







## **Model Curriculum**

**QP Name: Group Farming Practitioner** 

QP Code: AGR/Q7806

Version: 2.0

**NSQF Level: 4** 

**Model Curriculum Version: 1.0** 

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	Agriculture Industries
Occupation	Agri - Entrepreneurship & Rural Enterprises
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/6111
Minimum Educational Qualification and Experience	OR  10th grade pass with 2 years of relevant experience OR  10th grade pass and pursuing continuous schooling OR  Previous relevant qualification of NSQF Level 3.0 with minimum education as 8th grade pass with 3 years of relevant experience OR  Previous relevant qualification of NSQF Level 3.5 with 1.5 years of relevant experience
Pre-Requisite License or Training	NA
Minimum Job Entry Age	20 Years
Last Reviewed On	29/03/2023
Next Review Date	29/03/2026
NSQC Approval Date	29/03/2023
QP Version	2.0
Model Curriculum Creation Date	29/03/2023
Model Curriculum Valid Up to Date	29/03/2026
Model Curriculum Version	1.0
Minimum Duration of the Course	420 Hours
Maximum Duration of the Course	420 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:

- Elucidate ways to facilitate and participate in the formation and management of CIGs/FIGs/SHGs/PGs.
- Describe the process of undertaking harvest, post-harvest management and aggregation of the produce.
- Explain the importance of coordinating and negotiating with the input/service providers and buyers.
- Demonstrate the process of performing basic farm management.
- Elucidate ways to assimilate the market information.
- Demonstrate various practices to ensure health and safety at work.

### **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
Bridge Module	05:00	00:00	0:00	00:00	05:00
Module 1: Introduction to the role of a Group Farming Practitioner	05:00	0:00	0:00	00:00	05:00
AGR/N7825: Facilitate and participate in the formation and management of CIGs/FIGs/SHGs/PGs NOS Version- 2.0 NSQF Level- 4	50:00	35:00	0:00	00:00	85:00
Module 2: Process of facilitating and participating in the formation and management of CIGs/FIGs/SHGs/PGs	50:00	35:00	0:00	00:00	85:00
AGR/N9901: Perform basic farm management NOS Version- 2.0 NSQF Level- 4	05:00	25:00	0:00	00:00	30:00
Module 3: Process of performing basic farm management	05:00	25:00	0:00	00:00	30:00







AGR/N7826: Undertake harvest, post-harvest management and aggregation of the produce NOS Version- 2.0 NSQF Level- 4	25:00	35:00	0:00	00:00	60:00
Module 4: Process of undertaking harvest, post-harvest management and aggregation of the produce	25:00	35:00	0:00	00:00	60:00
AGR/N7827: Coordinate and negotiate with the input/service providers and buyers NOS Version- 2.0 NSQF Level- 4	25:00	35:00	0:00	00:00	60:00
Module 5: Process of coordinating and negotiating with the input/service providers and buyers	25:00	35:00	0:00	00:00	60:00
AGR/N9902: Assimilate the market information NOS Version- 2.0 NSQF Level- 4	05:00	25:00	0:00	00:00	30:00
Module 6: Process of assimilating the market information	05:00	25:00	0:00	00:00	30:00
AGR/N9903 Maintain health and safety at the workplace NOS Version- 3.0 NSQF Level- 4	05:00	25:00	0:00	00:00	30:00
Module 7: Hygiene and cleanliness	02:00	10:00	0:00	00:00	12:00
Module 8: Safety and emergency procedures	03:00	15:00	0:00	00:00	18:00
DGT/VSQ/N0102: Employability Skills (60 Hours) NOS Version- 1.0 NSQF Level- 4	60:00	00:00	0:00	00:00	60:00







Module 9: Employability Skills	60:00	00:00	0:00	00:00	60:00
<b>Total Duration</b>	180:00	180:00	0:00	00:00	360:00
OJT: 60 hours					







## **Module Details**

## Module 1: Introduction to the role of a Group Farming Practitioner Bridge Module

### **Terminal Outcomes:**

• Discuss the job role of a Group Farming Practitioner.

Duration: 05:00	Duration: 0:00	
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes	
<ul> <li>Describe the size and scope of the agriculture industry and its sub- sectors.</li> </ul>		
<ul> <li>Discuss the role and responsibilities of a Group Farming Practitioner.</li> </ul>		
<ul> <li>Identify various employment opportunities for a Group Farming Practitioner.</li> </ul>		
Classroom Aids		
Training Kit - Trainer Guide, Presentations, White	board, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements		
NA		







# Module 2: Process of facilitating and participating in the formation and management of CIGs/FIGs/SHGs/PGs

Mapped to AGR/N7825 v2.0

### **Terminal Outcomes:**

• Describe the process of facilitating and participating in the formation and operations of CIGs/FIGs/SHGs/PGs.

Duration: 50:00	Duration: 35:00	
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes	
State the scope of CIGs/FIGs/SHGs/PGs, i.e. collectivization, aggregation, value addition and marketing of produce.	<ul> <li>Demonstrate how to conduct feasibility assessment in the target village to determine the area and livelihood profile of the village, crops under cultivation and other details of</li> </ul>	
<ul> <li>Discuss the relevant schemes, such as Deendayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM).</li> </ul>	<ul><li> Show how to conduct business opportunity assessment to assess the</li></ul>	
<ul> <li>Explain the benefits of CIGs/FIGs/SHGs/PGs for the poor, marginal producers and small entrepreneurs such as the enhanced</li> </ul>	strength of the village, agricultural production and marketing surplus, market conditions, collective marketing opportunities, etc.	
ability to access resources, services, market and other facilities, reduced produce marketing cost, improved livelihood capabilities and enhanced income.	<ul> <li>Demonstrate the process of carrying out secondary research and primary research through focus group discussions.</li> </ul>	
<ul> <li>Elucidate the criteria and process for forming CIGs/FIGs/SHGs/PGs.</li> </ul>	<ul> <li>Prepare sample economics of the potential commodities, including cost-benefit analysis, breakeven analysis, etc.</li> </ul>	
<ul> <li>Explain the importance and measures to be taken to mobilize and incorporate small and marginal women farmer households in CIGs/FIGs/SHGs/PGs.</li> </ul>	<ul> <li>Show how to conduct risk assessment to assess risks related to production, produce quality and price, post- harvest handling/management,</li> </ul>	
<ul> <li>Elucidate the key functions of CIGs/FIGs/SHGs/PGs such as selection of potential commodities, continuous market engagement and access to market information,</li> </ul>	<ul> <li>market access, marketing, etc.</li> <li>Demonstrate the process of carrying out the CIGs/FIGs/SHGs/PGs preformation activities at the block level.</li> </ul>	
continuous assessment of transaction costs to reduce them with each transaction cycle, organizing market-	<ul> <li>Demonstrate the process of opening an appropriate type of bank account for the CIG/FIG/SHG/PG.</li> </ul>	
led production planning, establishing and running Village level Aggregation Centre (VLAC) for aggregation of agriproduce, primary processing in	<ul> <li>Prepare sample books of accounts, e.g. cash book, daily business register, member ledger, assets register etc., for the group.</li> </ul>	
the form of cleaning, washing,	Prepare sample operating profit and	







grading, sorting, packing etc.

- Elucidate the importance and process of promoting CIGs/FIGs/SHGs/PGs.
- Explain the role and importance of value chain actors, i.e. producers, buyers, processors (primary/secondary), selling agents (traders/ wholesaler/ retailers/ consumers), service providers (Nursery/Planters/Spraying Providers/Rejuvenation).
- Describe the components of production data, i.e. area, production, average supplies and peak supplies, marketable surplus, per acre productivity.
- State the seasonality of different agricultural commodities.
- Elucidate different production constraints and challenges, i.e. nursery, input supplies, seasons, pest and disease management, profitability for production, cost of production, the cash flows and expenditure timelines, technology interventions.
- Explain the components of business opportunity assessment, i.e. the strength of the village, agricultural production and marketing surplus, other livelihoods activities, market analysis, collective marketing opportunities that can be exercised to secure better earnings to the prospective members, savings in transaction costs and improvement in earnings by undertaking primary processing, etc.
- Explain the components of a business and revenue model, i.e. the approach, size, products, markets, pricing, business promotion, development with reference to business, how to achieve business goals and build revenue.
- Explain the components of a risk assessment for a PG, i.e. risk analysis concerning production, produce

loss statement for every business cycle as per the business plan.







quality and price, post-harvest handling/management, marketing, market access, etc.

- Explain the importance of developing a business plan.
- Explain the importance of collecting data on marketable surplus.
- Elucidate different channels to identify the relevant markets/buyers.
- State the relevant pre-supply arrangements required for agricultural produce.
- Describe the process of collecting and aggregating agricultural produce.
- Explain how primary processing of produce and robust quality checks help in value addition.
- Explain the weighing/aggregation/dispatch management, logistics plan, transaction closure & payment to members, fund management, the role of Udyog Mitra etc.
- Describe the business processes of CIGs/FIGs/SHGs/PGs, such Business Activities Mapping with Accountability, Market Assessment (By Management and Udyog Mitra), Preparation of Seasonal Calendar of Produce, Farmer level Processes (Quality product, Post-Harvest Management & Market ready product), Market Intelligence, Product Handling and Marketing & Market Access, Dispatches/Delivery Management/Transportation Produce on time and documentation of all activities.
- Describe the process of marketing the agricultural produce.
- Describe the key responsibilities of the management committee, such as overseeing the business operations of the group, supervision and monitoring of business transactions, arranging capacity-building exercises, training and exposure visits for group







members.

- Explain the role of Krishi Udyog Sakhi in CIGs/FIGs/SHGs/PGs.
- Discuss the management and governance structure of an FPO.
- Explain the roles and responsibilities of the CEO and Board of Directors (BoDs) in an FPO.
- List the requisite skillset to become a Board member in FPO management.
- Discuss the statutory and regulatory compliance to be adhered to by the FPO.
- Explain how to conceive and draft a business plan for an FPO.
- Elucidate the importance and elements of a Business Plan, i.e. Business Description, Market and Demand Analysis, Competitive Analysis, Management Plan, Operating Plan, Financial Plan.
- Describe the process of assessing business opportunities for an FPO through the Agri Value Chain Approach.
- Explain the Value Chain Concept.
- Explain the business activities that can be undertaken through the aggregation model in the Agriculture Value Chain, e.g. Pre-Production, Production, Post-harvest, Marketing activities.
- Discuss four core principles of mapping the agricultural value chain with the related business activities for the FPO – Aggregation of Inputs, Collective Marketing, Value Addition, Trading Business.
- Explain the key characteristics of Agricultural Marketing.
- Explain strategic positioning and different approaches involved in strategic positioning.
- Elucidate different Pricing Strategies,
   e.g. Geographical Pricing,







Promotional Pricing, Discriminatory Pricing, Product Mix Pricing, Price Discounts and Allowances, etc.

- Describe the process of setting the price of agricultural commodities.
- Explain financial Management in FPOs, i.e. budget preparation, Sales Revenue, fixed and variable costs, and profits.
- Explain how to conduct breakeven analysis.
- Describe sources of Finance Personal Financing, Credit Capital, Equity Capital, Debt Financing, Grant Support, etc.
- Describe the cash budgeting method.
- Elucidate the Cash Flow Statement,
   Net Present Value, Internal Rate of Return.
- List the relevant Licenses and Permissions required for business operations.
- Explain the Commodity Market Derivatives for FPOs.
- Elucidate the reasons for Price Fluctuation for Agricultural Commodities.
- Explain the meaning of Commodity Derivatives and Commodity Derivative Market.
- State the regulation of Commodity Derivative Exchange.
- Explain the benefits of Commodity Derivatives for farmers.
- Discuss the status of FPO participation in the commodity derivatives market.
- Describe the process by which FPOs can participate in the commodity futures derivative market to lock the price of their agricultural produce.
- Explain hedging and its types Long Hedge and Short Hedge.
- Describe the decision-making process







for hedging on the exchange.

- State the steps to be followed by the FPO for depositing goods on the Exchange after the crop is harvested.
- Explain what Mark to Market (M2M)
   Calculation is, and how to perform it.

### **Classroom Aids**

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

### **Tools, Equipment and Other Requirements**

Sickle, Screw pressing machines, Various charts like soil condition chart, planting chart, harvesting, pest management chart, rate chart, Notice Board, Cash Collection Box, Weighing scale, Fire extinguisher, Printer, Crates, Moisture Meter, Crop Chart, Scissors, Group Operation Manual/SOPs, Hedge Shears, Stock Register, Minutes Book, Trowels, Individual Farmer Book







### Module 3: Process of performing basic farm management Mapped to AGR/N9901 v2.0

### **Terminal Outcomes:**

- Elucidate ways to undertake crop planning and production.
- Describe the process of maintaining the relevant records and managing the finances.
- Elucidate ways to market the produce.

Duration: 05:00 Duration: 25:00			
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes		
<ul> <li>Describe documentation and related procedures applicable in the context of work.</li> </ul>	<ul> <li>Demonstrate the process of carrying out soil sampling following the recommended process.</li> </ul>		
<ul> <li>Elucidate the importance and process of soil testing, including the sampling of soil.</li> </ul>	Demonstrate the process of applying the appropriate soil treatment in the field as per the laboratory's		
<ul> <li>List the components of a soil testing report.</li> </ul>	recommendations to improve the soil fertility for undertaking the production of the identified crops.		
<ul> <li>Explain the criteria for selecting a crop for cultivation, such as agro- climatic zone, soil conditions, water</li> </ul>	<ul> <li>Show how to prepare the field according to the planned crop.</li> </ul>		
<ul> <li>availability, etc.</li> <li>Describe the process of preparing the field for planting/sowing a variety of</li> </ul>	<ul> <li>Demonstrate the process of carrying out sowing/planting activities, protecting the planting material from damage.</li> </ul>		
<ul><li>crops.</li><li>Describe safe planting material handling procedures.</li></ul>	Demonstrate the process of applying the recommended organic and inorganic fertilizers in the appropriate		
<ul> <li>State the fertilizer requirement of different crops.</li> </ul>	quantity, according to the stage of the crop's growth.		
<ul> <li>Explain the importance of using a balanced combination of organic and inorganic fertilizers.</li> </ul>	<ul> <li>Demonstrate the process of performing intercropping with the recommended crops for optimum</li> </ul>		
Explain the importance of using organic pest and disease control	resource utilization and achieve a better yield.		
<ul><li>measures.</li><li>State the safe quantity of pesticides to be used.</li></ul>	<ul> <li>Demonstrate the process of carrying out crop rotation, growing the recommended crops to improve soil's health and nutrient availability for</li> </ul>		
<ul> <li>Discuss effective weed management practices.</li> </ul>	crops.		
<ul> <li>Explain the benefits of intercropping and the type of crops to be intercropped.</li> </ul>	<ul> <li>Demonstrate the process of carrying out post-harvest crop management, including cleaning, drying, sorting, grading, etc.</li> </ul>		
Explain the benefits of crop rotation	<ul> <li>Prepare sample crop production activity records, crop calendar, weed</li> </ul>		







and types of crop to be rotated with.

- Explain the maturity index of a variety of crop.
- Describe the process of harvesting different crops and their post-harvest management.
- Describe the record-keeping methodologies for various activities.
- Explain the effective financial management for agricultural farms.
- Elucidate different types of costs incurred during agricultural production and how to control them.
- Elucidate the basic accounting and book-keeping principles.
- Explain how to assess the market demand for agricultural produce.
- Explain how to determine the price of agricultural produce and compare the prices
- Explain different types of marketing channels for marketing agricultural produce.
- List a variety of buyers of agricultural produce.
- State rates of different produce and the fluctuation in the pricing.
- State the transportation requirement for the produce.
- Explain how to negotiate with potential buyers.
- Describe the use of different electronic payment methods.

- calendars, insect and pest calendars, etc., in the physical registers and/or the relevant computer application.
- Show how to maintain necessary books of accounts, including investments and expenditures.
- Show how to maintain the backup of data to protect against accidental loss.
- Demonstrate how to review the data records periodically to ensure the accuracy of the data.
- Show how to determine the total cost of crop production, including various costs, such as field preparation, labour, equipment, fuel costs, etc.
- Demonstrate the process of processing the payments using the appropriate electronic payment methods, e.g. Unified Payments Interface (UPI), Aadhaar Enabled Payment System (AePS), digital wallets, etc.

### Classroom Aids

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

### **Tools, Equipment and Other Requirements**

Installed Video camera with high resolution and recording facility, Laptops/Computers, White board, Registers, projector, Marker, Harvester, Paper, Record keeping book, post-harvesting machines, Audio-visual aids, Farming tools & equipment, Fumigants, Sprayer, Baler Machine, scribbling machine, Stamping pressing machines and hydraulic briquetting machines, Rubber gloves, Packaging material, Safety mask, First aid kit







# Module 4: Process of undertaking harvest, post-harvest management and aggregation of the produce

Mapped to ARG/N7826 v2.0

### **Terminal Outcomes:**

- Demonstrate the process of performing harvesting and post-harvest management of the produce.
- Describe the process of aggregating the produce.

Duration: 25:00	Duration: 35:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul> <li>State the maturity index for various agricultural crops.</li> <li>Describe different harvesting methods employed for different agricultural crops.</li> <li>List the shelf life of different types of agricultural produce.</li> <li>Describe the safe handling methods of different types of produce.</li> <li>Discuss various post-harvest practices to be followed for different types of agricultural produce.</li> <li>Explain how to measure the quantity of different types of agricultural produce.</li> <li>Describe the appropriate methods and conditions for the safe storage of agricultural produce.</li> <li>Describe various quality assurance methods for the produce.</li> <li>State the considerations to be taken for the finalization of the collection points.</li> <li>Explain the importance of achieving effective coordination with various collection points for the procurement of goods.</li> <li>List the safety measures to be taken for the protection of collected stock.</li> <li>Explain how to follow the Agricultural Produce Market Committee (APMC) mechanism.</li> </ul>	<ul> <li>Demonstrate the process of harvesting the appropriate tool, equipment and implements.</li> <li>Demonstrate the process of cleaning, sorting and grading of the harvested produce.</li> <li>Show how to use the appropriate tools and equipment for handling the produce to avoid any damage to the produce and packing material.</li> <li>Show how to collect the stock from the common storage for transportation.</li> </ul>







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

### **Tools, Equipment and Other Requirements**

Sickle, Screw pressing machines, Various charts like soil condition chart, Planting chart, harvesting, pest management chart, rate chart, Notice Board, Cash Collection Box, Weighing scale, Fire extinguisher, Printer, Crates, Moisture Meter, Crop Chart, Scissors, Group Operation Manual/SOPs, Hedge Shears, Stock Register, Minutes Book, Trowels, Individual Farmer Book, Installed Video camera with high resolution and recording facility, Laptops/Computers, White board, Registers, projector, Marker, Harvester, Paper, Record keeping book, Post-harvesting machines, Audio-visual aids, Farming tools & equipment, Fumigants, Sprayer, Baler Machine, Scribbling machine, Stamping pressing machines and hydraulic briquetting machines, Rubber gloves, Packaging material, Safety mask, First aid kit







### Module 5: Process of coordinating and negotiating with the input/service providers and buyers

Mapped to AGR/N7827 v2.0

### **Terminal Outcomes:**

- Explain the process of Identify and negotiate with the input sellers/service providers.
- Elucidate ways to determine the needs of buyers.
- Explain the process of negotiating with buyers and entering into agreements.
- Explain the importance of ensuring efficient supply management.

Duration: 25:00	Duration: 35:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul> <li>Explain trade system and trade environment.</li> <li>Explain the usage of appropriate agriculture-related apps/ portals.</li> <li>Describe appropriate weighing and measurement methods.</li> <li>Elucidate the importance and process of determining the requirements of buyers.</li> <li>Elucidate stock planning with respect to season, climate etc.</li> <li>Describe the appropriate storage and transportation methods.</li> <li>Explain the importance of maintaining transparency in the flow of goods.</li> <li>Elucidate relevant tax-related liabilities.</li> <li>Describe the process of identifying and selecting appropriate input dealers and service providers to support agricultural production.</li> <li>Discuss efficient supply management practices.</li> </ul>	<ul> <li>Demonstrate the process of carrying out appropriate documentation to enter into an agreement with the input sellers/ service providers for the timely supply of quality inputs/services.</li> <li>Show how to analyze the existing trade system and trade environment.</li> <li>Roleplay how to conduct demand planning to project the future demand for the produce and customize the output.</li> <li>Demonstrate the process of carrying out relevant documentation with the buyers to enter into an agreement with them.</li> </ul>
Classroom Aids	

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

### **Tools, Equipment and Other Requirements**

Sickle, Screw pressing machines, Various charts like soil condition chart, planting chart, harvesting, pest management chart, rate chart, Notice Board, Cash Collection Box, Weighing scale, Fire extinguisher, Printer, Crates, Moisture Meter, Crop Chart, Scissors, Group Operation Manual/ SOPs, Hedge Shears, Stock Register, Minutes Book, Trowels, Individual Farmer Book







### Module 6: Process of assimilating the market information Mapped to AGR/N9902 v2.0

### **Terminal Outcomes:**

- Describe the process of collecting and analyzing the market information.
- Explain ways to utilize the market information for making decisions.

Duration: 05:00	Duration: 25:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul> <li>List the different sources of information at the village level through other farmers, agricultural extension workers, agriculture experts, concerned government and private departments.</li> <li>List appropriate sources of specific market information and proper ways to collect the required information.</li> <li>Explain the importance of collecting information from reliable sources.</li> <li>Describe ascertain methods of collecting information through personal visits, telephone, Internet and published reports, magazines and articles, workshops, attending seminars and training by agriculture extension service providers.</li> <li>Describe the process of analyzing the information for making decisions.</li> <li>Explain how to effectively utilize market information for making effective pre-harvest and post-harvest decisions.</li> <li>Explain the benefits of making decisions based on market information.</li> <li>List the organizations, media, and individuals involved in providing market information.</li> <li>List price trends of various agricultural inputs, such as fertilizers, pesticides, etc.</li> <li>Explain the cost-benefit analysis of different sources of information.</li> <li>Classroom Aids</li> </ul>	<ul> <li>Demonstrate how to collect market-related information from the identified sources, including through media, e.g. radio, newspaper, television, magazines, Internet, etc.</li> <li>Demonstrate the use of the appropriate mechanisms, tools, forms and templates to collect and organise the information.</li> <li>Roleplay how to conduct in-person visits in the field, attend seminars and the relevant training programs to get up-to-date market information.</li> <li>Show how to review the collected information and remove duplications and erroneous information.</li> <li>Demonstrate the process of analyzing the market information to gain insights into market conditions, such as the fluctuations in the prices of agricultural inputs and commodities.</li> <li>Demonstrate the process of carrying out appropriate documentation concerning the analysis of information.</li> </ul>







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

### **Tools, Equipment and Other Requirements**

Installed Video camera with high resolution and recording facility, Laptops/Computers, White board, Registers, projector, Marker, Harvester, Paper, Record keeping book, post-harvesting machines, Audio-visual aids, Farming tools & equipment, Fumigants, Sprayer, Baler Machine, scribbling machine, Stamping pressing machines and hydraulic briquetting machines, Rubber gloves, Packaging material, Safety mask, First aid kit







## Module 7: Hygiene and cleanliness Mapped to NOS AGR/N9903 v3.0

### **Terminal Outcomes:**

- Discuss how to adhere to personal hygiene practices.
- Demonstrate ways to ensure cleanliness around the workplace.

Duration: 02:00	Duration: 10:00	
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes	
<ul> <li>Explain the requirements of personal health, hygiene and fitness at work.</li> <li>Describe common health-related guidelines laid down by the organizations/ Government at the workplace</li> </ul>	<ul> <li>Demonstrate personal hygiene practices to be followed at the workplace.</li> <li>Demonstrate the correct way of washing hands using soap and water, and alcohol-based hand rubs.</li> </ul>	
<ul> <li>Explain the importance of good housekeeping at the workplace.</li> </ul>	<ul> <li>Demonstrate the steps to follow to put on and take off a mask safely.</li> </ul>	
<ul> <li>Explain the importance of informing the designated authority on personal health issues related to injuries and infectious diseases.</li> </ul>	<ul> <li>Show how to sanitize and disinfect one's work area regularly.</li> </ul>	
	Demonstrate adherence to the workplace sanitization norms.	
	Show how to ensure the cleanliness of the work area.	

### **Classroom Aids:**

Computer, Projection Equipment, PowerPoint Presentation and Software, Facilitator's Guide, Participant's Handbook.

### **Tools, Equipment and Other Requirements**

Personal Protective Equipment, Cleaning Equipment and Materials, Sanitizer, Soap, Mask







## Module 8: Safety and emergency procedures Mapped to NOS AGR/N9903 v3.0

### **Terminal Outcomes:**

- Describe how to adhere to safety guidelines.
- Show how to administer appropriate emergency procedures.

Duration: 03:00	Duration: 15:00		
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes		
<ul> <li>List the Personal Protective Equipment (PPE) required at the workplace.</li> </ul>	<ul> <li>Check various areas of the workplace for leakages, water-logging, pests, fire, etc.</li> </ul>		
<ul> <li>Describe the commonly reported hazards at the workplace.</li> <li>Describe the hazards caused due to</li> </ul>	<ul> <li>Demonstrate how to safely use the PPE and implement it as applicable to the workplace.</li> </ul>		
<ul> <li>chemicals/pesticides/fumigants.</li> <li>Describe the basic safety checks to be done before the operation of any equipment/machinery.</li> </ul>	<ul> <li>Display the correct way of donning, doffing and discarding PPE such as face masks, hand gloves, face shields, PPE suits, etc.</li> </ul>		
Describe the common first aid procedures to be followed in case of	<ul> <li>Sanitize the tools, equipment and machinery properly.</li> </ul>		
<ul> <li>emergencies.</li> <li>State measures that can be taken to prevent accidents and damage s at the workplace.</li> </ul>	<ul> <li>Demonstrate the safe disposal of waste.</li> <li>Demonstrate procedures for dealing with accidents, fires and</li> </ul>		
<ul> <li>Explain the importance of reporting details of first aid administered, to the reporting officer/doctor, in accordance with workplace procedures</li> <li>State common health and safety guidelines to be followed at the</li> </ul>	<ul> <li>emergencies.</li> <li>Demonstrate emergency procedures to the given workplace requirements.</li> <li>Demonstrate the use of emergency equipment in accordance with manufacturers' specifications and workplace requirements.</li> </ul>		
workplace.	<ul> <li>Demonstrate the administration of first aid.</li> <li>Prepare a list of relevant hotline/emergency numbers</li> </ul>		

### **Classroom Aids:**

Computer, Projection Equipment, PowerPoint Presentation and Software, Facilitator's Guide, Participant's Handbook.

### **Tools, Equipment and Other Requirements**

Personal Protective Equipment, First Aid Kit, Equipment used in Medical Emergencies.







## Module 9: Employability Skills 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**

- 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.
- 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 analyzing 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: On-the-Job Training**

**Mapped to Group Farming Practitioner** 

Mandatory Duration: 60:00 Recommended Duration: 00:00

**Location: On-Site** 

#### **Terminal Outcomes**

- Elucidate the criteria and process for forming CIGs/FIGs/SHGs/PGs.
- Conduct business opportunity assessment to assess the strength of the village, agricultural production and marketing surplus, market conditions, collective marketing opportunities, etc.
- Carry out the CIGs/FIGs/SHGs/PGs pre-formation activities at the block level.
- Harvest the produce using the appropriate tool, equipment and implements.
- Conduct demand planning to project the future demand for the produce and customize the output.
- Carry out sowing/planting activities, protecting the planting material from damage.
- Carry out post-harvest crop management, including cleaning, drying, sorting, grading, etc.
- Determine the total cost of crop production, including various costs, such as field preparation, labour, equipment, fuel costs, etc.
- Conduct in-person visits in the field, and attend seminars and relevant training programs to get up-to-date market information.
- Use the emergency equipment in accordance with manufacturers' specifications and workplace requirements.
- Use green and animal waste to prepare compost.







## **Annexure**

## **Trainer Requirements**

Trainer Prerequisites						
Minimum Educational	Specialization Relevant Industry Experience		Training Experience		Remarks	
Qualification		Years	Specialization	Years	Specialization	
12th Class	Class 12th	3	Agri Crop Production	0		Ex-Service-Man including Ex-Paramilitary personnel: Minimum Qualification is 10+2 with an Honourable Discharge/ Pension. SSC would consider a relaxation/ waiver of sector-specific experience on caseto-case basis.
Diploma	Diploma (Agriculture / Horticulture)	3	Agri Crop Production	0		
Graduate	Graduate	2	Agri Crop Production	0		For the school Program minimum qualification of the Trainer should be Graduate. Their Teaching experience will be considered industry experience
Graduate	Graduate (Agriculture / Horticulture / Botany)	1	Agri Crop Production	0		
Post Graduate	Post Graduate (Agriculture / Horticulture / Botany)	0		0		

Trainer Certification				
Domain Certification	Platform Certification			
Certified for Job Role "Group Farming Practitioner", mapped to QP: "AGR/Q7806, v2.0", Minimum accepted score is 80%	Recommended that the Trainer is certified for the Job Role: "Trainer (Vet and Skills)", mapped to the Qualification Pack: "MEP/Q2601, v2.0". The minimum accepted score as per MEPSC guidelines is 80%.			







## **Assessor Requirements**

	Assessor Prerequisites					
Minimum Educational	opening indicating induction,		Training/Assessme nt Experience		Remarks	
Qualification		Years	Specialization	Years	Specialization	
Graduation	Agriculture/ Agronomy/ Horticulture/ Extension/ Agri Business and related streams	5	Agriculture Extension or other related experience	0		Practical skills and knowledge required in the management of SHGs/ FPOs/ cooperatives, demonstrations, meetings
PGDM	PGDM Agri- Business/ Agri Marketing and related streams	2	Agriculture Extension or other related experience	0		Practical skills and knowledge required in the management of SHGs/ FPOs/ cooperatives, demonstrations, meetings
МВА	Agri-Business/ Agri Marketing and related streams	2	Agriculture Extension or other related experience	0		Practical skills and knowledge required in the management of SHGs/ FPOs/ cooperatives, demonstrations, meetings
PGDAEM		2	Agriculture Extension or other related experience	0		Practical skills and knowledge required in the management of SHGs/ FPOs/ cooperatives, demonstrations, meetings
Post- Graduation	Agriculture/ Agronomy/ Horticulture/ Extension/ Agri Business and related streams)	2	Agriculture Extension or other related experience	0		Practical skills and knowledge required in the management of SHGs/ FPOs/ cooperatives, demonstrations, meetings
PhD	Agriculture/ Agronomy/ Horticulture/ Extension/ Agri Business and related streams	1	Agriculture Extension or other related experience	0		Practical skills and knowledge required in the management of SHGs/ FPOs/ cooperatives, demonstrations, meetings







Assessor Certification			
Domain Certification	Platform Certification		
Certified for Job Role " <b>Group Farming Practitioner</b> ", mapped to QP: "AGR/Q7806, v2.0", Minimum accepted score is 80%	Certified for the Job Role: "Assessor (Vet and 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 empaneled 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 approved 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 standardization of the marking scheme.

### Type of Evidence and Evidence Gathering Protocol:

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

- GeoTagging 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
  - Candidate feedback sheet







- Assessment checklist for assessor
- Candidate Aadhar/ID card verification
- Pictures of the classroom, labs to check the availability of adequate equipment's and tool to conduct the training and assessment
- 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 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.
- <u>Video Calls</u>: 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
- <u>Evening Check (Post Assessment)</u>: Calls are made to the ground team to ensure the event is over by what time and the documentation is done properly or not.
- <u>TP Calling</u>: 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
- <u>Video and Picture Evidence:</u> 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.
- <u>Surprise Visit:</u> 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.
- <u>Geo Tagging</u>: 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 rolespecific 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