Model Curriculum

QP Name: Livestock Service Provider

QP Code: AGR/Q4804

Version: 7.0

NSQF Level: 4

Model Curriculum Version: 2.0

Agriculture Skill Council of India || Agriculture Skill Council of India (ASCI), 6th Floor, GNG Tower, Plot No. 10, Sector - 44

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Training Parameters

Sector	Agriculture
Sub-Sector	Animal Husbandry
Occupation	Livestock Health Management
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/6116
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 relevant experience
Pre-Requisite License or Training	NA
Minimum Job Entry Age	17 Years
Last Reviewed On	17/11/2021
Next Review Date	25/11/2024
NSQC Approval Date	25/11/2021
QP Version	7.0
Model Curriculum Creation Date	25/11/2021
Model Curriculum Valid Up to Date	25/11/2024
Model Curriculum Version	2.0
Minimum Duration of the Course	510 Hours
Maximum Duration of the Course	570 Hours

Program Overview

This section summarizes the end objectives of the program along with its duration.

Training Outcomes

At the end of the program, the learner should have acquired the listed knowledge and skills to:

- Provide preventive care to livestock and poultry as per the guideline of the Veterinarian.
- Provide primary first aid / essential curative treatment to livestock and poultry.
- Assist public agencies in animal disease control
- Assist in animal husbandry extension
- Assist in the implementation of guidelines related to animal welfare
- Assist in breed conservation
- Assist in disaster management
- Assist in the implementation of development programs.
- Assist in marketing livestock farm inputs and products
- Assist in the implementation of animal breeding services in small farm animals as per guidelines.

Compulsory Modules

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
AGR/N4801: Controlling/restraining / examination of animals NOS Version-2.0 NSQF Level-4	**10:00**	**20:00**	**0:00**	**00:00**	**30:00**
(Bridge Module) Module 1: Introduction	5:00	01:00	0:00	0:00	06:00
Module 2: Controlling, restraining and examination of animals	5:00	19:00	0:00	00:00	24:00
AGR/N4802: Conducting vaccination and implementing regular preventive health care program NOS Version-2.0 NSQF Level-4	**20:00**	**40:00**	**0:00**	**00:00**	**60:00**

Module 3: Conducting vaccination and implementing regular preventive health care program	20:00	40:00	0:00	00:00	60:00
AGR/N4805: Veterinary First Aid **NOS Version- 2.0** **NSQF Level- 4**	**20:00**	**40:00**	**0:00**	**00:00**	**60:00**
Module 4: Veterinary First Aid	20:00	40:00	0:00	00:00	60:00
AGR/N4807: Assisting government agencies in animal disease control with One Health approach **NOS Version-2.0** **NSQF Level-4**	**20:00**	**10:00**	**0:00**	**00:00**	**30:00**
Module 5: Assisting government agencies in animal disease control with 'One Health' approach	20:00	10:00	0:00	00:00	30:00
AGR/N4808: Assisting in veterinary extension services **NOS Version-2.0** **NSQF Level-4**	**20:00**	**40:00**	**0:00**	**00:00**	**60:00**
Module 6: Assisting in Veterinary extension services	20.00	40.00	0.00	00.00	60.00
AGR/N4810: Development program implementation and marketing in the livestock sector **NOS Version-3.0** **NSQF Level-4**	**20:00**	**10:00**	**0:00**	**00:00**	**30:00**
Module 7: Development program implementation and marketing in livestock sector	20.00	10.00	0.00	00.00	30.00
AGR/N4823: Assisting in Animal Welfare, Breed Conservation, and Disaster	**10:00**	**20:00**	**0:00**	**00:00**	**30:00**

NOS and Module Details					
Management **NOS Version-1.0** **NSQF Level-4**					
Module 8: Assisting in animal welfare, breed conservation and disaster management.	10.00	20.00	0.00	0.00	30.00
DGT/VSQ/N0102 **Employability Skills** **NOS Version-1.0** **NSQF Level-4**	**60:00**	**00:00**	**0:00**	**0:00**	**60:00**
Module 9: Employability Skills	60:00	00:00	0:00	0:00	60:00
Module 10: On-the-Job Training	**00:00**	**00:00**	**150:00**	**00:00**	**150:00**
Total Duration	**180:00**	**180:00**	**150:00**	**0:00**	**510:00**

Option: Implementation of animal breeding services in small farm animals

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
AGR/N4821: **Implementation of animal breeding service** **NOS Version-2.0** **NSQF Level-4**	**30:00**	**30:00**	**0:00**	**00:00**	**60:00**
Module 11: Implementation of animal breeding services in small farm animals (if required)	30.00	30.00	0.00	00.00	60.00
Total Duration	**30:00**	**30:00**	**0:00**	**00:00**	**60:00**

Module Details

Module 1: Introduction to the role of Livestock Service Provider
Bridge Module, Mapped to AGR/N4801 v2.0

Terminal Outcomes:

- The trainee will be able to explain the scope, job role, societal and professional responsibility of a Livestock Service Provider

Duration: 05:00	Duration: 1:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Practice general Discipline in the classroom (Do's & Don'ts) - Recognize the importance of rural Livelihood and livestock farming. - Identify village institutions, list and assess resources for effective service delivery - Recognize the scope and demand of veterinary service and animal husbandry extension. - Explain the likely career path of a Livestock Service Provider - Describe and adhere to Laws/rules related to Minor Veterinary Practice / Drug dispensing and appreciate the importance of supervision by Veterinarians. - Summarise the role and responsibility of a Livestock Service Provider - Appreciate the importance of continuous learning, skill acquisition, and use the support system for the referral.	Demonstrate social awareness and communication skills
Classroom Aids	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop	
Tools, Equipment and Other Requirements	
NA	

Module 2: Controlling, restraining, and examination of animals

Mapped to AGR/N4801 v2.0

Terminal Outcomes:

- The trainee will be able to perform controlling, restraining, and examination of animals as per standard protocol

Duration: 5:00	Duration: 19:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Describe signs of fear, pain, stress, and discomfort in farm animals - Describe common behaviors of farm animals - Identify external body parts and describe the organ systems of farm animals. - Estimate flight zone and point of balance and apply methods to approach, restrain, move various farm animals - Describe tools for securing animals. - Describe precautions to be taken during restraining and conform to animal welfare guidelines - Describe the health examination process and normal physiological values/findings for routine health examinations. - Follow personal safety guidelines and use personal protective equipment.	- Prepare examination area and ensure the upkeep of tools and equipment following guidelines. - Observe environment and communicate with owner/client to record history and signalment, e.g., breed, age, sex, color, and production class of animals. - Demonstrate ways to approach and control/hold a farm animal using tools/equipment. - Examine animals topographically following protocols and record findings

Classroom Aids
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop

Tools, Equipment, and Other Requirements
Animal casting kit

Module 3: Conducting vaccination and implementing the regular preventive health care program
Mapped to AGR/N4802 v2.0

Terminal Outcomes:

- The trained will be able to perform vaccination and other regular preventive animal health services under the supervision of veterinarians following approved government / organizational guidelines.

Duration: 20:00	Duration: 40:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Describe different causes and ways of transmission of diseases. - List risk factors of common endemic diseases. - Identify common diseases of animals. - Describe various zoonotic diseases. - Explain the concept of notifiable disease. - Describe the preventive measures to control diseases in animals (Explain Common measures, e.g., biosecurity, vaccination) and the value of practicing the same. - Describe approved traditional practices of farmers to prevent livestock diseases in farms. - Describe preventive measures adopted in wild, free-range animals and domestic animals in forest fringe areas. - Describe steps of vaccination process (e.g., factor to consider in scheduling vaccination, vaccination procedure, pre & post-vaccination care) - Describe the prerequisite for the success of vaccination. - Describe state government/supervisors guideline related to control of diseases/reporting requirements which is locally in force. - Explain Herd health approach - Describe data and why it is important? Or Why should one maintain data of health intervention? - Describe common livestock health records to be maintained. - Describe the different components of record-keeping (e.g., health, breeding, production)	- Demonstrate the methods for animal identification, e.g., ear tagging, ear notching, etc. - Record data using a mobile-based data collection tool. - Present collected data as per given format - Communicate risk factors of common endemic disease to farmers/traders. - Observe environment and communicate with owner/client to record history and signalment, e.g., breed, age, sex, color, and production class of animals. - Demonstrate the procedure of routine observation in a farm setting (e.g., housing, floor, farm environment, etc.) for preventive actions. - Identify diseased/sick animals. - Prepare a livestock vaccination calendar suggested for the district/state. - Demonstrate various routes for vaccine administration / Perform common vaccination in livestock and poultry following organizational SOP. - Communicate/defend on vaccination failure - Participate in post-vaccination evaluation programs. - Identify anemia (Use of FMACHA scoring) - Administer deworming and demonstrate the use of ectoparasiticide as per organizational SOP.
Classroom Aids	

Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop
Tools, Equipment, and Other Requirements
Ear tag, Ear notcher, Thermometer, Paper, Pen, Syringe, Needle

Module 4: Veterinary First Aid

Mapped to AGR/N4805 v2.0

Terminal Outcomes:

- The trained will be bale to perform first aid treatment/emergency care during emergency conditions under the supervision of veterinarians following approved government / organizational guidelines.

Duration: 20:00	Duration: 40:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Define the meaning of emergency conditions and predisposing factors related to the cause of a disease with some suitable examples. - Define a healthy animal from a diseased animal. - Describe various common symptoms of disease and their basic treatments in emergency conditions (As per instruction/manual prepared by a veterinarian) - Describe the importance of record keeping. - Classify the available approved traditional medicinal products and practices to apply in an emergency. - Explain how to prepare a standard first aid kit and its applications. - Describe the safety measures to be taken during an emergency or during giving first aid. - Explain the common approaches in handling poisoning and natural calamities.	- Demonstrate how to prepare an antiseptic solution for cleaning and washing of muzzle, hooves, mouth, etc. - Demonstrate how to prepare a datasheet/ fill up health monitoring proforma. - Demonstrate cardiopulmonary resuscitation (CPR) for small and newborn animals. - Practice handling of superficial wounds / Abscess. - Demonstrate ways to approach and handle fractures and horn injuries. - Demonstrate the first aid during animal birth. - Demonstrate ways to approach and handle poisoning cases, sun-stroke, electrocution, burn injuries, etc. - Demonstrate initial ways to handle prolapse of the uterus to clean, prevent bleeding and protect the wound. - Demonstrate ways to calculate the bodyweight of animals. - Demonstrate different routes for the administration of medicine as suggested by a veterinarian (Oral/ Subcutaneous / Intramuscular)
Classroom Aids:	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop, Kit required to demonstrate first aid.	
Tools, Equipment, and Other Requirements	
Syringe, Needle, Antiseptic solutions, Bandage, Cotton, Gauge, Intravenous infusion set, scalp vein set, Normal saline solution/Dextrose saline solution	

Module 5: Assisting government agencies in animal disease control with 'One Health' approach

Mapped to AGR/N4807 v2.0

Terminal Outcomes:

The trainee will be able to:

- Perform various planned government activities required for the control of a disease.
- Perform cleaning and disinfection of farm premises, proper disposal of the carcass.
- Assist in disease surveillance, monitoring, and epidemiological field data collection.

Duration: 20:00	Duration: 10:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Describe the concept of disease risk and risk analysis. - Describe the concept of One Health. - Describe the concept of bio-security and bio-safety. - Explain the modes of bio-security norms implementation in farms, livestock markets. - Define the idea of population, sample, and sampling. - Define the meaning of disease outbreak, morbidity, and mortality. - Describe the concept basic of the livestock value chain and explain the risks associated with animal transport. - Define the purpose of disease surveillance, monitoring, and epidemiological field data collection. - Explain the risk associated with the livestock markets. - Classify different categories of disease and explain how to report them by using a standard format.	- Practice recording and reporting of animal movement routes as per standard format (record keeping and reporting) - Practice mock reporting of disease using a mobile application or other approved means. - Demonstrate the procedures for cleaning and disinfection of farm premises/local area. - Record risky practices in a livestock market - Identify local resources that can help the government during disease control initiatives. - Illustrate the methods for culling and disposal of animals/birds.
Classroom Aids:	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
Tools, Equipment, and Other Requirements	
Kit required for practical demonstration of culling, disposal, disinfection, etc.	

Module 6: Assisting in veterinary extension services
Mapped to AGR/N4808 v2.0

Terminal Outcomes:

- The trainee will be able to practice record-keeping, use audiovisual aids, prepare program reports, fill out datasheet and survey form following approved government / organizational guidelines.

Duration: 20:00	Duration: 40:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Explain the meaning of KASA (Knowledge, Attitude, Skills, and Action) - Explain leadership qualities. - Define the meaning of extension and what it involves. - Explain extension-related schemes and institutions within the district/state. - Explain the production cycle in farm animals. - Explain the basics of livestock housing, feeding, breeding, and general farm management. - Explain points to be considered for the selection of breeding animals to farm with. - Describe the applications and benefits of commonly approved technologies in feeding, breeding, and other best practices (including organic practices (s) in various situations/opportunities/constraints - Explain the concept of quality and various parameters/components associated with quality farm input - Describe the importance of record-keeping Or Why should one maintain records of different farmer meeting/school activities? - Describe the different components of record-keeping (e.g., targeted and need-based)	- Demonstrate the applications of mobile and other technologies (e.g., modern communication devices or audiovisual aids) - Demonstrate how to prepare a brief field program report, fill datasheet and survey form. - Identify various fodder species and livestock feed ingredients. - Conduct organoleptic testing of feed - Use mobile application for ration balancing - Demonstrate fodder preservation, enrichment, and silage making. - Illustrate economic housing models prescribed for various species within the region/state. - Illustrate body condition scoring - Demonstrate hygienic milking and livestock product handling. - Illustrate different modes (e.g., mobile application, websites, brochures, pamphlets, information sheet, etc.) to transfer knowledge Or educate farmers/clients to avail different technology - Assist in conducting a participatory rural appraisal.
Classroom Aids:	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
Tools, Equipment, and Other Requirements	
Paper, pen, datasheet, manual, brochures/pamphlets, mobile, audiovisual aids	

Module 7: Development program implementation and marketing in the livestock sector
Mapped to AGR/N4810 v3.0

Terminal Outcomes:

The trainee will be able to

- Assist veterinarian and supervise other workers in implementation of development program.
- Participate in sales / marketing of livestock farm inputs e.g. feed
- Support producers on the marketing of livestock products, e.g., Milk, Meat, Egg, etc.

Duration: 20:00	Duration: 10:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- State expectation from a development worker - State the purpose of development program implementation and Sustainable development goal. - Explain basic aspects of development project management - Describe business planning - Describe guidelines for setting the price of products - Explain how to promote demand for livestock products in the market. - Describe various marketing task - Describe the basics of project development and management.	- Observe and record the implementation of various livestock and rural development programs at the village level. - Observe and record functioning of a Self Help Group - Conduct programs to promote development schemes of government to potential beneficiaries. - Conduct mock selling of any compound feed brand available in the local market - Practice promotion of a livestock insurance product to farmers. - Illustrate livestock product markets within the district/state. - Prepare a basic business plan to set up a livestock-linked enterprise.

Classroom Aids:
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop

Tools, Equipment and Other Requirements
Mobile/Electronic gadgets, Paper, Pen, Datasheet, Manual

Module 8: Assisting in Animal Welfare, Breed Conservation, and Disaster Management

Mapped to AGR/N4823 v1.0

Terminal Outcomes:

The trainee will be able to:

- Practice animal welfare, record, and document animal cruelty.
- Identify purebred indigenous animals.
- Support wildlife conservation
- Perform various activities related to disaster management.

Duration: 10:00	Duration: 20:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Define the concept of animal welfare along with the five freedoms. - Define the meaning of cruelty to animals and explain cruelty with the help of a suitable example. - Describe human-animal conflict and different ways for its management. - Explain how to recognize purebred indigenous animals and describe the importance of indigenous livestock. - Explain human-animal conflict and describe the importance of the conservation of wildlife. - Describe various factors related to animal housing along with the special requirements for disabled/recumbent animals in Goshala's - Describe the basic concept and ways of disaster management. - Explain various rules and regulations related to animal welfare and wildlife conservation	- Demonstrate how to prepare a brief report and read government guidelines. - Demonstrate how to explain farmers/animal owners on disaster management issues. - Practice various activities related to disaster management. - Demonstrate routine works in a goshala (Cattle shelter) - Demonstrate the use of mobile/electronic gadgets during a disaster.
Classroom Aids:	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
Tools, Equipment and Other Requirements	
Mobile/Electronic gadgets, Paper, Pen, Manual	

Module 9: Employability Skills (60 hours)

Mapped to NOS DGT/VSQ/N0102 v1.0

Duration: 60:00
Key Learning Outcomes

Introduction to Employability Skills Duration: 1.5 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: 1.5 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: 2.5 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: 10 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: 2 Hours
11. Create a career development plan with well-defined short- and long-term goals

Communication Skills Duration: 5 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: 2.5 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:5 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.
20. Discuss the legal rights, laws, and aids

Essential Digital Skills Duration: 10 Hours

21. Describe the role of digital technology in today's life

22. Demonstrate how to operate digital devices and use the associated applications and features, safely and securely

23. Discuss the significance of displaying responsible online behavior while browsing, using various social media platforms, e-mails, etc., safely and securely

24. Create sample word documents, excel sheets and presentations using basic features

25. utilize virtual collaboration tools to work effectively

Entrepreneurship Duration: 7 Hours

26. Explain the types of entrepreneurship and enterprises

27. Discuss how to identify opportunities for potential business, sources of funding and associated financial and legal risks with its mitigation plan

28. Describe the 4Ps of Marketing-Product, Price, Place and Promotion and apply them as per requirement

29. Create a sample business plan, for the selected business opportunity

Customer Service Duration: 5 Hours

30. Describe the significance of analysing different types and needs of customers

31. Explain the significance of identifying customer needs and responding to them in a professional manner.

32. Discuss the significance of maintaining hygiene and dressing appropriately

Getting Ready for apprenticeship & Jobs Duration: 8 Hours

33. Create a professional Curriculum Vitae (CV)

34. Use various offline and online job search sources such as employment exchanges, recruitment agencies, and job portals respectively

35. Discuss the significance of maintaining hygiene and confidence during an interview

36. Perform a mock interview

37. List the steps for searching and registering for apprenticeship opportunities

Module 10: Implementation of animal breeding services in small farm animals (Optional)

Mapped to AGR/N4821 v2.0

Terminal Outcomes:

The trainee will be able to:

- Guide farmers on small animal breeding plans, including pre-breeding-related activities such as breeder database maintenance, quality animal selection for breeding, artificial insemination in small ruminants, and breeding-related performance monitoring.

Duration: 30:00 hrs	Duration: 30:00 hrs
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Describe the basics of the reproductive system in small farm animals. - Describe the production cycle in small animals. - Describe basic concepts of genetics. - Describe the parameters related to the selection of breeding animals and explain how one can assist the farmers/clients in selective breeding of small farm animals - Explain how to assess the right artificial insemination (AI) time in small farm animals. - Describe the procedures/protocols in conducting artificial insemination (AI) in goats and pigs, including biosecurity, safety, hygiene, and animal welfare. - Describe parturition in goats, sheep and farrowing in pigs - Describe the common infertility issues in small farm animals - Explain how one can guide the farmers regarding the management of infertility in small farm animals.	- Demonstrate how to examine various reproductive organs in small farm animals - Identify signs of heat in sheep, goats, pigs - Practice analysis of appropriate quality of semen for artificial insemination (AI). - Demonstrate how to handle semen straw while conducting artificial insemination (AI). - Practice artificial insemination (AI). - Record field data using mobile-based data collection or electronic reader. - Demonstrate ways of approach or handle the difficulties related to animal birth in small farm animals.
Classroom Aids:	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
Tools, Equipment, and Other Requirements	
AI Kit, Straw, Semen, Animal for demonstration purpose (both male and female)	

Module 11: On-the-Job Training (Recommended) Suggested activities:

Controlling/restraining/examination of animals (30 hrs)

1. Work in a hospital or outdoor work setting and practice animal control and restraining.
2. Maintain a diary and record the detail of history, health examination finding while attending 15 live cases each for various species under the supervision of a veterinarian.

Conducting vaccination and implementing the regular preventive health care program (20 hrs.)

1. Work with a suitable agency and participate in animal identification/tagging related works
2. Work with a suitable agency implementing projects involving the use of mobile devices for animal data collection.
3. Participate in at least three camps and perform vaccination of livestock
4. Visit at least three organized dairy, goat, pig, and poultry farms and record observation and scope of improvement in biosecurity.

Veterinary First Aid (20 hrs.)

1. Work in hospital or animal rescue units and practice basic first aid and suggested drug administration activities under the guidance of veterinarians.
2. Perform at least two superficial wound dressings.
3. Attend at least 3 cases of animal birth and provide care to newborn
4. Work with a practicing veterinarian and assist him/her in correcting at least three uterine prolapse cases.

Assisting government agencies in animal disease control with the 'One Health' approach (10 hrs.)
1. Participate in cleaning and disinfection of a farm or livestock market premise
2. Work with an agency to collect disease surveillance-related data
3. Work with supervising veterinarians to practice collection and dispatch of laboratory samples

Assisting in Veterinary extension services (10 hrs)

1. Collect samples of various feed ingredients and practice organoleptic quality testing
2. Visit fodder plots and record practices.
3. Attend livestock expo and collect information related to various livestock farm inputs
4. Practice mobile applications for ration balancing

Assisting in animal welfare, breed conservation, and disaster management. (20 hrs)

1. Work in a Goshala (Cattle shelter) and practice day to day routine operations
2. Participate in at least one disaster management camps (e.g., flood relief)

Implementation of animal breeding services in small farm animals (40 hrs)

1. Perform a minimum of 10 artificial inseminations in small animals (e.g., goat, pig) in the field situation.
2. Collect details of various feed supplements and their uses/benefits in improving productivity.

ANNEXURE

Trainer Requirements

Minimum Educational Qualification of the Trainer	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
10th class		7	Animal welfare	0		Animal Health Worker with 7 Years experience ofworking with registered Corporates or Not for Profit Organizations after 10th Pass
Diploma	Veterinary /Animal Husbandary / Dairying	5	Animal welfare	0		Regular Diploma more than 15 months inveterinary /AnimalHusbandary /Dairying Ex-Service-Man including Ex-Paramilitary personnel: Minimum Qualification is 10+2 with anHonorable Discharge/Pension. SSC would considera relaxation/waiverof sector specificexperience on case to case basis.
Graduate	Agriculture	4	Animal welfare	0		For school Programminimum qualification ofTrainer should beGraduate in (Agriculture/Zoology). Their Teachingexperience will be considered industry experience
B. Tech	B. Tech (Dairy)	3	Animal welfare	0		

B. V. Sc.		1	Animal welfare	0		
Post Graduate	Animal science	0		0		

<table>
<tr><td colspan="2" align="center">Trainer Certification</td></tr>
<tr><td>Domain Certification</td><td>Platform Certification</td></tr>
<tr><td>Certified for Job Role "Livestock Service Provider", mapped to QP: "AGRQ4804, v7.0", Minimum accepted scoress is 80%</td><td>Recommended that the Trainer is certified for the Job Role: "Trainer (Vet & Skills)", mapped to the Qualification Pack: "MEP/Q2601, v2.0". Minimum accepted score as per MEPSC guidelines is 80%.</td></tr>
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Assessor Requirements

Assessor Prerequisites - Livestock Service Provoider						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
		Years	*Specialization*	*Years*	*Specialization*	
B. V. Sc.		4	In Animal Science/Veterinary Science /related experience	0		Practical skills and knowledge required in preventive health care, assistance in contagious disease control and basic first aid services to farm animal
M. V. Sc		2	In Animal Science/Veterinary Science /related experience	0		Practical skills and knowledge required in preventive health care, assistance in contagious disease control and basic first aid services to farm animal
Ph. D	Veterinary Science/Animal Husbandry/ Veterinary Clinical Medicine/Veterinary Clinical Sciences	1	In Animal Science/Veterinary Science /related experience	0		Practical skills and knowledge required in preventive health care, assistance in contagious disease control and basic first aid services to farm animal

Assessor Certification	
Domain Certification	**Platform Certification**
"**Livestock Service provider**", "AGR/Q4804, v7.0", Minimum accepted score is 80%	Certified for the Job Role: "Assessor (Vet & Skills)", mapped to the Qualification Pack: "MEP/Q2701, v2.0", with a minimum score of 80%.

Assessment Strategy

Assessment System Overview

In Agriculture Sector it is of ultimate importance that individuals dealing with crop production or livestock have the requisite knowledge and competencies to undertake the task. Based on the Assessment Criteria, SSC in association with empaneled AAs, define the test structure for the given job roles to cover the required skills and competencies. Assessment strategy consists of the following:

1. <u>Multiple Choice Questions</u>: To assess basic knowledge (Objective/Subjective)
2. <u>Viva:</u> To assess awareness on processes (Oral and/or written questioning)
3. <u>Practical:</u> To evaluate skills and identify competencies. (Observation)

Assessments for knowledge and awareness on processes may be conducted through 'real-time' internet-based evaluation or by conducting the same 'offline' through TABs. Skills and competencies are to be assessed by conducting 'practical' on the ground through qualified and ToA certified assessors.

An individual must have adequate knowledge and skills to perform a specific task; weightage for different aspects of the assessment is given as follows:

- Multiple Choice Questions: 20%-30%, depending on the specific QP
- Viva: 20%
- Practical: 50% - 60% (Involves demonstrations of applications and presentations of procedures/tasks and other components)
- Assessment will be carried out by certified assessors through empanelled assessment partners. Based on the results of the assessment; ASCI will certify the learners/candidates

Testing Environment

Assessments are conducted on laptops, Mobiles and android tablets via both offline and online mode depending on the internet connectivity at the assessment location.

In remote locations/villages, assessments get delivered through tablets without the requirement of the Internet.

- Multilingual assessments (ASCI is conducting the assessments in 13 + languages pan India)
- Rubric driven assessments in Practical/Viva sections and responses recorded accordingly
- All responses, data, records and feedback stored digitally on the cloud
- Advanced auto-proctoring features – photographs, time-stamp, geographic-tagging, toggle- screen/copy-paste disabled, etc.
- Android-based monitoring system
- End to end process from allocation of a batch to final result upload, there is no manual intervention

- Assessment will normally be fixed for a day after the end date of the training / within 7 days of completion of training.

- Assessment will be conducted at the training venue

- The room where assessment is conducted will be set with proper seating arrangements with enough space to curb copying or other unethical activities

- Question bank of theory and practice will be prepared by ASCI /assessment agency and approvsed ASCI. Only from approved Question Bank assessment agency will prepare the question paper. Theory testing will include multiple-choice questions, pictorial questions, etc. which will test the trainee on his theoretical knowledge of the subject.

- The theory, practical and viva assessments will be carried out on the same day. In case of a greater number of candidates, the number of assessors and venue facilitation be increased and facilitated

Assessment			
Assessment Type	**Formative or Summative**	**Strategies**	**Examples**
Theory	Summative	MCQ/Written exam	Knowledge of facts related to the job role and functions. Understanding of principles and concepts related to the job role and functions
Practical	Summative	Structured tasks/Demonstration	Practical application /Demonstration /Application tasks
Viva	Summative	Questioning and Probing	Mock interviews on the usability of job roles/advantages /importance of adherence to procedures. Viva will be used to gauge trainee's confidence and correct knowledge in handling the job situation

The question paper pre-loaded in the computer /Tablet and it will be in the language as requested by the training partner.

Assessment Quality Assurance framework

Assessment Framework and Design:

Based on the Assessment Criteria, SSC in association with AAs will define the test structure for the given roles to cover the required skills and competencies. ASCI offer a bouquet of tools for multi-dimensional evaluation of candidates covering language, cognitive skills, behavioural traits and domain knowledge.

Theoretical Knowledge - Item constructs and types are determined by a theoretical understanding of the testing objectives and published research about the item types and constructs that have shown statistical validity towards measuring the construct. Test item types that have been reported to be coachable are not included. Based on these, items are developed by domain experts. They are provided with comprehensive guidelines of the testing objectives of each question and other quality measures.

Type – Questions based on Knowledge Required, Case-based practical scenario questions and automated simulation-based questions.

Practical Skills - The practical assessments are developed taking into consideration two aspects: what practical tasks is the candidate expected to perform on the job and what aspects of the job cannot be judged through theoretical assessments. The candidates shall be asked to perform either an entire task or a set of subtasks depending on the nature of the job role

Type – Standardized rubrics for evaluation against a set of tasks in a demo/practical task

Viva Voce - Those practical tasks which cannot be performed due to time or resource constraints are evaluated through the viva mode. Practical tasks are backed up with Viva for thorough assessment and complete evaluation

Type – Procedural questions, dos and don'ts, subjective questions to check the understanding of practical tasks.

The assessor has to go through an orientation program organized by the Assessment Agency. The training would give an overview to the assessors on the overall framework of QP evaluation. The assessor shall be given a NOS and PC level overview of each QP as applicable. The overall structure of assessment and objectivity of the marking scheme will be explained to them. The giving of marks will be driven by an objective framework that will maintain the standardisation of the marking scheme.

Type of Evidence and Evidence Gathering Protocol:

During the assessment the evidence collected by AAs and ASCI are:

- Geo Tagging to track ongoing assessment
- AA's coordinator emails the list of documents and evidence (photos and videos) to the assessor one day before the assessment. The list is mentioned below:
    - Signed Attendance sheet
    - Assessor feedback sheet

- o Candidate feedback sheet
- o Assessment checklist for assessor
- o Candidate Aadhar/ID card verification
- o Pictures of the classroom, labs to check the availability of adequate equipment's and tool to conduct the training and assessment
- o Pictures and videos of Assessment, training feedback and infrastructure.

- Apart from the Assessor, a Technical assistant is popularly known as Proctor also ensures the proper documentation and they verify each other's tasks.

- To validate their work on the day of the assessment, regular calls and video calls are done.

- On-boarding and training of the assessor and proctor is done on a timely basis to ensure that the quality of the assessment should be maintained.

- Training covers the understanding of QP, NSQF level, NOS and assessment structure

Methods of Validation

- Morning Check (Pre-Assessment): Backend team of AA calls and confirms assessor/technical SPOC event status. Assessor/Technical SPOC are instructed to reach the centre on time by 9:30 AM / as decided with TC and delay should be highlighted to the Training Partner in advance.

- Video Calls: Random video calls are made to the technical SPOC/assessor so as to keep a check on assessment quality and ensure assessment is carried out in a fair and transparent manner

- Aadhar verification of candidates

- Evening Check (Post Assessment): Calls are made to the ground team to ensure the event is over by what time and the documentation is done properly or not.

- TP Calling: To keep a check on malpractices, an independent audit team calls the TP on a recorded line to take confirmation if there was any malpractice activity observed in the assessment on part of the AA/SSC team. If calls are not connected, an email is sent to TP SPOC for taking their confirmation

- Video and Picture Evidence: Backend team collects video and pictures for assessment on a real-time basis and highlights any issue such as students sitting idle/ trainer helping the candidates during the assessment.

- Surprise Visit: Time to time SSC/AA Audit team can visit the assessment location and conduct a surprise audit for the assessment carried out by the ground team.

- Geo Tagging: On the day of the assessment, each technical SPOC is required to login into our internal app which is Geotagged. Any deviation with the centre address needs to be highlighted to the assessment team on a real-time basis.

Method for assessment documentation, archiving, and Access:

- ASCI have a fully automated result generation process in association with multiple AAs

- Theory, Practical and Viva marks form the basis of the results and encrypted files generated to avoid data manipulation. All responses were captured and stored in the

System with Time-Stamps at the end of AAs and SSC. NOS-wise and PC-wise scores can be generated.

- Maker Checker concept: One person prepares the results and another audit result which is internally approved by AA at first and then gets vetted at the end of SSC

- All softcopies of documents are received from the on-ground tech team over email. The same is downloaded by our internal backend team and saved in Repository. The repository consists of scheme-wise folders. These scheme-wise folders have two job role-specific folders. These specific folders have Year wise and Month wise folders where all documents are saved in Batch specific folders. All Hard copies are filed and stored in the storeroom.

Result Review & Recheck Mechanism –

- Time-stamped assessment logs

- Answer/Endorsement sheets for each candidate

- Attendance Sheet

- Feedback Forms: Assessor feedback form, Candidate feedback form, TP feedback form

- The results for each of the candidate shall be stored and available for review (retained for 5 years/ till the conclusion of the project or scheme)

References

Glossary

Term	Description
Declarative Knowledge	Declarative knowledge refers to facts, concepts and principles that need to be known and/or understood in order to accomplish a task or to solve a problem.
Key Learning Outcome	Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application).
OJT (M)	On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on site
OJT (R)	On-the-job training (Recommended); trainees are recommended the specified hours of training on site
Procedural Knowledge	Procedural knowledge addresses how to do something, or how to perform a task. It is the ability to work, or produce a tangible work output by applying cognitive, affective or psychomotor skills.
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training.
Terminal Outcome	Terminal outcome is a statement of what a learner will know, understand and be able to do upon the completion of a module. A set of terminal outcomes help to achieve the training outcome.

Acronyms and Abbreviations

Term	Description
AGR	Agriculture
NOS	National Occupational Standard (s)
NSQF	National Skills Qualifications Framework
OJT	On-the-job Training
QP	Qualifications Pack
PwD	People with Disability
PPE	Personal Protective Equipment