

Model Curriculum

QP Name: Dairy Farmer / Entrepreneur

QP Code: AGR/Q4101

QP Version: 4.0

NSQF Level: 4

Model Curriculum Version: 2.0

Sector	Agriculture & Allied
Sub-Sector	Dairying
Occupation	Dairy Farm Management
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/6121.0201
Minimum Educational Qualification and Experience	10th Class with 2 years of relevant Experience OR 10th Class Pass and pursuing continuous regular schooling OR 8th Class with 3 Years of relevant experience OR Previous relevant qualification of NSQF Level 3 with minimum education as 5th grade pass with 2 Years of Experience
Pre-Requisite License or Training	N/A
Minimum Job Entry Age	17 Years
Last Reviewed On	27/01/2022
Next Review Date	27/01/2025
NSQC Approval Date	27/01/2022
QP Version	4.0
Model Curriculum Creation Date	27/01/2022
Model Curriculum Valid Up to Date	27/01/2025
Model Curriculum Version	2.0
Minimum Duration of the Course	60 Hours
Maximum Duration of the Course	60 Hours

Module Details

Module 1: Introduction to the role of a Dairy Farmer/Entrepreneur

Bridge Module

Terminal Outcomes:

- Discuss the roles and responsibilities of Dairy Farmer/Entrepreneur

Duration: 03:00	Duration: 00:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none">• Describe the size and scope of the Dairy Industry and its market• Discuss the role and responsibilities of a Dairy Farmer/Entrepreneur• Identify various employment/business opportunities for a Dairy Farmer/Entrepreneur• Explain the process of milk procurement• Discuss the concept of clean and antibiotic free milk• Explain the opportunities and challenges in dairy business• List types of synthetic milk and its effects on human health	
Classroom Aids:	
Laptop, White Board, Marker, Projector	
Tools, Equipment and Other Requirements	

Module 2: Process of preparing and maintaining livestock accommodation

Mapped to AGR/N4101 v2.0

Terminal Outcomes:

- Describe the process of preparing and maintaining the Livestock Accommodation

Duration: 02:00	Duration: 02:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe the accommodation needs of livestock • Explain the different types of accommodation- Head-to-Head, Tail to tail • Describe the best balance between animal health and well-being and available resources • Describe the cleaning routine • Describe the process of waste segregation and waste management 	<ul style="list-style-type: none"> • Demonstrate preparing animal accommodation which achieves the best balance between animal health and well-being • Demonstrate maintaining accommodation in a safe and clean condition for livestock • Demonstrate replenishing materials and supplies as required by livestock • Show how to clean tools and equipment and maintain according to established workplace procedures
Classroom Aids:	
Laptop, White Board, Marker, Projector	
Tools, Equipment and Other Requirements	
Cattle Shed	

Module 3: Process of establishing and monitoring livestock within accommodation

Mapped to AGR/N4102 v2.0

Terminal Outcomes:

- Demonstrate how to establish and monitor livestock withing accommodation

Duration: 03:00	Duration: 02:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe the appropriate livestock accommodations required for each type of animal • Enlist the materials (e.g. bedding) and environmental conditions which animals need within their accommodation to maintain their health and well-being • Explain the different factors which should be taken into account when preparing accommodation in a safe, secure and clean state • Explain the safety procedures to be followed 	<ul style="list-style-type: none"> • Show how to check the suitable environment condition of the accommodation before establishing livestock within it • Demonstrate handling and moving the livestock correctly and safely • Show how to monitor environmental conditions carefully to ensure that they promote • Demonstrate arranging for regular cleaning of animal housing areas, floors and mats of animals (if any) according to the animal accommodation and specification
Classroom Aids:	
Laptop, White Board, Marker, Projector	
Tools, Equipment and Other Requirements	
Cattle Shed	

Module 4: Process of preparing feed for Livestock

Mapped to AGR/N4103 v2.0

Terminal Outcomes:

- Describe the process to prepare feed for livestock
- Demonstrate supplying feed and water to livestock

Duration: 02:00	Duration: 02:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe the feed composition and quality • Enlist the nutrients requirement for animals • Explain the correct methods for supplying feed and maintaining adequate levels • Describe the methods of cleaning and maintaining feeding and watering equipment in a fit condition • Explain the importance of ensuring all livestock have access to feed and water • Explain the importance of following health, hygiene, safety and quality standards • 	<ul style="list-style-type: none"> • Show how to mix the appropriate proportions of feed and feed supplements depending on the age and stage of growth of animal • Demonstrate preparing the correct amount of animal feed as directed in the Feeding Plan in a way that minimizes wastage • Show how to monitor the condition of feed and water and take the appropriate action when problems occur • Show how to clean and maintain feed and water equipment according to established workplace procedures
Classroom Aids:	
Laptop, White Board, Marker, Projector	
Tools, Equipment and Other Requirements	
Feed Components	

Module 5: Know-how of maintaining healthy performance of livestock

Mapped to AGR/N4104 v2.0

Terminal Outcomes:

- Monitor the health and well-being of livestock

Duration: 04:00	Duration: 02:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe the parameters of healthy animal and characteristics of different species • Describe the preventive care for maintaining the health and well-being of animals • Explain the significance of expiry dates on drugs and medications • Explain relevant legislation, standards and policies • Describe the correct method of waste segregation and waste disposal in eco-friendly way 	<ul style="list-style-type: none"> • Demonstrate maintaining the record of health check-up of the animal and treatment provided • Show how to administer drugs and medication according to veterinary instructions • Show how to identify a health emergency and correct actions to be taken
Classroom Aids:	
Laptop, White Board, Marker, Projector	
Tools, Equipment and Other Requirements	

Module 6: Practices for good hand and machine milking

Mapped to AGR/N4105 v2.0

Terminal Outcomes:

- Describe the process of procuring and sourcing feed for livestock

Duration: 04:00	Duration: 02:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain the feed quality and composition required for feeding animals at different stages • Describe the feed composition and quality • Explain the arrangement for various feed and feed supplements essential for animal nutrition and growth • Describe assessment of the quality and stock level of feed regularly • Explain the fodder cultivation schedule and sourcing of fodder 	<ul style="list-style-type: none"> • Demonstrate the identification and procurement of the inputs required for the feed preparation • Demonstrate the arrangement for various feed and feed supplements essential for animal nutrition and growth • Show how to monitor the condition of feed and water and take the appropriate action when problems occur • Show how to follow supplier/expert’s recommendations and workplace norms for feed storage
Classroom Aids:	
Laptop, White Board, Marker, Projector	
Tools, Equipment and Other Requirements	
Milking Machine, Hot Water	

Module 7: Process of Forage Conservation

Mapped to AGR/N4106 v2.0

Terminal Outcomes:

- Describe the activities of fodder conservation

Duration: 02:00	Duration: 02:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe the method of hay making, silage preparation and treatment of straw • Describe the different methods of storing the forage • Describe the various types and functions of equipment and machinery used in silage and haymaking • Describe about common weeds, pests and diseases associated with crops and pastures • Describe the measures to minimize risk of spoilage and combustion during storage • Describe the correct method of waste segregation and waste disposal in eco-friendly way 	<ul style="list-style-type: none"> • Show how to identify and use the tools and equipment for preparation of forage • Show how to clean and service machinery and ancillary equipment according to the standards
Classroom Aids:	
Laptop, White Board, Marker, Projector	
Tools, Equipment and Other Requirements	
Forage	

Module 8: Practices of Breed improvement of livestock

Mapped to AGR/N4114 v1.0

Terminal Outcomes:

- Describe practices of breed improvement and reproductive performance of livestock

Duration: 05:00	Duration: 02:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain relevant legislation, standards, policies and procedures in the workplace • Describe breed improvement methods and their suitability for different animals • Describe the various factors which influence the breeding efficiency • Explain various factors affecting the reproductive performance of animals • Describe various materials and equipment required in the process • Describe potential hazards related to the reproduction and well-being of animals caused by humans or other animals • Explain the measures to ensure hygiene and sanitation standards 	<ul style="list-style-type: none"> • Show how to choose appropriate breed improvement program • Demonstrate adapting suitable measures for insemination of animals
Classroom Aids:	
Laptop, White Board, Marker, Projector	
Tools, Equipment and Other Requirements	
Cattle shed, Lab	

Module 9: Process of planning, budgeting and marketing

Mapped to AGR/N4107 v2.0

Terminal Outcomes:

- Demonstrate the business activities of dairy farm
- Describe the process of planning the dairy enterprise/ business.
- Describe the process of managing the dairy production process.
- Describe the process of managing the post-production and marketing processes.

Duration: 03:00	Duration: 2:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain how to analyse the demand and supply of the relevant dairy produce in the market • Describe the process of identifying the target customers and assess their needs and expectations with respect to the quality and price of the produce. • Explain how to identify various types of dairy entrepreneurship/ business opportunities. • Explain how to prepare a basic business plan for dairy entrepreneurship/business activities. • State the appropriate sources of funding for the dairy entrepreneurship/ businesses • State the relevant government schemes and programs • Explain the importance of ensuring compliance with the government structural reforms and • framework, along with the applicable rules and regulations. • List various resources required for dairy production • Describe the process of planning dairy production and the use of relevant technologies to enhance production • Explain the importance of ensuring 	<ul style="list-style-type: none"> • Demonstrate how to analyse the demand and supply of the relevant dairy produce in the market. • Prepare a sample basic business plan for dairy entrepreneurship/business activities. • Demonstrate how to calculate the costs incurred and determine the price of the product for profitability. • Prepare a sample marketing plan considering the 4Ps i.e., product, price, promotion, and place and 4As i.e., acceptability, affordability, accessibility, and awareness. • Demonstrate the process of using the relevant digital services such as e-commerce, e-payments, electronic recordkeeping, etc.

Module 10: Practices of collective farming and creating farmer groups

Mapped to AGR/N4121 v1.0

Terminal Outcomes:

- Demonstrate creating the different farmer groups
- Describe the activities of collective dairy farming

Duration: 04:00	Duration: 00:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe the process of forming PG/FIG/SHG, their management, and operation • Describe the various laws and regulation regarding PG/FIG/SHG • Describe the importance of organizing the meetings and training of PG/FIG/SHG • Describe the process of group’s credit facility and the concept of group owned bank • Enlist core collective farming activities • Explain the concept and benefits of forward and backward linkages • Explain the benefits of value addition 	
Classroom Aids:	
Laptop, White Board, Marker, Projector	
Tools, Equipment and Other Requirements	

Module 11: Employability Skills (12 hours)

Mapped to NOS DGT/VSQ/N0102 v1.0

Duration: 12:00

Key Learning Outcomes

Introduction to Employability Skills Duration: 1 Hours

After completing this programme, participants will be able to:

1. Discuss the Employability Skills required for jobs in various industries
2. List different learning and employability related GOI and private portals and their usage

Constitutional values - Citizenship Duration: 1 Hours

3. Explain the constitutional values, including civic rights and duties, citizenship, responsibility towards society and personal values and ethics such as honesty, integrity, caring and respecting others that are required to become a responsible citizen
4. Show how to practice different environmentally sustainable practices.

Becoming a Professional in the 21st Century Duration: 1 Hours

5. Discuss importance of relevant 21st century skills.
6. Exhibit 21st century skills like Self-Awareness, Behavior Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn etc. in personal or professional life.
7. Describe the benefits of continuous learning.

Basic English Skills Duration: 03 Hours

8. Show how to use basic English sentences for everyday conversation in different contexts, in person and over the telephone
9. Read and interpret text written in basic English
10. Write a short note/paragraph / letter/e -mail using basic English

Career Development & Goal Setting Duration: 1 Hours

11. Create a career development plan with well-defined short- and long-term goals

Communication Skills Duration: 2 Hours

12. Demonstrate how to communicate effectively using verbal and nonverbal communication etiquette.
13. Explain the importance of active listening for effective communication
14. Discuss the significance of working collaboratively with others in a team

Diversity & Inclusion Duration: 1 Hours

15. Demonstrate how to behave, communicate, and conduct oneself appropriately with all genders and PwD
16. Discuss the significance of escalating sexual harassment issues as per POSH act.

Financial and Legal Literacy Duration:2 Hours

17. Outline the importance of selecting the right financial institution, product, and service
18. Demonstrate how to carry out offline and online financial transactions, safely and securely
19. List the common components of salary and compute income, expenditure, taxes, investments etc.