
	2.	Explain the different methods of pasture conservation								
	3.	Explain the different methods of pasture conservation								
	4.	List the advantages of silage and hay-making								
LO2 Know the appropriate time for pasture conservation	1.	State the steps involved in processing pastures for conservation								
	2.	Explain the factors to be considered in pasture conservation								
	3.	Explain the indicators considered for pasture conservation								
LO3 Know the time for pasture utilization	1.	Explain the annual period of feeds scarcity								
	2.	Define supplementation period								
	3.	Explain the types of forage used for supplementation								
LO4 Carryout conservation of harvested pastures	1.	Select pasture for conservation								
	2.	Select the appropriate methods of conservation								
	3.	Carryout the conservation by harvest								
	4.	Carryout the conservation by fallow								
LO5 Determine the time for utilization conserved pasture	1.	Identify periods of feed scarcity								
	2.	Identify appropriate periods for rotational grazing								
	3.	Identify periods supplementation is required								

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)    Date:	

## Pasture Products Marketing

Unit reference number: **PRP/AG/012/L3**

QCF level: **3**

Credit value:**3**

Guided learning hours: **30**

Unit Purpose: This unit is aimed at providing skills, Knowledge and understanding for Rangers on the marketingof pasture products. It focuses on identifying targeted customers and when to market pasture products. It also includes knowledge of pasture products and customers' needs.

### NOS evidence requirements

NOS	Pasture Products Marketing
Evidence	Evidence for this unit will be: Questioning (QA) Direct Observation (Obs) Learner's Personal Statement (LPS) Witness Statement Witness Testimony (WT) Assignment (ASS)

**PASTURE PRODUCTS MARKETING - PRP/AG/012/L3**

<b>LO (Learning outcome)</b>	<b>Criteria:-</b>	<b>Evidence Type</b>				<b>Evidence Ref Page number</b>				
L01 Know the pasture products	1.	List the pasture products								
	2.	Explain the methods of storing pasture products								
	3.	Describe mode of transporting pasture products								
	4.	Explain the different packaging techniques for pasture products								
	5.	Explain the importance of quality and seed purity in pasture products								
L02 Know when to market pasture products	1.	Explain the marketing strategy for pasture products								
	2.	State best time to start marketing pasture products								
	3.	Explain the pricing regime for pasture products								
L03 Know the customer's needs	1.	Identify target customer								
	2.	Explain the importance of customer satisfaction								
	3.	Explain the need for feedback channel								
	4.	Explain how to manage records of sales								
L04 Identify targeted customers	1.	Carryout market survey								
	2.	Source for potential customers								
	3.	Identify locations of potential customers								
L05 Carryout Pasture Product Marketing	1.	Identify Customer's needs								
	2.	Identify price regime for the product								
	3.	Select product to be marketed								
	4.	Package product to meet customers' specification								
	5.	Identify mode of transportation of product								
	6.	Market the product								

Learners Signature:	Date:
Assessors Signature:	Date:
IQA Signature (if sampled)	Date:
EQA Signature (if sampled)	Date:

## TEAM LIST FOR NOS DEVELOPMENT

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