Model Curriculum

QP Name: Water Resource Community Mobilizer

Electives: Watershed/Springshed/Groundwater

QP Code: AGR/Q6601

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	Forestry, Environment, Renewable Energy and Water Resource Management
Occupation	Watershed Management
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/2143
Minimum Educational Qualification and Experience	12th grade pass 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	18 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	390 Hours
Maximum Duration of the Course	450 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:

- Demonstrate the process of collecting data and carrying out ground-truthing for water resource planning.
- Elucidate ways to facilitate the formation and operation of water governance institutions.
- Elucidate ways to mobilize and organize the community for water resource project interventions ensuring community ownership.
- Elucidate ways to strengthen the community institutions by training and capacity building.
- Demonstrate the process of conducting the annual audit and maintaining the relevant data.
- Demonstrate various practices to ensure health and safety at work.
- Demonstrate the process of assisting in the planning, implementation, monitoring and review of watershed programs.
- Demonstrate the process of assisting in the planning, implementation, monitoring and review of springshed programs.
- Demonstrate the process of assisting in the planning, implementation, monitoring and review of groundwater programs.

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/N6625: Collect data and carry out ground-truthing for water resource planning **NOS Version- 1.0** **NSQF Level- 4**	**15:00**	**15:00**	**0:00**	**00:00**	**30:00**
Module 1: Introduction to the role of a Water Resource Community Mobilizer	05:00	00:00	0:00	00:00	05:00
Module 2: Process of collecting data and carrying out ground-truthing for water resource planning	10:00	15:00	0:00	00:00	25:00
AGR/N6626: Facilitate the formation and operation of water governance institutions **NOS Version- 1.0**	**65:00**	**25:00**	**0:00**	**00:00**	**90:00**

NSQF Level- 4					
Module 3: Process of facilitating the formation and operation of water governance institutions	65:00	25:00	0:00	00:00	90:00
AGR/N6601: Mobilize and organize the community for water resource project interventions ensuring community ownership **NOS Version- 2.0** **NSQF Level- 4**	**15:00**	**45:00**	**0:00**	**00:00**	**60:00**
Module 4: Process of mobilizing and organizing the community for water resource project interventions ensuring community ownership	15:00	45:00	0:00	00:00	60:00
AGR/N6602: Strengthen the community institutions by training and capacity building **NOS Version- 2.0** **NSQF Level- 4**	**05:00**	**25:00**	**0:00**	**00:00**	**30:00**
Module 5: Process of strengthening the community institutions by training and capacity building	05:00	25:00	0:00	00:00	30:00
AGR/N6627: Assist in conducting the social and regulatory audits and maintain the relevant data **NOS Version- 1.0** **NSQF Level- 4**	**15:00**	**15:00**	**0:00**	**00:00**	**30:00**
Module 6: Process of assisting in conducting the social and regulatory audits and maintaining the relevant data	15:00	15:00	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

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
DGT/VSQ/N0102: Employability Skills 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
Total Duration	180:00	150:00	30:00	00:00	360:00

Elective Modules

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

Elective 1: Watershed

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
AGR/N6629: Assist in the planning, implementation, monitoring and review of watershed programs NOS Version- 1.0 NSQF Level- 4	10:00	20:00	0:00	00:00	30:00
Module 10: Process of assisting in the planning, implementation, monitoring and review of watershed programs	10:00	20:00	0:00	00:00	30:00
Total Duration	10:00	20:00	0:00	00:00	30:00

Elective 2: Springshed

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
AGR/N6635: Assist in the planning, implementation, monitoring and review of springshed programs NOS Version- 1.0 NSQF Level- 4	10:00	20:00	0:00	00:00	30:00
Module 11: Process of assisting in the planning, implementation, monitoring	10:00	20:00	0:00	00:00	30:00

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
and review of springshed programs					
Total Duration	**10:00**	**20:00**	**0:00**	**00:00**	**30:00**

Elective 3: Groundwater

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
AGR/N6636: Assist in the planning, implementation, monitoring and review of groundwater Programs **NOS Version- 1.0** **NSQF Level- 4**	**10:00**	**20:00**	**0:00**	**00:00**	**30:00**
Module 12: Process of assisting in the planning, implementation, monitoring and review of groundwater programs	10:00	20:00	0:00	00:00	30:00
Total Duration	**10:00**	**20:00**	**0:00**	**00:00**	**30:00**

Module Details

Module 1: Introduction to the role of a Water Resource Community Mobilizer

Bridge Module

Terminal Outcomes:

- Discuss the job role of a Water Resource Community Mobilizer.

Duration: 05:00	Duration: 0:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Describe the size and scope of the agriculture industry and its sub-sectors. - Discuss the role and responsibilities of a Water Resource Community Mobilizer. - Identify various employment opportunities for a Water Resource Community Mobilizer.	
Classroom Aids	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
NA	

Module 2: Process of collecting data and carrying out ground-truthing for water resource planning

Mapped to AGR/N6625 v1.0

Terminal Outcomes:

- Describe the process of collecting data for water resource planning and management.
- Demonstrate the process of maintaining the collected data for water resource planning.
- Demonstrate the process of carrying out ground-truthing of data.

Duration: 10:00	Duration: 15:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Explain the importance of collecting hydro-meteorological and physiographical data for watershed planning, such as local climate data, physiographical data, physical and natural characteristics of the water resources, water resource boundaries, floodplain maps, topography or natural features of the watershed, water body and watershed conditions, wetland assessment, land use and land cover data, soils characteristics, texture, structure, etc. • Describe the process of collecting socio-political or demographic data, beneficiary census, economic data related to a watershed, local ordinances, land management practices, and environmental and ecosystems data like habitat, silviculture sources, cropland sources, fish and wildlife, livestock sources, biological data, water quality standards and pollutant sources (point and non-point pollution sources), etc. • Describe the process of ground truth data collection, as per the project objectives, nature of features being studied, representation of all features present in the study area from collected data, environmental conditions, selection of appropriate sampling strategy, and the applicable costs and time for data collection. • Explain the importance of collecting the ground truth data (thematic data and	• Demonstrate the process of collecting different types of data for water resource planning, such as demographic, ecological, climate data, etc. • Show how to analyse the relevant maps and extract the relevant data. • Show how to review the records to ensure the accuracy of the information. • Prepare a sample record of relevant observations and deviations.

spectral data) from a variety of sources, such as field surveys or measurements, interpretation of very high-resolution images or aerial photographs and library records/reports.

- Explain the importance of checking the available data and determining the need to get the district level data/ information.

- State the authority and jurisdictions of different water governance institutions.

- State various types of stakeholders and their relative importance, watershed management policies and decision making.

- Explain the basics of accounting and maintaining data.

- Explain the purpose of ground truth data collection, the types of ground truth data and its essential elements.

- Describe various types of sampling patterns.

- Explain the factors that may cause errors in the ground-truthing of data.

- Describe when, where and how to collect the ground-truthing data.

- List the tools and equipment required for data collection.

- Elucidate the dos and don'ts of data collection and how to deal with the relevant safety hazards while collecting data.

- Explain the use of the appropriate documentation system.

- Explain the use of a computer to record information/data and maintain records.

- Elucidate the benefits and methods rainwater harvesting.

Classroom Aids

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

Tools, Equipment and Other Requirements

Survey of India Topo sheet, Installed Video camera with high resolution and recording facility, A Frame Construction model, L Scale, Mason pipe, Plum bob, White Board, Measuring Tape, Cadastral Maps, Audio/ Visual Aids, Hammer, Computer, Wooden Pole for pipe level

Module 3: Process of facilitating the formation and operation of water governance institutions

Mapped to ARG/N6626 v1.0

Terminal Outcomes:

- Explain ways to facilitate the formation and operations of water governance institutions.

Duration: 65:00	Duration: 25:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Elucidate the nature and development of participatory water institutions/ WUAs. - Explain the benefits of setting and pursuing SDGs. - State the evolution and characteristics of water governance institutions. - State the institutional structure, participation, and devolution of water governance institutions. - Discuss the applicable laws and policies for watershed development. - Elucidate how to build amicable relationships and create awareness about water governance institutions, their benefits, structure, role, and functions. - Explain how a water governance institution is organized with farmers, their leaders, and representatives of the Water Managing Organizations (WMOs). - List the key actors involved in the service area of a water governance institution. - Explain the use of preliminary survey, key-informant interviews, focus groups, secondary data, and insights from the community-based natural resources management documents and literature and common-pool resources theory for the formation of water governance institution. - Elucidate the importance and process of collecting the basic information about farmers, farm types, sizes, critical	- Roleplay how to facilitate the representative election meetings for water governance institutions. - Roleplay how to facilitate the introductory meetings of the representative assembly to apprise the members about the purpose of the water governance institutions, and consult them on the selection procedure for the sub-committees if required. - Demonstrate the process of carrying out analysis of problems and priorities in the area for the preparation of the vision document including the relevant SDGs. - Prepare sample founding documents, such as the model charter and bylaws, relevant maps, etc. - Demonstrate the process of operating and maintaining the relevant assets and equipment. - Roleplay how to conduct training for the water governance institution members in the use of advanced irrigation methods, ensuring the use of new methods and technologies by them.

water-related problems, etc.

- Elucidate the importance and process of examining the performance of water governance institutions, the role of various actors, power relations, socio-institutional dynamics, and the context in supplying water to the area of operation.

- List the essential components of an irrigation and drainage service plan.

- Explain the importance of setting the objectives of water resource development projects in consultation with senior management or scheme owner with a focus on helping the rural masses in solving the local issues.

- State the standard structure and organs of water governance institutions, membership criteria, tenure of representatives, election procedure, rules and bylaws for effective functioning of the water governance institutions at different levels of the system.

- Explain the importance of conducting the introductory meetings of the Representative Assembly to apprise the members about the purpose of the water governance institution and consult on the selection procedure for the water governance institution council.

- Explain how to carry out a group analysis of agriculture and irrigation-related problems and identify appropriate solutions for the irrigation system.

- Elucidate the importance and process of preparing the water governance institution founding documents, such as model charter, bylaws and relevant maps.

- Explain the importance for a water governance institution to make fair and democratic decisions with the involvement of all members.

- Discuss the relevant practices to be followed to ensure the rational and

economical use of water, reduce non-productive losses, control soil erosion and salinity, and prevent soil/land Waterlogging.

- Explain the importance of preparing appropriate documents relevant to water governance institution management bodies.

- Discuss the common rights and obligations of the members of a water governance institution.

- Discuss the participatory approach for the management of irrigation projects for conserving and optimal utilization of resources.

- Explain the concept of Participatory Irrigation Management (PIM).

- Elucidate how to improve water resource management.

- List the relevant community participation and mobilization tools.

Classroom Aids

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

Tools, Equipment and Other Requirements

Survey of India Topo sheet, Installed Video camera with high resolution and recording facility, A Frame Construction model, L Scale, Mason pipe, Plum bob, White Board, Measuring Tape, Cadastral Maps, Audio/ Visual Aids, Hammer, Computer, Wooden Pole for pipe level

Module 4: Process of mobilizing and organizing the community for water resource project interventions ensuring community ownership
Mapped to AGR/N6601 v2.0

Terminal Outcomes:

- Explain the importance of ensuring community participation in the planning, execution and monitoring of the project.
- Explain the importance of ensuring community participation in maintaining social discipline.
- Elucidate ways to assist the community in realizing the potential of water resource projects.
- Elucidate ways to motivate the community through visits to successful water resource projects.
- Explain the process of managing logistics for training and workshops.

Duration: 15:00	Duration: 45:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
- Explain the importance of community participation in the planning, execution and monitoring of water resource management projects. - Explain the importance of community participation in maintaining social discipline. - Discuss the concept and practices in participatory and integrated water resource management. - Explain the relevant community organization, participation and mobilization tools and strategies. - Explain the applicable soil and water conservation technologies. - Describe the process of planning and executing water resource management projects. - Elucidate the guidelines on community participation, ownership, and transparency in water resource projects. - Explain the role, responsibilities and the management of community institutions in participatory water resource management. - Discuss the best practices to be followed for community participation and ownership in various resource management development projects.	- Roleplay how to organise community meetings, presenting the relevant data and objectives. - Show how to create a database of villages and individuals participating in the project. - Roleplay how to conduct interactive sessions with children and school students to explain the importance of social discipline and following environmental protection measures. - Demonstrate the process of carrying out regular participatory progress monitoring against the project objectives. - Show how to conduct impact monitoring with community participation to determine the impacts against the expectations through appropriate methods and techniques, e.g. transact walk, case study, survey, etc. - Roleplay how to conduct objective-oriented field visits/ tours with the community members to the successful water resource development sites, facilitating interactions between the project communities and key individuals. - Roleplay how to conduct field visits with the community members to the water resource development sites where the

• Explain the importance and ways of assisting the community in realizing the potential of water resource projects. • Explain the benefits of conducting community visits to successful water resource projects. • Elucidate the logistics management for training and workshops.	impact of projects is visible.

Classroom Aids

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

Tools, Equipment and Other Requirements

Survey of India Topo sheet, Installed Video camera with high resolution and recording facility, A Frame Construction model, L Scale, Mason pipe, Plum bob, White Board, Measuring Tape, Cadastral Maps, Audio/ Visual Aids, Hammer, Computer, Wooden Pole for pipe level

Module 5: Process of strengthening the community institutions by training and capacity building
Mapped to AGR/N6602 v2.0

Terminal Outcomes:

- Elucidate ways to strengthen the water resource institutions.
- Explain the process of planning and executing capacity-building measures for water resource institutions.
- Elucidate ways to assist the water resource institutions in their functioning and management.

Duration: 05:00	Duration: 25:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- State the relevant training tools and techniques. - Explain the role, responsibilities and management of community institutions in watershed management. - Discuss the best practices to be followed in community institutions in various development projects. - Discuss the guidelines, laws and legal compliances requirements relevant to community institutions.	- Roleplay how to conduct formal meetings with the community members, ensuring participation from all social and economic backgrounds. - Show how to refine the training/event modules based on the need for modification or customization with guidance and consultation from the relevant authority. - Roleplay how to conduct capacity-building training/ meetings for the village institutions to increase awareness for and participation in water resource development program, using the relevant tools, techniques and methods. - Show how to organise on-field training on water resource interventions for the optimal fulfilment of demand and supply. - Roleplay how to conduct training sessions and events as per the capacity-building program, following the principles of pedagogy. - Demonstrate the process of carrying out action planning exercises and cross-learning events within and across the water resource institutions. - Roleplay how to conduct periodic meetings with the institutions for planning, including action reviews, decision making, information sharing and skill upgrade.

Classroom Aids

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

Tools, Equipment and Other Requirements

Survey of India Topo sheet, Installed Video camera with high resolution and recording facility, A Frame Construction model, L Scale, Mason pipe, Plum bob, White Board, Measuring Tape, Cadastral Maps, Audio/ Visual Aids, Hammer, Computer, Wooden Pole for pipe level

Module 6: Process of assisting in conducting the social and regulatory audits and maintaining the relevant data

Mapped to AGR/N6627 v1.0

Terminal Outcomes:

- Elucidate ways to assist in conducting the social and regulatory audit.
- Explain the process of maintaining the necessary data concerning water resource development audit.

Duration: 15:00	Duration: 15:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Explain the importance of complete and accurate documentation. - Explain the importance of quality control procedures. - Elucidate the functioning and use of ERP platforms. - Explain how to use an integrated planning tool. - State the operating requirements, parameters and corrective action required when the operation is outside specific operating parameters. - Explain how to work with cross-functional teams. - Explain the importance of collaborating with internal and external stakeholders. - Explain the importance of maintaining the documents related to the program management, such as action plans. - Describe the scope and selection criteria for water resource development projects. - Explain the importance of adopting a water resource development strategy and prioritizing sectoral activities.	- Demonstrate how to perform the on-site review to ensure regulatory compliance. - Demonstrate how to maintain the relevant documents concerning the objectives of the audit, audit criteria, audit scope and methodology. - Show how to maintain documents related to audit findings, such as financial management, the release of funds, diversion of earmarked component funds, adherence to cost norms, etc. - Show how to maintain the necessary documents concerning the water resource program management. - Show how to document the physical and financial achievements concerning the water resource program implementation through the Monthly Progress Reports (MPRs). - Demonstrate how to maintain documents related to the verification of treated areas through land revenue records and diverse socio-economic factors. - Demonstrate how to maintain documents related to impact analysis, such as pre, interim and post-water resource observation of groundwater level, change in cropping pattern, change in productivity, etc. - Demonstrate how to document the program monitoring and supervision

	activities.

Classroom Aids

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

Tools, Equipment and Other Requirements

Survey of India Topo sheet, Installed Video camera with high resolution and recording facility, A Frame Construction model, L Scale, Mason pipe, Plum bob, White Board, Measuring Tape, Cadastral Maps, Audio/ Visual Aids, Hammer, Computer, Wooden Pole for pipe level

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**
- Explain the requirements of personal health, hygiene and fitness at work. - Describe common health-related guidelines laid down by the organizations/ Government at the workplace - Explain the importance of good housekeeping at the workplace. - Explain the importance of informing the designated authority on personal health issues related to injuries and infectious diseases.	- Demonstrate personal hygiene practices to be followed at the workplace. - Demonstrate the correct way of washing hands using soap and water, and alcohol-based hand rubs. - Demonstrate the steps to follow to put on and take off a mask safely. - Show how to sanitize and disinfect one's work area regularly. - 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**
- List the Personal Protective Equipment (PPE) required at the workplace. - Describe the commonly reported hazards at the workplace. - Describe the hazards caused due to chemicals/pesticides/fumigants. - Describe the basic safety checks to be done before the operation of any equipment/machinery. - Describe the common first aid procedures to be followed in case of emergencies. - State measures that can be taken to prevent accidents and damage s at the workplace. - Explain the importance of reporting details of first aid administered, to the reporting officer/doctor, in accordance with workplace procedures - State common health and safety guidelines to be followed at the workplace.	- Check various areas of the workplace for leakages, water-logging, pests, fire, etc. - Demonstrate how to safely use the PPE and implement it as applicable to the workplace. - Display the correct way of donning, doffing and discarding PPE such as face masks, hand gloves, face shields, PPE suits, etc. - Sanitize the tools, equipment and machinery properly. - Demonstrate the safe disposal of waste. - Demonstrate procedures for dealing with accidents, fires and emergencies. - Demonstrate emergency procedures to the given workplace requirements. - Demonstrate the use of emergency equipment in accordance with manufacturers' specifications and workplace requirements. - Demonstrate the administration of first aid. - Prepare a list of relevant hotline/ emergency numbers
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

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 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: Process of assisting in the planning, implementation, monitoring and review of watershed programs

Mapped to AGR/N6629 v1.0

Terminal Outcomes:

- Elucidate ways to assist in data collection and ground-truthing.
- Elucidate ways to facilitate the formation and operation of WUAs /water governance institutions.
- Explain the need of identifying the convergence opportunities.

Duration: 10:00	Duration: 20:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Explain different types of data required for watershed planning. - Elucidate the benefits and methods of rooftop and rainwater harvesting. - Explain the importance of aquifer and water table. - Describe the process and mechanism of groundwater recharge. - Explain different water recharge structures. - Explain different water conservation measures. - Explain how to read different types of maps. - Discuss the watershed concept and the watershed planning process. - Explain how to mark the boundaries in a watershed atlas. - Explain the Basic Schedule Rate (BSR). - Describe the scientific and traditional soil and water conservation methods. - Explain the concept of Natural Resource Management (NRM). - Discuss various practices for sustainable agriculture. - Elucidate the relevant climate change concerns. - Discuss the watershed management practices and the scope of integration	- Show how to assist in collecting different types of data for watershed planning, e.g. demographic, village boundary, household income assessment, livestock, social stratification etc. - Demonstrate how to use toposheet to identify and define watershed. - Prepare a sample record of the changing pattern of the watershed.

for different practices.

- Explain the benefits of watershed management.

- Explain the categorization of watersheds based on size, drainage, shape, etc.

- List various activities undertaken in integrated watershed development projects.

- Explain the concept of the hydrological cycle.

- Explain the importance of soil in watershed management.

- Discuss different approaches to conserve soil and prevent soil erosion.

- Explain different types of water harvesting structures.

- Explain how to measure the water requirements of different crops.

- Elucidate the need for afforestation in a watershed and how to achieve it.

- Explain how to formulate the skeletal plan of a watershed project.

- Discuss different initiatives required at different levels for adaptation and climate risk reduction.

- Explain the recommended measures to involve communities in a watershed management project.

- Discuss the aspects to be considered while formulating the rules, regulations and bylaws for the watershed committee.

- Discuss the ideal structure of a watershed committee.

- Describe the procedure for the functioning of the watershed committee.

- Explain the common problems encountered in the monitoring of a watershed project.

Classroom Aids

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

Tools, Equipment and Other Requirements

Module 11: Process of assisting in the planning, implementation, monitoring and review of springshed programs
Mapped to AGR/N6635 v1.0

Terminal Outcomes:

- Elucidate ways to assist in data collection and ground-truthing.
- Elucidate ways to facilitate the formation and operation of WUAs /water governance institutions.
- Elucidate ways to assist in community mobilization, livelihood creation and capacity building.
- Elucidate ways to assist in identifying funding sources and carrying out convergence.

Duration: 10:00	Duration: 20:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
- Discuss basic groundwater management practices. - Explain the application of geology and hydrogeology in water resource management. - Explain the best practices for the utilization of springs and aquifers. - Describe the process of springshed development. - Explain the benefits of the springshed management program. - Explain the benefits of pre-feasibility surveys in springshed management. - List the secondary sources of information for springs. - List the tools for undertaking feasibility surveys and water budgeting exercises with communities. - Explain the critical springs for prioritized interventions from a community's perspective. - State the key parameters of interest for spring inventory. - Explain the use of relevant mobile apps for spring inventory. - List the estimated numbers of declining or dry springs in the target region. - Explain the use of springs by local communities.	- Demonstrate how to collect secondary data on springs, land use and demographic dependence. - Show how to analyse the impact of climate change on catchments and reduction of discharge from the springs. - Demonstrate the process of carrying out mapping and collate the relevant information concerning the springs of interest in a geographical area in a standard format manually or electronically. - Show how to use Remote Sensing (RS) and GIS technologies, such as LiDAR for spring inventories, as appropriate. - Demonstrate the process of carrying out geo-tagging and documentation concerning land use, ownership, and demographic information on springs. - Demonstrate the process of performing a systematic data monitoring of rainfall, spring discharge, and water quality. - Show how to use 3D models/visual aids to explain the relevant concepts to the community. - Roleplay how to conduct training for farmer groups on water management practices that support allied livelihood activities, such as System of Crop Intensification (SCI), innovative irrigation techniques, fisheries,

	horticulture, etc.
• Explain the trend of spring discharge, rainfall and water quality of springs.	
• List the tools for creating awareness and enhancing community participation in water resource management.	
• Explain how to build ownership and sustainability in springshed management projects with communities.	
• Elucidate how the strengthening of institutional mechanisms at the grassroots level can ensure the sustainability of springshed management.	
• Explain how to strengthen the existing VLIs to undertake springshed management.	
• Explain how to identify community leaders for spearheading projects.	
• Explain how to encourage communities to lead springshed management.	
• Explain the advantages of state and national-level consortiums on springshed management.	
• State the examples of state-level consortiums for springshed management.	
• Discuss the applicable management protocol for springshed management.	
• State the water management practices relevant to springshed management.	
• Elucidate the recharge interventions suitable for different Land-use and Land-cover (LULC) types, topographies, elevation, hydrogeology, etc.	
• Explain the effect of forests, agriculture and other land uses on spring discharge and quality.	
• Explain the connections between springs across local-watershed-basin scales.	
• Explain the benefits of isotope analysis.	
• List different sources of funding available through convergence and the examples where convergence has	

helped scale up springshed management.	
• Explain the importance of convergence in springshed management and the relevant authorities to be contacted for the purpose.	
• Elucidate how can communities be encouraged to lead SM.	
• Explain the importance of financial support from communities for springshed management.	
• Explain the concept of baseflow in hydrology.	
• Explain different characteristics of springs.	
• Explain the uses of a spring chamber.	
• Explain the concept of diversion-based irrigation.	

Classroom Aids

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

Tools, Equipment and Other Requirements

Module 12: Process of assisting in the planning, implementation, monitoring and review of groundwater programs
Mapped to AGR/N6636 v1.0

Terminal Outcomes:

- Elucidate ways to assist in collecting primary data and ground-truthing.
- Elucidate ways to facilitate the formation and operation of water governance institutions.
- Explain the need of identifying the convergence opportunities.

Duration: 10:00	Duration: 20:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Explain the importance of maintaining the water table. - Describe the process of aquifer Mapping. - Explain how to read different types of maps. - Explain the benefits of a Water Security Plan and how to prepare one. - Elucidate the concept of geohydrology.	- Demonstrate the process of undertaking ground-truthing of the collected data. - Demonstrate the process of undertaking the appropriate Participatory Rural Appraisal (PRA), such as the mapping of aquifers, wells, borewells, crop fields, etc.
Classroom Aids	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
Tools, Equipment and Other Requirements	

Module 13: On-the-Job Training

Mapped to Water Resource Community Mobilizer

Mandatory Duration: 30:00	Recommended Duration: 00:00
Location: On-Site	

Terminal Outcomes

- Explain the basics of watershed, springshed and groundwater.
- Collect different types of data for water resource planning, such as demographic, ecological, climate data, etc.
- Operate and maintain the relevant assets and equipment.
- Conduct objective-oriented field visits/ tours with the community members to the successful water resource development sites, facilitating interactions between the project communities and key individuals.
- Organise on-field training on water resource interventions for the optimal fulfilment of demand and supply.
- Conduct impact monitoring with community participation to determine the impacts against the expectations through appropriate methods and techniques.
- Prepare the necessary metrics related to water resource development to track the performance at the required level of the institution in consultation with senior officials.
- Use emergency equipment in accordance with manufacturers' specifications and workplace requirements.
- Use toposheet to identify and define watershed.
- Use Remote Sensing (RS) and GIS technologies, such as LiDAR for spring inventories, as appropriate.
- Prepare Village Water Security Plans (VWSPs) using participatory water budget assessments.

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
Diploma	Diploma in Natural Resource Management/ Watershed Management/ Agriculture/ Agriculture Engineering/ Civil Engineering (After 10+2)	3	Watershed Management	0		
Graduate	Graduate	3	Watershed Management	0		For school Program minimum qualification of Trainer should be Graduate. Their Teaching experience will be considered industry experience
Graduate	B. Sc (Agriculture & Agri-allied)	2	Watershed Management	0		
Post Graduate	MSc/ Post graduate diploma (Agricultural Extension/ Rural Development)	0		0		

Trainer Certification	
Domain Certification	**Platform Certification**
Certified for Job Role "**Water Resource Community Mobilizer**", mapped to QP: "AGR/Q6601, 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 Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
		Years	Specialization	Years	Specialization	
Graduation	B.Sc (Environmental Science & Ecology/ Agriculture/ Geoscience/ Natural Resource Management/ Biological Sciences/ Ecology and Conservation/ Agriculture engineering/ Agriculture or related streams and fields)	5	In Watershed/ Agriculture/ Agriculture engineering/ Environmental engineering/ Ecology/ Natural Resource Management/ Geoscience/ Civil Engineering or related streams and fields	0		Practical skills and knowledge required in Watershed Management
Post-Graduation	M.Sc (Agriculture/Environmental Science & Ecology/ Geoscience/ Natural Resource Management/ Biological Sciences/ Ecology and Conservation/ Agriculture engineering/ Agriculture or related streams and fields)	2	In Watershed/ Agriculture/ Agriculture Engineering/ Environmental engineering/ Ecology/ Natural Resource Management/ Geoscience/ Civil Engineering or related streams and fields	0		Practical skills and knowledge required in Watershed Management
PhD	Ph.D (Agriculture/ Environmental Science & Ecology/ Geoscience/ Natural Resource Management/ Biological Sciences/ Ecology and Conservation/ Agriculture engineering/ Agriculture or related streams and fields)	1	In Watershed/ Agriculture/Agriculture Engineering/ Environmental engineering/ Ecology/ Natural Resource Management/ Geoscience/ Civil Engineering or related streams and fields	0		Practical skills and knowledge required in Watershed Management

Assessor Certification	
Domain Certification	**Platform Certification**
Certified for Job Role "**Water Resource Community Mobilizer**", mapped to QP: "AGR/Q6601, 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.

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 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

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.

- 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