









Dairy Worker

QP Code: AGR/Q4102

Version: 3.0

NSQF Level: 3

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AGR/Q4102: Dairy Worker

Brief Job Description

A Dairy Worker needs to perform the duties of caring, feeding and milking for the livestock on the dairy farm. The individual should take proper care of dairy animals which involves maintaining the animal areas, lots and barns clean and free from manure and extraneous objects. The individual should perform the job in an efficient manner to increase the productivity and promote animal well-being and comfort.

Personal Attributes

The Dairy worker should work independently, laborious and must have the ability to make operational decisions pertaining to his area of work. The individual should have clarity and should be result oriented. The individual should also be able to demonstrate skills to use various tools

Applicable National Occupational Standards (NOS)

Compulsory NOS:

- 1. AGR/N4105: Perform Hand and Machine Milking
- 2. AGR/N4115: Prepare and maintain accommodation for livestock
- 3. AGR/N4116: Carry out proper management of the herd
- 4. AGR/N4117: Prepare and provide recommended feed and water to the livestock
- 5. AGR/N4118: Maintain health and productivity of livestock
- 6. AGR/N4119: cultivate and prepare forage for livestock
- 7. AGR/N4120: Maintain safety and cleanliness at dairy farm
- 8. DGT/VSQ/N0101: Employability Skills (30 Hours)

Qualification Pack (QP) Parameters

Sector	Agriculture
Sub-Sector	Dairying
Occupation	Dairy Farm Management
Country	India









NSQF Level	3
Credits	10
Aligned to NCO/ISCO/ISIC Code	NCO-2015/6121.0601
Minimum Educational Qualification & Experience	10th Class OR 8th Class (with two years of (NTC/ NAC) after 8th) OR 8th grade pass and pursuing continuous schooling in regular school with vocational subject OR 8th grade pass with 2 Years of experience relevant experience OR 5th grade pass with 5 Years of experience relevant experience OR Previous relevant Qualification of NSQF Level (Level 2) with 1 Year of experience relevant experience OR Previous relevant Qualification of NSQF Level (Level 2) with 1 Year of experience relevant experience OR
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	16 Years
Last Reviewed On	NA
Next Review Date	30/04/2025
NSQC Approval Date	24/02/2022
Version	3.0
Reference code on NQR	QG-03-AG-00322-2023-V1.1-ASCI
NQR Version	1.1







AGR/N4105: Perform Hand and Machine Milking

Description

This OS is about good hand and machine milking practices to be followed by the dairy farmer in day to day dairy activities

Scope

The scope covers the following :

- Pre-Milking Activities
- Milking Activities
- Post-Milking Activities

Elements and Performance Criteria

Pre-Milking Activities

To be competent, the user/individual on the job must be able to:

- PC1. maintain conducive milking environment
- PC2. restrain livestock for milking
- **PC3.** ensure personal hygiene of milker and prepare udder before milking
- PC4. check for mastitis
- PC5. check and adjust milking equipment, as required
- **PC6.** ensure correct livestock health treatments during drying off, as directed, with minimal stress and weight loss
- PC7. follow proper livestock treatments during drying off period

Milking Activities

To be competent, the user/individual on the job must be able to:

- PC8. develop a calm regular milking routine in livestock
- **PC9.** implement milking procedures with minimum stress to livestock and maximum yield within reasonable timeframes
- **PC10.** rectify minor malfunctions of equipment and milking systems under guidance of technical expert
- **PC11.** implement prescribed handling practices so as to prevent cross-infection during milking operations

Post-Milking Activities

To be competent, the user/individual on the job must be able to:

- **PC12.** perform teat dipping to prevent mastitis
- **PC13.** weigh and store the milk into milk can
- PC14. clean the milking pail and keep them in the designated place
- PC15. clean the milking machine and store in a hygienic place

Knowledge and Understanding (KU)









The individual on the job needs to know and understand:

- KU1. relevant legislation, standards, policies, and procedures in work
- KU2. relevant health and safety requirements applicable in the work environment
- KU3. their own job role and responsibilities and sources for information pertaining to work
- **KU4.** who to approach for support in order to obtain work-related information, clarifications and support
- **KU5.** importance of following health, hygiene, safety and quality standards on productivity, consumers and the business
- KU6. documentation and related procedures applicable in the context of work
- **KU7.** hygiene and proper environment requirements for stress-free milking
- KU8. factors which increases livestock stress and measures to be taken to minimize stress
- **KU9.** how to identify mastitis and measures to be taken thereafter
- KU10. methodology of operating milking machine and its maintenance
- KU11. relevant codes of practice with regard to milking operation
- KU12. causes of poor milk quality
- KU13. hygiene requirements of milker, premises, animal and utensils
- KU14. proper milk storage techniques to avoid milk spoilage
- KU15. basic types & control of udder health problems of dairy cattle

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1. write relevant notes and develop reports on milking pattern
- GS2. read the relevant literature to get latest updates about the field of work
- GS3. communicate politely and professionally with co-workers
- GS4. plan tasks for effective use of time
- **GS5.** identify possible hazards and disruptions and take appropriate preventive measures
- GS6. evaluate all possible solutions to a problem to select the best one







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Pre-Milking Activities	12	19	-	7
PC1. maintain conducive milking environment	-	-	-	-
PC2. restrain livestock for milking	-	_	_	-
PC3. ensure personal hygiene of milker and prepare udder before milking	-	-	-	-
PC4. check for mastitis	-	-	-	-
PC5. check and adjust milking equipment, as required	-	-	-	-
PC6. ensure correct livestock health treatments during drying off, as directed, with minimal stress and weight loss	-	-	-	-
PC7. follow proper livestock treatments during drying off period	-	-	-	-
Milking Activities	9	15	-	6
PC8. develop a calm regular milking routine in livestock	-	-	-	-
PC9. implement milking procedures with minimum stress to livestock and maximum yield within reasonable timeframes	-	-	-	-
PC10. rectify minor malfunctions of equipment and milking systems under guidance of technical expert	-	-	_	-
PC11. implement prescribed handling practices so as to prevent cross-infection during milking operations	-	-	-	-
Post-Milking Activities	9	15	-	8
PC12. perform teat dipping to prevent mastitis	-	-	-	-
PC13. weigh and store the milk into milk can	-	-	-	-
PC14. clean the milking pail and keep them in the designated place	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC15. clean the milking machine and store in a hygienic place	-	-	-	-
NOS Total	30	49	-	21









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N4105
NOS Name	Perform Hand and Machine Milking
Sector	Agriculture
Sub-Sector	Dairying
Occupation	Dairy Farm Management
NSQF Level	4
Credits	1
Version	2.0
Last Reviewed Date	29/09/2023
Next Review Date	29/09/2026
NSQC Clearance Date	29/09/2023







AGR/N4115: Prepare and maintain accommodation for livestock

Description

This OS is about the preparation & maintenance of livestock accommodation

Scope

The scope covers the following :

- Carry out preparation of the livestock accommodation
- Carry out maintenance of the livestock accommodation

Elements and Performance Criteria

Carry out preparation of the livestock accommodation

To be competent, the user/individual on the job must be able to:

- PC1. prepare the shed in accordance with stage of animal growth and production
- **PC2.** take appropriate measures to protect the animals from climatic extremes.
- **PC3.** take measures to avoid damage to the shed due to rains, storms, floods etc.
- PC4. prepare the equipment, tools, and materials required for livestock accommodation
- PC5. ensure safety of animals from wild animals, theft, infighting.

Carry out maintenance of the livestock accommodation

To be competent, the user/individual on the job must be able to:

- **PC6.** perform cleaning and sanitation according to the industry norms
- PC7. carry out disposal of the waste material according to the workplace procedures
- **PC8.** store the equipment safely and securely
- **PC9.** identify problems with the shed and take appropriate measures

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. relevant legislation, standards, policies and procedures in the workplace
- KU2. relevant health and safety requirements applicable to the work environment
- **KU3.** the types of accommodations and their suitability for animals as per type, growth stage and production stage
- KU4. the legislation and codes of livestock welfare
- KU5. the materials and equipment necessary for good health & well-being of animal
- **KU6.** potential hazards which may arise in relation to the well-being of the livestock caused by structures, other animals, wild animals or humans
- KU7. eco-friendly activities for managing animal and waste particularly in indoor accommodation

Generic Skills (GS)

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User/individual on the job needs to know how to:

- **GS1.** record the data which are required for record-keeping purpose
- GS2. report problems to the appropriate personnel in a timely manner
- GS3. write descriptions and details about incidents in reports
- GS4. read instruction manuals and procedures for handing tools, equipment, and consumables
- **GS5.** maintain effective liaison and work relationship with fellow workers, seniors and others
- GS6. plan and schedule daily activities
- **GS7.** identify the problem and evaluate the possible solutions and implement the same
- **GS8.** analyze the information gathered from observations and experiences







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Carry out preparation of the livestock accommodation</i>	21	25	-	15
PC1. prepare the shed in accordance with stage of animal growth and production	-	-	-	-
PC2. take appropriate measures to protect the animals from climatic extremes.	-	-	-	-
PC3. take measures to avoid damage to the shed due to rains, storms, floods etc.	-	-	-	-
PC4. prepare the equipment, tools, and materials required for livestock accommodation	-	-	-	-
PC5. ensure safety of animals from wild animals, theft, infighting.	-	-	-	-
<i>Carry out maintenance of the livestock accommodation</i>	11	18	-	10
PC6. perform cleaning and sanitation according to the industry norms	-	-	-	-
PC7. carry out disposal of the waste material according to the workplace procedures	-	-	-	-
PC8. store the equipment safely and securely	-	-	-	-
PC9. identify problems with the shed and take appropriate measures	-	-	-	-
NOS Total	32	43	-	25







National Occupational Standards (NOS) Parameters

NOS Code	AGR/N4115
NOS Name	Prepare and maintain accommodation for livestock
Sector	Agriculture
Sub-Sector	Dairying
Occupation	Dairy Farm Management
NSQF Level	3
Credits	1
Version	1.0
Last Reviewed Date	24/02/2022
Next Review Date	24/02/2025
NSQC Clearance Date	24/02/2022









AGR/N4116: Carry out proper management of the herd

Description

This OS is about management of livestock at different stages

Scope

The scope covers the following :

- Manage livestock in the shed.
- Manage livestock at different stages

Elements and Performance Criteria

Manage livestock in the shed

To be competent, the user/individual on the job must be able to:

- **PC1.** identify and utilize suitable personal protective equipment required while working with livestock in the shed
- **PC2.** identify and use materials and shed which are suitable for reception of the livestock
- PC3. take precautions while moving the livestock into the shed
- **PC4.** ensure the livestock is not under stress while being accommodated
- **PC5.** identify animals with abnormal behaviour and make necessary arrangement for their care / treatment

Manage livestock at different stages

To be competent, the user/individual on the job must be able to:

- PC6. identify and isolate the livestock in late pregnancy to give special attention
- PC7. manage calving, pre and post-parturition periods as per the standard procedure
- PC8. carry out weaning and feeding the calf as per standard procedure
- PC9. monitor and assess the livestock carefully to ensure their good health and well-being
- **PC10.** ensure and manage the feed materials and supplies required by the livestock in different stages
- PC11. implement animal identification systems (ear tagging, branding) and dehorning of calves

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. relevant legislation, standards, policies and procedures in the workplace
- **KU2.** relevant health and safety requirements applicable to the work environment
- **KU3.** the types of accommodations and decide appropriate accommodation as per livestock growth stage and production
- KU4. how to operate tools and equipment in the dairy farm
- KU5. the precautionary measures while settling animals in a new place









- **KU6.** the specific needs of animals at different stages of growth and health conditions to make appropriate arrangement
- KU7. management of calf, sick animals, and animals in heat
- KU8. use of disinfectants and cleaning agents required for the cleaning process
- KU9. how to read instructions on work orders and procedures
- KU10. how to communicate with co-workers, labour, seniors, and deal with visitors

Generic Skills (GS)

User/individual on the job needs to know how to:

- **GS1.** record the data which are required for record-keeping purpose
- **GS2.** report problems to the appropriate personnel in a timely manner
- **GS3.** fill logbooks of heating and cooling systems.
- **GS4.** read ear tags to track information like age, number of calves, etc.
- **GS5.** read instructions on work orders and procedures
- **GS6.** communicate with co-workers, labour, seniors, and deal with visitors
- GS7. plan and schedule daily activities
- GS8. evaluate all possible solutions to a problem to select the best one







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Manage livestock in the shed	20	14	-	12
PC1. identify and utilize suitable personal protective equipment required while working with livestock in the shed	-	-	-	-
PC2. identify and use materials and shed which are suitable for reception of the livestock	-	-	-	-
PC3. take precautions while moving the livestock into the shed	-	-	_	-
PC4. ensure the livestock is not under stress while being accommodated	-	-	-	-
PC5. identify animals with abnormal behaviour and make necessary arrangement for their care / treatment	-	-	-	-
Manage livestock at different stages	24	13	-	17
PC6. identify and isolate the livestock in late pregnancy to give special attention	-	-	_	-
PC7. manage calving, pre and post-parturition periods as per the standard procedure	-	-	_	-
PC8. carry out weaning and feeding the calf as per standard procedure	-	-	-	-
PC9. monitor and assess the livestock carefully to ensure their good health and well-being	-	-	-	-
PC10. ensure and manage the feed materials and supplies required by the livestock in different stages	-	-	-	-
PC11. implement animal identification systems (ear tagging, branding) and dehorning of calves	-	-	-	-
NOS Total	44	27	-	29









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N4116
NOS Name	Carry out proper management of the herd
Sector	Agriculture
Sub-Sector	Dairying
Occupation	Dairy Farm Management
NSQF Level	3
Credits	1
Version	1.0
Last Reviewed Date	24/02/2022
Next Review Date	24/02/2025
NSQC Clearance Date	24/02/2022







AGR/N4117: Prepare and provide recommended feed and water to the livestock

Description

This OS is about ways of preparing and maintaining feed & water and their supply to the livestock.

Scope

The scope covers the following :

- Procure and store livestock feed and feed ingredients
- Prepare feed and water supplies for herd
- Deliver feed & water to livestock

Elements and Performance Criteria

Procure and store livestock feed and feed ingredients

To be competent, the user/individual on the job must be able to:

- **PC1.** ensure the correct amount, type, and condition of feed material and ingredients free of any contamination have been procured
- **PC2.** report any shortfalls in delivered animal feed to the appropriate person
- **PC3.** store feed material safely according to the supplier /manufacturers recommendations and workplace norms
- PC4. examine stored animal feed regularly for any signs of bacterial, fungal, and pest infestation
- PC5. assess stock levels against critical levels regularly
- PC6. carry out outsourcing of fodder in case of scarcity

Prepare feed and water supplies for livestock

To be competent, the user/individual on the job must be able to:

- PC7. prepare tools & equipment effectively before undertaking any work related to processing
- **PC8.** prepare appropriate proportions of green and dry fodder, feed, and supplements depending on the type, growth stage and production of livestock
- **PC9.** carry out operation and maintenance of equipment used in chaffing, conservation, and dispensing of fodder
- PC10. minimize feed and water wastage
- PC11. dispose of waste animal feed (leftover in mangers) safely in a designated place
- PC12. clean and store all the tools and equipment in the designated place
- PC13. clean the mangers, water troughs, and water reservoirs as per schedules and norms.

Deliver feed & water to livestock

To be competent, the user/individual on the job must be able to:

- **PC14.** ensure suitable personal protective equipment is used while providing feed and water to livestock
- **PC15.** ensure quality of feed and water being delivered to the livestock









- **PC16.** provide appropriate type and quantity of feed to calves, growing stock, dry animals, and milking animals
- **PC17.** change the feeding procedure in case of change in ingredients of feed
- PC18. provide feed supplements to pregnant and lactating animals as suggested by the experts

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** relevant legislation, standards, policies and procedures in the workplace
- KU2. relevant health and safety requirements applicable to the work environment
- **KU3.** impact of not following the health, hygiene, safety, quantity and quality standards on consumers and the business
- KU4. the proper channels and contacts for indenting stocks of feed, supplements and fodder
- **KU5.** the importance of checking the quantity & quality of received fodder, feed, supplements
- **KU6.** types of feeds and their suitability for animals at different stages of growth and production
- KU7. different pest, rodent and microbial infestation and the necessary measures to control it
- KU8. process of cleaning the feeding and watering structures
- **KU9.** feeding related ailments like bloating, acidosis, ketosis, nitrate poisoning, etc. and their preventive measures
- **KU10.** abnormal feeding and drinking behavior of livestock and potential reasons for changes in consumption

Generic Skills (GS)

User/individual on the job needs to know how to:

- **GS1.** record the data which are required for record keeping purpose
- GS2. report problems to the appropriate personnel in a timely manner
- **GS3.** write descriptions and details about incidents in reports
- GS4. read instruction manuals for handling tools and equipment
- **GS5.** read labeling on the feed bags, supplements and their interpretation.
- GS6. communicate with co-workers and visitors and suppliers
- GS7. plan and schedule daily activities
- **GS8.** maintain effective work relationships with co-workers
- **GS9.** analyze the information from observations and experiences
- GS10. evaluate all possible solutions to a problem to select the best one







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Procure and store livestock feed and feed ingredients</i>	14	15	-	10
PC1. ensure the correct amount, type, and condition of feed material and ingredients free of any contamination have been procured	-	-	-	-
PC2. report any shortfalls in delivered animal feed to the appropriate person	-	-	-	-
PC3. store feed material safely according to the supplier /manufacturers recommendations and workplace norms	-	-	-	-
PC4. examine stored animal feed regularly for any signs of bacterial, fungal, and pest infestation	-	-	-	-
PC5. assess stock levels against critical levels regularly	-	-	-	-
PC6. carry out outsourcing of fodder in case of scarcity	-	-	-	-
Prepare feed and water supplies for livestock	14	11	-	10
PC7. prepare tools & equipment effectively before undertaking any work related to processing	-	-	-	-
PC8. prepare appropriate proportions of green and dry fodder, feed, and supplements depending on the type, growth stage and production of livestock	-	-	-	-
PC9. carry out operation and maintenance of equipment used in chaffing, conservation, and dispensing of fodder	-	-	-	-
PC10. minimize feed and water wastage	-	-	-	-
PC11. dispose of waste animal feed (leftover in mangers) safely in a designated place	-	-	-	-
PC12. clean and store all the tools and equipment in the designated place	_	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. clean the mangers, water troughs, and water reservoirs as per schedules and norms.	-	-	-	-
Deliver feed & water to livestock	10	11	-	5
PC14. ensure suitable personal protective equipment is used while providing feed and water to livestock	-	-	-	-
PC15. ensure quality of feed and water being delivered to the livestock	-	-	-	-
PC16. provide appropriate type and quantity of feed to calves, growing stock, dry animals, and milking animals	-	-	-	-
PC17. change the feeding procedure in case of change in ingredients of feed	-	-	-	-
PC18. provide feed supplements to pregnant and lactating animals as suggested by the experts	_	_	_	-
NOS Total	38	37	-	25







National Occupational Standards (NOS) Parameters

NOS Code	AGR/N4117
NOS Name	Prepare and provide recommended feed and water to the livestock
Sector	Agriculture
Sub-Sector	Dairying
Occupation	Dairy Farm Management
NSQF Level	2
Credits	1
Version	1.0
Last Reviewed Date	24/02/2022
Next Review Date	24/02/2025
NSQC Clearance Date	24/02/2022









AGR/N4118: Maintain health and productivity of livestock

Description

Maintain health of livestock along with productivity

Scope

The scope covers the following :

- Monitor the health and well-being of livestock to ensure productivity
- Deliver recommended treatment to animal with minimum impact on production

Elements and Performance Criteria

Monitor the health and well-being of livestock to ensure productivity

To be competent, the user/individual on the job must be able to:

- **PC1.** deal animals in a manner which complies with relevant legislation, minimize stress, injury and maintains their health and well-being
- **PC2.** ensure that sufficient space & area is maintained for animal mobility and physical functioning
- **PC3.** monitor the physical condition of the animals at suitable intervals and identify abnormal signs
- PC4. perform inspection of the herd to identify parasites
- PC5. provide assistance for any health related emergency and initiate appropriate action
- **PC6.** manage waste in a safe & secure manner ensuring the health and well-being of herd

Deliver recommended treatment to animal with minimum impact on production

To be competent, the user/individual on the job must be able to:

- **PC7.** follow disease prevention practices like vaccination, deworming, pest and parasite control
- **PC8.** assist the veterinarian in administering drugs, medication, and other medical supplies in accordance with organizational policy.
- **PC9.** use the correct technique to administer the specified treatment in the absence of animal health worker
- PC10. manage animals under treatment as instructed by veterinarian
- **PC11.** report any difficulties encountered while administering treatments immediately to the concerned person
- PC12. monitor animal's post-treatment and report concerns immediately to the concerned person

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. relevant legislation, standards, policies and procedures in the workplace
- KU2. relevant health and safety requirements applicable to the work environment
- **KU3.** whom to approach for support in order to obtain work related information and clarifications









- **KU4.** impact of not following the health, hygiene, safety and quality standards on consumers and the business
- KU5. how to promote the health and well-being of animals and minimize any stress and injury
- **KU6.** organizational policy in relation to the treatment of animals and his responsibility under welfare legislation
- **KU7.** the purpose for which the animals are being kept and the relationship of this to health and well-being
- **KU8.** preventative care for maintaining the health and well-being of animals
- KU9. recognize a health emergency in an animal and the appropriate actions
- **KU10.** personal hygiene and safety precautions (e.g. communicable Diseases) Personal protective equipment
- **KU11.** behavioral and physical changes in the condition of the animal which may occur after the treatment

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1. mention the data which are required for record keeping purpose
- **GS2.** report problems to the appropriate personnel in a timely manner
- **GS3.** write descriptions and details about incidents in reports
- **GS4.** receive instructions and seek advice from supervisors and managers and deal with co-workers and subordinates
- **GS5.** choose work procedures, chose animal restraining procedure.
- GS6. schedule Daily activities and drawing up priorities
- GS7. monitor and maintain the condition of tools and equipment
- **GS8.** monitor the health of the animal







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Monitor the health and well-being of livestock to ensure productivity	16	22	-	17
PC1. deal animals in a manner which complies with relevant legislation, minimize stress, injury and maintains their health and well-being	-	-	_	-
PC2. ensure that sufficient space & area is maintained for animal mobility and physical functioning	-	-	-	-
PC3. monitor the physical condition of the animals at suitable intervals and identify abnormal signs	-	-	-	-
PC4. perform inspection of the herd to identify parasites	-	-	-	-
PC5. provide assistance for any health related emergency and initiate appropriate action	-	-	_	-
PC6. manage waste in a safe & secure manner ensuring the health and well-being of herd	-	-	-	_
Deliver recommended treatment to animal with minimum impact on production	12	17	-	16
PC7. follow disease prevention practices like vaccination, deworming, pest and parasite control	-	-	-	-
PC8. assist the veterinarian in administering drugs, medication, and other medical supplies in accordance with organizational policy.	-	_	-	-
PC9. use the correct technique to administer the specified treatment in the absence of animal health worker	-	-	-	-
PC10. manage animals under treatment as instructed by veterinarian	-	-	_	-
PC11. report any difficulties encountered while administering treatments immediately to the concerned person	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. monitor animal's post-treatment and report concerns immediately to the concerned person	-	-	-	-
NOS Total	28	39	-	33









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N4118
NOS Name	Maintain health and productivity of livestock
Sector	Agriculture
Sub-Sector	Dairying
Occupation	Dairy Farm Management
NSQF Level	3
Credits	1
Version	1.0
Last Reviewed Date	24/02/2022
Next Review Date	24/02/2025
NSQC Clearance Date	24/02/2022







AGR/N4119: cultivate and prepare forage for livestock

Description

This OS is about ways of conserving forage so as to ensure all year supply of the same to the dairy animals at the farm

Scope

The scope covers the following :

- Growing fodder crops
- Harvesting and Preparation of fodder
- Fodder Conservation
- Closing operations

Elements and Performance Criteria

cultivation of fodder crops

To be competent, the user/individual on the job must be able to:

- **PC1.** identify legume, non-legume and tree fodder crops suitable to local climatic conditions
- PC2. perform tillage operations for growing fodder crops
- **PC3.** identify risk factors for spoilage in fodder crop through rains, floods, storms and plan preventive measures accordingly
- PC4. identify fodder scarcity periods and prepare fodder production schedule
- **PC5.** identify insect/pests of fodder crops and take preventive measures, ask for control measures.
- **PC6.** identify crops with abnormal symptoms and ask for causes and remedies.

Harvesting and preparation of fodder.

To be competent, the user/individual on the job must be able to:

- PC7. plan and schedule harvesting of fodder for optimum outcome
- PC8. perform harvesting of fodder in efficient manner
- **PC9.** identify safety hazards and implement OHS (occupational health and safety) procedures for forage harvesting, transport and chaffing.
- **PC10.** practice appropriate mix of dry-green, and legume-non legume fodders for better productivity
- PC11. check equipment during harvesting operations regularly

conservation of fodder

To be competent, the user/individual on the job must be able to:

- **PC12.** identify various forage conservation techniques to ensure year round availability of feed and fodder
- PC13. ensure favorable conditions suitable for forage conservation
- **PC14.** prepare forage conservation machinery and equipment in accordance with manufacturer's specifications, Occupational Health and Safety (OHS) requirements.
- PC15. prepare storage facility for selected forage conservation type









- PC16. monitor weather conditions to determine optimum time for harvest and to ensure quality
- **PC17.** prepare silage, hay and treat straw chemically
- PC18. bale, wrap, compact, seal or store forage in accordance with storage plan
- PC19. load, transport, and store/compact forage in accordance with OHS and quality requirements
- PC20. store forage so as to minimize risk of spoilage and combustion

Closing Operations

To be competent, the user/individual on the job must be able to:

- **PC21.** dispose off all waste and debris to minimize environmental impacts
- **PC22.** perform cleaning and service of machinery and ancillary equipment in accordance with manufacturer's specifications, OHS requirements and industry practice
- **PC23.** collect representative sample for testing of stored forage for quality.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. relevant legislation, standards, policies, and procedures in work
- **KU2.** relevant health and safety requirements applicable in the work• environment
- **KU3.** different legume, non legume and tree fodders that can be grown under given climatic conditions in the area.
- KU4. fodder production schedule for year round availability of green fodder
- KU5. indenting and arranging inputs like seeds, fertilizers and FYM etc for growing fodder
- KU6. diseases and pests of fodder crops and their control
- KU7. optimum time and stage of harvesting fodder crop
- KU8. factors affecting the quality of conserved fodder
- **KU9.** types and functions of tillage, sowing, harvesting, transport, chaffing, and, silage and hay making machinery and equipment
- KU10. types and application of personal protective equipment
- **KU11.** environmental risks and impacts on forage conservation.

Generic Skills (GS)

User/individual on the job needs to know how to:

- **GS1.** mention the data which are required for record keeping purpose
- GS2. report problems to the appropriate personnel in a timely manner
- **GS3.** read instruction manuals warning symbols for chemical use, machinery, hand tool and equipments
- **GS4.** Prioritize harvesting in different patches
- **GS5.** choose work procedures
- **GS6.** select appropriate machinery, hand tools and personal protection devices considering safety requirements and materials being used







- **GS7.** schedule fodder production and conservation activities and drawing up priorities sowing times
- **GS8.** manage relationships with co workers and managers of the who may be stressed, frustrated, confused or angry







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
cultivation of fodder crops	12	6	-	6
PC1. identify legume, non-legume and tree fodder crops suitable to local climatic conditions	-	-	-	-
PC2. perform tillage operations for growing fodder crops	-	-	-	-
PC3. identify risk factors for spoilage in fodder crop through rains, floods, storms and plan preventive measures accordingly	-	-	-	-
PC4. identify fodder scarcity periods and prepare fodder production schedule	-	-	-	-
PC5. identify insect/pests of fodder crops and take preventive measures, ask for control measures.	-	-	-	-
PC6. identify crops with abnormal symptoms and ask for causes and remedies.	-	-	-	-
Harvesting and preparation of fodder.	9	13	-	12
PC7. plan and schedule harvesting of fodder for optimum outcome	-	-	-	-
PC8. perform harvesting of fodder in efficient manner	-	_	-	-
PC9. identify safety hazards and implement OHS (occupational health and safety) procedures for forage harvesting, transport and chaffing.	-	-	-	-
PC10. practice appropriate mix of dry-green, and legume-non legume fodders for better productivity	-	-	-	-
PC11. check equipment during harvesting operations regularly	-	-	-	-
conservation of fodder	8	11	-	9









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. identify various forage conservation techniques to ensure year round availability of feed and fodder	-	-	-	-
PC13. ensure favorable conditions suitable for forage conservation	-	-	-	-
PC14. prepare forage conservation machinery and equipment in accordance with manufacturer's specifications, Occupational Health and Safety (OHS) requirements.	-	-	-	-
PC15. prepare storage facility for selected forage conservation type	-	-	-	-
PC16. monitor weather conditions to determine optimum time for harvest and to ensure quality	-	-	-	-
PC17. prepare silage, hay and treat straw chemically	-	-	-	-
PC18. bale, wrap, compact, seal or store forage in accordance with storage plan	-	-	-	-
PC19. load, transport, and store/compact forage in accordance with OHS and quality requirements	-	-	-	-
PC20. store forage so as to minimize risk of spoilage and combustion	-	-	-	-
Closing Operations	4	4	-	6
PC21. dispose off all waste and debris to minimize environmental impacts	-	-	-	-
PC22. perform cleaning and service of machinery and ancillary equipment in accordance with manufacturer's specifications, OHS requirements and industry practice	-	-	-	-
PC23. collect representative sample for testing of stored forage for quality.	-	-	-	-
NOS Total	33	34	-	33









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N4119
NOS Name	cultivate and prepare forage for livestock
Sector	Agriculture
Sub-Sector	Dairying
Occupation	Dairy Farm Management
NSQF Level	3
Credits	1
Version	1.0
Last Reviewed Date	24/02/2022
Next Review Date	24/02/2025
NSQC Clearance Date	24/02/2022







AGR/N4120: Maintain safety and cleanliness at dairy farm

Description

This OS is for the dairy farmer who is responsible for maintaining cleanliness and health and safety of animals, self and co workers at workplace

Scope

The scope covers the following :

- Maintain clean and efficient dairy farm
- Render appropriate safety and emergency procedures

Elements and Performance Criteria

Maintain clean and efficient dairy farm.

To be competent, the user/individual on the job must be able to:

- **PC1.** perform basic cleanliness and sanitary checks before operations in sheds, parlours, and premises in general and report any major deviations the appropriate supervisor
- **PC2.** use appropriate protective clothing or equipment in performing various jobs in accordance with workplace policy.
- PC3. adopt prescribed procedure for cleaning
- PC4. clear clogged gullies, and drains
- PC5. ensure sanitary measures like foot dips, hand sanitisers, at entry points to sheds
- PC6. identify and isolate the animals suffering from diseases to isolation sheds as per policy
- **PC7.** perform cleaning and washing of animals as per schedules
- PC8. segregate and dispose waste at a designated place

Render appropriate safety and emergency procedures

To be competent, the user/individual on the job must be able to:

- **PC9.** assess risks prior to performing manual handling, and work according to currently recommended safety practice
- **PC10.** use equipment and materials safely and correctly and return the same to designated store when not in use
- PC11. dispose waste safely and correctly in a designated area
- PC12. follow preventive measures while using equipment and machinery
- PC13. follow procedures for dealing with accidents, storms, fires and emergencies
- **PC14.** follow evacuation and other emergency procedures as per company standard / workplace requirements
- PC15. report details of first aid administered in accordance with workplace procedures

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:









- **KU1.** relevant legislation, standards, policies, and procedures in work
- **KU2.** relevant health and safety requirements applicable in the work • environment
- **KU3.** own job role and responsibilities and sources for information pertaining to work
- KU4. importance of following health, hygiene, safety and quality standards
- KU5. personal hygiene and fitness requirements
- **KU6.** safe disposal methods for waste
- **KU7.** workplace procedures and requirements for the treatment of workplace injuries/illnesses.
- **KU8.** basic emergency first aid procedures

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1. mention the data which are required for record keeping purpose
- GS2. read instruction manual for hand tool and equipment
- GS3. identify need of first aid and render it accordingly
- **GS4.** manage relationships with co-workers and managers who maybe stressed, frustrated, confused or angry
- GS5. monitor and maintain the condition of tools and equipment
- GS6. assess situation & identify appropriate control measures







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Maintain clean and efficient dairy farm.	16	17	-	20
PC1. perform basic cleanliness and sanitary checks before operations in sheds, parlours, and premises in general and report any major deviations the appropriate supervisor	-	-	-	-
PC2. use appropriate protective clothing or equipment in performing various jobs in accordance with workplace policy.	-	-	-	-
PC3. adopt prescribed procedure for cleaning	-	-	-	-
PC4. clear clogged gullies, and drains	-	-	-	-
PC5. ensure sanitary measures like foot dips, hand sanitisers, at entry points to sheds	-	-	-	-
PC6. identify and isolate the animals suffering from diseases to isolation sheds as per policy	-	-	-	-
PC7. perform cleaning and washing of animals as per schedules	-	-	-	-
PC8. segregate and dispose waste at a designated place	-	-	-	-
Render appropriate safety and emergency procedures	15	17	-	15
PC9. assess risks prior to performing manual handling, and work according to currently recommended safety practice	-	_	-	-
PC10. use equipment and materials safely and correctly and return the same to designated store when not in use	-	-	-	-
PC11. dispose waste safely and correctly in a designated area	-	-	-	-
PC12. follow preventive measures while using equipment and machinery	-	-	-	-
PC13. follow procedures for dealing with accidents, storms, fires and emergencies	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. follow evacuation and other emergency procedures as per company standard / workplace requirements	-	-	-	-
PC15. report details of first aid administered in accordance with workplace procedures	-	-	-	-
NOS Total	31	34	-	35









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N4120
NOS Name	Maintain safety and cleanliness at dairy farm
Sector	Agriculture
Sub-Sector	Dairying
Occupation	Dairy Farm Management
NSQF Level	3
Credits	1
Version	1.0
Last Reviewed Date	24/02/2022
Next Review Date	24/02/2025
NSQC Clearance Date	24/02/2022







DGT/VSQ/N0101: Employability Skills (30 Hours)

Description

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

Scope

The scope covers the following :

- Introduction to Employability Skills
- Constitutional values Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

Elements and Performance Criteria

Introduction to Employability Skills

To be competent, the user/individual on the job must be able to:

PC1. understand the significance of employability skills in meeting the job requirements

Constitutional values - Citizenship

To be competent, the user/individual on the job must be able to:

PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices

Becoming a Professional in the 21st Century

To be competent, the user/individual on the job must be able to:

PC3. explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, selfmotivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.

Basic English Skills

To be competent, the user/individual on the job must be able to:

PC4. speak with others using some basic English phrases or sentences

Communication Skills

To be competent, the user/individual on the job must be able to:

- PC5. follow good manners while communicating with others
- PC6. work with others in a team









Diversity & Inclusion

To be competent, the user/individual on the job must be able to:

- PC7. communicate and behave appropriately with all genders and PwD
- PC8. report any issues related to sexual harassment

Financial and Legal Literacy

To be competent, the user/individual on the job must be able to:

- PC9. use various financial products and services safely and securely
- PC10. calculate income, expenses, savings etc.
- **PC11.** approach the concerned authorities for any exploitation as per legal rights and laws *Essential Digital Skills*

To be competent, the user/individual on the job must be able to:

- PC12. operate digital devices and use its features and applications securely and safely
- PC13. use internet and social media platforms securely and safely

Entrepreneurship

To be competent, the user/individual on the job must be able to:

PC14. identify and assess opportunities for potential business

PC15. identify sources for arranging money and associated financial and legal challenges *Customer Service*

To be competent, the user/individual on the job must be able to:

- PC16. identify different types of customers
- PC17. identify customer needs and address them appropriately
- PC18. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

To be competent, the user/individual on the job must be able to:

- PC19. create a basic biodata
- PC20. search for suitable jobs and apply
- PC21. identify and register apprenticeship opportunities as per requirement

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. need for employability skills
- KU2. various constitutional and personal values
- KU3. different environmentally sustainable practices and their importance
- KU4. Twenty first (21st) century skills and their importance
- KU5. how to use basic spoken English language
- KU6. Do and dont of effective communication
- KU7. inclusivity and its importance
- KU8. different types of disabilities and appropriate communication and behaviour towards PwD
- KU9. different types of financial products and services









- KU10. how to compute income and expenses
- **KU11.** importance of maintaining safety and security in financial transactions
- **KU12.** different legal rights and laws
- KU13. how to operate digital devices and applications safely and securely
- KU14. ways to identify business opportunities
- **KU15.** types of customers and their needs
- KU16. how to apply for a job and prepare for an interview
- **KU17.** apprenticeship scheme and the process of registering on apprenticeship portal

Generic Skills (GS)

User/individual on the job needs to know how to:

- **GS1.** communicate effectively using appropriate language
- GS2. behave politely and appropriately with all
- **GS3.** perform basic calculations
- **GS4.** solve problems effectively
- **GS5.** be careful and attentive at work
- GS6. use time effectively
- **GS7.** maintain hygiene and sanitisation to avoid infection







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	1	1	-	-
PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
Constitutional values – Citizenship	1	1	-	-
PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	1	3	-	-
PC3. explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
Basic English Skills	2	3	-	-
PC4. speak with others using some basic English phrases or sentences	_	-	-	-
Communication Skills	1	1	-	-
PC5. follow good manners while communicating with others	-	-	-	-
PC6. work with others in a team	-	-	-	-
Diversity & Inclusion	1	1	-	-
PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8. report any issues related to sexual harassment	-	-	-	-
Financial and Legal Literacy	3	4	-	-
PC9. use various financial products and services safely and securely	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. calculate income, expenses, savings etc.	-	-	-	-
PC11. approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
Essential Digital Skills	4	6	-	-
PC12. operate digital devices and use its features and applications securely and safely	-	-	-	-
PC13. use internet and social media platforms securely and safely	-	-	-	_
Entrepreneurship	3	5	-	-
PC14. identify and assess opportunities for potential business	-	-	-	-
PC15. identify sources for arranging money and associated financial and legal challenges	-	-	-	-
Customer Service	2	2	-	-
PC16. identify different types of customers	-	-	-	-
PC17. identify customer needs and address them appropriately	-	-	-	-
PC18. follow appropriate hygiene and grooming standards	-	-	-	-
Getting ready for apprenticeship & Jobs	1	3	-	-
PC19. create a basic biodata	-	-	-	-
PC20. search for suitable jobs and apply	-	-	-	-
PC21. identify and register apprenticeship opportunities as per requirement	-	-	-	-
NOS Total	20	30	-	-









National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0101
NOS Name	Employability Skills (30 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	2
Credits	1
Version	1.0
Last Reviewed Date	29/03/2023
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down the proportion of marks for Theory and Skills Practical for each PC.

2. The assessment for the theory part will be based on the knowledge bank of questions created by the SSC.

3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.

4. Individual assessment agencies will create unique question papers for the theory part for each candidate at each examination/training centre (as per assessment criteria below).

5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on this criterion.

6. To pass the Qualification Pack, every trainee should score a minimum of 50% of aggregate marks to successfully clear the assessment.







7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack

Minimum Aggregate Passing % at QP Level : 50

(**Please note**: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AGR/N4105.Performing Hand and Machine Milking	24	54	-	22	100	15
AGR/N4115.Prepare and maintain accommodation for livestock	32	43	0	25	100	15
AGR/N4116.Carry out proper management of the herd	44	27	0	29	100	15
AGR/N4117.Prepare and provide recommended feed and water to the livestock	38	37	0	25	100	10
AGR/N4118.Maintain health and productivity of livestock	28	39	0	33	100	20
AGR/N4119.cultivate and prepare forage for livestock	33	34	0	33	100	10
AGR/N4120.Maintain safety and cleanliness at dairy farm	31	34	0	35	100	10
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	5
Total	250	298	-	202	750	100







Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training







Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.









Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.