



NATIONAL BOARD FOR TECHNICAL EDUCATION

PLOT B BIDA ROAD, P.M.B. 2239, KADUNA, NIGERIA

IN COLLABORATION WITH



NATIONAL OCCUPATIONAL STANDARDS (NOS)

DAIRY CATTLE PRODUCTION LEVELS 1 - 3

JUNE, 2026



RENEWED HOPE

PREFACE

The development of the National Occupational Standards (NOS) for the agricultural sector marks another important milestone in Nigeria's commitment to strengthening Technical and Vocational Education and Training (TVET), promoting skills development, and improving workforce productivity. These standards have been developed to provide nationally recognized benchmarks for the knowledge, skills, and competencies required for effective performance in various agricultural occupations.

The National Occupational Standards were developed through a collaborative process involving industry experts, employers, professional bodies, regulatory agencies, training institutions, development partners, and other key stakeholders. Their contributions ensured that the standards reflect current industry practices, emerging technologies, and the competency requirements of the modern agricultural sector.

I wish to express my sincere appreciation to the Honourable Minister of Education for providing the policy direction that made this initiative possible. I also acknowledge the support of the Honourable Minister of Agriculture and Food Security and the Honourable Minister of Livestock Development for their commitment to advancing agricultural skills development in Nigeria.

I extend my profound gratitude to the Tertiary Education Trust Fund (TETFund) for its intervention and support, which facilitated the development of these National Occupational Standards. I also appreciate the invaluable contributions of the Sector Skills Council for Agriculture (SSC4A), members of the Implementation Committee, resource persons, industry practitioners, employers, professional associations, regulatory agencies, the French Embassy in Nigeria, development partners, and all stakeholders who contributed their expertise throughout the development process.

These National Occupational Standards will serve as an important reference for competency-based training, assessment, certification, apprenticeship, Recognition of Prior Learning (RPL), and workforce development within the agricultural sector. It is my expectation that all implementing institutions and industry partners will effectively utilize these standards to enhance the quality, relevance, and competitiveness of agricultural skills development in Nigeria.

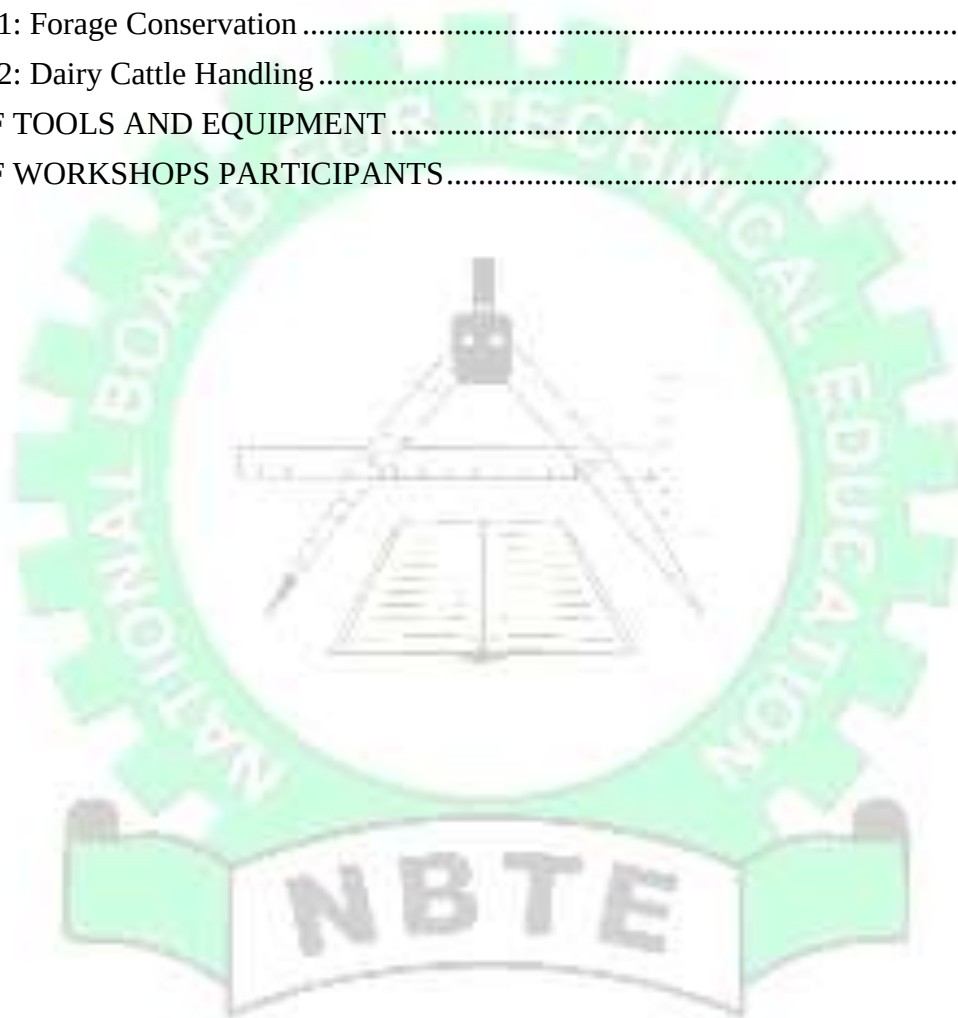
I commend all stakeholders for their dedication and commitment to this important national assignment and look forward to the successful implementation of these National Occupational Standards for the benefit of the agricultural sector and the nation as a whole.

Professor Idris M. Bugaje, FNSE
Chairman, Implementation Committee
EXECUTIVE SECRETARY
National Board for Technical Education (NBTE), Kaduna

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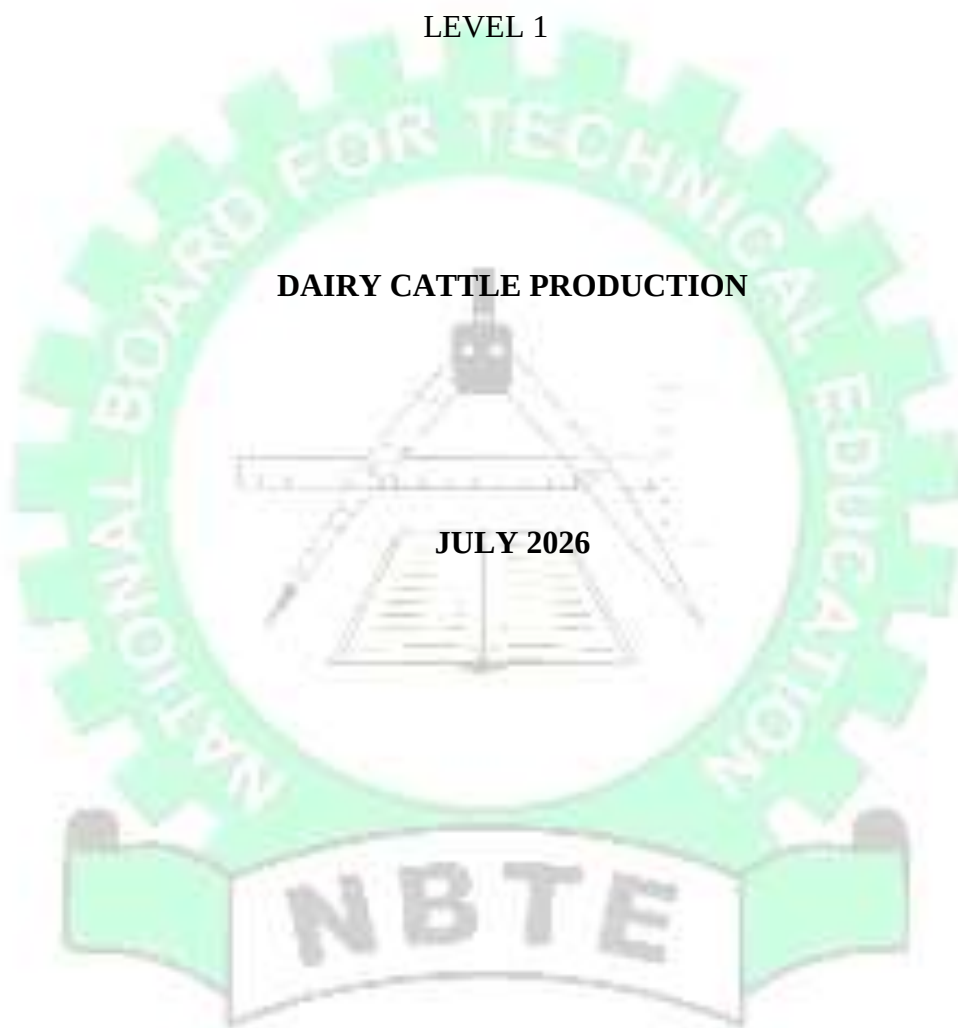


NATIONAL SKILLS QUALIFICATION (NSQ)

LEVEL 1

DAIRY CATTLE PRODUCTION

JULY 2026



GENERAL INFORMATION

OVERVIEW

This qualification is designed for individuals who are interested in pursuing a career in **Dairy Cattle Production** for the award of National Skills Qualifications (NSQ)/National Occupational Standards (NOS). It is aimed at producing competencies necessary to support in **Dairy Cattle Production** at **NSQ Level 1**.

This qualification is subject to review as and when the need arises.

QUALIFICATION PURPOSE

The qualification is designed to produce competent entry level Dairy Production Assistants with knowledge, skills, and attitude required to perform routine dairy cattle production activities under supervision using basic precision agriculture principles and tools

QUALIFICATION REQUIREMENTS

All Candidates must be:

- At least sixteen (16) years of age
- Medically fit
- Mentally fit (Mental alertness)
- A Nigerian citizen
- Other nationals should present an International passport, residence permit or Parent work permit.
- Vetted
- Interest in agricultural production and related support operations;
- Ability to carry out simple practical tasks under supervision.

QUALIFICATION OBJECTIVES

This qualification is intended to equip the learner with the foundational knowledge, skills and attitudes required to:

- i. Apply safe and healthy work practices in dairy cattle production environments.
- ii. Communicate effectively with supervisors, colleagues, customers, and other stakeholders in dairy cattle production.
- iii. Work effectively as a member of a team to achieve dairy production objectives.
- iv. Adhere to basic understanding of dairy cattle production principles and practices.
- v. Prepare, maintain, and manage dairy cattle housing and handling facilities in accordance with industry standards.
- vi. Perform basic dairy cattle husbandry practices to promote animal health, welfare, and productivity.
- vii. Apply appropriate feed selection and feeding practices to meet the nutritional requirements of dairy cattle.

NATIONAL SKILLS QUALIFICATION (NSQ) TABLE

Mandatory Units

S/No /Unit No	Reference Number	NOS Title	Credit Value	Guided Learning Hours	Practice Hours	Remark
1.	AGR/DCP/001/L1	Safety in Dairy Cattle Production Environment	2	20	40	Mandatory
2.	AGR/DCP/002/L1	Communicate in Dairy Cattle Production Environment	2	20	40	Mandatory
3.	AGR/DCP/003/L1	Teamwork	2	20	40	Mandatory
4.	AGR/DCP/004/L1	Basics of Dairy Cattle Production	3	30	70	Mandatory
5.	AGR/DCP/005/L1	Dairy Cattle Housing and Handling Facilities	3	30	70	Mandatory
6.	AGR/DCP/006/L1	Basic Dairy Cattle Husbandry Practices	3	30	90	Mandatory
7.	AGR/DCP/007/L1	Feeds and Feeding Practices in Dairy Cattle	3	30	70	Mandatory
TOTAL			18	180	420	

QUALIFICATION STRUCTURE

This qualification comprises a total of seven (7) Mandatory Units, with a credit value of 18 and 180 Guided Learning Hours (GLH) across the full qualification. One (1) credit is equivalent to ten (10) GLH. Guided Learning Hours are the time a learner spends in the classroom, workshop and laboratory of the Skills Training Centre (STC), being taught, instructed, supervised or assessed by a qualified trainer, facilitator or assessor.

In addition to the GLH, the qualification requires at least twice or thrice the GLH as practice time. Practice time is the time a learner is expected to spend applying the skills of each unit in a real workplace environment, carrying out the same tasks repeatedly until performance becomes consistent, accurate and habitual to the standard the qualification demands. It is undertaken under the guidance of a workplace supervisor, recorded in the learner's logbook and duly endorsed. Practice time is the principal setting where core assessment is conducted. It is through repeated performance in the workplace that a learner's achievement of the Learning Outcomes and Performance Criteria is judged and evidenced. Practice time is an additional requirement to GLH and does not replace them.

To achieve this qualification, the learner must complete all mandatory units, undertake the prescribed practice time, and accumulate the minimum credit value approved by NBTE. Credit is awarded only when a learner has been assessed as competent against all Learning Outcomes and Performance Criteria of a unit.



GENERAL GUIDE

Unit title	Provides a clear explanation of the content of the unit.
Unit number	The unique number assigned to the unit.
Unit reference	The unique reference number given to each unit at qualification approval by NBTE
Unit level	Denotes the level of the unit within the National Skill Qualification framework NSQF.
Unit credit value	The value that has been given to the unit based on the expected learning time for an average learner. 1 credit = 10 learning hours
Unit aim	Provides a brief outline of the unit content.
Learning outcome	A statement of what a learner will know, understand or be able to do, as a result of a process of learning.
Assessment criteria	A description of the requirements a learner must achieve to demonstrate that a learning outcome has been met.
Unit assessment guidance	Any additional guidance provided to support the assessment of the unit.
Unit guided learning hours	The average number of hours of supervised or directed study time or assessment required to achieve a qualification or unit of a qualification.

UNIT 001: SAFETY IN DAIRY CATTLE PRODUCTION ENVIRONMENT

Unit Reference Number: AGR/DCP/001/L1

NSQ Level: 1

Credit Value: 2

Guided Learning Hours: 20

Practice Time: 40 hours

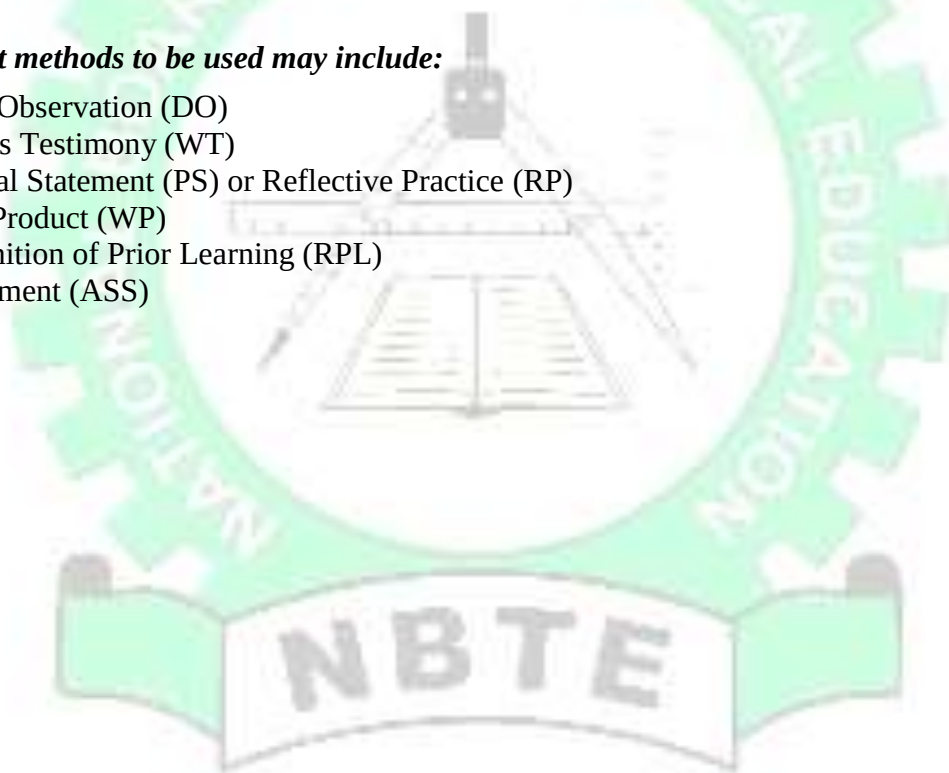
Unit Purpose: This unit is designed to equip learners with knowledge and skills to work safely in dairy cattle production environment.

Unit Assessment Requirements/ Evidence Requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Witness Testimony (WT)
3. Personal Statement (PS) or Reflective Practice (RP)
4. Work Product (WP)
5. Recognition of Prior Learning (RPL)
6. Assignment (ASS)



UNIT 001: Safety in Dairy Cattle Production Environment

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type				Evidence Ref. DCPe No.			
The learner will:		The learner can:								
LO 1: Work safely in the dairy cattle production environment	1.1	Explain safe work practices along the dairy cattle production value chain								
	1.2	Identify safety signs and symbols in dairy production and milk handling facilities								
	1.3	Describe safe work practices and instructions in dairy facilities								
	1.4	Clean equipment in accordance with health and safety practices								
LO 2: Comply with safety standards in dairy facilities	2.1	Identify work environment hazards (kicks, goring, trampling, slippery floors, electricity, machinery)								
	2.2	State types of hazards and risks in dairy production and milk handling facilities								
	2.3	State safety standards in dairy production and milk handling facilities								
	2.4	Use safety tools, materials and equipment in dairy facilities								
LO 3: Apply personal protective equipment (PPEs) in dairy facilities	3.1	Identify the types of PPE (overall, apron, rubber boots, hand gloves, nose cover, head cover)								
	3.2	Select appropriate PPE for each task								
	3.3	Demonstrate the use of PPE								
	3.4	Maintain PPE before and after use								
LO 4: Respond to accidents/injury in the dairy unit	4.1	Locate the first aid facility								
	4.2	Use basic dressing materials								
	4.3	Apply supervisor-given instructions								
	4.4	Report accident/injury to the appropriate supervisor								
LO 5: Apply safe work habits and maintain a clean work environment	5.1	Use safe access and exit routes in the work environment								
	5.2	Identify appropriate working tools, materials and equipment								

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type	Evidence Ref. DCPe No.
The learner will:		The learner can:		
	5.3	Use tools and equipment safely in accordance with the supervisor's instructions		
	5.4	Store all tools, equipment and unused materials for appropriate storage		
	5.5	Carry out general housekeeping of the work environment		
	5.6	Dispose wastes (manure, effluent, used containers) appropriately to designated waste facilities		
LO 6: Comply with standards of lifting, loading/offloading and stacking of materials	6.1	Explain stacking techniques		
	6.2	Explain lifting techniques in loading and offloading of feed bags and materials without assistance		
	6.3	Explain correct lifting and loading techniques with mechanical assistance		
	6.4	Stack materials correctly		
LO 7: Observe hygiene measures against zoonotic diseases	7.1	Identify common zoonotic diseases of cattle (brucellosis, bovine tuberculosis, anthrax)		
	7.2	Disinfect hands before and after assisting in animal handling		
	7.3	Use foot dips at the entry and exit points of the ranch		
	7.4	Report suspected zoonotic cases to the supervisor		
Learners Signature:			Date:	
Assessors Signature:			Date:	
IQA Signature (if sampled)			Date:	
EQA Signature (if sampled)			Date:	

UNIT 002: COMMUNICATE IN DAIRY CATTLE PRODUCTION ENVIRONMENT

Unit Reference Number: AGR/DCP/002/L1

NSQ Level: 1

Credit Value: 2

Guided Learning Hours: 20

Practice Time: 40 hours

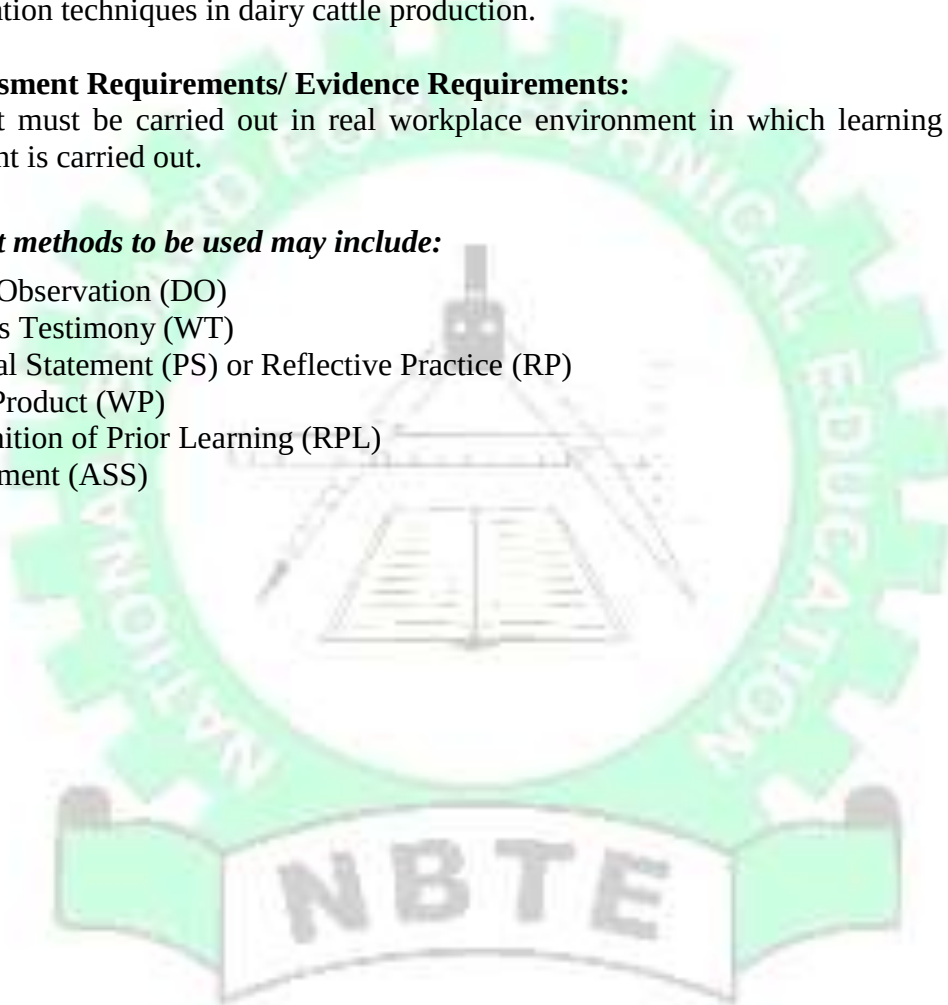
Unit Purpose: This unit is designed to equip learners with knowledge and skills in simple communication techniques in dairy cattle production.

Unit Assessment Requirements/ Evidence Requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Witness Testimony (WT)
3. Personal Statement (PS) or Reflective Practice (RP)
4. Work Product (WP)
5. Recognition of Prior Learning (RPL)
6. Assignment (ASS)



UNIT 002: Communicate in Dairy Cattle Production Environment

LEARNING OUTCOME (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type	Evidence Ref. DCPe No.
LO 1: Apply simple communication system in the work environment	1.1	Use verbal means to pass on necessary information		
	1.2	Use non-verbal means to convey necessary information e.g. body language, signs, actions etc.		
	1.3	Interpret symbols and signs appropriately		
LO 2: Source for information in the work environment	2.1	Identify the source of information in the work environment		
	2.2	Relate effectively with the source of information		
	2.3	Use the different information flow systems in the work environment		
	2.4	Use information gathered to avoid challenges in a work situation		
	2.5	Report findings appropriately in accordance with laid down procedures in the work environment		
	2.6	Use simple communication gadgets (mobile phones and table phones, etc.)		
LO 3: Apply various means of communication in the work environment	3.1	Locate the various communication equipment in the work environment		
	3.2	Use effectively the various communication equipment in the work environment		
	3.3	Pass information effectively to the right personnel		
	3.4	Obey instructions in line with the ethics of the work environment		
Learners Signature:			Date:	
Assessors Signature:			Date:	
IQA Signature (if sampled			Date:	
EQA Signature (if sampled)			Date:	

UNIT 003: TEAMWORK

Unit Reference Number: AGR/DCP/003/L1

NSQ Level: 1

Credit Value: 2

Guided Learning Hours: 20

Practice Time: 40 hours

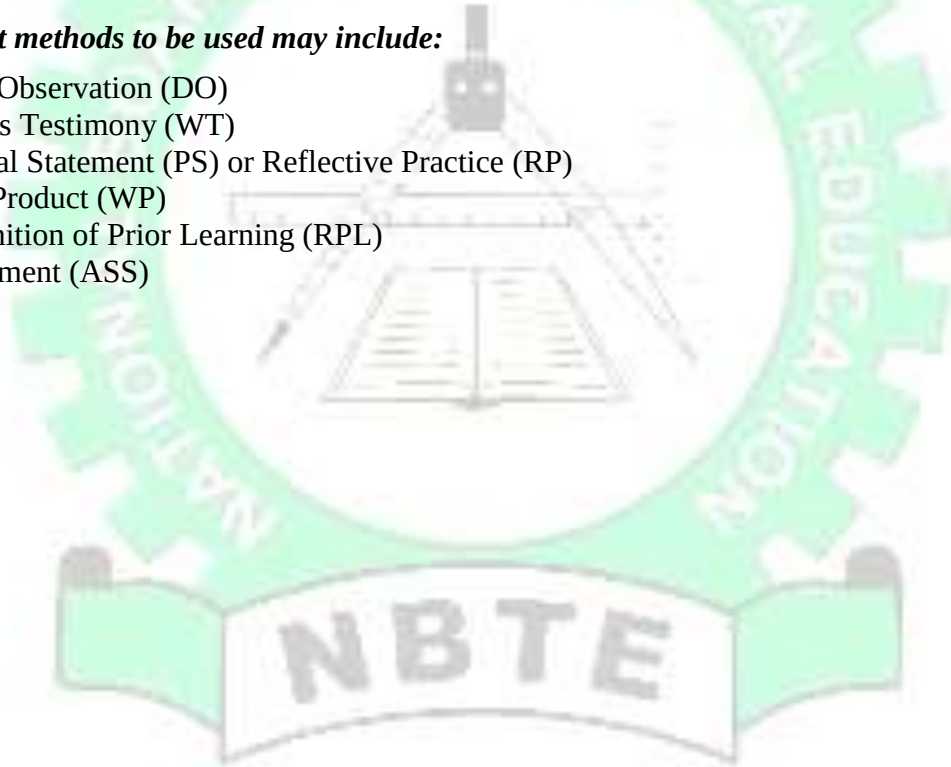
Unit Purpose: This unit is designed to equip learners with knowledge and the necessary skills required to develop team spirit and a positive working relationship with colleagues.

Unit Assessment Requirements/ Evidence Requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Witness Testimony (WT)
3. Personal Statement (PS) or Reflective Practice (RP)
4. Work Product (WP)
5. Recognition of Prior Learning (RPL)
6. Assignment (ASS)



UNIT 003: Teamwork

LEARNING OUTCOME (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type		Evidence Ref. DCPe No.
LO 1: Maintain a positive working relationship with colleagues	1.1	Identify the need for developing a positive working relationship with colleagues			
	1.2	Recognize the importance of relating with other people in a way that makes them feel valued and respected			
	1.3	Assist team members when required			
	1.4	Report to the appropriate personnel when a request for assistance falls outside own area of responsibility			
	1.5	Communicate information to colleagues about individual work that may affect teamwork			
LO 2: Take responsibility within the team	2.1	Recognize own role and responsibilities within a team			
	2.2	Perform individual tasks in line with the team's rules and regulations			
	2.3	Participate effectively in teamwork			
LO 3: Work in line with organizational standards	3.1	Explain the organizational code of conduct			
	3.2	Work in line with the organizational standard and code of practice			
	3.3	Adhere strictly to instructions given by Management			
Learners Signature:			Date:		
Assessors Signature:			Date:		
IQA Signature (if sampled)			Date:		
EQA Signature (if sampled)			Date:		

UNIT 004: BASICS OF DAIRY CATTLE PRODUCTION

Unit Reference Number: AGR/DCP/004/L1

NSQ Level: 1

Credit Value: 3

Guided Learning Hours: 30

Practice Time: 70 hours

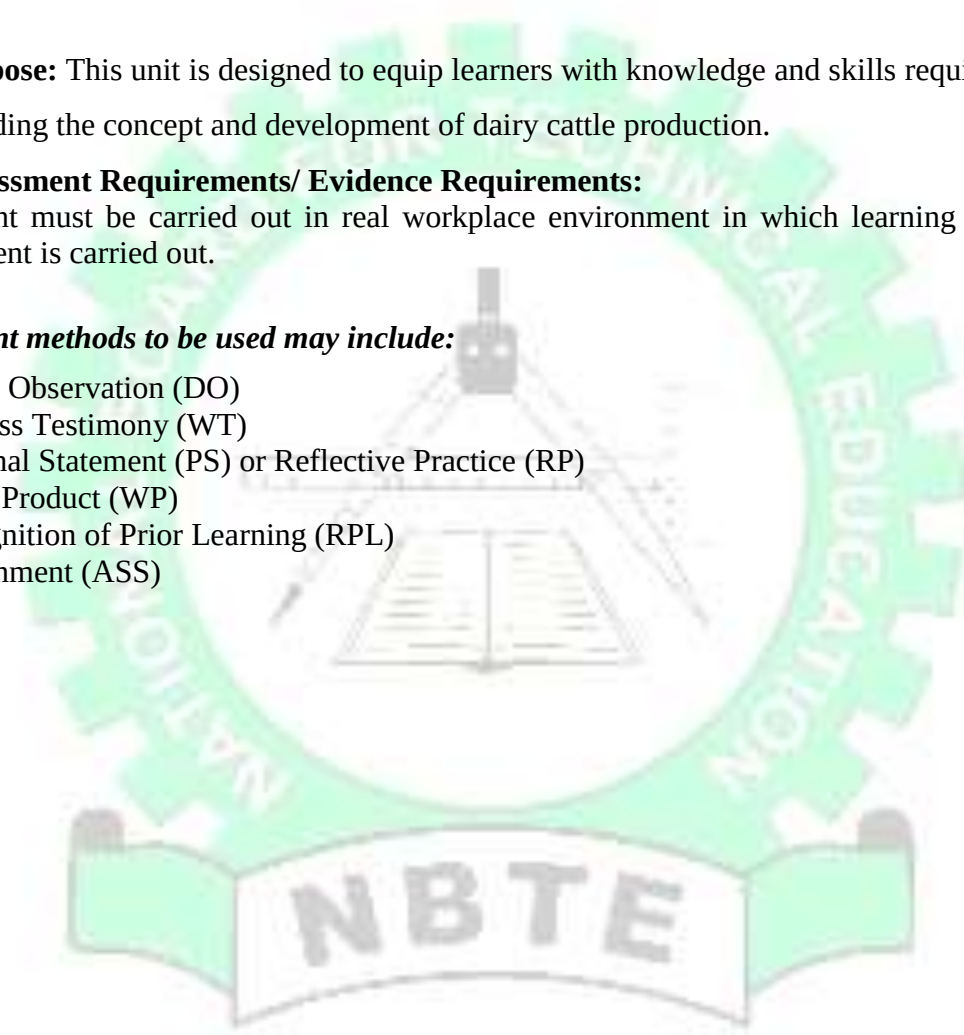
Unit Purpose: This unit is designed to equip learners with knowledge and skills required in understanding the concept and development of dairy cattle production.

Unit Assessment Requirements/ Evidence Requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

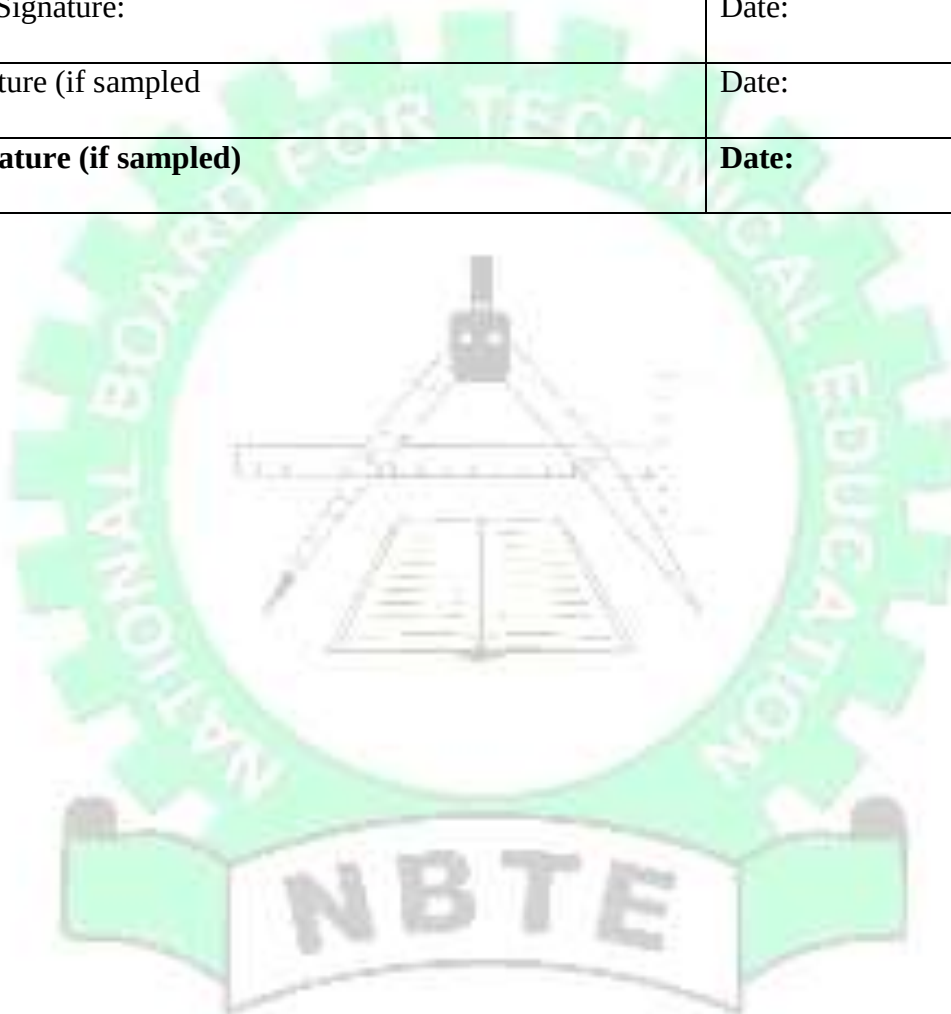
1. Direct Observation (DO)
2. Witness Testimony (WT)
3. Personal Statement (PS) or Reflective Practice (RP)
4. Work Product (WP)
5. Recognition of Prior Learning (RPL)
6. Assignment (ASS)



UNIT 004: Basics of Dairy Cattle Production

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type	Evidence Ref. DCPe No.
The learner will:		The learner can:		
LO 1: Explain dairy cattle production	1.1	Explain the various terminologies used in dairy farming (cow, heifer, bull, calf, steer, lactation, dry period, colostrum)		
	1.2	Describe the various dairy cattle production systems (extensive/pastoral, semi-intensive, intensive)		
	1.3	Identify the various breeds of dairy cattle in Nigeria (White Fulani, Bunaji, Sokoto Gudali, Red Bororo, Friesian, Jersey and their crosses)		
	1.4	Explain the demand seasons for milk and milk products in Nigeria		
	1.5	Explain the factors that affect dairy cattle farming (feed, water, disease, breed, climate, management)		
LO 2: State the importance of milk and milk products	2.1	State the importance of milk and milk products in Nigeria		
	2.2	Identify local milk products (nono, wara, kindirmo, man shanu, Pasteurized milk, yoghurt)		
	2.3	Distinguish between good and bad milk by appearance and smell		
LO 3: Identify employment opportunities in dairy production	3.1	Explain the various career opportunities in dairy cattle production		
	3.2	Identify the value chain segments in dairy production		
	3.3	List the major actors in the dairy value chain		
LO 4: Recognise the signs of ill-health in dairy cattle	4.1	Identify the signs displayed by a sick cow (dullness, loss of appetite, drop in milk yield, discharges, isolation from the herd)		
	4.2	Isolate a sick animal from the herd under supervision		
	4.3	Identify common vectors of disease in a dairy unit (ticks, flies, lice, rodents)		
	4.4	Identify the sources of		

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type	Evidence Ref. DCPe No.
The learner will:		The learner can:		
		contamination in a dairy unit (water, feed, rodents, visitors, equipment)		
Learners Signature:			Date:	
Assessors Signature:			Date:	
IQA Signature (if sampled)			Date:	
EQA Signature (if sampled)			Date:	



UNIT 005: DAIRY CATTLE HOUSING AND HANDLING FACILITIES

Unit Reference Number: AGR/DCP/005/L1

NSQ Level: 1

Credit Value: 3

Guided Learning Hours: 30

Practice Time: 70 hours

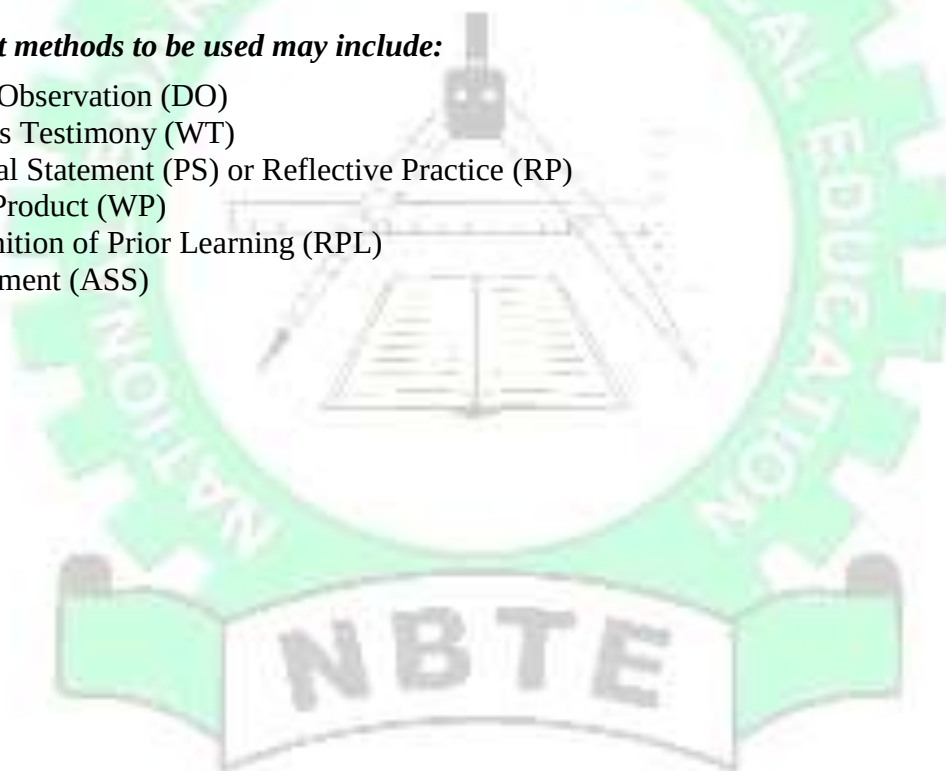
Unit Purpose: This unit is designed to equip learners with knowledge and skills in basic dairy cattle housing and handling facilities, depending on the environment.

Unit Assessment Requirements/ Evidence Requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Witness Testimony (WT)
3. Personal Statement (PS) or Reflective Practice (RP)
4. Work Product (WP)
5. Recognition of Prior Learning (RPL)
6. Assignment (ASS)



UNIT 005: Dairy Cattle Housing and Handling Facilities

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type	Evidence Ref. DCPe No.
The learner will:		The learner can:		
LO 1: Describe the housing needs of dairy cattle	1.1	Describe the different housing systems in dairy cattle production (open kraal, loose housing, free-stall/cubicle, tethering)		
	1.2	Distinguish between the open kraal and loose housing		
	1.3	Identify the components of a dairy unit (feeding alley, loafing area, milking parlour, calf pen, isolation pen)		
	1.4	Describe basic requirement of space for dairy cattle		
LO 2: Demonstrate Housing components and beddings	2.1	Identify suitable bedding materials and their sources		
	2.2	Measure the floor space requirement for the different classes of dairy cattle		
	2.3	Measure the feeding and watering space requirement for the different classes of dairy cattle		
	2.4	Carry out the replacement of soiled bedding materials		
LO 3: Recognise dairy cattle handling facilities	3.1	Identify handling facilities (cattle crush, race, headgate, foot bath, dip and spray race)		
	3.2	Explain the uses of (cattle crush, race, headgate, foot bath, dip and spray race)		
	3.3	Identify suitable feeders and water troughs for dairy cattle		
	3.4	Disinfect pens, alleys and handling facilities		
Learners Signature:			Date:	
Assessors Signature:			Date:	
IQA Signature (if sampled)			Date:	
EQA Signature (if sampled)			Date:	

UNIT 006: BASIC DAIRY CATTLE HUSBANDRY PRACTICES

Unit Reference Number: AGR/DCP/006/L1

NSQ Level: 1

Credit Value: 3

Guided Learning Hours: 30

Practice Time: 90 hours

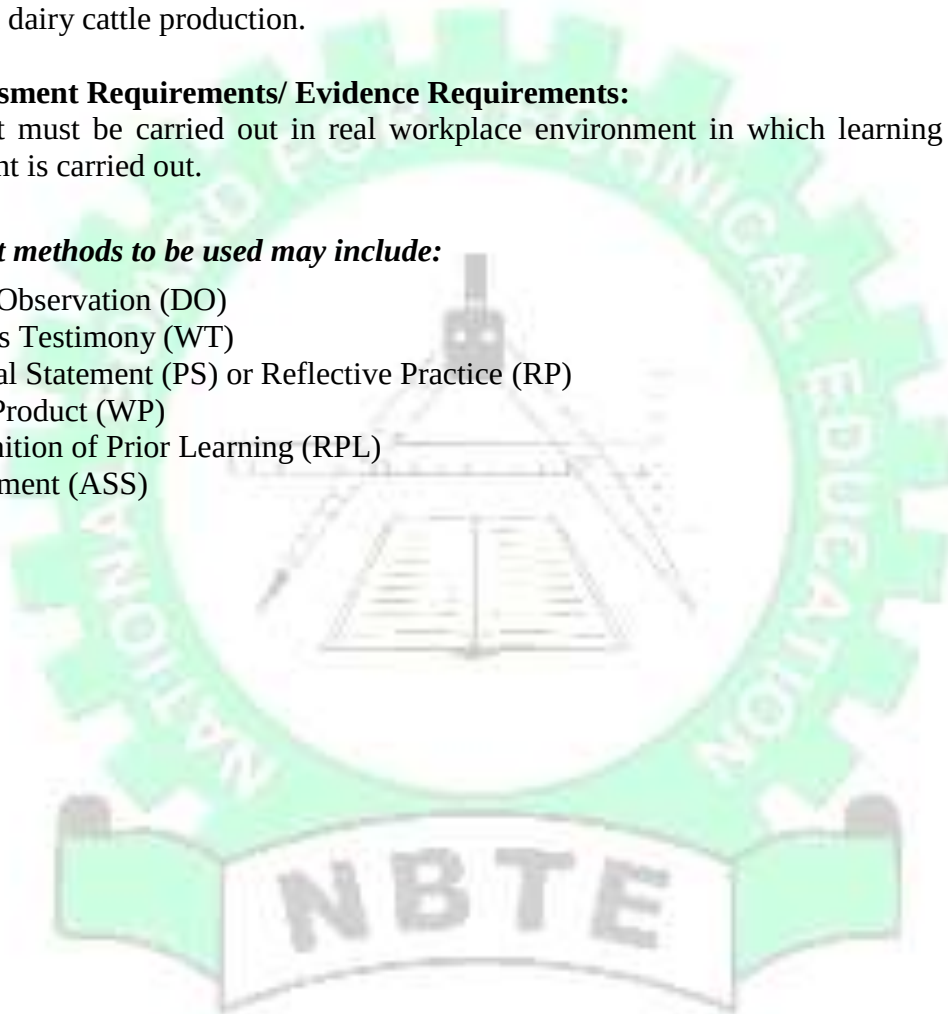
Unit Purpose: This unit is designed to equip learners with knowledge and skills in husbandry practices in dairy cattle production.

Unit Assessment Requirements/ Evidence Requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Witness Testimony (WT)
3. Personal Statement (PS) or Reflective Practice (RP)
4. Work Product (WP)
5. Recognition of Prior Learning (RPL)
6. Assignment (ASS)



UNIT 006: Basic Dairy Cattle Husbandry Practices

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type				Evidence Ref. DCPe No.			
The learner will:		The learner can:								
LO 1: Carry out basic husbandry practices in dairy cattle production	1.1	Explain the following basic husbandry practices: • Identification and Tagging, • Grooming; • Hoof care; • Dehorning; • Castration; • Deworming; • Dipping/Spraying; • And culling etc.								
	1.2	Administer feed and water to the herd under supervision								
	1.3	Carry out the identification and tagging of animals under supervision								
	1.4	Assist in restraining animals for routine treatment								
LO 2: Perform basic cleaning and hygiene practices	2.1	Carry out the cleaning of feeders and water troughs								
	2.2	Carry out the removal of manure and soiled bedding from pens								
	2.3	Carry out the washing and disinfection of milking utensils								
	2.4	Describe the daily routine of a dairy unit								
LO 3: Assist handling of dairy cattle	3.1	Approach cattle calmly without frightening them								
	3.2	Identify what frightens cattle (sudden movements, shouting, beating, rough handling, strange people, colour and objects, etc.)								
	3.3	Identify cattle response to calm voice, gentle touch, alarm sound and familiar handlers								
	3.4	Restrain a cow using rope and cattle crush under supervision								
	3.5	Report unusual animal behaviour to the supervisor								
LO 4: Identify the basic tools used in	4.1	Identify the tools for the different husbandry practices								

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type					Evidence Ref. DCPe No.				
The learner will:		The learner can:										
dairy production	4.2	Explain the use of the tools for the different husbandry practices										
	4.3	Use the tools safely for feeding, watering and cleaning										
	4.4	Clean tools after use										
	4.5	Store tools after use										
Learners Signature:			Date:									
Assessors Signature:			Date:									
IQA Signature (if sampled)			Date:									
EQA Signature (if sampled)			Date:									



UNIT 007: FEEDS AND FEEDING PRACTICES IN DAIRY CATTLE

Unit Reference Number: AGR/DCP/007/L1

NSQ Level: 1

Credit Value: 3

Guided Learning Hours: 30

Practice Time: 70 hours

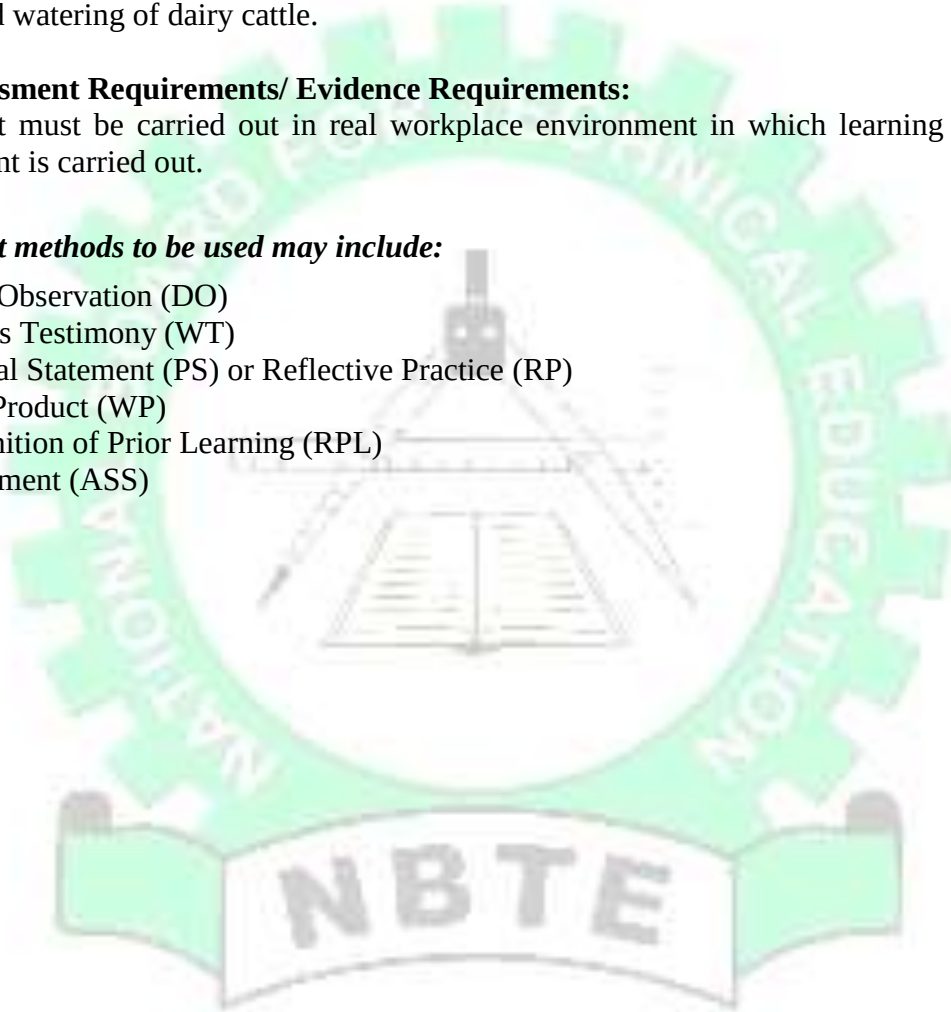
Unit Purpose: This unit is designed to equip learners with knowledge and skills of feeds, feeding and watering of dairy cattle.

Unit Assessment Requirements/ Evidence Requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Witness Testimony (WT)
3. Personal Statement (PS) or Reflective Practice (RP)
4. Work Product (WP)
5. Recognition of Prior Learning (RPL)
6. Assignment (ASS)



UNIT 007: Feeds and Feeding Practices in Dairy Cattle

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type	Evidence Ref. DCPe No.
The learner will:		The learner can:		
LO 1: Identify different feed categories for dairy cattle	1.1	Identify common feed ingredients (maize bran, wheat offal, cotton seed cake, groundnut cake, brewers' grain, bone meal, salt lick, feed additives)		
	1.2	Distinguish between roughages, concentrates and supplements		
	1.3	Identify common forage grasses and legumes (Elephant grass, Gamba, Stylosanthes, Lablab, Centrosema etc.)		
	1.4	Identify crop residues used for feeding dairy cattle (maize stover, groundnut haulms, cowpea husk, treated rice straw etc.)		
LO 2: Carry out the process of feeding dairy cattle	2.1	Carry out the feeding of calves, heifers, pregnant cows, lactating cows and dry cows as directed		
	2.2	Measure the quantity of feed required per animal per day as directed		
	2.3	Carry out the cutting and carrying of fresh forage to the animals		
	2.4	Communicate feed refusals and animals that are off-feed		
LO 3: Carry out the process of watering dairy cattle	3.1	State the importance of clean water to dairy cattle		
	3.2	Identify the sources of water for dairy cattle		
	3.3	Identify quality water for dairy cattle		
	3.4	Carry out the filling and cleaning of water troughs		
LO 4: Perform feed storage	4.1	Carry out the stacking of feed bags in the store		
	4.2	Explain the good storage conditions for dairy feeds		
	4.3	Identify the signs of spoilt or mouldy feed		
	4.4	Record feed received into and issued from the store		

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type	Evidence Ref. DCPe No.
The learner will:		The learner can:		
Learners Signature:			Date:	
Assessors Signature:			Date:	
IQA Signature (if sampled			Date:	
EQA Signature (if sampled)			Date:	

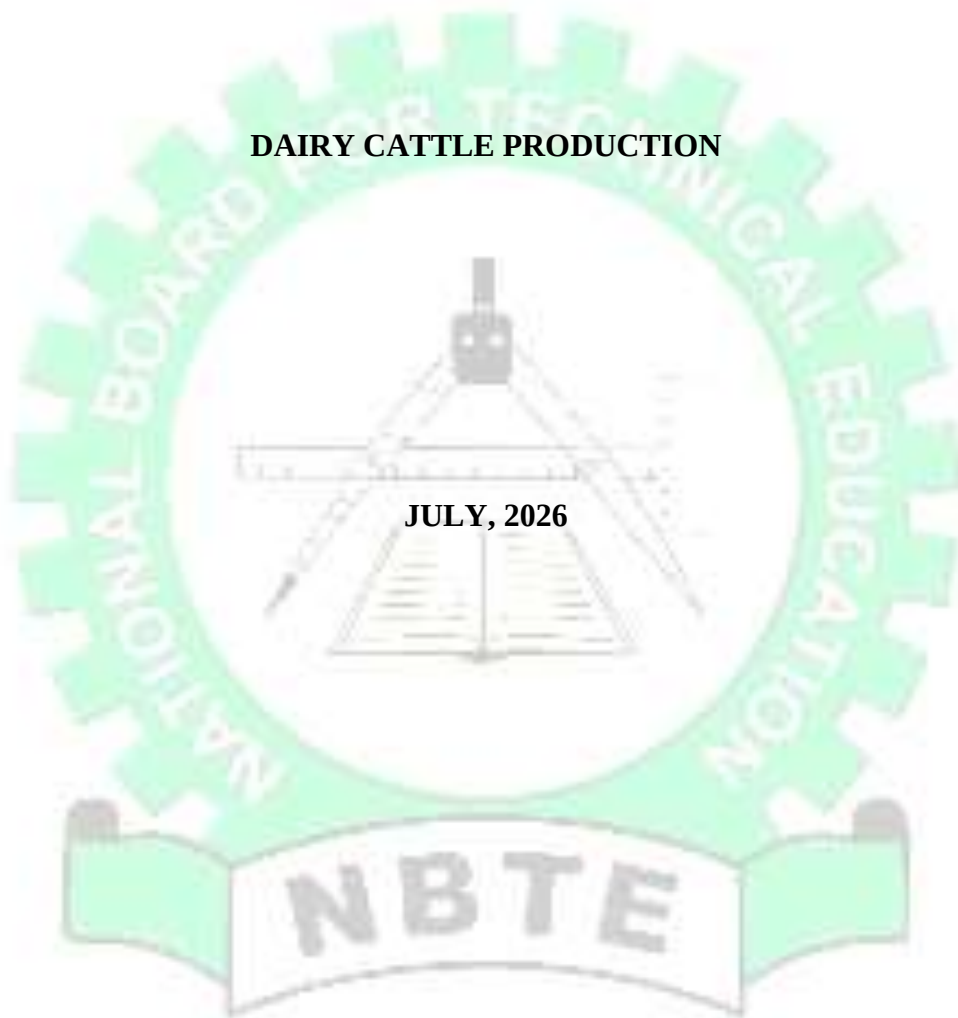


NATIONAL SKILLS QUALIFICATION (NSQ)

LEVEL 2

DAIRY CATTLE PRODUCTION

JULY, 2026



GENERAL INFORMATION

OVERVIEW

This qualification is designed for individuals who are interested in pursuing a career in **Dairy Cattle Production** for the award of National Skills Qualifications (NSQ)/National Occupational Standards (NOS). It is aimed at producing competencies necessary to support in **Dairy Cattle Production at NSQ Level 2**.

This qualification is subject to review as and when the need arises.

QUALIFICATION PURPOSE

The qualification is designed to produce competent entry level Dairy Production Assistants with knowledge, skills, and attitude required to perform routine Dairy Cattle Production activities under minimal supervision using basic precision agriculture principles and tools.

QUALIFICATION REQUIREMENTS

All Candidates must be:

- At least seventeen (17) years of age
- Medically fit
- Mentally fit (Mental alertness)
- A Nigerian citizen
- Other nationals should present an International passport, residence permit or Parent work permit.
- Vetted
- Interest in agricultural production and related support operations;
- Ability to carry out routine practical tasks with minimal supervision.

QUALIFICATION OBJECTIVES

This qualification is intended to equip the learner with the foundational knowledge, skills and attitudes required to:

- i. Apply safe and healthy work practices in dairy cattle production environments.
- ii. Communicate effectively with supervisors, colleagues, customers, and other stakeholders in dairy cattle production.
- iii. Work effectively as a member of a team to achieve dairy cattle production goals.
- iv. Identify the roles and responsibilities of dairy cattle producers in accordance with industry standards.
- v. Perform routine dairy cattle husbandry practices to promote animal health, welfare, and productivity.
- vi. Identify common dairy cattle diseases and apply appropriate preventive and basic control measures in line with good livestock management practices.
- vii. Carry out milking and milk handling operations in accordance with milk hygiene and quality standards.
- viii. Apply basic dairy cattle breeding, reproduction, and calf rearing practices to improve herd productivity.

- ix. Produce, manage, and conserve forage to ensure an adequate year-round feed supply for dairy cattle.
- x. Maintain accurate dairy farm records to support effective farm management and decision-making.

NATIONAL SKILLS QUALIFICATION (NSQ) TABLE

Mandatory Units

S/No /Unit No	Reference Number	NOS Title	Credit Value	Guided Learning Hours	Practice Hours	Remark
1.	AGR/DCP/001/L2	Safety in Dairy Cattle Production Environment	2	20	40	Mandatory
2.	AGR/DCP/002/L2	Communication in Workplace	2	20	40	Mandatory
3.	AGR/DCP/003/L2	Teamwork and Work Ethics	2	20	40	Mandatory
4.	AGR/DCP/004/L2	Dairy Cattle Production and Products	3	30	80	Mandatory
5.	AGR/DCP/005/L2	Dairy Cattle Husbandry Practices	3	30	110	Mandatory
6.	AGR/DCP/006/L2	Dairy Cattle Health and Diseases Management	3	30	110	Mandatory
7.	AGR/DCP/007/L2	Milking and Milk Handling	4	40	120	Mandatory
8.	AGR/DCP/008/L2	Dairy Cattle Reproduction and Calf Rearing	3	30	80	Mandatory
9.	AGR/DCP/009/L2	Forage Production and Conservation	3	30	60	Mandatory
10.	AGR/DCP/010/L2	Dairy Farm Records	3	30	40	Mandatory
TOTAL			28	280	720	

This qualification comprises a total of ten (10) Mandatory Units, with a credit value of 28 and 280 Guided Learning Hours (GLH) across the full qualification. One (1) credit is equivalent to ten (10) GLH. Guided Learning Hours are the time a learner spends in the classroom, workshop and laboratory of the Skills Training Centre (STC), being taught, instructed, supervised or assessed by a qualified trainer, facilitator or assessor.

In addition to the GLH, the qualification requires at least twice or thrice the GLH as practice time. Practice time is the time a learner is expected to spend applying the skills of each unit in a real workplace environment, carrying out the same tasks repeatedly until performance becomes consistent, accurate and habitual to the standard the qualification demands. It is undertaken under the guidance of a workplace supervisor, recorded in the learner's logbook and duly endorsed. Practice time is the principal setting where core assessment is conducted. It is through repeated performance in the workplace that a learner's achievement of the Learning Outcomes and Performance Criteria is judged and evidenced. Practice time is an additional requirement to GLH and does not replace them.

To achieve this qualification, the learner must complete all mandatory units, undertake the prescribed practice time, and accumulate the minimum credit value approved by NBTE. Credit is awarded only when a learner has been assessed as competent against all Learning Outcomes and Performance Criteria of a unit.

GENERAL GUIDE

Unit title	Provides a clear explanation of the content of the unit.
Unit number	The unique number assigned to the unit.
Unit reference	The unique reference number given to each unit at qualification approval by NBTE
Unit level	Denotes the level of the unit within the National Skill Qualification framework NSQF.
Unit credit value	The value that has been given to the unit based on the expected learning time for an average learner. 1 credit = 10 learning hours
Unit aim	Provides a brief outline of the unit content.
Learning outcome	A statement of what a learner will know, understand or be able to do, as a result of a process of learning.
Assessment criteria	A description of the requirements a learner must achieve to demonstrate that a learning outcome has been met.
Unit assessment guidance	Any additional guidance provided to support the assessment of the unit.
Unit guided learning hours	The average number of hours of supervised or directed study time or assessment required to achieve a qualification or unit of a qualification.

UNIT 001: SAFETY IN DAIRY CATTLE PRODUCTION ENVIRONMENT

Unit Reference Number: AGR/DCP/001/L2

NSQ Level: 2

Credit Value: 2

Guided Learning Hours: 20

Practice Time: 40 hours

Unit Purpose: This unit equips the learner with the knowledge and skills required to inspect routine hazards, use safety controls, implement established procedures and respond to incidents in Dairy cattle production operations

Unit Assessment Requirements/ Evidence Requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Recognition of Prior Learning and experience (RPL)
3. Witness testimony (WT)
4. Personal statement (PS)/ Reflective Practice (RP).
5. Work Product (WP)
6. Assignment (ASS)



UNIT 001: Safety in Dairy Cattle Production Environment

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type					Evidence Ref. No.			
The learner will:		The learner can:									
LO 1: Identify workplace hazards	1.1	Identify physical, chemical, biological and animal-related hazards in cattle pens, handling areas, feed stores and grazing facilities.									
	1.2	Compare observed conditions with approved workplace safety and biosecurity requirements.									
	1.3	Report identified hazards and unsafe conditions to the supervisor.									
LO 2: Use safety controls	2.1	Select the specified control for a routine hazard associated with cattle, equipment, chemicals or waste.									
	2.2	Use personal protective equipment correctly during cattle production activities.									
	2.3	Maintain safety barriers, warning signs, escape routes and restricted access areas.									
LO 3: Carry out safe operating procedures	3.1	Follow approved procedures for approaching, restraining, moving and handling cattle.									
	3.2	Apply hygiene, disinfection and zoonotic disease prevention requirements during operations.									
	3.3	Maintain clean pens, handling facilities, equipment and work areas throughout operations.									
	3.4	Maintain PPE before and after use									
LO 4: Address routine incidents	4.1	Raise the approved alarm for an injury, animal escape, chemical spill or other routine incident.									
	4.2	Apply the stated first-response procedure within own competence.									
	4.3	Complete the incident record and report the outcome to the supervisor.									
Learners Signature:			Date:								

LEARNING OUTCOME (LO)	PERFORMANCE CRITERIA	Evidence Type	Evidence Ref. No.
The learner will:	The learner can:		
Assessors Signature:		Date:	
IQA Signature (if sampled)		Date:	
EQA Signature (if sampled)		Date:	



UNIT 002: COMMUNICATION IN WORKPLACE

Unit Reference Number: AGR/DCP/002/L2

NSQ Level: 2

Credit Value: 2

Guided Learning Hours: 20

Practice Time: 40 hours

Unit Purpose: This unit equips the learner with the knowledge and skills required to use routine information, communicate with customers and co-workers, operate communication tools and compile routine reports in Dairy Cattle Production.

Unit Assessment Requirements/ Evidence Requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Recognition of Prior Learning and experience (RPL)
3. Witness testimony (WT)
4. Personal statement (PS)/ Reflective Practice (RP).
5. Work Product (WP)
6. Assignment (ASS)

UNIT 002: Communication in Workplace

LEARNING OUTCOME (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type				Evidence Ref. No.			
LO 1: Use Dairy cattle production information	1.1	Interpret routine work instructions, feeding schedules, animal identification records, labels and notices.								
	1.2	Distinguish urgent animal health, welfare or safety information from routine operational information.								
	1.3	Clarify unclear information through the approved communication channel.								
LO 2: Demonstrate customer and workplace communication	2.1	Explain approved information about cattle, production activities or services within own authority.								
	2.2	Respond politely and accurately to routine enquiries from buyers, suppliers, visitors and co-workers.								
	2.3	Refer enquiries or complaints outside own authority to the appropriate person.								
LO 3: Use communication tools	3.1	Operate approved phones, radios, messaging tools or email systems for work purposes.								
	3.2	Send a routine work message using the approved format and terminology.								
	3.3	Store communication records in the designated location.								
LO 4: Compile routine reports	4.1	Gather relevant facts from approved records, observations and workplace sources.								
	4.2	Summarise completed cattle production tasks, animal observations and outstanding issues.								
	4.3	Submit the report to the designated person within the stated time.								
Learners Signature:			Date:							
Assessors Signature:			Date:							
IQA Signature (if sampled			Date:							

LEARNING OUTCOME (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type	Evidence Ref. No.
EQA Signature (if sampled)			Date:	



UNIT 003: TEAMWORK AND WORK ETHICS

Unit Reference Number: AGR/DCP/003/L2

NSQ Level: 2

Credit Value: 2

Guided Learning Hours: 20

Practice Time: 40 hours

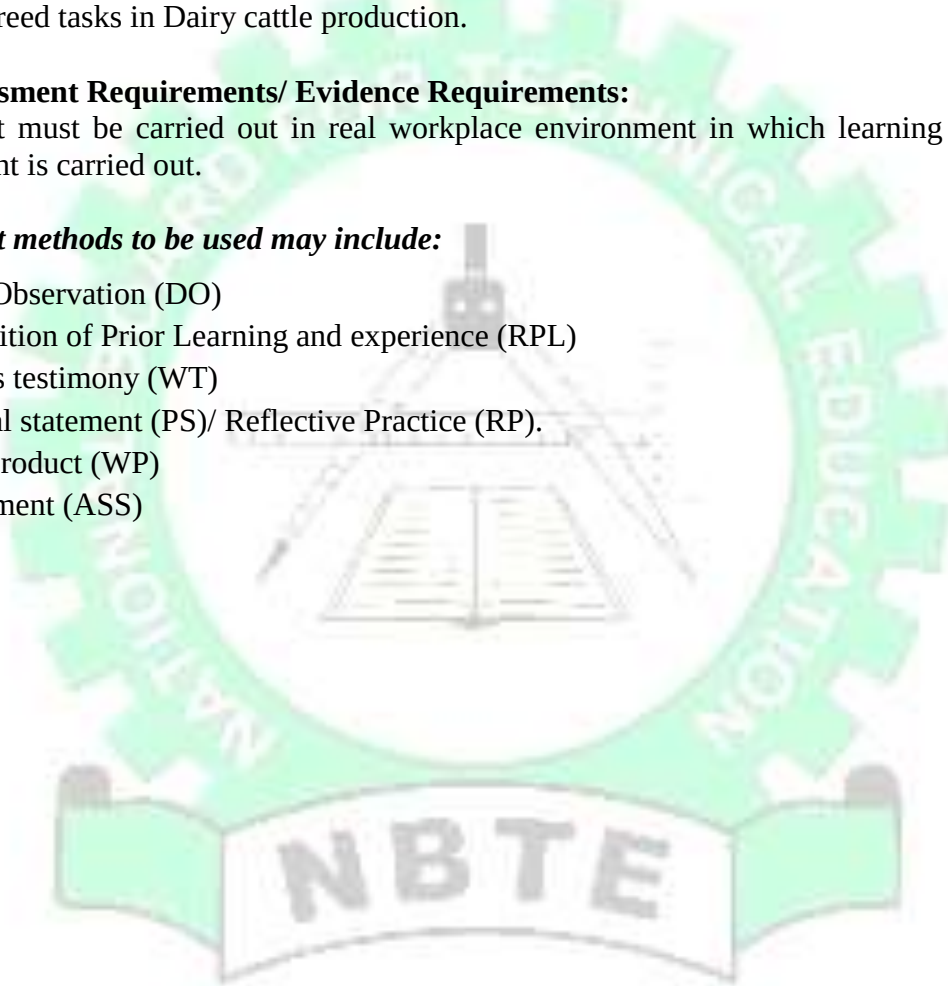
Unit Purpose: This unit equips the learner with the knowledge and skills required to work effectively with others, demonstrate professional conduct, address routine disagreements and perform agreed tasks in Dairy cattle production.

Unit Assessment Requirements/ Evidence Requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Recognition of Prior Learning and experience (RPL)
3. Witness testimony (WT)
4. Personal statement (PS)/ Reflective Practice (RP).
5. Work Product (WP)
6. Assignment (ASS)



UNIT 003: Teamwork and Work Ethics

LEARNING OUTCOME (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type				Evidence Ref. No.			
LO 1: <i>Demonstrate teamwork</i>	1.1	Participate in assigned team activities (cattle care, feeding, handling, cleaning or record keeping , etc.)								
	1.2	Share relevant animal, safety and work information with team members.								
	1.3	Support a co-worker within own competence and assigned responsibility.								
LO 2: <i>Demonstrate professional conduct</i>	2.1	Observe punctuality, attendance, dress and personal hygiene requirements.								
	2.2	Follow workplace ethics, animal welfare, confidentiality and biosecurity rules.								
	2.3	Use respectful behaviour with customers, visitors, supervisors and colleagues.								
LO 3: Address routine disagreements	3.1	Identify the cause of a simple workplace disagreement.								
	3.2	Use the approved discussion procedure to seek a practical resolution.								
	3.3	Refer unresolved disagreement to the supervisor.								
LO 4: Perform agreed workplace tasks	4.1	Complete assigned cattle production tasks to the stated standard and time.								
	4.2	Provide accurate progress information to the team.								
	4.3	Apply feedback to subsequent work activities.								
Learners Signature:			Date:							
Assessors Signature:			Date:							
IQA Signature (if sampled			Date:							
EQA Signature (if sampled)			Date:							

UNIT 004: DAIRY CATTLE PRODUCTION AND PRODUCTS

Unit Reference Number: AGR/DCP/004/L2

NSQ Level: 2

Credit Value: 3

Guided Learning Hours: 30

Practice Time: 80 hours

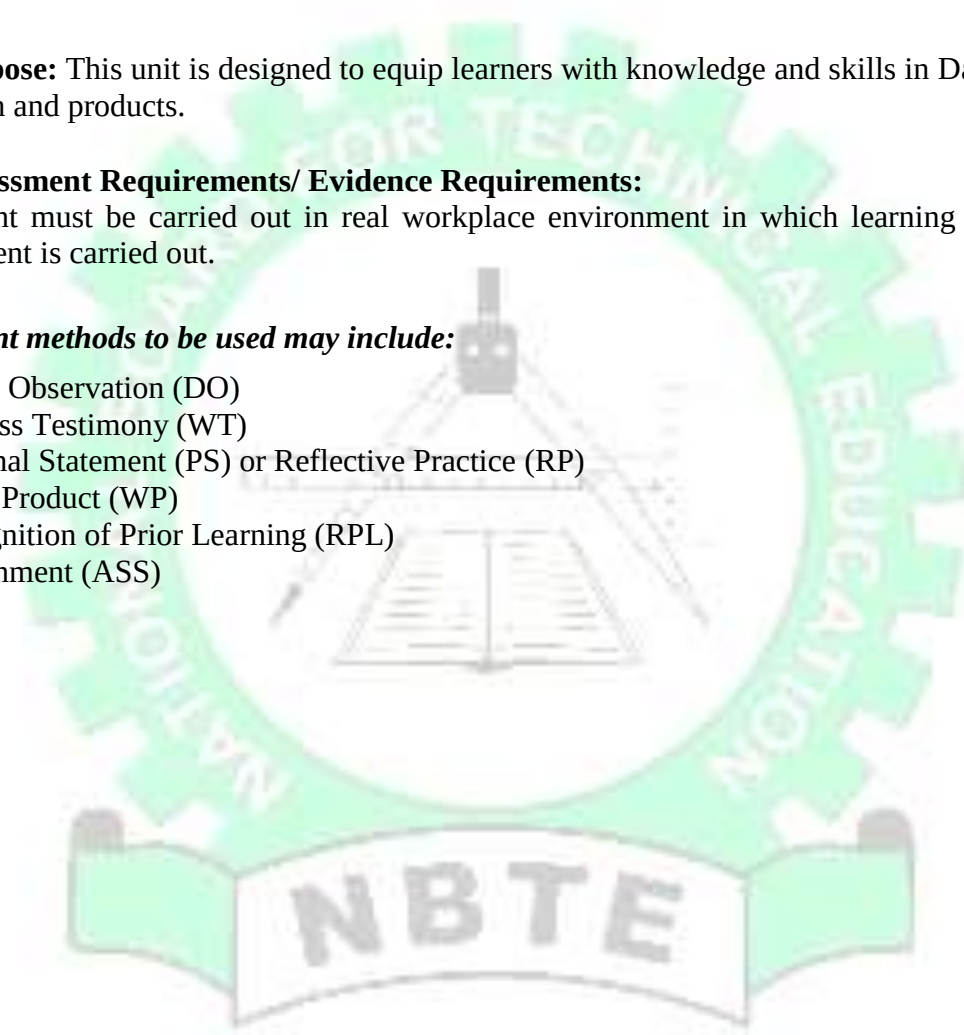
Unit Purpose: This unit is designed to equip learners with knowledge and skills in Dairy cattle production and products.

Unit Assessment Requirements/ Evidence Requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Witness Testimony (WT)
3. Personal Statement (PS) or Reflective Practice (RP)
4. Work Product (WP)
5. Recognition of Prior Learning (RPL)
6. Assignment (ASS)



UNIT 004: Dairy Cattle Production and Products

LEARNING OUTCOME (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type				Evidence Ref. DCPe No.			
LO 1: Carry out dairy cattle production activities	1.1	Identify the types of dairy cattle management systems (intensive, semi-intensive and extensive/pastoral)								
	1.2	Administer feed and water to the herd								
	1.3	Carry out routine herd health under supervision								
	1.4	Carry out routine dipping /spraying of the herd under supervision								
LO 2: Identify the prospect and risks in dairy industry	2.1	Explain the importance of milk and milk products to Nigeria economy								
	2.2	Identify the risks involved in dairy cattle production (disease, feed and water scarcity, milk spoilage, insecurity, price fluctuation)								
	2.3	Describe the role of dairy by-products (manure, biogas, hides, bones, blood etc.) to the economy								
LO 3: Explain the importance of milk in human nutrition	3.1	State the nutritional and food value of milk to humans								
	3.2	Explain the role of milk in the growth and development of children								
	3.3	Distinguish between good and bad milk								
	3.4	Identify the common milk products of Nigeria								
LO 4: Recognize business opportunities in the dairy value chain	4.1	Identify business opportunities in the milk value chain								
	4.2	Mention the primary, secondary and support industries for the dairy industry								
	4.3	Identify inputs and input suppliers for a dairy enterprise								
	4.4	Identify the key players and stakeholders in the Nigerian dairy industry								
	4.5	Carry out the sale of raw milk at the farm gate								
Learners Signature:			Date:							
Assessors Signature:			Date:							

LEARNING OUTCOME (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type	Evidence Ref. DCPe No.
IQA Signature (if sampled)			Date:	
EQA Signature (if sampled)			Date:	



UNIT 005: DAIRY CATTLE HUSBANDRY PRACTICES

Unit Reference Number: AGR/DCP/005/L2

NSQ Level: 2

Credit Value: 3

Guided Learning Hours: 30

Practice Time: 110 hours

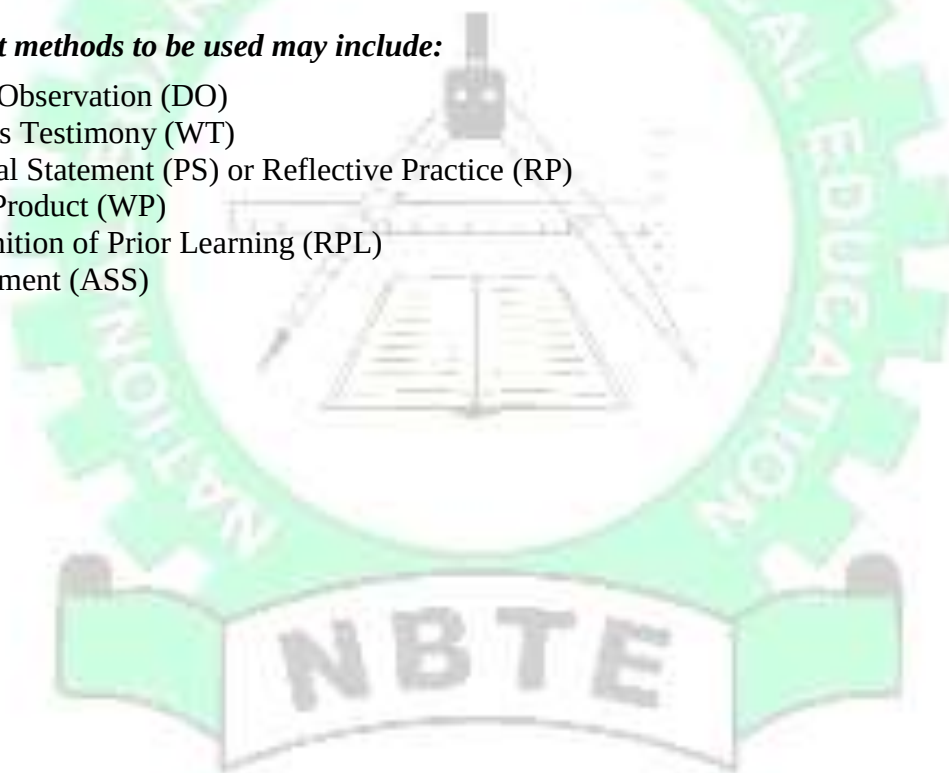
Unit Purpose: This unit is designed to equip learners with knowledge and skills of dairy husbandry practices.

Unit Assessment Requirements/ Evidence Requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

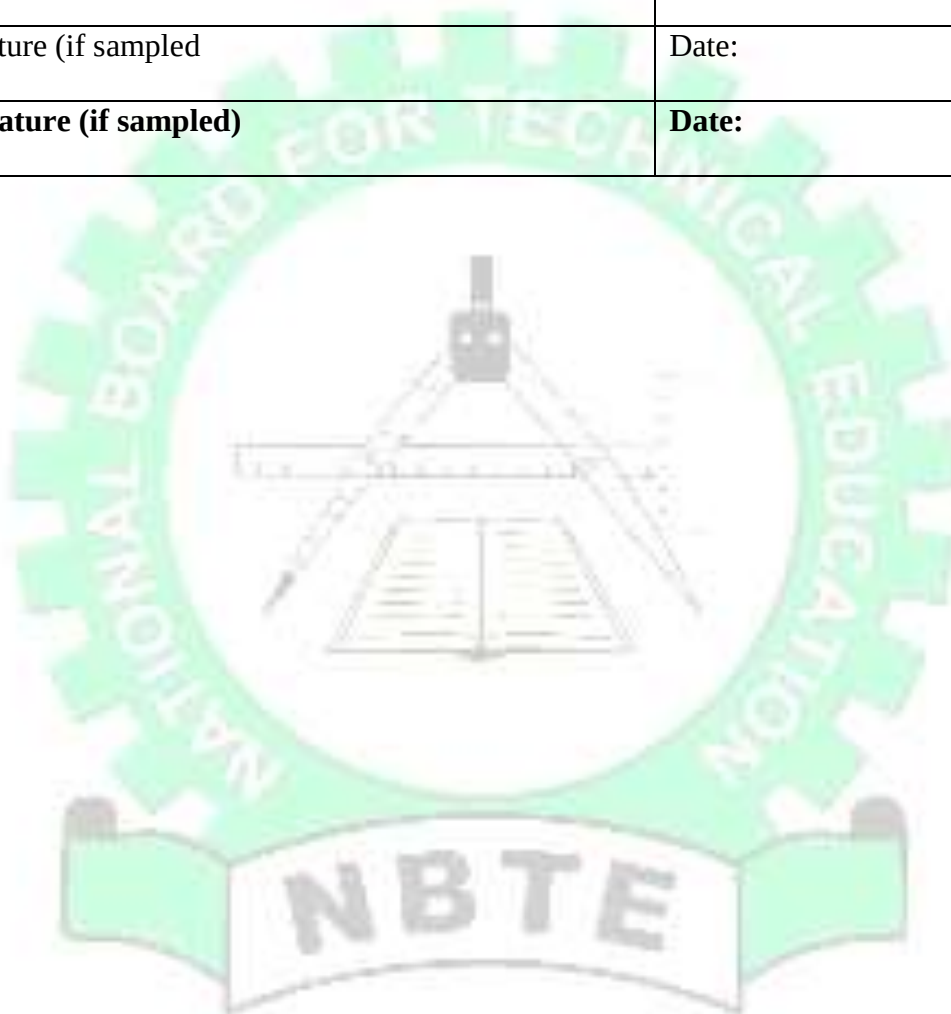
1. Direct Observation (DO)
2. Witness Testimony (WT)
3. Personal Statement (PS) or Reflective Practice (RP)
4. Work Product (WP)
5. Recognition of Prior Learning (RPL)
6. Assignment (ASS)



UNIT 005: Dairy Cattle Husbandry Practices

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type				Evidence Ref. DCPe No.			
The learner will:		The learner can:								
LO 1: Carry out different husbandry practices in dairy cattle production	1.1	Explain husbandry practices: identification, grooming, hoof care, dehorning, castration, weaning and culling								
	1.2	Explain the importance of feeds/water and feeding management								
	1.3	Perform animal health services under supervision in dairy management (deworming, vaccination dipping/spraying, prophylactic treatment, cleaning/washing, disinfection)								
	1.4	Perform non-animal-health practices in dairy management (bedding management, manure removal, pasture rotation, kraal maintenance)								
	1.5	Package manure and other by-products for sale								
LO 2: Identify the approach to husbandry practices in different production systems	2.1	Identify the common dairy cattle production systems								
	2.2	Explain the advantages and disadvantages of each production systems								
	2.3	Identify the equipment for each production system								
	2.4	State the constraints of each production system								
	2.5	State the measures used to address the constraints								
LO 3: Carry out the operations within each dairy production activity	3.1	Identify the equipment used in dairy practice								
	3.2	Carry out hoof trimming under supervision								
	3.3	Carry out the grooming and washing of cows before milking								
	3.4	Change the bedding materials								
	3.5	Restrain cows properly during								

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type	Evidence Ref. DCPe No.
The learner will:		The learner can:		
		treatment and milking operations		
Learners Signature:			Date:	
Assessors Signature:			Date:	
IQA Signature (if sampled)			Date:	
EQA Signature (if sampled)			Date:	



UNIT 006: DAIRY CATTLE HEALTH AND DISEASES MANAGEMENT

Unit Reference Number: AGR/DCP/006/L2

NSQ Level: 2

Credit Value: 3

Guided Learning Hours: 30

Practice Time: 110 hours

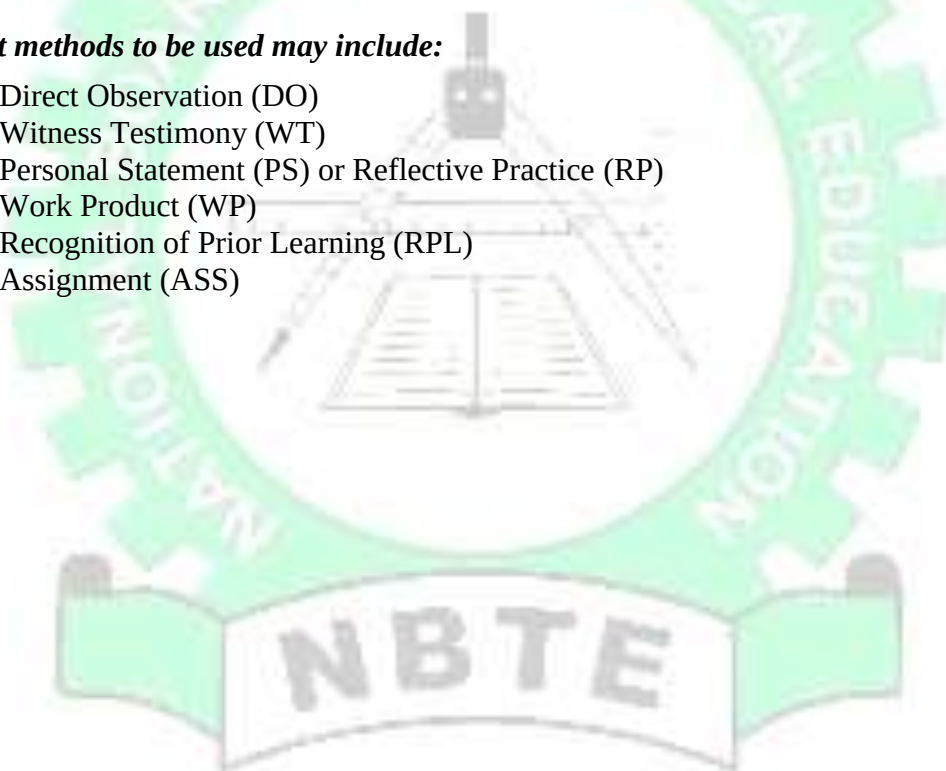
Unit Purpose: This unit is designed to equip learners with the knowledge and skills in herd health management.

Unit Assessment Requirements/ Evidence Requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

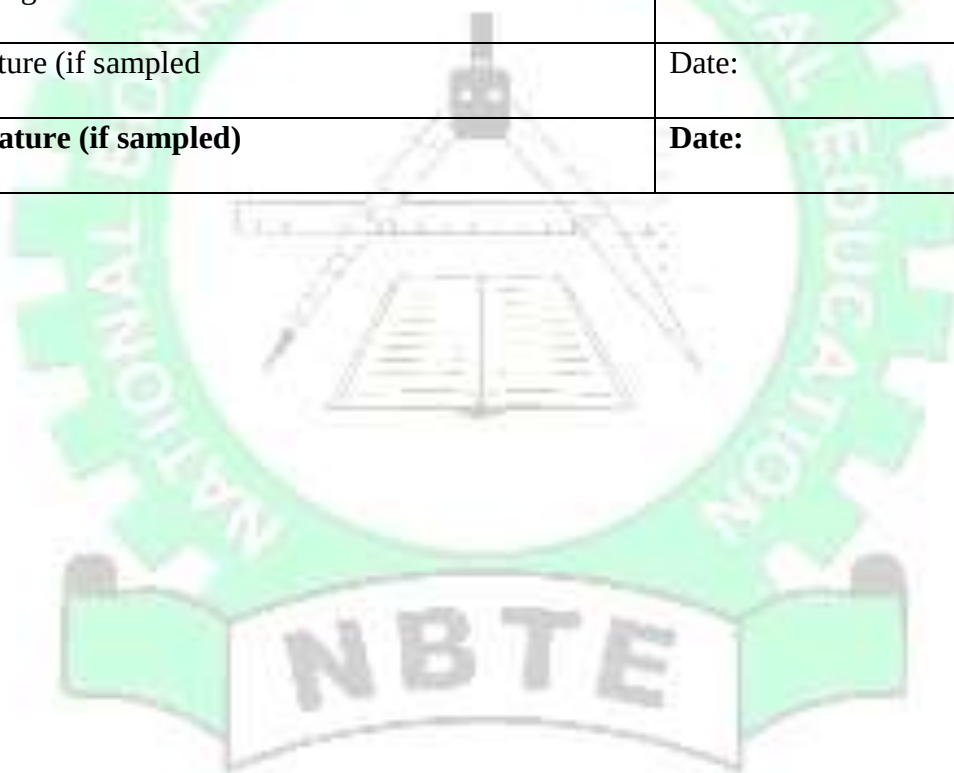
1. Direct Observation (DO)
2. Witness Testimony (WT)
3. Personal Statement (PS) or Reflective Practice (RP)
4. Work Product (WP)
5. Recognition of Prior Learning (RPL)
6. Assignment (ASS)



UNIT 006: Dairy Cattle Health and Diseases Management

LEARNING OUTCOME (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type				Evidence Ref. No.			
LO 1: Identify common signs of dairy cattle diseases	1.1	Identify the common signs of dairy cattle diseases • Swelling, • Dry muzzle • Limping • Loss of hair • Diarrhoea • Coughing etc.								
	1.2	State the causes of diseases in dairy cattle (viral, bacterial, parasitic, fungal, nutritional, etc.)								
	1.3	Set up an isolation pen								
	1.4	Set up a disinfectant foot bath								
LO 2: Recognise unhealthy animals in the herd	2.1	Discuss the importance of the regular observation of the herd								
	2.2	Identify normal and abnormal behaviour or appearance								
	2.3	Explain the procedure to follow when abnormal behaviour is observed								
	2.4	Identify sick animals and isolate them from the herd								
	2.5	Carry out the culling of sick or unproductive animals under supervision								
	2.6	Carry out the disposal of dead animals under supervision								
LO 3: Carry out disease control and prevention	3.1	Explain the importance of biosecurity in disease control and prevention								
	3.2	Identify the available and common cattle vaccines and medications								
	3.3	Identify the endo- and ecto-parasites of dairy cattle								
	3.4	Carry out the control and preventive measures against endo- and ecto-parasites								
	3.5	Carry out routine vaccination and								

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type				Evidence Ref. No.			
The learner will:		The learner can:								
		medication for the different classes of cattle under supervision								
	3.6	Implement biosecurity and quarantine measures on the farm								
	3.7	Identify the risks of the indiscriminate use of drugs and of drug residues in milk								
Learners Signature:			Date:							
Assessors Signature:			Date:							
IQA Signature (if sampled)			Date:							
EQA Signature (if sampled)			Date:							



UNIT 007: MILKING AND MILK HANDLING

Unit Reference Number: AGR/DCP/007/L2

NSQ Level: 2

Credit Value: 3

Guided Learning Hours: 30

Practice Time: 120 hours

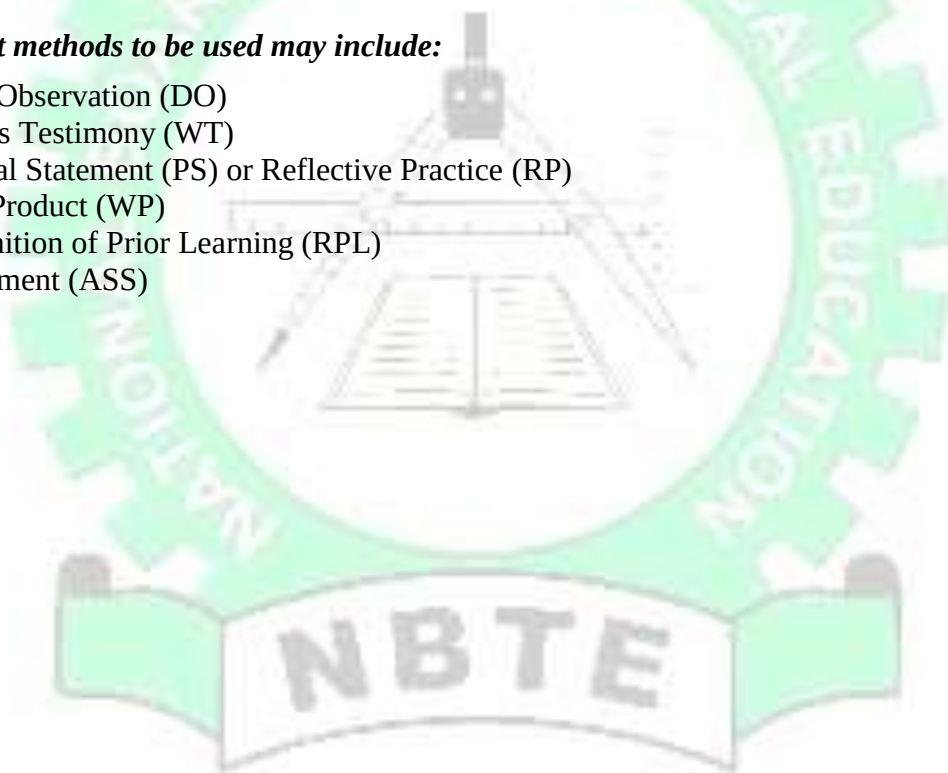
Unit Purpose: This unit is designed to equip the learners with the knowledge and skills required to milk the cow and to handle, store, clean and sell milk safely.

Unit Assessment Requirements/ Evidence Requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Witness Testimony (WT)
3. Personal Statement (PS) or Reflective Practice (RP)
4. Work Product (WP)
5. Recognition of Prior Learning (RPL)
6. Assignment (ASS)



UNIT 007: Milking and Milk Handling

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type				Evidence Ref. DCPe No.			
The learner will:		The learner can:								
LO 1: Prepare for milking	1.1	Describe the structure of the udder								
	1.2	Explain the milk let-down time (5-8minutes)								
	1.3	Carry out the cleaning and disinfection of the milking parlour before and after milking								
	1.4	Carry out washing and drying of udder and teats before and after milking								
	1.5	Carry out the stripping of foremilk into a strip cup to check for mastitis								
LO 2: Carry out the milking of the cow	2.1	Describe the different types of milking (hand milking and machine milking)								
	2.2	Demonstrate hygienic hand milking								
	2.3	Operate a portable milking machine under supervision								
	2.4	Carry out post-milking teat dipping								
	2.5	Measure the milk yield per cow								
	2.6	Record the milk yield per cow								
LO 3: Carry out handling and storage of raw milk	3.1	Explain the short shelf-life of raw milk and the principle behind cooling								
	3.2	Carry out the sieving/filtering of milk								
	3.3	Cool milk using the facilities available under local conditions								
	3.4	Use appropriate containers for the storage of milk								
	3.5	Explain the importance of pasteurization of milk								
	3.6	Carry out simple milk quality tests (organoleptic, lactometer, clot-on-boiling, alcohol test)								
LO 4: Sanitize milking	4.1	Identify the implements, machines and utensils associated with milk collection, storage and								

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type	Evidence Ref. DCPe No.
The learner will:		The learner can:		
equipment		sales		
	4.2	Demonstrate sanitizing techniques for milk utensils and milking machines		
	4.3	Explain the health risks associated with the unhygienic handling of milk and milk products		
LO 5: Carry out the sale of milk	5.1	List the available outlets for raw milk		
	5.2	Carry out the sale of milk at the farm gate using local pricing systems		
	5.3	Use and maintain milk churns		
Learners Signature:			Date:	
Assessors Signature:			Date:	
IQA Signature (if sampled)			Date:	
EQA Signature (if sampled)			Date:	

UNIT 008: DAIRY CATTLE REPRODUCTION AND CALF REARING

Unit Reference Number: AGR/DCP/008/L2

NSQ Level: 2

Credit Value: 3

Guided Learning Hours: 30

Practice Time: 80 hours

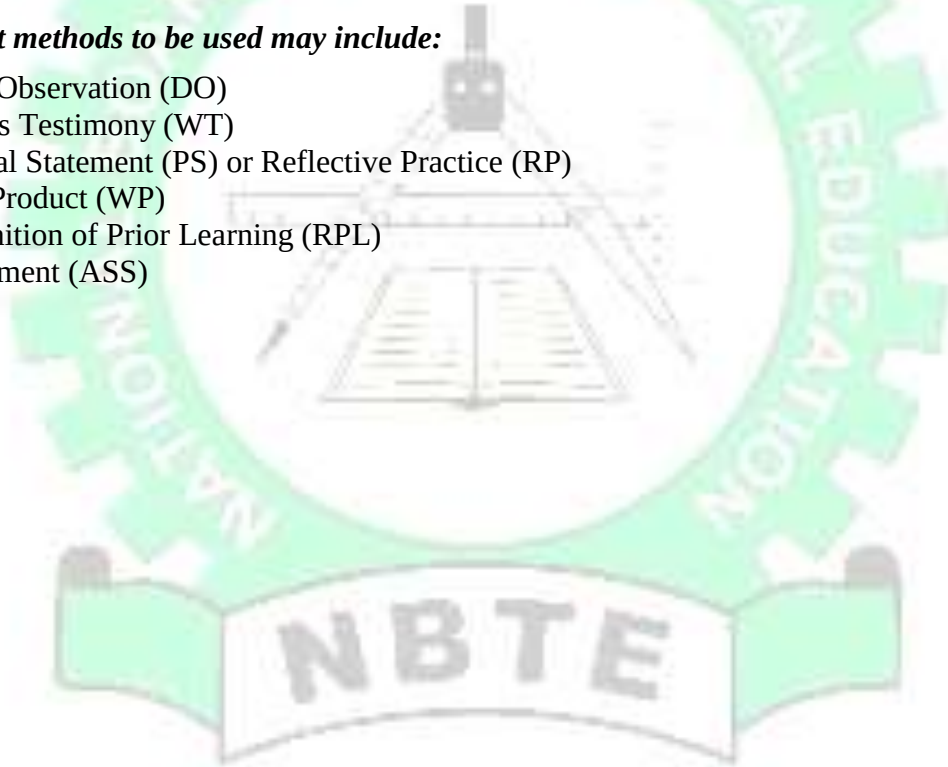
Unit Purpose: This unit is designed to equip the learner with knowledge and skills on cattle reproduction and calf rearing.

Unit Assessment Requirements/ Evidence Requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Witness Testimony (WT)
3. Personal Statement (PS) or Reflective Practice (RP)
4. Work Product (WP)
5. Recognition of Prior Learning (RPL)
6. Assignment (ASS)



UNIT 008: Dairy Cattle Reproduction and Calf Rearing

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type					Evidence Ref. DCPe No.			
The learner will:		The learner can:									
LO 1: <i>Identify the reproductive cycle of the cow</i>	1.1	Describe the signs of heat in cows									
	1.2	Carry out heat detection									
	1.3	Record the heat detection observation									
	1.4	State when a cow is ready for service									
	1.5	Identify the methods of mating in dairy cattle (natural service and artificial insemination)									
	1.6	State the advantages and disadvantages of each system of mating									
LO 2: <i>Recognise pregnancy and calving in dairy cattle</i>	2.1	Calculate the expected calving date from the date of service									
	2.2	Identify a pregnant cow at second to third trimester									
	2.3	Prepare the calving pen									
	2.4	Identify the signs of parturition									
	2.5	Recognize normal and abnormal presentation of the calf									
	2.6	Communicate to the supervisor or veterinarian									
	2.7	Record calving events and calving intervals									
LO 3: <i>Carry out calf rearing</i>	3.1	Explain the significance of feeding colostrum within the first hours of birth									
	3.2	Explain the importance of feeding colostrum at birth									
	3.3	Carry out navel dressing									
	3.4	Identify the new-born calf									
	3.5	Carry out the feeding of colostrum to the new-born calf									
	3.6	Describe the different calf rearing systems									
	3.7	Identify common calf ailments (scours, pneumonia, navel ill) and report them									
	3.8	Report calf ailments to supervisor									

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type	Evidence Ref. DCPe No.
The learner will:		The learner can:		
	3.9	Carry out the weaning of calves under supervision		
Learners Signature:			Date:	
Assessors Signature:			Date:	
IQA Signature (if sampled)			Date:	
EQA Signature (if sampled)			Date:	



UNIT 009: FORAGE PRODUCTION AND CONSERVATION

Unit Reference Number: AGR/DCP/009/L2

NSQ Level: 2

Credit Value: 3

Guided Learning Hours: 30

Practice Time: 60 hours

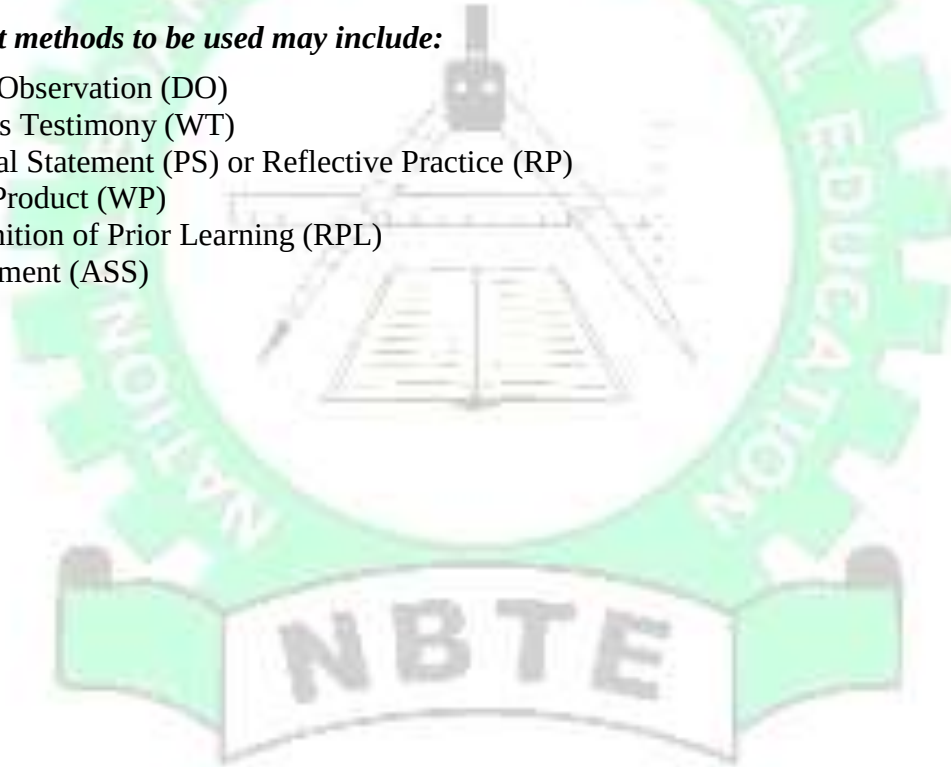
Unit Purpose: This unit is designed to equip the learner with the knowledge and skills to establish a pasture field and make hay and silage.

Unit Assessment Requirements/ Evidence Requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Witness Testimony (WT)
3. Personal Statement (PS) or Reflective Practice (RP)
4. Work Product (WP)
5. Recognition of Prior Learning (RPL)
6. Assignment (ASS)



UNIT 009: Forage Production and Conservation

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type				Evidence Ref. DCPe No.			
The learner will:		The learner can:								
LO 1: Identify forage resources for dairy cattle	1.1	Identify the different types of forages for feeding dairy cattle (grasses, legumes and crop residues, etc.)								
	1.2	State the reasons for forage conservation								
	1.3	Enumerate the different forage conservation methods								
	1.4	State the roles of grasses and legumes in dairy cattle nutrition								
LO 2: Carry out haymaking	2.1	Identify the appropriate crops for haymaking								
	2.2	Explain the weather conditions suitable for haymaking								
	2.3	Carry out the cutting, wilting and turning of forage for hay								
	2.4	Bale hay appropriately								
	2.5	Store hay properly								
	2.6	Identify good and spoilt hay by colour and smell								
LO 3: Carry out silage making	3.1	State the importance of silage making								
	3.2	Identify suitable crops and the basic additives for silage making								
	3.3	Carry out the chopping and packing of forage into a silo or bunker								
	3.4	Weigh the silage								
	3.5	Store the silage								
	3.6	Seal the silo in a good condition								
	3.7	Identify good and spoilt silage by colour, smell and texture								
LO 4: Carry out pasture field establishment and management	4.1	Carry out land preparation for a pasture plot								
	4.2	Carry out the planting of forage grasses and legumes								
	4.3	Carry out weeding, fertilizer application and harvesting of the pasture plot								
	4.4	Record the harvest of pasture seeds and pasture from the plot								

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type	Evidence Ref. DCPe No.
The learner will:		The learner can:		
Learners Signature:			Date:	
Assessors Signature:			Date:	
IQA Signature (if sampled			Date:	
EQA Signature (if sampled)			Date:	



UNIT 010: DAIRY FARM RECORDS

Unit Reference Number: AGR/DCP/010/L2

NSQ Level: 2

Credit Value: 3

Guided Learning Hours: 30

Practice Time: 40 hours

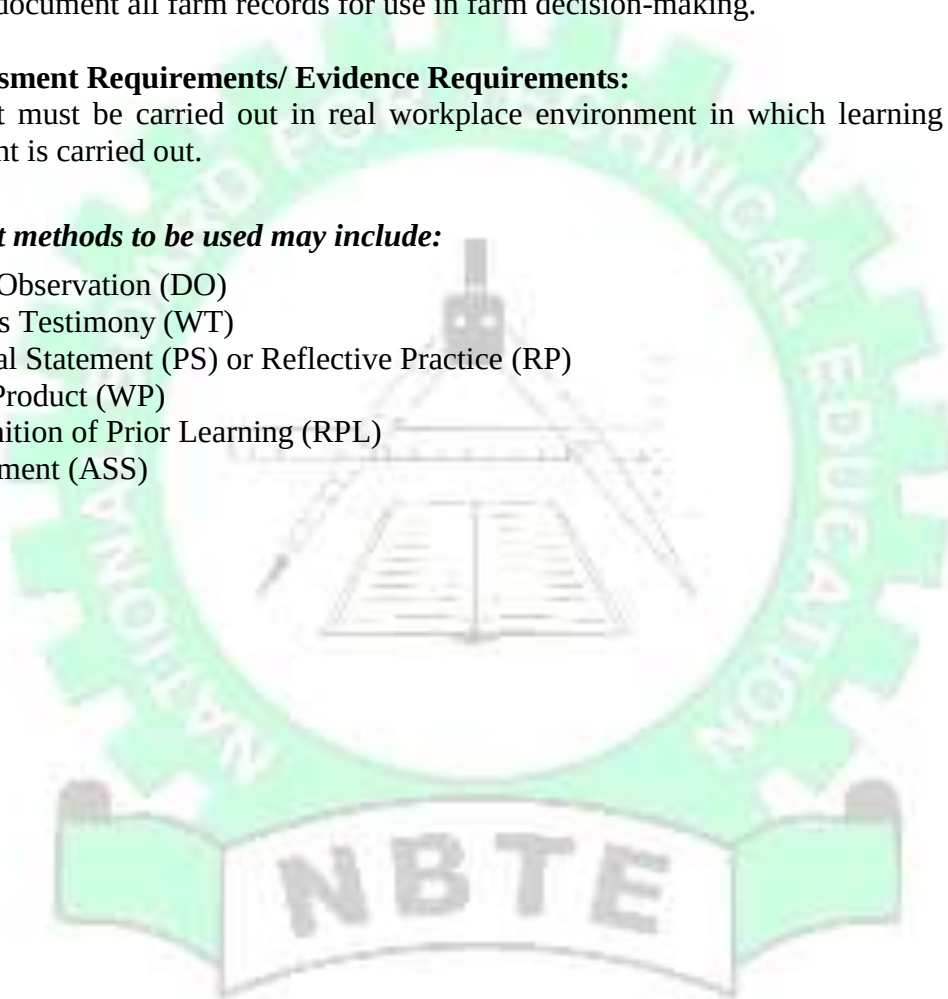
Unit Purpose: This unit is designed to equip the learner with the knowledge and skills to accurately document all farm records for use in farm decision-making.

Unit Assessment Requirements/ Evidence Requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Witness Testimony (WT)
3. Personal Statement (PS) or Reflective Practice (RP)
4. Work Product (WP)
5. Recognition of Prior Learning (RPL)
6. Assignment (ASS)



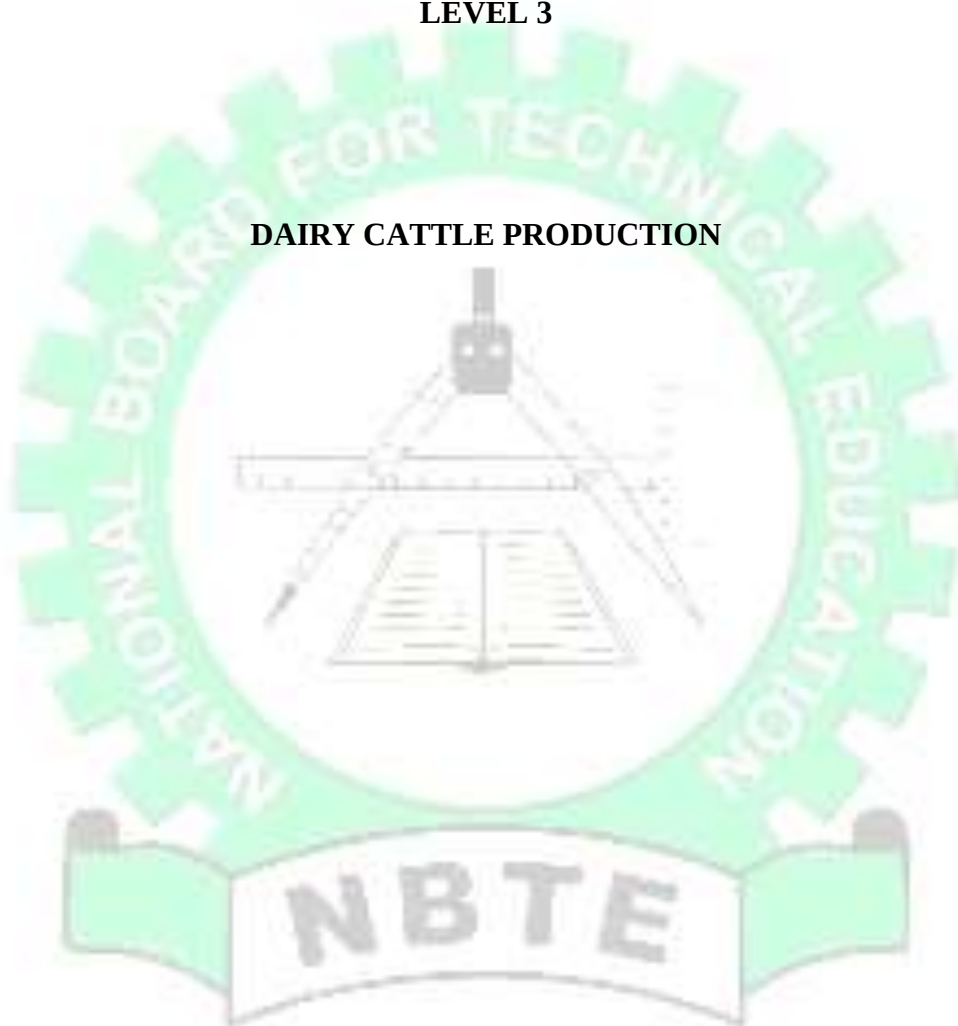
UNIT 010: Dairy Farm Records

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type				Evidence Ref. DCPe No.			
The learner will:		The learner can:								
LO 1: Maintain dairy farm records	1.1	List the different kinds of records kept on a dairy farm								
	1.2	Assist in the maintenance of farm dairy								
	1.3	Maintain individual cow cards								
LO 2: Maintain production and health records	2.1	Record the daily milk yield per cow								
	2.2	Assist in collating herd health and vaccination records								
	2.3	Assist in maintaining breeding and calving records								
	2.4	Assist in mortality, morbidity and culling records.								
LO 3: Maintain input, output and sales records	3.1	Assist in developing an inventory of inputs (feeds, drugs, labour, utilities and services)								
	3.2	Keep records of outputs (milk, calves, manure and other by-products)								
	3.3	Record the daily sales of milk and milk products								
	3.4	Submit records to the supervisor in the required format and at the required time								
Learners Signature:			Date:							
Assessors Signature:			Date:							
IQA Signature (if sampled)			Date:							
EQA Signature (if sampled)			Date:							

NATIONAL SKILLS QUALIFICATION (NSQ)

LEVEL 3

DAIRY CATTLE PRODUCTION



JULY, 2026

GENERAL INFORMATION

OVERVIEW

This qualification is designed for individuals who are interested in pursuing a career in **Dairy Cattle Production** for the award of National Skills Qualifications (NSQ)/National Occupational Standards (NOS). It is aimed at producing competencies necessary to support in **Dairy Cattle Production at NSQ Level 3**.

This qualification is subject to review as and when the need arises.

QUALIFICATION PURPOSE

The qualification is designed to produce competent Dairy Production Technicians with knowledge, skills, and attitude required to perform routine Dairy cattle production activities using precision agriculture principles and tools.

QUALIFICATION REQUIREMENTS

All Candidates must be:

- At least eighteen (18) years of age
- Medically fit
- Mentally fit (Mental alertness)
- A Nigerian citizen
- Other nationals should present an International passport, residence permit or Parent work permit.
- Vetted
- Interest in agricultural production and related support operations;
- Ability to carry out practical tasks independently and to guide the work of others.

QUALIFICATION OBJECTIVES

This qualification is intended to equip the learner with the foundational knowledge, skills and attitudes required to:

1. Ensure work Safety in Dairy Cattle Production Environment.
2. Communicate Effectively in Dairy Cattle Production Environment.
3. Practice teamwork
4. Identify the role and contribution of the dairy industry to economic, social and agricultural development.
5. Apply appropriate dairy cattle management practices to ensure optimum productivity and animal welfare.
6. Plan and implement appropriate feeding programmes to meet the nutritional requirements of dairy cattle.
7. Apply preventive and routine herd health management practices to maintain healthy and productive dairy cattle.
8. Carry out reproductive and calf rearing practices to improve herd productivity and replacement stock.
9. Maintain and apply farm records for effective planning, monitoring and decision-making in dairy production.

10. Perform hygienic milking, ensure proper milk handling, and apply appropriate milk marketing practices.
11. Apply forage conservation techniques to ensure year-round availability of quality livestock feed.
12. Handle dairy cattle safely and humanely using appropriate livestock handling techniques.



NATIONAL SKILLS QUALIFICATION (NSQ) TABLE

Mandatory Units

S/No /Unit No	Reference Number	NOS Title	Credit Value	Guided Learning Hours	Practice Hours	Remark
1.	AGR/DCP/001/L3	Occupational Health and Safety in Dairy Cattle Production	2	20	40	Mandatory
2.	AGR/DCP/002/L3	Communication in Dairy Cattle Production	2	20	40	Mandatory
3.	AGR/DCP/003/L3	Teamwork and Professional Conduct in Dairy Cattle Production	2	20	40	Mandatory
4.	AGR/DCP/004/L3	Relevance of Dairy Industry to National Development	2	20	60	Mandatory
5.	AGR/DCP/005/L3	Dairy Cattle Management Systems	3	30	140	Mandatory
6.	AGR/DCP/006/L3	Dairy Cattle Feeds and Feeding	3	30	180	Mandatory
7.	AGR/DCP/007/L3	Dairy Cattle Herd Health Management	4	40	180	Mandatory
8.	AGR/DCP/008/L3	Reproduction and Calf Rearing Management	4	40	180	Mandatory
9.	AGR/DCP/009/L3	Farm Records and Administration	4	40	120	Mandatory
10	AGR/DCP/010/L3	Milking, Milk Hygiene and Sales	4	40	180	Mandatory
11	AGR/DCP/011/L3	Forage Conservation	4	40	180	Mandatory
12	AGR/DCP/012/L3	Dairy Cattle Handling	4	40	180	Mandatory
TOTAL			38	380	1520	

QUALIFICATION STRUCTURE

This qualification comprises a total of Twelve (12) mandatory units with 38 Credit Value and 380 Guided Learning Hours across the full unit set. One (1) Credit is equivalent to approximately Ten (10) Guided Learning Hours (GLH). To achieve this qualification, the learner must complete all

mandatory units and accumulate the minimum credit value approved by NBTE. Credit is awarded only when a learner has been assessed as competent against all Learning Objectives and Performance Criteria of a unit.

GENERAL GUIDE

Unit title	Provides a clear explanation of the content of the unit.
Unit number	The unique number assigned to the unit.
Unit reference	The unique reference number given to each unit at qualification approval by NBTE
Unit level	Denotes the level of the unit within the National Skill Qualification framework NSQF.
Unit credit value	The value that has been given to the unit based on the expected learning time for an average learner. 1 credit = 10 learning hours
Unit aim	Provides a brief outline of the unit content.
Learning outcome	A statement of what a learner will know, understand or be able to do, as a result of a process of learning.
Assessment criteria	A description of the requirements a learner must achieve to demonstrate that a learning outcome has been met.
Unit assessment guidance	Any additional guidance provided to support the assessment of the unit.
Unit guided learning hours	The average number of hours of supervised or directed study time or assessment required to achieve a qualification or unit of a qualification.

UNIT 001: OCCUPATIONAL HEALTH AND SAFETY IN DAIRY CATTLE PRODUCTION

Unit Reference Number: AGR/DCP/001/L3

NSQ Level: 3

Credit Value: 2

Guided Learning Hours: 20

Practice Time: 40 hours

Unit Purpose: This unit equips the learner with the knowledge and skills required to assess workplace risks, implement and monitor safety controls, coordinate safe operating procedures and manage incidents in Dairy cattle production operations.

Unit assessment requirements/evidence requirements:

Assessment may be carried out in real workplace environment where learning and human activities are normally conducted. However, simulation techniques may also be adopted to replace or enhance real-life experiences.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Recognition of Prior Learning and experience (RPL)
3. Witness testimony (WT)
4. Personal statement (PS)/ Reflective Practice (RP).
5. Work Product (WP)
6. Assignment (ASS)
7. Professional Discussion (PD)

UNIT 001: Occupational Health and Safety in Dairy Cattle Production

LEARNING OUTCOME (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type				Evidence Ref. Page No.			
LO 1: Assess workplace hazards and risks	1.1	Inspect cattle housing, handling facilities, grazing areas, feed stores, equipment and chemical storage for hazards.								
	1.2	Assess the likelihood and consequence of identified hazards using the approved risk-rating method.								
	1.3	Communicate risks requiring immediate or planned action.								
LO 2: Implement safety controls	2.1	Select controls in accordance with the approved hierarchy of control and workplace procedures.								
	2.2	Verify the correct use of personal protective equipment, cattle restraint systems, barriers and hygiene controls.								
	2.3	Monitor compliance and arrange correction of unsafe conditions within own authority.								
LO 3: Coordinate safe operating procedures	3.1	Coordinate safe procedures for cattle handling, treatment, loading, transport, waste management and equipment use.								
	3.2	Brief workers on task hazards, control measures, emergency arrangements and individual responsibilities.								
	3.3	Maintain required safety, inspection, maintenance and biosecurity records.								

LO 4: <i>Manage incidents and corrective actions</i>	4.1	Coordinate the immediate response to injury, animal escape, disease risk, fire, spill or equipment failure.																		
	4.2	Secure the affected area and																		
	4.3	Complete required notification and incident documentation.																		
	4.4	Review incident causes																		
	4.5	Recommend corrective actions to prevent recurrence.																		
Learner's Signature:		Date:																		
Assessor's Signature:		Date:																		
IQA Signature (if sampled)		Date:																		
EQA Signature (if sampled)		Date:																		

UNIT 002: COMMUNICATION IN DAIRY CATTLE PRODUCTION

Unit Reference Number: AGR/DCP/002/L3
NSQ Level: 3
Credit Value: 2
Guided Learning Hours: 20
Practice Time: 40 hours

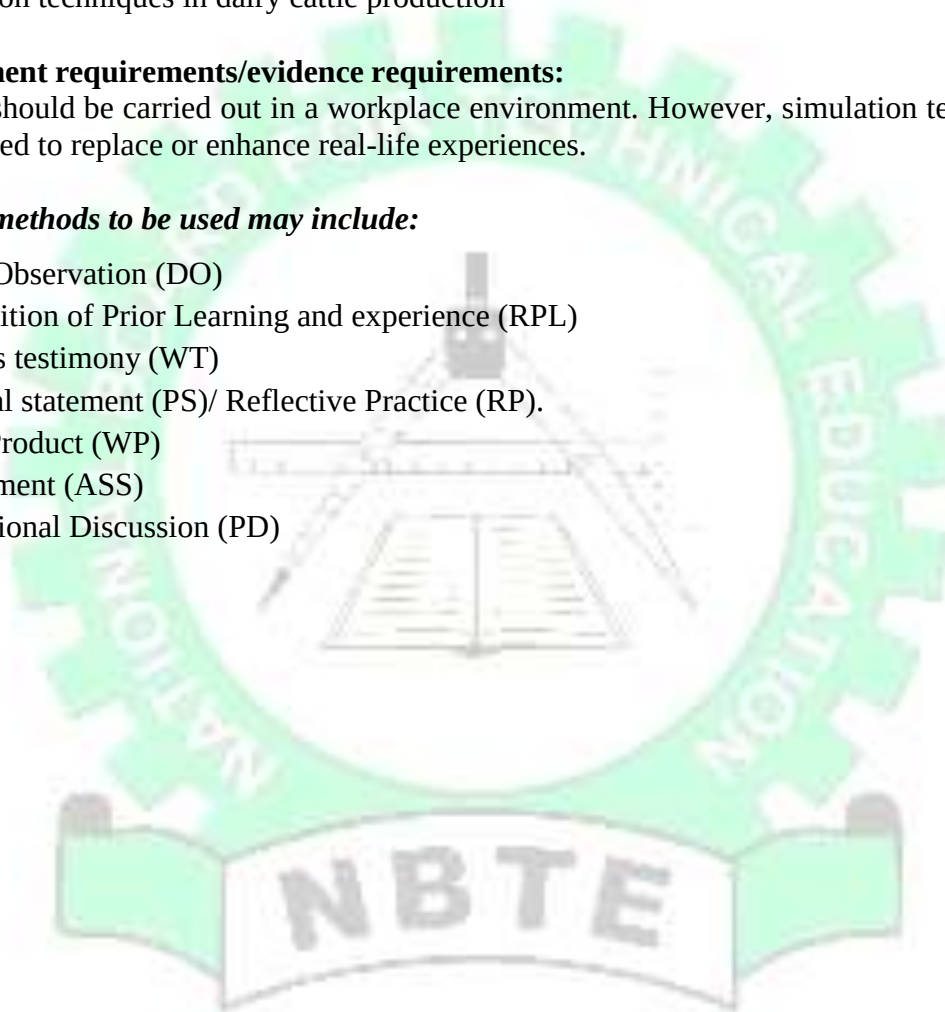
Unit Purpose: This unit is designed to equip the learner with the knowledge and skills in communication techniques in dairy cattle production

Unit assessment requirements/evidence requirements:

Assessment should be carried out in a workplace environment. However, simulation techniques may also be adopted to replace or enhance real-life experiences.

Assessment methods to be used may include:

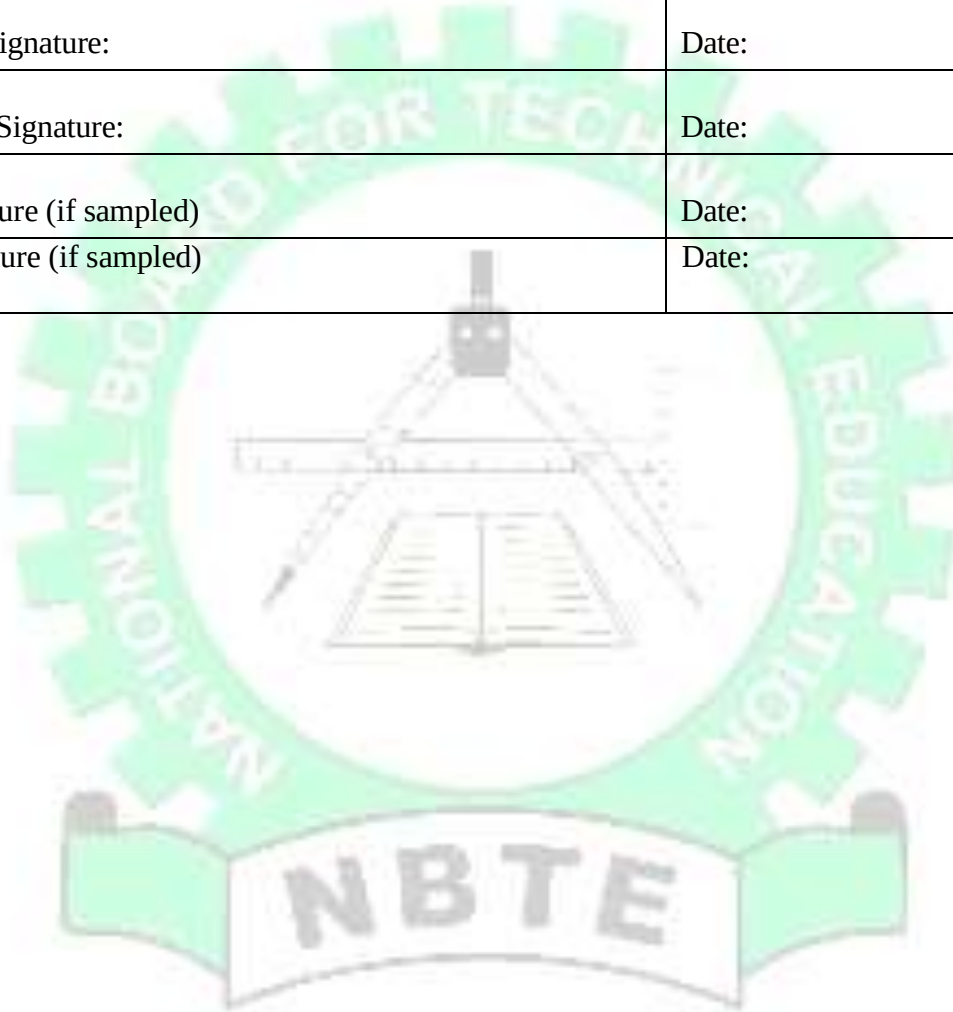
1. Direct Observation (DO)
2. Recognition of Prior Learning and experience (RPL)
3. Witness testimony (WT)
4. Personal statement (PS)/ Reflective Practice (RP).
5. Work Product (WP)
6. Assignment (ASS)
7. Professional Discussion (PD)



UNIT 002: Communication in Dairy Cattle Production

LEARNING OUTCOME (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO 1: Interpret dairy cattle production information	1.1	Interpret production plans, animal performance records, health instructions, market information and regulatory notices.									
	1.2	Check information for accuracy, relevance, urgency and completeness before use or distribution.									
	1.3	Resolve information gaps through consultation with authorised persons or approved sources.									
LO 2: Communicate with workplace stakeholders	2.1	Present clear operational information to workers, supervisors, veterinarians, buyers and suppliers.									
	2.2	Adapt communication method and terminology to the needs of the recipient and situation.									
	2.3	Handle routine concerns and escalate complex, sensitive or unauthorised matters appropriately.									
LO 3: Coordinate communication tools and records	3.1	Use appropriate communication tools for routine and urgent operational messages.									
	3.2	Coordinate the timely distribution of work instructions, animal alerts and schedule changes.									
	3.3	Maintain secure, accurate and retrievable communication records in accordance with workplace requirements.									
LO 4: Produce operational reports	4.1	Collate information from production, health, feeding,									

	breeding, inventory and workforce records.										
4.2	Prepare concise reports that identify performance, variances, incidents and required actions.										
4.3	Submit reports to authorised persons and respond to requests for clarification.										
Learner's Signature:		Date:									
Assessor's Signature:		Date:									
IQA Signature (if sampled)		Date:									
EQA Signature (if sampled)		Date:									



UNIT 003: TEAMWORK AND PROFESSIONAL CONDUCT IN DAIRY CATTLE PRODUCTION

Unit Reference Number: AGR/DCP/003/L3

NSQ Level: 3

Credit Value: 2

Guided Learning Hours: 20

Practice Time: 40 hours

Unit Purpose: This unit equips the learner with the knowledge and skills required to coordinate team activities, promote professional conduct, resolve workplace disagreements and monitor task performance in dairy cattle production.

Unit assessment requirements/evidence requirements:

Assessment should be carried out in a workplace environment. However, simulation techniques may also be adopted to enhance real-life experiences.

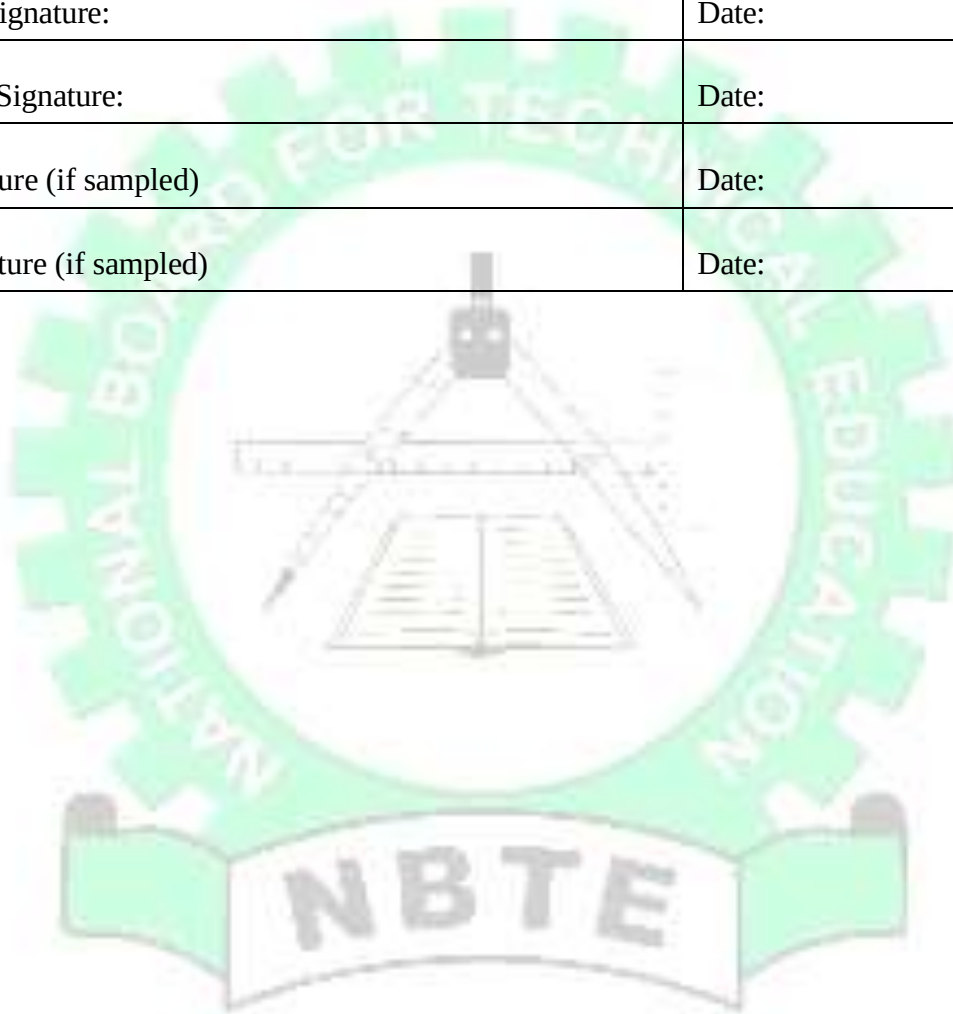
Assessment methods to be used may include:

1. Direct Observation (DO)
2. Recognition of Prior Learning and experience (RPL)
3. Witness testimony (WT)
4. Personal statement (PS)/ Reflective Practice (RP).
5. Work Product (WP)
6. Assignment (ASS)
7. Professional Discussion (PD)

UNIT 003: Teamwork and Professional Conduct in Dairy Cattle Production

LEARNING OUTCOME (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO 1: Coordinate teamwork	1.1	Allocate routine cattle production activities according to work priorities, competence and available resources.									
	1.2	Coordinate the exchange of animal, safety and production information among team members.									
	1.3	Provide practical support and guidance to team members within own responsibility.									
LO 2: Promote professional conduct	2.1	Model punctuality, accountability, respectful behaviour and compliance with workplace requirements.									
	2.2	Promote animal welfare, confidentiality, biosecurity, non-discrimination and ethical work practices.									
	2.3	Address minor conduct issues promptly and refer serious or repeated issues appropriately.									
LO 3: Resolve workplace disagreements	3.1	Establish the facts and interests associated with a workplace disagreement.									
	3.2	Facilitate a respectful discussion and agree practical actions within workplace procedures.									
	3.3	Document and refer unresolved, sensitive or serious disagreements to the authorised person.									
LO 4: Monitor agreed workplace tasks	4.1	Monitor team progress against assigned standards, schedules and animal welfare requirements.									
	4.2	Provide timely, specific and constructive feedback on									

		work performance.												
	4.3	Adjust routine work arrangements												
	4.4	Recommend further action where performance requirements are not met.												
Learner's Signature:			Date:											
Assessor's Signature:			Date:											
IQA Signature (if sampled)			Date:											
EQA Signature (if sampled)			Date:											



UNIT 004: RELEVANCE OF DAIRY INDUSTRY TO NATIONAL DEVELOPMENT

Unit Reference Number: AGR/DCP/004/L3

NSQ Level: 3

Credit Value: 2

Guided Learning Hours: 20

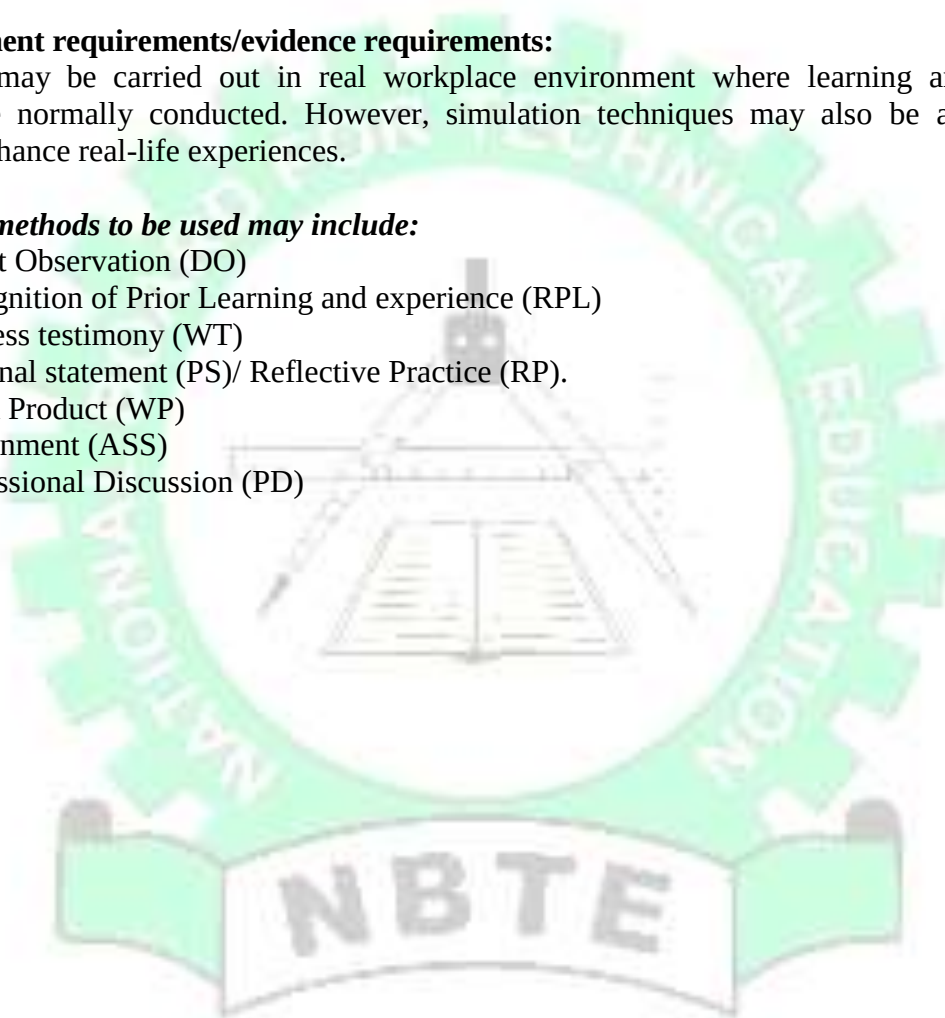
Unit Purpose: This unit is designed to equip the learners with knowledge and skills to identify relevance of dairy cattle and milk products to national development.

Unit assessment requirements/evidence requirements:

Assessment may be carried out in real workplace environment where learning and human activities are normally conducted. However, simulation techniques may also be adopted to replace or enhance real-life experiences.

Assessment methods to be used may include:

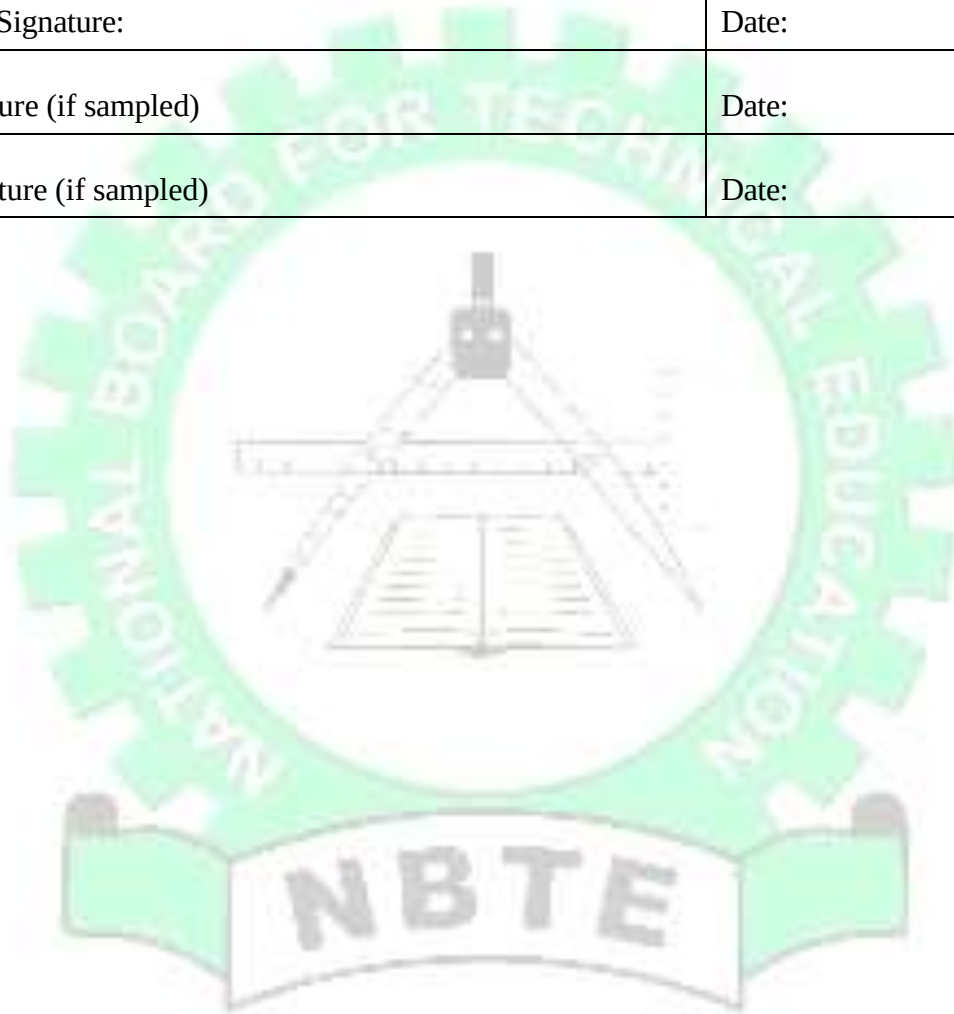
1. Direct Observation (DO)
2. Recognition of Prior Learning and experience (RPL)
3. Witness testimony (WT)
4. Personal statement (PS)/ Reflective Practice (RP).
5. Work Product (WP)
6. Assignment (ASS)
7. Professional Discussion (PD)



UNIT 004: Relevance of Dairy Industry to National Development

LEARNING OUTCOME (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.				
LO 1: Identify reasons for keeping dairy cattle	1.1	Explain the importance of milk and milk products in Nigerian diets										
	1.2	Discuss demand-supply patterns for milk and milk products in Nigeria										
	1.3	Identify key roles of dairy value chains to national development										
LO 2: Identify prospects and risks involved in keeping dairy cattle	2.1	Discuss advantages of milk dairy cattle production in Nigeria										
	2.2	Identify prospects for keeping dairy cattle in Nigeria										
	2.3	Enumerate risks involved in dairy cattle production										
	2.4	Identify appropriate measures to minimize risks in dairy cattle production										
LO 3: Explain the nature of milk and its relevance	3.1	Identify the nutritional value of milk										
	3.2	Differentiate between good and bad milk										
	3.3	Explain nutritional and food value of milk										
	3.4	Explain role of milk in mental development of the infant										
	3.5	Enumerate contributions of dairy cattle production to national development										
LO 4: Recognize business opportunities in dairy	4.1	Identify opportunities in the dairy-value-chain										

production industries	4.2	Identify industries in dairy production										
	4.3	Identify inputs and inputs suppliers										
	4.4	Identify dairy markets										
Learner's Signature:			Date:									
Assessor's Signature:			Date:									
IQA Signature (if sampled)			Date:									
EQA Signature (if sampled)			Date:									



UNIT 005: DAIRY CATTLE MANAGEMENT SYSTEMS

Unit Reference Number: AGR/DCP/005/L3
NSQ Level: 3
Credit Value: 3
Guided Learning Hours: 30
Practice Time: 140 hours

Unit Purpose: This unit is designed to equip learners with knowledge and skills required in raising dairy cattle and recognizing appropriate methods for specific environments

Unit assessment requirements/evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Recognition of Prior Learning and experience (RPL)
3. Witness testimony (WT)
4. Personal statement (PS)/ Reflective Practice (RP).
5. Work Product (WP)
6. Assignment (ASS)
7. Professional Discussion (PD)



UNIT 005: Dairy Cattle Management Systems

LEARNING OUTCOME (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO 1: Explain dairy cattle production systems	1.1	Explain systems for dairy cattle production									
	1.2	Explain components of each production system									
	1.3	Take informed decisions on choice of production system									
LO 2: Address Constraints for the different production systems	2.1	Assess the constraints for each production system									
	2.2	Implement appropriate measure to address some production constraints									
	2.3	Evaluate the effectiveness of the measure applied									
	2.4	Recommend improvements									
LO 3: Perform tasks in different dairy production system	3.1	Carry out routine operations specific to each dairy production system									
	3.2	Use appropriate tools, equipment, and techniques for each production system									
	3.3	Maintain production standards in accordance with recommended industry practice									
Learner's Signature:			Date:								
Assessor's Signature:			Date:								
IQA Signature (if sampled)			Date:								
EQA Signature (if sampled)			Date:								

UNIT 006: DAIRY CATTLE FEEDS AND FEEDING

Unit Reference Number:	AGR/DCP/006/L3
NSQ Level:	3
Credit Value:	3
Guided Learning Hours:	30
Practice Time:	180 hours

Unit Purpose: This unit is designed to equip the learners with knowledge and skills on principles of feeds and feeding of dairy cattle.

Unit assessment requirements/evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

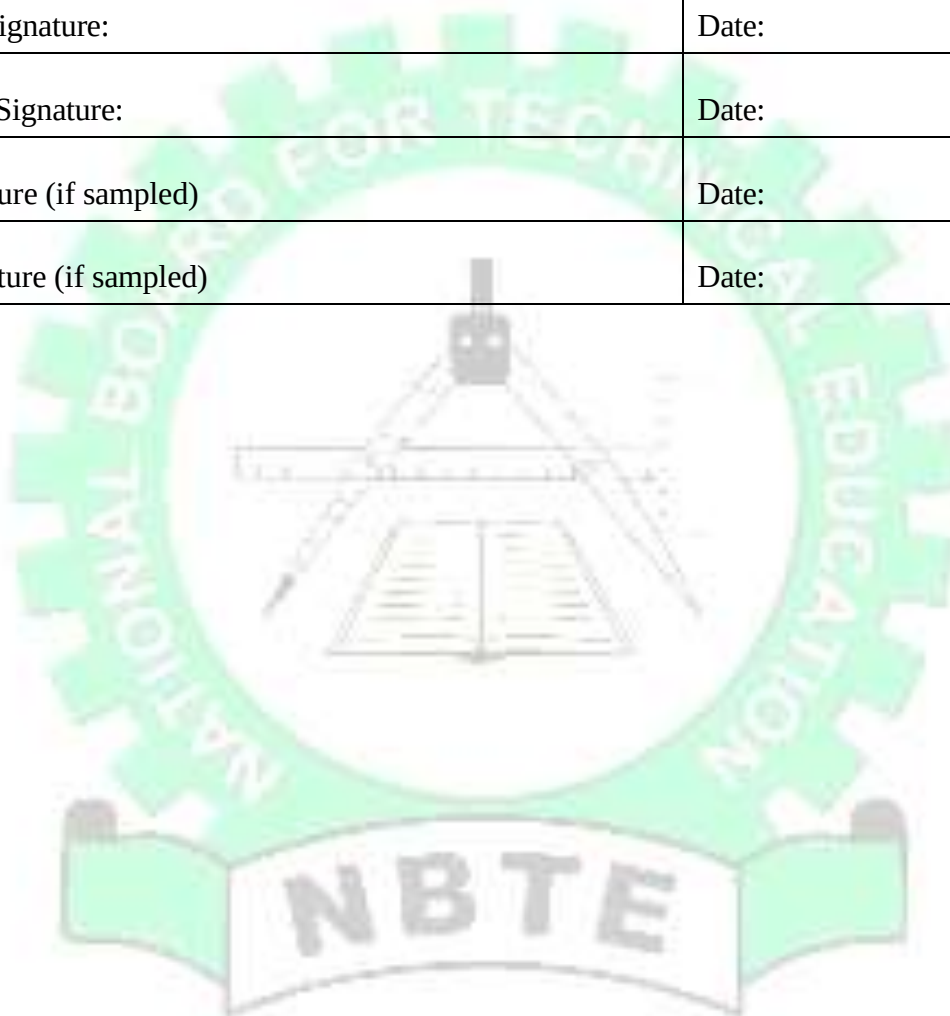
1. Direct Observation (DO)
2. Recognition of Prior Learning and experience (RPL)
3. Witness testimony (WT)
4. Personal statement (PS)/ Reflective Practice (RP).
5. Work Product (WP)
6. Assignment (ASS)
7. Professional Discussion (PD)



UNIT 006: Dairy Cattle Feeds and Feeding

LEARNING OUTCOME (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO 1: Explain the digestive system of cattle and its feed requirements	1.1	Explain the digestive system of dairy cattle									
	1.2	Identify dairy cattle feeds									
	1.3	Explain how feeds and feeding influence quantity and quality of milk									
LO 2: Manage water supply of dairy cattle production	2.1	Assess the impact of water availability on feed intake, digestion, and physiological health.									
	2.2	Calculate daily water requirements for various classes of dairy cattle based on climate and diet.									
	2.3	Test farm water sources for quality, cleanliness and safety.									
LO 3: Formulate balanced ration for dairy cattle	3.1	Prepare a Total Mixed Ration (TMR) according to batch specifications and feeding protocols									
	3.2	Formulate a cost-effective balanced ration using Pearson Square or formulation software.									
	3.3	Adjust feed compound dynamically based on animal body condition score (BCS)									
LO 4: Determine the quantity and quality of feed	4.1	Carry out methods of feeding dairy cattle (restricted, / <i>ad-libitum</i> and feeding on body weight)									
	4.2	Identify roughages, concentrates and supplements									
	4.3	Identify roles of grasses and legumes in dairy cattle nutrition									

LO 5: <i>Identify Supplements, minerals and vitamins</i>	5.1	Identify the role of minerals in dairy cattle feeding																		
	5.2	Explain the role of vitamins in dairy cattle nutrition																		
	5.3	Describe the mode of administration of vitamins and minerals																		
Learner's Signature:			Date:																	
Assessor's Signature:			Date:																	
IQA Signature (if sampled)			Date:																	
EQA Signature (if sampled)			Date:																	



UNIT 007: DAIRY CATTLE HERD HEALTH MANAGEMENT

Unit Reference Number: AGR/DCP/007/L3

NSQ Level: 3

Credit Value: 4

Guided Learning Hours: 40

Practice Time: 180 hours

Unit Purpose: This unit is designed to equip the learners with knowledge and skills required to maintain of animal health, prevention and control of diseases in dairy cattle

Unit assessment requirements/evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Recognition of Prior Learning and experience (RPL)
3. Witness testimony (WT)
4. Personal statement (PS)/ Reflective Practice (RP).
5. Work Product (WP)
6. Assignment (ASS)
7. Professional Discussion (PD)



UNIT 007: Dairy Cattle Herd Health Management

LEARNING OUTCOME (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO 1: Implement disease prevention methods	1.1	Maintain hygienic practices in dairy cattle housing, feeding and milking areas									
	1.2	Apply quarantine and isolation procedures for sick or newly introduced animals									
	1.3	Implement biosecurity measures to prevent the introduction or spreading of diseases.									
LO 2: Perform Herd Health Management activities	2.1	Observe dairy cattle regular regularly									
	2.2	Detect signs of illness and distress									
	2.3	Identify normal and abnormal behavior or Appearance in dairy cattle									
	2.4	Take proper action when sick or abnormal animals are identified									
	2.5	Eliminate factors that contribute to disease occurrence in dairy cattle									
	2.6	Dispose dead animals in accordance with biosecurity and environmental procedure									
	2.7	Maintain herd health records accurately									
LO 3: Carry out disease control measures	3.1	Follow the recommended vaccination programme for dairy cattle									
	3.2	Control ecto and endo parasites using approved methods									
	3.3	Administer veterinary drugs in accordance with recommended dosage and withdrawal period									
Learner's Signature:			Date:								
Assessor's Signature:			Date:								

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



UNIT 008: REPRODUCTION AND CALF REARING MANAGEMENT

Unit Reference Number: AGR/DCP/008/L3
NSQ Level: 3
Credit Value: 4
Guided Learning Hours: 40
Practice Time: 180 hours

Unit Purpose: This unit is designed to equip the learners with knowledge and skills required in dairy cattle reproduction and calf rearing.

Unit assessment requirements/evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Recognition of Prior Learning and experience (RPL)
3. Witness testimony (WT)
4. Personal statement (PS)/ Reflective Practice (RP).
5. Work Product (WP)
6. Assignment (ASS)
7. Professional Discussion (PD)



UNIT 008: Reproduction and Calf Rearing Management

LEARNING OUTCOME (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO 1: Perform Dairy Cattle Breeding Activities	1.1	Select appropriate breeding methods for different production objectives.									
	1.2	Apply appropriate breeding practices in dairy cattle production.									
	1.3	Evaluate the suitability of breeding methods for specific herd requirements.									
LO 2: Assist in Artificial Insemination Operations	2.1	Prepare animals and materials for artificial insemination.									
	2.2	Maintain an artificial insemination kit.									
	2.3	Store semen in accordance with recommended procedures.									
	2.4	Assist in carrying out artificial insemination under supervision									
	2.5	Identify signs of pregnancy using approved farm procedures.									
	2.6	Record suspected pregnancy using approved farm procedures.									
LO 3: Manage Calving (Parturition) Activities	3.1	Record the expected calving date.									
	3.2	Monitor cows									
	3.3	Recognise signs of approaching parturition									
	3.4	Assist with normal calving									
	3.5	Report difficult calving cases promptly.									
	3.6	Provide immediate post-calving care to the cow and calf.									
LO 4: Carry Out	4.1	Recognise signs of heat in dairy cows									

Heat Detection Activities	4.2	Apply appropriate heat detection methods											
	4.3	Determine the appropriate time for servicing or artificial insemination											
LO 5: Perform Calf Rearing Activities	5.1	Feed colostrum to newborn calves in accordance with recommended procedures.											
	5.2	Administer colostrum substitute where necessary.											
	5.3	Apply appropriate calf rearing systems based on farm requirements.											
	5.4	Detect common calf diseases											
	5.5	Apply appropriate control measures.											
	5.6	Prepare calf feed according to recommended formulations											
	5.7	Feed calves according to the recommended feeding programme.											
LO 6: Manage Abortion cases in dairy cattle	6.1	Detect signs of abortion in dairy cattle.											
	6.2	Report signs of abortion in dairy cattle.											
	6.3	Apply appropriate procedures for managing abortion cases.											
	6.4	Dispose of aborted fetuses and contaminated materials in accordance with biosecurity and environmental guidelines.											
Learner's Signature:										Date:			
Assessor's Signature:										Date:			
IQA Signature (if sampled)										Date:			
EQA Signature (if sampled)										Date:			

UNIT 009: FARM RECORDS AND ADMINISTRATION

Unit Reference Number: AGR/DCP/009/L3
NSQ Level: 3
Credit Value: 4
Guided Learning Hours: 40
Practice Time: 120 hours

Unit Purpose: This unit is designed to equip the learners with knowledge and skills required in keeping farm records and administration.

Unit assessment requirements/evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Recognition of Prior Learning and experience (RPL)
3. Witness testimony (WT)
4. Personal statement (PS)/ Reflective Practice (RP).
5. Work Product (WP)
6. Assignment (ASS)
7. Professional Discussion (PD)



UNIT 009: Farm Records and Administration

LEARNING OUTCOME (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type	Evidence Ref. Page No.
LO 1: Maintain farm records	1.1	Identify different kinds of records kept in a dairy farm		
	1.2	Explain individual productivity records		
	1.3	Take milk record		
	1.4	Take reproduction record		
	1.5	Take individual health record		
LO 2: Maintain input, output and sales records	2.1	Explain inventory inputs (feeds, drugs, labour, utilities and services)		
	2.2	Record the daily sales of milk and milk products		
	2.3	Explain records of outputs (milk, calves, manure and other by-products)		
	2.4	Submit records to the supervisor in the required format and at the required time		
LO 3: Monitor Feed Intake and Milk Yield Trends	3.1	Maintain accurate records of weekly feed offered and feed intake.		
	3.2	Analyse weekly feed consumption records and identify variations.		
	3.3	Analyse weekly milk yield records and recommend appropriate management action		
Learner's Signature:			Date:	
Assessor's Signature:			Date:	
IQA Signature (if sampled)			Date:	
EQA Signature (if sampled)			Date:	

UNIT 010: MILKING, MILK HYGIENE AND SALES

Unit Reference Number: AGR/DCP/010/L3
NSQ Level: 3
Credit Value: 4
Guided Learning Hours: 40
Practice Time: 180 hours

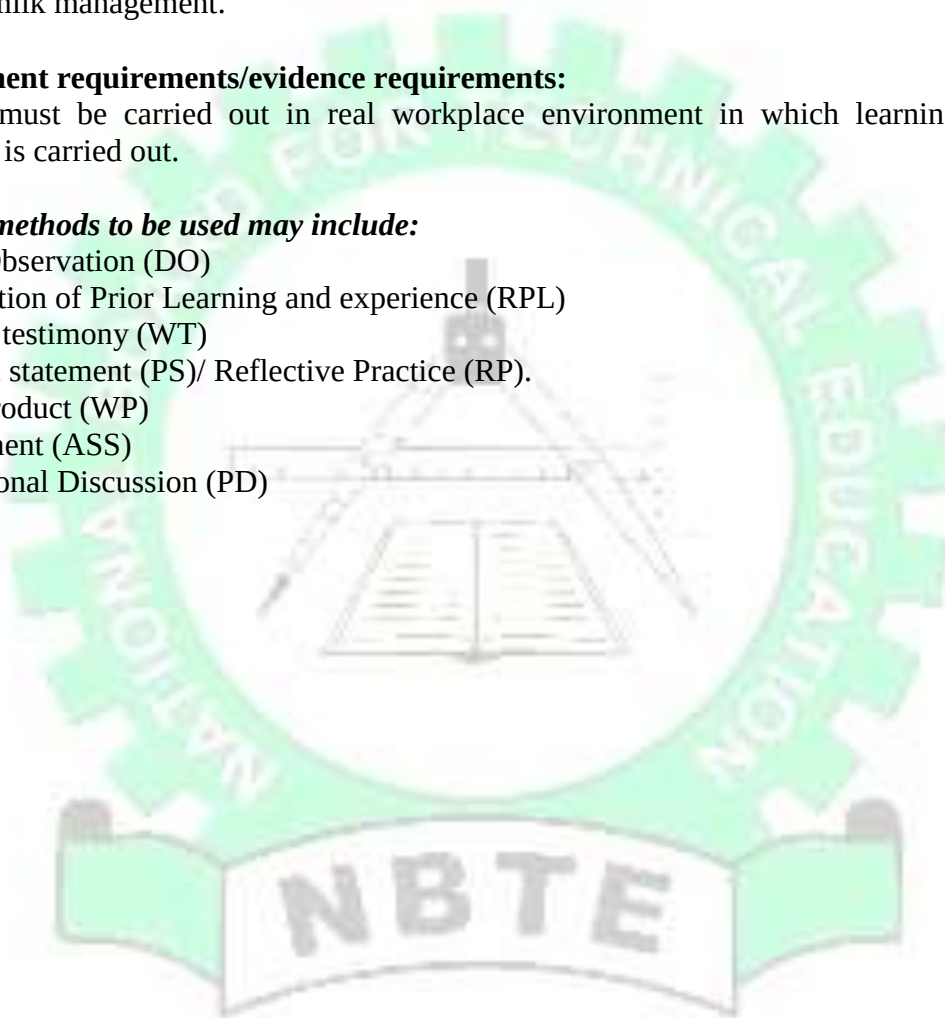
Unit Purpose: This unit is designed to equip the learners with knowledge and skills on hygienic practices of milk management.

Unit assessment requirements/evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Recognition of Prior Learning and experience (RPL)
3. Witness testimony (WT)
4. Personal statement (PS)/ Reflective Practice (RP).
5. Work Product (WP)
6. Assignment (ASS)
7. Professional Discussion (PD)



UNIT 010: Milking, Milk Hygiene and Sales

LEARNING OUTCOME (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type					Evidence Ref. Page No.			
LO 1: Demonstrate cow milking	1.1	Identify triggers of milk-letdown									
	1.2	Demonstrate hand milking and machine milking techniques.									
	1.3	Carry out hygienic milking techniques									
	1.4	Operate portable and industrial milking machines.									
LO 2: Carry out Storage and Preservation of Raw Milk	2.1	Identify signs of milk spoilage									
	2.2	Demonstrate milk pasteurization									
	2.3	Carry out milk cooling procedures									
	2.4	Practice local milk cooling methods									
	2.5	Select suitable storage containers									
	2.6	Perform preservation methods									
LO 3: Market Raw milk	3.1	Identify milk sales outlets									
	3.2	Calculate milk selling price									
	3.3	Maintain milk churns									
	3.4	Establish contact with local milk buyers									
LO 4: Sanitize milking equipment	4.1	Identify risks of poor milk hygiene									
	4.2	Identify milk handling equipment									
	4.3	Carry out sanitation procedures for milking equipment									
Learner's Signature:			Date:								
Assessor's Signature:			Date:								
IQA Signature (if sampled)			Date:								
EQA Signature (if sampled)			Date:								

Unit 011: Forage Conservation

Unit Reference Number: AGR/DCP/011/L3

NSQ Level: 3

Credit Value: 4

Guided Learning Hours: 40

Practice Time: 180 hours

Unit Purpose: This unit is designed to equip the learners with knowledge and skills in silage and haymaking.

Unit assessment requirements/evidence requirements: Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Recognition of Prior Learning and experience (RPL)
3. Witness testimony (WT)
4. Personal statement (PS)/ Reflective Practice (RP).
5. Work Product (WP)
6. Assignment (ASS)
7. Professional Discussion (PD)



UNIT 011: Forage Conservation

LEARNING OUTCOME (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type				Evidence Ref. Page No.			
LO 1: Manage Forage Conservation Programmes	1.1	Assess seasonal feed requirements and.								
	1.2	determine the need for forage conservation								
	1.3	Select suitable forage crops for conservation based on nutritional value, yield and climatic conditions.								
	1.4	Develop a forage conservation plan for a dairy enterprise.								
	1.5	Estimate forage requirements and conservation targets for different classes of dairy cattle.								
	1.6	Monitor forage quality								
	1.7	Recommend appropriate conservation methods.								
LO 2: Produce High-Quality Hay	2.1	Determine the optimum stage of crop maturity for hay production.								
	2.2	Assess weather forecasts and schedule haymaking operations accordingly.								
	2.3	Operate forage harvesting and drying activities.								
	2.4	Assess moisture content and nutritional quality of hay before storage.								
	2.5	Produce hay using recommended standards.								
	2.6	Bale hay using recommended standards								
	2.7	Store hay using recommended standards								
	2.8	Identify factors affecting hay quality during storage.								
	2.9	Rectify factors affecting hay								

		quality during storage.																	
LO 3: Carry out production and management of Silage	3.1	Evaluate crops for suitability in silage production.																	
	3.2	Calculate forage quantities required for silage production.																	
	3.3	Apply appropriate silage additives based on forage quality.																	
	3.4	Supervise harvesting, chopping, compaction and sealing of silage.																	
	3.5	Monitor fermentation processes																	
	3.6	Assess silage quality.																	
	3.7	Recommend corrective measures for common silage defects and losses.																	
LO 4: Evaluate Forage Quality and Feeding Value	4.1	Collect forage samples for quality assessment.																	
	4.2	Assess physical characteristics of hay and silage as indicators of quality.																	
	4.3	Determine the suitability of conserved forage for different categories of dairy cattle.																	
	4.4	Recommend feeding strategies based on available conserved forage resources.																	
LO 5: Manage forage storage facilities and safety	5.1	Maintain forage storage structures.																	
	5.2	Implement safety procedures during hay and silage production operations.																	
	5.3	Minimize forage storage losses.																	
	5.4	Maintain records of forage production, storage and utilization.																	
Learner's Signature:			Date:																
Assessor's Signature:			Date:																

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



UNIT 012: DAIRY CATTLE HANDLING

Unit Reference Number: AGR/DCP/012/L3

NSQ Level: 3

Credit Value: 4

Guided Learning Hours: 40

Practice Time: 180 hours

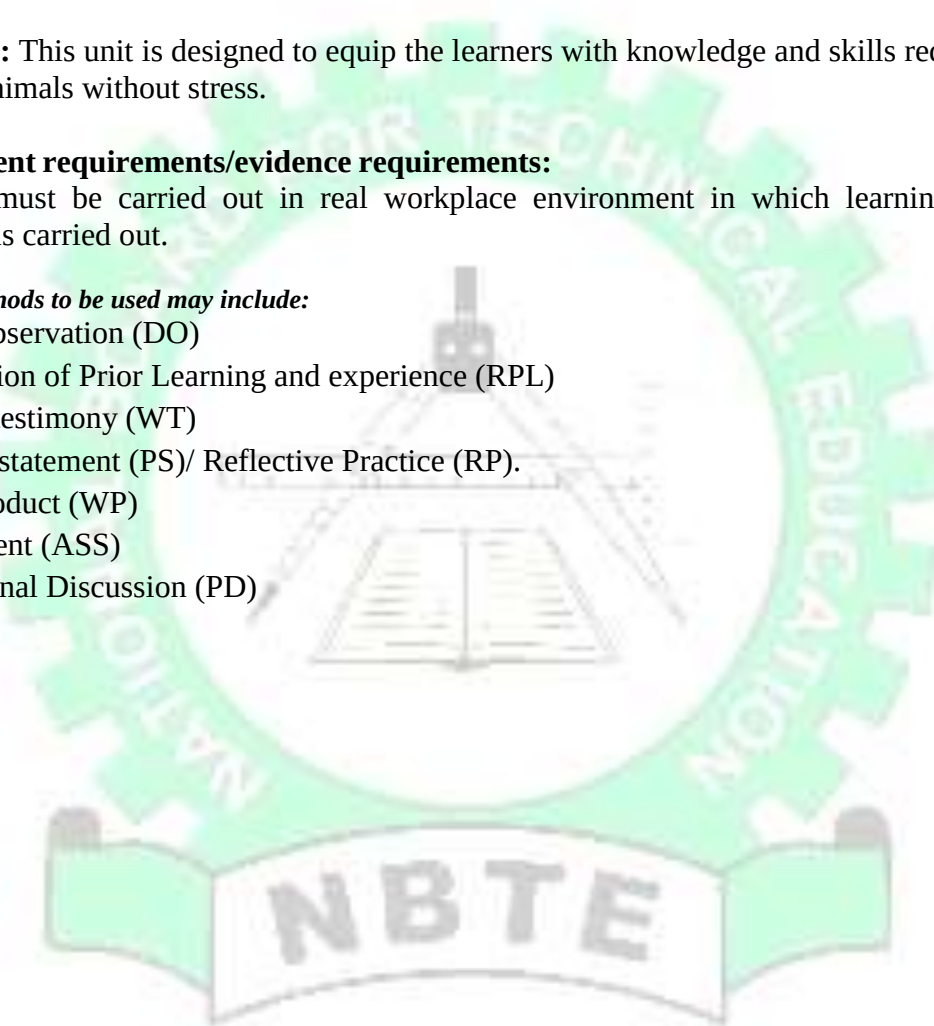
Unit Purpose: This unit is designed to equip the learners with knowledge and skills required in handling of animals without stress.

Unit assessment requirements/evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used may include:

1. Direct Observation (DO)
2. Recognition of Prior Learning and experience (RPL)
3. Witness testimony (WT)
4. Personal statement (PS)/ Reflective Practice (RP).
5. Work Product (WP)
6. Assignment (ASS)
7. Professional Discussion (PD)



UNIT 012: Dairy Cattle Handling

LEARNING OUTCOME (LO)		PERFORMANCE CRITERIA	Evidence Type				Evidence Ref. No.			
The learner will:		The learner can:								
LO 1: Demonstrate Safe and Effective Animal Handling	1.1	Demonstrate the correct approach to dairy cattle under different farm conditions.								
	1.2	Identify signs of fear and stress in dairy cattle								
	1.3	Minimize factors causing distress.								
	1.4	Assess the impact of frightened animals on welfare, milk production, animal performance and farm safety.								
	1.5	Apply handling practices that promote calm behaviour and positive animal responses.								
	1.6	Restrain dairy cattle safely and humanely during milking, treatment and routine management procedures.								
LO 2: Handle dairy cattle safely and humanely	2.1	Identify the behaviour and temperament of dairy cattle before handling								
	2.2	Use appropriate handling equipment and personal protective equipment (PPE) according to farm procedures.								
	2.3	Inspect handling facilities to ensure they are safe and fit for use.								
	2.4	Move dairy cattle calmly using low-stress handling techniques.								
	2.5	Position handlers to utilize the cattle's flight zone and point of balance.								
	2.6	Apply humane handling practices in accordance with animal welfare requirements.								
	2.7	Implement occupational health and safety (OHS) procedures throughout handling operations.								
LO 3: Restrain	3.1	Select appropriate restraint								

		completion of the required procedure.								
	3.5	Maintain handling and restraint equipment according to farm procedures.								
Animal Welfare	4.1	Identify hazards associated with dairy cattle handling								
	4.2	Implement risk control measures to prevent accidents and injuries								
	4.3	Report injuries, abnormal animal behaviour, or damaged handling facilities according to farm procedures								
	4.4	Maintain handling facilities and work areas to meet biosecurity, safety and animal welfare requirements.								
	4.5	Complete handling records accurately in accordance with farm requirements.								
Signature:							Date:			
Signature:							Date:			
e (if sampled)							Date:			
ure (if sampled)							Date:			

LIST OF TOOLS AND EQUIPMENT

S/N	Tools/Equipment/Items/Resources	Quantity (30 Learners)
1	Dairy cattle (training herd)	15 animals
2	Calves	6
3	Bull	1
4	Cattle crush	2
5	Head gate	2
6	Ropes	15
7	Ear tags (set)	100
8	Ear tag applicator	5
9	Grooming brushes/kits	15
10	Hoof knife	15
11	Hoof trimmer	15
12	Dehorner	5
13	Castration kit	5
14	Knapsack sprayer	15
15	Drench gun	10
16	Automatic syringe	5
17	Syringes	30
18	Needles (pack)	10 packs
19	Clinical thermometer	15
20	Strip cup	15
21	California Mastitis Test Kit	5
22	Drug measuring utensils	15
23	Foot bath	2
24	Cattle dip	1
25	Disinfectants	20 litres
26	First aid box	2
27	Dressing materials	2 sets
28	Fire extinguisher	4
29	Waste bins	6
30	Manure pit	1
31	PPE (overall, boots, gloves, apron, head cover, nose cover)	30 complete sets
32	Feed troughs	15
33	Water troughs	15
34	Feed ingredients	1 complete training set
35	Compounded feed	1 tonne
36	Mineral supplements	30 kg
37	Vitamin supplements	30 kg
38	Salt licks	15
39	Forage grasses	1 training plot

40	Legume forage	1 training plot
41	Crop residues	1 training set
42	Water supply	1 functional system
43	Cutlasses	15
44	Sickles	15
45	Hoes	15
46	Garden forks	15
47	Rakes	15
48	Shovels	15
49	Wheelbarrows	15
50	Head pans	15
51	Weighing scales	5
52	Measuring buckets	15
53	Measuring cylinders	15
54	Measuring tape	15
55	Feed store	1
56	Pallets	20
57	Milking parlour	1
58	Portable milking machine	5
59	Milking buckets	15
60	Milk utensils	15 sets
61	Milk churns	10
62	Milk cans	15
63	Milk storage tank	1
64	Cooling facility	1
65	Refrigerator/Freezer	2
66	Milk sieve/filter	15
67	Teat dip cups	15
68	Udder cloths	30
69	Lactometer	10
70	Steam generator	1
71	Sodium hypochlorite	20 litres
72	Scrubbing brushes	15
73	Drying racks	5
74	Gas cylinder	2
75	Cooking pot	2
76	Napkins	30
77	Detergent	20 litres
78	Heat detection kit	5
79	Artificial insemination kit (demonstration)	2
80	Calving pen	2
81	Calf pen	2
82	Calf feeding buckets	15
83	Calf teats	15
84	Iodine (navel dressing)	5 litres

85	Reproduction record cards	100
86	Forage chopper	2
87	Hay baler	1
88	Silo/Bunker	2
89	Polythene sheets	20
90	Silage additives (molasses)	50 litres
91	Old tyres/weights	20
92	Fodder demonstration plot	1
93	Planting materials	1 complete set
94	Record books	30
95	Ledgers	10
96	Cow record cards	100
97	Farm dairy	10
98	Milk record sheets	100
99	Sales record cards	100
100	Stock cards	100
101	Calculator	15
102	Farm work schedule	5
103	Duty roster board	2
104	Notice board	2
105	Record cards	100
106	Flip charts	10
107	Mobile phone	15
108	Safety signs and symbols	20
109	Charts	20
110	Posters	20
111	Visual aids	20
112	Multimedia projector	2
113	Organizational code of conduct manual	30 copies



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