









Water Resource Community Mobilizer

Electives: Watershed/ Springshed/ Groundwater

QP Code: AGR/Q6601

Version: 2.0

NSQF Level: 4

Agriculture Skill Council of India || 6th Floor, GNG Tower, Plot No. 10, Sector -44, Gurgaon Haryana-122004 || email:mohit@advisoryfeedback.com









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AGR/Q6601: Water Resource Community Mobilizer

Brief Job Description

A Water Resource Community Mobilizer: Watershed Management, Springshed Management, Groundwater Management is responsible for mobilizing the village community to develop and manage water resources. The individual helps organize the community into community institutions and build their capacities. The person is also responsible for active community participation to ensure the successful execution and sustenance of the water resource interventions. The individual assists in planning, implementing, monitoring and reviewing watershed/ springshed/ groundwater programs.

Personal Attributes

The individual must possess strong communication, facilitation and organizing skills. The person must be able to comprehend the socio-political situations and strategize accordingly. Excellent verbal and written communication skills are also critical in this job role.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

- 1. AGR/N6625: Collect data and carry out ground-truthing for water resource planning
- 2. AGR/N6626: Facilitate the formation and operation of water governance institutions
- 3. <u>AGR/N6601</u>: <u>Mobilize and organize the community for water resource project interventions ensuring community ownership</u>
- 4. AGR/N6602: Strengthen the community institutions by training and capacity building
- 5. AGR/N6627: Assist in conducting the social and regulatory audits and maintain the relevant data
- 6. AGR/N9903: Maintain health and safety at the workplace
- 7. DGT/VSQ/N0102: Employability Skills (60 Hours)

Electives(mandatory to select at least one):

Elective 1: Watershed

Specialization in Watershed

1. AGR/N6629: Assist in the planning, implementation, monitoring and review of watershed programs

Elective 2: Springshed









Specialization in Springshed

1. AGR/N6635: Assist in the planning, implementation, monitoring and review of springshed programs

Elective 3: Groundwater

Specialization in Groundwater

1. <u>AGR/N6636</u>: Assist in the planning, implementation, monitoring and review of groundwater <u>programs</u>

Qualification Pack (QP) Parameters

Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Watershed Management
Country	India
NSQF Level	4
Credits	15
Aligned to NCO/ISCO/ISIC Code	NCO-2015/NIL
Minimum Educational Qualification & Experience	12th grade Pass OR 10th grade pass with 2 Years of experience in the relevant field 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 experience in the relevant field OR Previous relevant Qualification of NSQF Level (3.5) (with 1.5 years of relevant experience)
Minimum Level of Education for Training in School	10th Class
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years









Last Reviewed On	NA
Next Review Date	29/03/2026
NSQC Approval Date	29/03/2023
Version	2.0
Reference code on NQR	QG-04-AG-00378-2023-V1-ASCI
NQR Version	1









AGR/N6625: Collect data and carry out ground-truthing for water resource planning

Description

This OS unit is about collecting and maintaining various types of data for water resource planning and management.

Scope

The scope covers the following:

- Collect data for water resource planning and management
- Maintain the collected data for water resource planning
- Carry out ground-truthing of data

Elements and Performance Criteria

Collect data for water resource planning and management

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

- **PC1.** collect different types of data for water resource planning, such as demographic, ecological, climate data, etc.
- **PC2.** analyse the relevant maps and extract the relevant data

Maintain the collected data for water resource planning

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

- **PC3.** review the records to ensure the accuracy of the information
- **PC4.** ensure to capture data in the prescribed format
- **PC5.** enter the data correctly in the Management Information System (MIS) with the help of persons/agencies engaged
- **PC6.** ensure the availability of correct data for necessary water resource planning
- **PC7.** maintain the record of relevant observations and deviations
- **PC8.** coordinate with the relevant personnel for the audit of the records to ensure compliance with the regulatory requirements

Carry out ground-truthing of data

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

- **PC9.** identify the need and purpose of collecting ground truth data and estimate the cost of data collection
- **PC10.** plan the ground truth data collection, considering the project objectives, nature of features being studied, environmental conditions, etc.
- **PC11.** arrange the necessary tools, equipment and materials for data collection
- **PC12.** ensure to collect the ground truth data in the entire study area in the prescribed format

Knowledge and Understanding (KU)









The individual on the job needs to know and understand:

- **KU1.** 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
- **KU2.** 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.
- **KU3.** 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
- **KU4.** the importance of collecting the ground truth data (thematic data and 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
- **KU5.** how ground-truthing and the collection of ground-truth data on location enables calibration of remote-sensing data and aids in the analysis of sensing data
- **KU6.** the importance of checking the available data and determining the need to get the district-level data/ information
- **KU7.** the authority and jurisdictions of different water governance institutions
- **KU8.** the basics of watershed, springshed and groundwater
- **KU9.** data required for watershed planning and different sources of watershed data
- **KU10.** the concept of watershed management and different watershed management approaches
- **KU11.** various types of stakeholders and their relative importance, watershed management policies and decision making
- KU12. the basics of accounting and maintaining data
- **KU13.** the purpose of ground truth data collection, the types of ground truth data and its essential elements
- **KU14.** various types of sampling patterns
- **KU15.** the factors that may cause errors in the ground-truthing of data
- **KU16.** when, where and how to collect the ground-truthing data
- **KU17.** the key considerations to be made while planning sampling patterns
- KU18. the tools and equipment required for data collection
- **KU19.** how to estimate the cost of ground truth data collection
- **KU20.** the dos and don'ts of data collection and how to deal with the relevant safety hazards while collecting data
- **KU21.** the use of the appropriate documentation system
- **KU22.** the use of a computer to record information/data and maintain records
- **KU23.** how to record and store various types of data in the physical registers, and the relevant Enterprise Resource Planning (ERP) system









- KU24. the importance and process of creating data backup to protect against accidental loss
- **KU25.** the process of reviewing the records to ensure accuracy of the records and getting them audited to ensure compliance with the regulatory requirements
- KU26. the benefits and methods of rainwater harvesting

Generic Skills (GS)

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

- **GS1.** maintain work-related records
- GS2. read the relevant literature to get the latest updates about the field of work
- **GS3.** communicate politely and professionally
- **GS4.** listen attentively to understand the information/ instructions being given
- GS5. plan and schedule tasks for efficient use of time
- GS6. take quick decisions to deal with workplace emergencies/ accidents
- **GS7.** identify possible disruptions to work and take appropriate preventive measures
- **GS8.** coordinate with the co-workers to achieve the work objectives









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Collect data for water resource planning and management	10	15	-	10
PC1. collect different types of data for water resource planning, such as demographic, ecological, climate data, etc.	-	-	-	-
PC2. analyse the relevant maps and extract the relevant data	-	-	-	-
Maintain the collected data for water resource planning	11	10	-	8
PC3. review the records to ensure the accuracy of the information	-	-	-	-
PC4. ensure to capture data in the prescribed format	-	-	-	-
PC5. enter the data correctly in the Management Information System (MIS) with the help of persons/agencies engaged	-	-	-	-
PC6. ensure the availability of correct data for necessary water resource planning	-	-	-	-
PC7. maintain the record of relevant observations and deviations	_	-	-	-
PC8. coordinate with the relevant personnel for the audit of the records to ensure compliance with the regulatory requirements	-	-	-	-
Carry out ground-truthing of data	9	15	-	12
PC9. identify the need and purpose of collecting ground truth data and estimate the cost of data collection	-	-	-	-
PC10. plan the ground truth data collection, considering the project objectives, nature of features being studied, environmental conditions, etc.	-	-	-	-
PC11. arrange the necessary tools, equipment and materials for data collection	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. ensure to collect the ground truth data in the entire study area in the prescribed format	-	-	-	-
NOS Total	30	40	-	30









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N6625
NOS Name	Collect data and carry out ground-truthing for water resource planning
Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Watershed Management
NSQF Level	4
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023









AGR/N6626: Facilitate the formation and operation of water governance institutions

Description

This OS unit is about facilitating the formation and operations of water governance institutions for optimal interventions in water resource planning and management.

Scope

The scope covers the following:

- Facilitate the formation of water governance institutions
- Facilitate the operations of water governance institutions

Elements and Performance Criteria

Facilitate the formation of water governance institutions

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

- **PC1.** create awareness about water governance institutions among the target audience, informing them about the benefits, the process of organizing, structure and functions of the institutions, and Sustainable development Goals (SDGs)
- **PC2.** use the preliminary survey, key-informant interviews, focus groups, secondary data and program guidelines for the formation of water governance institutions
- **PC3.** facilitate the identification of objectives of water resource management and how these will assist the rural masses in solving the relevant issues, in consultation with the senior management or scheme owner, if any
- **PC4.** determine the structure and organs of the water governance institution, its membership criteria, tenure of representatives, election procedure, rules and bylaws for its effective functioning at different levels of the system
- **PC5.** ensure the participation of all genders, Persons with Disabilities (PwD) and underprivileged sections in water governance institutions
- **PC6.** facilitate the representative election meetings for water governance institutions
- **PC7.** 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
- **PC8.** assist the water governance institutions in carrying out analysis of problems and priorities in the area for the preparation of the vision document including the relevant SDGs
- **PC9.** prepare the founding documents, such as the model charter and bylaws, relevant maps, etc.
- **PC10.** assist the water governance institutions in adhering to the updated and concurrent bylaws
- **PC11.** facilitate the involvement of all members in setting up and managing the water governance institutions

Facilitate the operations of water governance institutions

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









- **PC12.** assist in the planning of appropriate activities for better governance and management of water resources
- **PC13.** assist the farmers by acting as an interface between them and the water governance institution to facilitate the water resource project activities in the target area
- **PC14.** operate and maintain the relevant assets and equipment
- **PC15.** check and ensure equitable distribution of water in the proposed area
- **PC16.** assist in resolving disputes amongst the water governance institution members and non-members
- PC17. check and ensure the provision of safe drinking water
- **PC18.** cooperate with other water governance institutions to form federations at the appropriate level to manage the relevant water resources
- **PC19.** identify and recommend cropping patterns and package of agricultural practices suitable for farmers
- **PC20.** assist in arranging inputs from experts for the members to guide them in undertaking irrigated agriculture
- **PC21.** manage the agriculture extension services and farmer training
- **PC22.** follow the promote the recommended practices to ensure ecological and environmental safety, enforcing the rights and legal interests of land owners and users
- **PC23.** 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
- **PC24.** promote the conservation of forests and other common lands to improve the recharge and sustained ecological flows, including source sustainability

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** the nature and development of participatory water institutions/ WUAs
- **KU2.** the benefits of setting and pursuing SDGs
- **KU3.** the evolution and characteristics of water governance institutions
- **KU4.** the institutional structure, participation, and devolution of water governance institutions
- **KU5.** the applicable laws and policies for watershed development
- **KU6.** how to build amicable relationships and create awareness about water governance institutions, their benefits, structure, role, and functions
- **KU7.** how a water governance institution is organized with farmers, their leaders, and representatives of the Water Managing Organizations (WMOs)
- **KU8.** the key actors involved in the service area of a water governance institution
- **KU9.** 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
- **KU10.** the importance and process of collecting the basic information about farmers, farm types, sizes, critical water-related problems, etc.









- **KU11.** 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
- **KU12.** the essential components of an irrigation and drainage service plan
- **KU13.** 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
- **KU14.** 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
- **KU15.** 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
- **KU16.** how to carry out a group analysis of agriculture and irrigation-related problems and identify appropriate solutions for the irrigation system
- **KU17.** the importance and process of preparing the water governance institution founding documents, such as model charter, bylaws and relevant maps
- **KU18.** the importance for a water governance institution to make fair and democratic decisions with the involvement of all members
- **KU19.** 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
- **KU20.** the importance of preparing appropriate documents relevant to water governance institution management bodies
- **KU21.** the common rights and obligations of the members of a water governance institution
- **KU22.** the participatory approach for the management of irrigation projects for conserving and optimal utilization of resources
- **KU23.** the concept of Participatory Irrigation Management (PIM)
- **KU24.** how to improve water resource management
- **KU25.** the relevant community participation and mobilization tools

Generic Skills (GS)

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

- GS1. maintain work-related notes and records
- **GS2.** communicate politely and professionally
- **GS3.** listen attentively to understand the information being shared
- **GS4.** read the relevant literature to learn about the latest developments in the field of work
- **GS5.** coordinate with the co-workers and stakeholders to achieve the work objectives
- **GS6.** plan and prioritize tasks to ensure timely completion
- **GS7.** take quick decisions to deal with workplace emergencies
- **GS8.** evaluate all possible solutions to a problem to select the best one









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Facilitate the formation of water governance institutions	15	26	-	18
PC1. create awareness about water governance institutions among the target audience, informing them about the benefits, the process of organizing, structure and functions of the institutions, and Sustainable development Goals (SDGs)	-	-	-	-
PC2. use the preliminary survey, key-informant interviews, focus groups, secondary data and program guidelines for the formation of water governance institutions	-	-	-	-
PC3. facilitate the identification of objectives of water resource management and how these will assist the rural masses in solving the relevant issues, in consultation with the senior management or scheme owner, if any	-	-	-	-
PC4. determine the structure and organs of the water governance institution, its membership criteria, tenure of representatives, election procedure, rules and bylaws for its effective functioning at different levels of the system	-	-	-	-
PC5. ensure the participation of all genders, Persons with Disabilities (PwD) and underprivileged sections in water governance institutions	-	-	-	-
PC6. facilitate the representative election meetings for water governance institutions	-	-	-	-
PC7. 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	-	-	-	-
PC8. assist the water governance institutions in carrying out analysis of problems and priorities in the area for the preparation of the vision document including the relevant SDGs	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC9. prepare the founding documents, such as the model charter and bylaws, relevant maps, etc.	-	-	-	-
PC10. assist the water governance institutions in adhering to the updated and concurrent bylaws	-	-	-	-
PC11. facilitate the involvement of all members in setting up and managing the water governance institutions	-	-	-	-
Facilitate the operations of water governance institutions	15	14	-	12
PC12. assist in the planning of appropriate activities for better governance and management of water resources	-	-	-	-
PC13. assist the farmers by acting as an interface between them and the water governance institution to facilitate the water resource project activities in the target area	-	-	-	-
PC14. operate and maintain the relevant assets and equipment	-	-	-	-
PC15. check and ensure equitable distribution of water in the proposed area	-	-	-	-
PC16. assist in resolving disputes amongst the water governance institution members and non-members	-	-	-	-
PC17. check and ensure the provision of safe drinking water	-	-	-	-
PC18. cooperate with other water governance institutions to form federations at the appropriate level to manage the relevant water resources	-	-	-	-
PC19. identify and recommend cropping patterns and package of agricultural practices suitable for farmers	-	-	-	-
PC20. assist in arranging inputs from experts for the members to guide them in undertaking irrigated agriculture	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC21. manage the agriculture extension services and farmer training	-	-	-	-
PC22. follow the promote the recommended practices to ensure ecological and environmental safety, enforcing the rights and legal interests of land owners and users	-	-	-	-
PC23. 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	-	-	-	-
PC24. promote the conservation of forests and other common lands to improve the recharge and sustained ecological flows, including source sustainability	-	-	-	-
NOS Total	30	40	-	30









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N6626
NOS Name	Facilitate the formation and operation of water governance institutions
Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Watershed Management
NSQF Level	4
Credits	3
Version	1.0
Last Reviewed Date	NA
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023









AGR/N6601: Mobilize and organize the community for water resource project interventions ensuring community ownership

Description

This OS unit is about mobilizing the community to take up water resource project interventions in the project area. It also covers ensuring the participation of the community in planning, organizing, executing and monitoring water resource projects.

Scope

The scope covers the following:

- Ensure community participation in the planning, execution and monitoring of the project
- Ensure community participation in maintaining social discipline
- Assist the community in realizing the potential of water resource projects
- Motivate the community through visits to successful water resource projects
- Manage logistics for training and workshops

Elements and Performance Criteria

Ensure community participation in the planning, execution and monitoring of the project

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

- **PC1.** mobilize the community members of all genders and from all social and economic backgrounds for participation
- **PC2.** organise community meetings, presenting the relevant data and objectives
- **PC3.** create awareness among the community concerning water resource projects through meetings, including the project phases such as entry point, capacity building, full implementation, consolidation, etc.
- **PC4.** encourage the prominent individuals and community members to exchange views and participate in decision-making in the meetings at the village/ water resource institution level
- **PC5.** mobilize women, asset-less and landless households to participate in the planning processes
- **PC6.** create a database of villages and individuals participating in the project
- **PC7.** assist in maintaining transparency concerning the plans, processes, project implementation and achievements regularly by updating the committee and community members through meetings, display boards, circulars, etc.
- **PC8.** follow the committee guidelines to address grievances/concerns raised by the community members
- **PC9.** identify the need to prioritise interventions as per community needs and take appropriate measures, ensuring community participation in the project
- **PC10.** assist in facilitating the intervention process with the active involvement of water governance institutions
- **PC11.** facilitate the formation of water governance institutions
- PC12. assist in the efficient functioning of the water governance institutions









PC13. communicate effectively with the community members about the progress of the project interventions

Ensure community participation in maintaining social discipline

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

- **PC14.** encourage the community and community institutions to discuss mechanisms to obey social disciplines/ norms, such as the ban on cutting trees and controlled grazing by domestic animals, appropriate water uses practices, etc.
- **PC15.** encourage the community and community institutions to follow the updated and concurrent bylaws
- **PC16.** assist the water resource institutions in monitoring compliance with the applicable disciplines/norms and ensuring appropriate action against the violators
- **PC17.** mobilize the community to make appropriate contributions to the project, e.g. labour, materials and financial contributions, to help achieve the project goals
- **PC18.** conduct interactive sessions with children and school students to explain the importance of social discipline and following environmental protection measures
- **PC19.** carry out regular participatory progress monitoring against the project objectives

Assist the community in realizing the potential of water resource projects

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

- **PC20.** identify the socio-economic and developmental problems of the community
- **PC21.** develop a plan through PRA for the necessary water resource project interventions as an alternative to solve the problems faced by the community
- **PC22.** present the action plan to the water resource institutions/ Gram Sabha/ panchayat functionaries, ensuring the participation of the village community for the necessary approvals and implementation
- **PC23.** conduct impact monitoring with community participation to deter
- **PC24.** conduct Participatory Rural Appraisal (PRA)/ Rapid Rural Appraisal (RRA) with the community using the appropriate tools, such as social mapping, resource mapping, etc.
- **PC25.** plan mid-course corrections in treatments and strategies with the Water resource committee to enhance the impacts of project interventions
- **PC26.** create awareness amongst the community about the maintenance of water resource interventions, setting appropriate mechanisms, such as a maintenance fund as per the project guidelines
- **PC27.** coordinate with the water resource committee to establish and increase the sustainability of the maintenance fund after the project is over
- **PC28.** organize demonstrations for the community members to train them on the repair and maintenance of water resource assets

Motivate the community through visits to successful water resource projects

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

- **PC29.** identify the successful water resource projects in the vicinity and their strengths
- **PC30.** 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
- **PC31.** conduct field visits with the community members to the water resource development sites where the impact of projects is visible









- **PC32.** conduct discussions with the water resource institutions, community members etc., regarding the relevant processes, experiences, difficulties and impacts
- **PC33.** ensure to take feedback from the community members and water resource institutions concerning the water resource projects to identify the scope of improvement and prepare an action plan
- **PC34.** analyze the change in the response of the community members and revisit the community mobilization strategies
- **PC35.** follow the recommended measures to motivate and encourage the participation of community members

Manage logistics for training and workshops

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

- **PC36.** select an appropriate venue and time for training and workshops to ensure maximum participation
- **PC37.** ensure the availability of an appropriate facility with the required seating capacity and health and safety arrangements
- **PC38.** arrange the appropriate tools, equipment and aids for training and workshops, e.g. audiovisual aids, stationery, relevant literature, refreshments, etc.
- **PC39.** coordinate with the relevant authorities to get necessary approvals for training and workshops

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** the importance of community participation in the planning, execution and monitoring of water resource management projects
- **KU2.** the importance of community participation in maintaining social discipline
- **KU3.** the concept and practices in participatory and integrated water resource management
- **KU4.** the relevant community organization, participation and mobilization tools and strategies
- **KU5.** the applicable soil and water conservation technologies
- **KU6.** the process of planning and executing water resource management projects
- **KU7.** the guidelines on community participation, ownership, and transparency in water resource projects
- **KU8.** the role, responsibilities and the management of community institutions in participatory water resource management
- **KU9.** the best practices to be followed for community participation and ownership in various resource management development projects
- **KU10.** the importance and ways of assisting the community in realizing the potential of water resource projects
- **KU11.** the benefits of conducting community visits to successful water resource projects
- **KU12.** the logistics management for training and workshops

Generic Skills (GS)









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

- **GS1.** maintain work-related notes and records
- GS2. read the relevant literature to learn about the latest developments in the field of work
- GS3. listen attentively to understand the information and instructions being shared
- **GS4.** communicate politely and professionally
- **GS5.** plan and schedule various tasks for efficient use of time
- **GS6.** identify possible disruptions to work and take appropriate preventive measures
- **GS7.** evaluate all possible solutions to a problem to select the best one









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Ensure community participation in the planning, execution and monitoring of the project	6	8	-	6
PC1. mobilize the community members of all genders and from all social and economic backgrounds for participation	-	-	-	-
PC2. organise community meetings, presenting the relevant data and objectives	-	-	-	-
PC3. create awareness among the community concerning water resource projects through meetings, including the project phases such as entry point, capacity building, full implementation, consolidation, etc.	-	-	-	-
PC4. encourage the prominent individuals and community members to exchange views and participate in decision-making in the meetings at the village/ water resource institution level	-	-	-	-
PC5. mobilize women, asset-less and landless households to participate in the planning processes	-	-	-	-
PC6. create a database of villages and individuals participating in the project	-	-	-	-
PC7. assist in maintaining transparency concerning the plans, processes, project implementation and achievements regularly by updating the committee and community members through meetings, display boards, circulars, etc.	-	-	-	-
PC8. follow the committee guidelines to address grievances/concerns raised by the community members	-	-	-	-
PC9. identify the need to prioritise interventions as per community needs and take appropriate measures, ensuring community participation in the project	-	-	-	-
PC10. assist in facilitating the intervention process with the active involvement of water governance institutions	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. facilitate the formation of water governance institutions	-	-	-	-
PC12. assist in the efficient functioning of the water governance institutions	-	-	-	-
PC13. communicate effectively with the community members about the progress of the project interventions	-	-	-	-
Ensure community participation in maintaining social discipline	6	8	-	6
PC14. encourage the community and community institutions to discuss mechanisms to obey social disciplines/ norms, such as the ban on cutting trees and controlled grazing by domestic animals, appropriate water uses practices, etc.	-	-	-	-
PC15. encourage the community and community institutions to follow the updated and concurrent bylaws	-	-	-	-
PC16. assist the water resource institutions in monitoring compliance with the applicable disciplines/norms and ensuring appropriate action against the violators	-	-	-	-
PC17. mobilize the community to make appropriate contributions to the project, e.g. labour, materials and financial contributions, to help achieve the project goals	-	-	-	-
PC18. conduct interactive sessions with children and school students to explain the importance of social discipline and following environmental protection measures	-	-	-	-
PC19. carry out regular participatory progress monitoring against the project objectives	-	-	-	-
Assist the community in realizing the potential of water resource projects	6	8	-	6
PC20. identify the socio-economic and developmental problems of the community	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC21. develop a plan through PRA for the necessary water resource project interventions as an alternative to solve the problems faced by the community	-	-	-	-
PC22. present the action plan to the water resource institutions/ Gram Sabha/ panchayat functionaries, ensuring the participation of the village community for the necessary approvals and implementation	-	-	-	-
PC23. conduct impact monitoring with community participation to deter	-	-	-	-
PC24. conduct Participatory Rural Appraisal (PRA)/ Rapid Rural Appraisal (RRA) with the community using the appropriate tools, such as social mapping, resource mapping, etc.	-	-	-	-
PC25. plan mid-course corrections in treatments and strategies with the Water resource committee to enhance the impacts of project interventions	-	-	-	-
PC26. create awareness amongst the community about the maintenance of water resource interventions, setting appropriate mechanisms, such as a maintenance fund as per the project guidelines	-	-	-	-
PC27. coordinate with the water resource committee to establish and increase the sustainability of the maintenance fund after the project is over	-	-	-	-
PC28. organize demonstrations for the community members to train them on the repair and maintenance of water resource assets	-	-	-	-
Motivate the community through visits to successful water resource projects	6	8	-	6
PC29. identify the successful water resource projects in the vicinity and their strengths	-	-	-	-
PC30. 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	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC31. conduct field visits with the community members to the water resource development sites where the impact of projects is visible	-	-	-	-
PC32. conduct discussions with the water resource institutions, community members etc., regarding the relevant processes, experiences, difficulties and impacts	-	-	-	-
PC33. ensure to take feedback from the community members and water resource institutions concerning the water resource projects to identify the scope of improvement and prepare an action plan	-	-	-	-
PC34. analyze the change in the response of the community members and revisit the community mobilization strategies	-	-	-	-
PC35. follow the recommended measures to motivate and encourage the participation of community members	-	-	-	-
Manage logistics for training and workshops	6	8	-	6
PC36. select an appropriate venue and time for training and workshops to ensure maximum participation	-	-	-	-
PC37. ensure the availability of an appropriate facility with the required seating capacity and health and safety arrangements	-	-	-	-
PC38. arrange the appropriate tools, equipment and aids for training and workshops, e.g. audio- visual aids, stationery, relevant literature, refreshments, etc.	-	-	-	-
PC39. coordinate with the relevant authorities to get necessary approvals for training and workshops	-	-	-	-
NOS Total	30	40	-	30









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N6601
NOS Name	Mobilize and organize the community for water resource project interventions ensuring community ownership
Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Watershed Management
NSQF Level	4
Credits	2
Version	2.0
Last Reviewed Date	NA
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023









AGR/N6602: Strengthen the community institutions by training and capacity building

Description

This OS unit is about strengthening the water resource institutions and undertaking training and capacity-building measures for institution members.

Scope

The scope covers the following:

- Strengthen the water resource institutions
- Plan and execute capacity-building measures for water resource institutions
- Assist the water resource institutions in their functioning and management

Elements and Performance Criteria

Strengthen the water resource institutions

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

- **PC1.** conduct formal meetings with the community members, ensuring participation from all social and economic backgrounds
- **PC2.** assist the community members and key leaders in understanding the importance of water resource institutions and their roles and responsibilities in a water resource project
- **PC3.** follow the formal process set by the project team to form the water resource committee
- **PC4.** follow the appropriate measures to resolve social conflicts that may arise during the formation process

Plan and execute capacity-building measures for water resource institutions

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

- **PC5.** identify the training needs based on the current understanding of community institution members
- **PC6.** refine the training/event modules based on the need for modification or customization with guidance and consultation from the relevant authority
- **PC7.** organize the required resources for training through coordination with the relevant personnel
- **PC8.** ensure the community members are made aware of training programs and encouraged to attend them for the required number of days
- **PC9.** plan and 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
- **PC10.** organise on-field training on water resource interventions for the optimal fulfilment of demand and supply
- **PC11.** conduct training sessions and events as per the capacity-building program, following the principles of pedagogy
- **PC12.** carry out action planning exercises and cross-learning events within and across the water resource institutions









PC13. encourage the community members to display their skills and information in community meetings, workshops, delegation visits, etc.

Assist the water resource institutions in their functioning and management

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

- **PC14.** conduct periodic meetings with the institutions for planning, including action reviews, decision making, information sharing and skill upgrade
- **PC15.** enable the chief functionaries to lead the meetings, maintain the record of proceedings and execute the decisions made
- **PC16.** assist the water resource institutions in the execution, monitoring and management of the water resource interventions
- PC17. identify the convergence needs for additional grant, credit, information and knowledge
- **PC18.** assist the community institutions in contacting the relevant agencies for convergence, prepare proposals, follow up and execute the approved interventions
- **PC19.** determine the long-term goals of the community institutions, and facilitate the preparation of the development plans for water resource management
- **PC20.** assist the institutions in getting registered under the appropriate laws and ensure compliance with the applicable laws

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** the relevant training tools and techniques
- **KU2.** the role, responsibilities and management of community institutions in watershed management
- **KU3.** the best practices to be followed in community institutions in various development projects
- **KU4.** the guidelines, laws and legal compliances requirements relevant to community institutions

Generic Skills (GS)

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

- **GS1.** maintain work-related notes and records
- **GS2.** read the relevant literature to get information about the latest developments in the field of work
- **GS3.** listen attentively to understand the information/ instructions being shared by the speaker
- **GS4.** communicate clearly and politely with co-workers and clients
- **GS5.** coordinate with co-workers to achieve work objectives
- **GS6.** plan and prioritize tasks to ensure timely completion
- **GS7.** identify possible disruptions to work and take appropriate preventive measures
- **GS8.** take quick decisions to deal with workplace emergencies/ accidents
- **GS9.** evaluate all possible solutions to a problem to select the best one









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Strengthen the water resource institutions	12	13	-	11
PC1. conduct formal meetings with the community members, ensuring participation from all social and economic backgrounds	-	-	-	-
PC2. assist the community members and key leaders in understanding the importance of water resource institutions and their roles and responsibilities in a water resource project	-	-	-	-
PC3. follow the formal process set by the project team to form the water resource committee	-	-	-	-
PC4. follow the appropriate measures to resolve social conflicts that may arise during the formation process	-	-	-	-
Plan and execute capacity-building measures for water resource institutions	9	14	-	10
PC5. identify the training needs based on the current understanding of community institution members	-	-	-	-
PC6. refine the training/event modules based on the need for modification or customization with guidance and consultation from the relevant authority	-	-	-	-
PC7. organize the required resources for training through coordination with the relevant personnel	-	-	-	-
PC8. ensure the community members are made aware of training programs and encouraged to attend them for the required number of days	-	-	-	-
PC9. plan and 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	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. organise on-field training on water resource interventions for the optimal fulfilment of demand and supply	-	-	-	-
PC11. conduct training sessions and events as per the capacity-building program, following the principles of pedagogy	-	-	-	-
PC12. carry out action planning exercises and cross-learning events within and across the water resource institutions	-	-	-	-
PC13. encourage the community members to display their skills and information in community meetings, workshops, delegation visits, etc.	-	-	-	-
Assist the water resource institutions in their functioning and management	9	13	-	9
PC14. conduct periodic meetings with the institutions for planning, including action reviews, decision making, information sharing and skill upgrade	-	-	-	-
PC15. enable the chief functionaries to lead the meetings, maintain the record of proceedings and execute the decisions made	-	-	-	-
PC16. assist the water resource institutions in the execution, monitoring and management of the water resource interventions	-	-	-	-
PC17. identify the convergence needs for additional grant, credit, information and knowledge	-	-	-	-
PC18. assist the community institutions in contacting the relevant agencies for convergence, prepare proposals, follow up and execute the approved interventions	-	-	-	-
PC19. determine the long-term goals of the community institutions, and facilitate the preparation of the development plans for water resource management	-	-	-	-
PC20. assist the institutions in getting registered under the appropriate laws and ensure compliance with the applicable laws	-	-	-	-









Assessment Criteria for Outcomes	Theory	Practical	Project	Viva
	Marks	Marks	Marks	Marks
NOS Total	30	40	-	30









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N6602
NOS Name	Strengthen the community institutions by training and capacity building
Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Watershed Management
NSQF Level	4
Credits	1
Version	2.0
Last Reviewed Date	NA
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023









AGR/N6627: Assist in conducting the social and regulatory audits and maintain the relevant data

Description

This OS unit is about conducting the annual audit of documentation and water resource development projects. It also covers the maintenance of relevant data and the preparation of metrics to track the performance of water governance institutions.

Scope

The scope covers the following:

- Assist in conducting the social and regulatory audit
- Maintain the necessary data concerning water resource development audit

Elements and Performance Criteria

Assist in conducting the social and regulatory audit

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

- **PC1.** perform the on-site review to ensure regulatory compliance
- **PC2.** facilitate and assist in the social and regulatory audits/inspections
- **PC3.** ensure water resource projects are selected as per the prescribed criteria and approved program guidelines
- **PC4.** check and ensure the water resource project action plans are prepared according to the applicable guidelines
- **PC5.** check the effectiveness of financial management, implementation of program components, and the supervision and monitoring mechanisms
- **PC6.** ensure the program wise and year wise breakup of expenditure and unutilized funds match with the fund released by the sponsoring organizations
- **PC7.** ensure the unutilized funds from the earmarked components are duly documented and processed as per the scheme requirements
- **PC8.** ensure the scrutiny of progress reports is appropriately done and cost norms are adhered to during the project implementation
- **PC9.** follow the action plan for the proposed schemes during program implementation and prioritization of sectoral activities
- **PC10.** ensure the verification of treated areas is done through the Land Revenue Records
- **PC11.** ensure project implementation following the program guidelines with due attention to the activities that can yield multiple and long-term benefits
- **PC12.** ensure the optimum and economical utilization of human
- **PC13.** ensure effective monitoring and evaluation of the project to achieve the goals
- **PC14.** ensure the availability of project pre, interim and post-status data as per the program parameters

Maintain the necessary data concerning water resource development audit









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

- **PC15.** maintain the relevant documents concerning the objectives of the audit, audit criteria, audit scope and methodology
- **PC16.** maintain documents related to audit findings, such as financial management, the release of funds, diversion of earmarked component funds, adherence to cost norms, etc.
- **PC17.** maintain the necessary documents concerning the water resource program management
- **PC18.** document the physical and financial achievements concerning the water resource program implementation through the Monthly Progress Reports (MPRs)
- **PC19.** maintain documents related to the verification of treated areas through land revenue records and diverse socio-economic factors
- **PC20.** 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.
- **PC21.** document the program monitoring and supervision activities

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** the importance of complete and accurate documentation
- **KU2.** the importance of quality control procedures
- **KU3.** the functioning and use of ERP platforms
- **KU4.** how to use an integrated planning tool
- **KU5.** the operating requirements, parameters and corrective action required when the operation is outside specific operating parameters
- **KU6.** how to work with cross-functional teams
- **KU7.** the importance of collaborating with internal and external stakeholders
- **KU8.** the importance of maintaining the documents related to the program management, such as action plans
- **KU9.** the scope and selection criteria for water resource development projects
- **KU10.** the importance of conducting and documenting impact analysis concerning the water resource development projects
- **KU11.** the importance of adopting a water resource development strategy and prioritizing sectoral activities

Generic Skills (GS)

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

- **GS1.** maintain work-related notes and records
- GS2. communicate politely and professionally
- GS3. listen attentively to understand the information being shared
- **GS4.** read the relevant literature to learn about the latest developments in the field of work
- **GS5.** coordinate with the co-workers and stakeholders to achieve the work objectives
- **GS6.** plan and prioritize tasks to ensure timely completion









GS7. take quick decisions to deal with workplace emergencies

GS8. evaluate all possible solutions to a problem to select the best one









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Assist in conducting the social and regulatory audit	20	26	-	20
PC1. perform the on-site review to ensure regulatory compliance	-	-	-	-
PC2. facilitate and assist in the social and regulatory audits/inspections	-	-	-	-
PC3. ensure water resource projects are selected as per the prescribed criteria and approved program guidelines	-	-	-	-
PC4. check and ensure the water resource project action plans are prepared according to the applicable guidelines	-	-	-	-
PC5. check the effectiveness of financial management, implementation of program components, and the supervision and monitoring mechanisms	-	-	-	-
PC6. ensure the program wise and year wise breakup of expenditure and unutilized funds match with the fund released by the sponsoring organizations	-	-	-	-
PC7. ensure the unutilized funds from the earmarked components are duly documented and processed as per the scheme requirements	-	-	-	-
PC8. ensure the scrutiny of progress reports is appropriately done and cost norms are adhered to during the project implementation	-	-	-	-
PC9. follow the action plan for the proposed schemes during program implementation and prioritization of sectoral activities	-	-	-	-
PC10. ensure the verification of treated areas is done through the Land Revenue Records	-	-	-	-
PC11. ensure project implementation following the program guidelines with due attention to the activities that can yield multiple and long-term benefits	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. ensure the optimum and economical utilization of human	-	-	-	-
PC13. ensure effective monitoring and evaluation of the project to achieve the goals	-	-	-	-
PC14. ensure the availability of project pre, interim and post-status data as per the program parameters	-	-	-	-
Maintain the necessary data concerning water resource development audit	10	14	-	10
PC15. maintain the relevant documents concerning the objectives of the audit, audit criteria, audit scope and methodology	-	-	-	-
PC16. maintain documents related to audit findings, such as financial management, the release of funds, diversion of earmarked component funds, adherence to cost norms, etc.	-	-	-	-
PC17. maintain the necessary documents concerning the water resource program management	-	-	-	-
PC18. document the physical and financial achievements concerning the water resource program implementation through the Monthly Progress Reports (MPRs)	-	-	-	-
PC19. maintain documents related to the verification of treated areas through land revenue records and diverse socio-economic factors	-	-	-	-
PC20. 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.	-	-	-	-
PC21. document the program monitoring and supervision activities	-	-	-	-
NOS Total	30	40	-	30









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N6627
NOS Name	Assist in conducting the social and regulatory audits and maintain the relevant data
Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Watershed Management
NSQF Level	4
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023









AGR/N9903: Maintain health and safety at the workplace

Description

This OS is about maintaining health and safety of self and other co-workers at the workplace

Scope

The scope covers the following:

- Maintain personal hygiene
- Maintain clean and safe workplace
- Administer appropriate emergency procedures

Elements and Performance Criteria

Maintain personal hygiene

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

- **PC1.** wash hands, legs and face with soap/alcohol based sanitizer at reasonable intervals
- **PC2.** wash the worn clothes with soap and sun dry before use next time
- **PC3.** ensure the face is covered with mask or three layers of cloth-piece
- **PC4.** follow the workplace sanitization norms including distancing from sick people

Maintain clean and safe workplace

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

- **PC5.** carry out basic safety checks before operation of all tools, implements, and machinery and report identified hazards to the supervisor
- **PC6.** wear appropriate Personal Protective Equipment (PPE) while performing work in accordance with the workplace policy
- **PC7.** follow the instructions mentioned on the labels of chemicals/pesticides/fumigants etc to avoid hazards
- **PC8.** assess risks prior to performing manual handling jobs, and work according to currently recommended safe practices
- **PC9.** sanitize equipment, tools and machinery before and after use
- **PC10.** use equipment and materials safely and correctly and return the same to designated storage after use
- **PC11.** dispose waste safely and correctly in the designated area
- **PC12.** recognize risks to bystanders and take required action to reduce the risks
- **PC13.** work in a manner which minimizes environmental damage, ensuring all procedures and instructions for controlling risks are followed
- **PC14.** report any accidents, incidents or problems without delay to an appropriate person and take necessary immediate action to reduce further danger
- PC15. follow government / workplace advisories incase of outbreak of any disease/disaster

Administer appropriate emergency procedures

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









- **PC16.** follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to the location of emergency, as per the workplace requirements
- **PC17.** use emergency equipment in accordance with manufacturer's specifications and workplace requirements
- **PC18.** provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques
- **PC19.** recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate
- PC20. report details of first aid administered in accordance with workplace procedures

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** relevant legislation, standards, policies, and procedures at work
- **KU2.** relevant health and safety requirements applicable to the work environment
- **KU3.** own job role and responsibilities and sources of information pertaining to work
- **KU4.** who to approach for support in order to obtain work related information, clarifications and support
- **KU5.** importance of following health, hygiene, safety and quality standards and the impact of not following the standards on consumers and the business
- **KU6.** personal hygiene and fitness requirement
- **KU7.** importance of sanitization of the workplace
- **KU8.** types of Personal Protective Equipment (PPE) required at the workplace and their importance
- **KU9.** the correct and safe way to use materials and equipment required for the work
- **KU10.** the importance of good housekeeping at the workplace
- **KU11.** safe waste disposal methods
- KU12. methods for minimizing environmental damage during work
- **KU13.** the risks to health and safety including contagious diseases and the measures to be taken to control those risks in the area of work
- **KU14.** workplace procedures and requirements for the prevention and treatment of workplace injuries/illnesses.
- **KU15.** basic emergency first aid procedure
- **KU16.** local emergency services
- **KU17.** why accidents, incidents and problems should be reported and the appropriate actions to be taken

Generic Skills (GS)

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

- **GS1.** record the data as per the requirement
- **GS2.** report problems to the appropriate personnel in a timely manner









- **GS3.** read instruction manual for hand tool and equipments
- GS4. communicate clearly and effectively with co-workers, and other stakeholders
- **GS5.** comprehend information shared by senior people and experts
- **GS6.** make decisions pertaining to personal hygiene and safety
- GS7. schedule daily activities and draw up priorities
- GS8. manage relationships with co-workers, manager and other stakeholders
- **GS9.** assess situation and identify appropriate control measures









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Maintain personal hygiene	10	5	-	10
PC1. wash hands, legs and face with soap/alcohol based sanitizer at reasonable intervals	-	-	-	-
PC2. wash the worn clothes with soap and sun dry before use next time	-	-	-	-
PC3. ensure the face is covered with mask or three layers of cloth-piece	-	-	-	-
PC4. follow the workplace sanitization norms including distancing from sick people	-	-	-	-
Maintain clean and safe workplace	15	15	-	15
PC5. carry out basic safety checks before operation of all tools, implements, and machinery and report identified hazards to the supervisor	-	-	-	-
PC6. wear appropriate Personal Protective Equipment (PPE) while performing work in accordance with the workplace policy	-	-	-	-
PC7. follow the instructions mentioned on the labels of chemicals/pesticides/fumigants etc to avoid hazards	-	-	-	-
PC8. assess risks prior to performing manual handling jobs, and work according to currently recommended safe practices	-	-	-	-
PC9. sanitize equipment, tools and machinery before and after use	-	-	-	-
PC10. use equipment and materials safely and correctly and return the same to designated storage after use	-	-	-	-
PC11. dispose waste safely and correctly in the designated area	-	-	-	-
PC12. recognize risks to bystanders and take required action to reduce the risks	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. work in a manner which minimizes environmental damage, ensuring all procedures and instructions for controlling risks are followed	-	-	-	-
PC14. report any accidents, incidents or problems without delay to an appropriate person and take necessary immediate action to reduce further danger	-	-	-	-
PC15. follow government / workplace advisories incase of outbreak of any disease/disaster	-	-	-	-
Administer appropriate emergency procedures	15	5	-	10
PC16. follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to the location of emergency, as per the workplace requirements	-	-	-	-
PC17. use emergency equipment in accordance with manufacturer's specifications and workplace requirements	-	-	-	-
PC18. provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques	-	-	-	-
PC19. recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate	-	-	-	-
PC20. report details of first aid administered in accordance with workplace procedures	-	-	-	-
NOS Total	40	25	-	35









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N9903
NOS Name	Maintain health and safety at the workplace
Sector	Agriculture
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4
Credits	1
Version	4.0
Last Reviewed Date	22/10/2024
Next Review Date	22/10/2027
NSQC Clearance Date	22/10/2024









DGT/VSQ/N0102: Employability Skills (60 Hours)

Description

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

Scope

The scope covers the following:

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

Elements and Performance Criteria

Introduction to Employability Skills

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

- **PC1.** identify employability skills required for jobs in various industries
- PC2. identify and explore learning and employability portals

Constitutional values - Citizenship

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

- **PC3.** recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.
- **PC4.** follow environmentally sustainable practices

Becoming a Professional in the 21st Century

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

- **PC5.** recognize the significance of 21st Century Skills for employment
- **PC6.** practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life

Basic English Skills

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









- **PC7.** use basic English for everyday conversation in different contexts, in person and over the telephone
- **PC8.** read and understand routine information, notes, instructions, mails, letters etc. written in English
- **PC9.** write short messages, notes, letters, e-mails etc. in English

Career Development & Goal Setting

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

- PC10. understand the difference between job and career
- **PC11.** prepare a career development plan with short- and long-term goals, based on aptitude *Communication Skills*

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

- **PC12.** follow verbal and non-verbal communication etiquette and active listening techniques in various settings
- PC13. work collaboratively with others in a team

Diversity & Inclusion

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

- PC14. communicate and behave appropriately with all genders and PwD
- **PC15.** escalate any issues related to sexual harassment at workplace according to POSH Act *Financial and Legal Literacy*

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

- **PC16.** select financial institutions, products and services as per requirement
- **PC17.** carry out offline and online financial transactions, safely and securely
- **PC18.** identify common components of salary and compute income, expenses, taxes, investments etc
- **PC19.** identify relevant rights and laws and use legal aids to fight against legal exploitation *Essential Digital Skills*

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

- **PC20.** operate digital devices and carry out basic internet operations securely and safely
- PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively
- **PC22.** use basic features of word processor, spreadsheets, and presentations

Entrepreneurship

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

- **PC23.** identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
- **PC24.** develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
- **PC25.** identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity

Customer Service

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

- **PC26.** identify different types of customers
- **PC27.** identify and respond to customer requests and needs in a professional manner.









PC28. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

- PC29. create a professional Curriculum vitae (Résumé)
- **PC30.** search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively
- **PC31.** apply to identified job openings using offline /online methods as per requirement
- **PC32.** answer questions politely, with clarity and confidence, during recruitment and selection
- **PC33.** identify apprenticeship opportunities and register for it as per guidelines and requirements

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. need for employability skills and different learning and employability related portals
- **KU2.** various constitutional and personal values
- **KU3.** different environmentally sustainable practices and their importance
- **KU4.** Twenty first (21st) century skills and their importance
- **KU5.** how to use English language for effective verbal (face to face and telephonic) and written communication in formal and informal set up
- **KU6.** importance of career development and setting long- and short-term goals
- **KU7.** about effective communication
- KU8. POSH Act
- **KU9.** Gender sensitivity and inclusivity
- **KU10.** different types of financial institutes, products, and services
- **KU11.** how to compute income and expenditure
- **KU12.** importance of maintaining safety and security in offline and online financial transactions
- KU13. different legal rights and laws
- **KU14.** different types of digital devices and the procedure to operate them safely and securely
- **KU15.** how to create and operate an e- mail account and use applications such as word processors, spreadsheets etc.
- **KU16.** how to identify business opportunities
- **KU17.** types and needs of customers
- **KU18.** how to apply for a job and prepare for an interview
- **KU19.** apprenticeship scheme and the process of registering on apprenticeship portal

Generic Skills (GS)

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

- **GS1.** read and write different types of documents/instructions/correspondence
- **GS2.** communicate effectively using appropriate language in formal and informal settings









- **GS3.** behave politely and appropriately with all
- **GS4.** how to work in a virtual mode
- **GS5.** perform calculations efficiently
- **GS6.** solve problems effectively
- **GS7.** pay attention to details
- **GS8.** manage time efficiently
- GS9. maintain hygiene and sanitization to avoid infection









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	1	1	-	-
PC1. identify employability skills required for jobs in various industries	-	-	-	-
PC2. identify and explore learning and employability portals	-	-	-	-
Constitutional values - Citizenship	1	1	-	-
PC3. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
PC4. follow environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	2	4	-	-
PC5. recognize the significance of 21st Century Skills for employment	-	-	-	-
PC6. practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
Basic English Skills	2	3	-	-
PC7. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
PC8. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
PC9. write short messages, notes, letters, e-mails etc. in English	-	-	-	-
Career Development & Goal Setting	1	2	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. understand the difference between job and career	-	-	-	-
PC11. prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
Communication Skills	2	2	-	-
PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
PC13. work collaboratively with others in a team	-	-	-	-
Diversity & Inclusion	1	2	-	-
PC14. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
Financial and Legal Literacy	2	3	-	-
PC16. select financial institutions, products and services as per requirement	-	-	-	-
PC17. carry out offline and online financial transactions, safely and securely	-	-	-	-
PC18. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
PC19. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
Essential Digital Skills	3	4	-	-
PC20. operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
PC22. use basic features of word processor, spreadsheets, and presentations	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Entrepreneurship	2	3	-	-
PC23. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
PC24. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
PC25. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
Customer Service	1	2	-	-
PC26. identify different types of customers	-	-	-	-
PC27. identify and respond to customer requests and needs in a professional manner.	-	-	-	-
PC28. follow appropriate hygiene and grooming standards	-	-	-	-
Getting ready for apprenticeship & Jobs	2	3	-	-
PC29. create a professional Curriculum vitae (Résumé)	-	-	-	-
PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
PC31. apply to identified job openings using offline /online methods as per requirement	-	-	-	-
PC32. answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
NOS Total	20	30	-	-









National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0102
NOS Name	Employability Skills (60 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	4
Credits	2
Version	1.0
Last Reviewed Date	18/02/2025
Next Review Date	18/02/2028
NSQC Clearance Date	18/02/2025









AGR/N6629: Assist in the planning, implementation, monitoring and review of watershed programs

Description

This OS unit is about assisting in the planning, implementation, monitoring and review of watershed programs.

Scope

The scope covers the following:

- Assist in data collection and ground-truthing
- Facilitate the formation and operation of WUAs /water governance institutions
- Identify the convergence opportunities

Elements and Performance Criteria

Assist in data collection and ground-truthing

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

- **PC1.** assist in collecting different types of data for watershed planning, e.g. demographic, village boundary, household income assessment, livestock, social stratification etc.
- **PC2.** determine the present and proposed land use
- **PC3.** identify the drainage type-based stream order and watershed physical and social boundary
- **PC4.** identify and define watershed using toposheet
- **PC5.** determine the highest and lowest levels in the GPS reading for watershed planning
- **PC6.** maintain the record of the changing pattern of the watershed

Facilitate the formation and operation of WUAs /water governance institutions

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

- **PC7.** establish rapport with the target audience through the entry program(s)
- **PC8.** create awareness among the target audience about the project objectives
- **PC9.** mobilize the community for the watershed project development, encouraging them to take up watershed project interventions
- **PC10.** facilitate the formation of water user associations and groups, Self-help Groups (SHG), mentoring committees, village watershed committees, watershed project management committees, etc.
- **PC11.** assist in developing bylaws for the relevant institutions and capacities within the user groups and management committees
- PC12. assist in resolving conflicts among the group members and follow up, if required

Identify the convergence opportunities

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

- **PC13.** utilize other existing funding resources to complement and supplement components of watershed management for achieving scalability
- **PC14.** converge with the existing government programs









- **PC15.** create community-led funds through voluntary contributions by the user groups to improve the longevity of the recharge measures and sustainability of initiatives
- PC16. coordinate with the panchayat and identify the convergence opportunities

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** different types of data required for watershed planning, such as physiographical data, environmental and ecosystems data, soil characteristics, soil texture, soil structure, soil erosion, moisture retention capacity, water quality standards and pollutant sources, ecological, local climate data, viz. rainfall and temperature, Catchment Area, Watershed recharge capacity, water level, topography, land use, land cover data, land holding category (small/medium/large/marginal/landless), existing
- **KU2.** groundwater and wells
- **KU3.** the benefits and methods of rooftop and rainwater harvesting
- **KU4.** the distribution of subsurface water
- **KU5.** the importance of aquifer and water table
- **KU6.** Groundwater development and movement
- **KU7.** well hydraulics and well inventory
- **KU8.** the concept of safe yield
- **KU9.** the process and mechanism of groundwater recharge
- **KU10.** the estimation of groundwater recharge and estimation
- **KU11.** different water recharge structures
- **KU12.** different water conservation measures
- **KU13.** how to read different types of maps
- **KU14.** the watershed concept and the watershed planning process
- **KU15.** the ridge to valley planning
- **KU16.** how to mark the boundaries in a watershed atlas
- **KU17.** the Basic Schedule Rate (BSR)
- **KU18.** the scientific and traditional soil and water conservation methods
- **KU19.** the concept of Natural Resource Management (NRM)
- **KU20.** various practices for sustainable agriculture
- **KU21.** the relevant climate change concerns
- **KU22.** the watershed management practices and the scope of integration for different practices
- **KU23.** the benefits of watershed management
- **KU24.** the categorization of watersheds based on size, drainage, shape, etc.
- **KU25.** various activities undertaken in integrated watershed development projects, viz. soil and water conservation, agronomical practices, livestock management, renewable energy management, institutional developments, etc.
- **KU26.** the concept of the hydrological cycle
- **KU27.** the distribution of subsurface water in a watershed









- **KU28.** the importance of soil in watershed management
- **KU29.** different approaches to conserve soil and prevent soil erosion
- KU30. different types of water harvesting structures
- **KU31.** how to measure the water requirements of different crops
- KU32. the need for afforestation in a watershed and how to achieve it
- KU33. how to formulate the skeletal plan of a watershed project
- KU34. different initiatives required at different levels for adaptation and climate risk reduction
- KU35. the recommended measures to involve communities in a watershed management project
- **KU36.** the aspects to be considered while formulating the rules, regulations and bylaws for the watershed committee
- KU37. the ideal structure of a watershed committee
- KU38. the procedure for the functioning of the watershed committee
- **KU39.** the common problems encountered in the monitoring of a watershed project

Generic Skills (GS)

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

- **GS1.** maintain work-related notes and records
- **GS2.** read the relevant literature to get information about the latest developments in the field of work
- GS3. listen attentively to understand the information/ instructions being shared by the speaker
- **GS4.** communicate clearly and politely with co-workers and clients
- **GS5.** coordinate with co-workers to achieve work objectives
- **GS6.** plan and prioritize tasks to ensure timely completion
- GS7. evaluate all possible solutions to a problem to select the best one









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Assist in data collection and ground-truthing	12	14	-	12
PC1. assist in collecting different types of data for watershed planning, e.g. demographic, village boundary, household income assessment, livestock, social stratification etc.	-	-	-	-
PC2. determine the present and proposed land use	-	-	-	-
PC3. identify the drainage type-based stream order and watershed physical and social boundary	-	-	-	-
PC4. identify and define watershed using toposheet	-	-	-	-
PC5. determine the highest and lowest levels in the GPS reading for watershed planning	-	-	-	-
PC6. maintain the record of the changing pattern of the watershed	-	-	-	-
Facilitate the formation and operation of WUAs /water governance institutions	10	15	-	10
PC7. establish rapport with the target audience through the entry program(s)	-	-	-	-
PC8. create awareness among the target audience about the project objectives	-	-	-	-
PC9. mobilize the community for the watershed project development, encouraging them to take up watershed project interventions	-	-	-	_
PC10. facilitate the formation of water user associations and groups, Self-help Groups (SHG), mentoring committees, village watershed committees, watershed project management committees, etc.	-	-	-	-
PC11. assist in developing bylaws for the relevant institutions and capacities within the user groups and management committees	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. assist in resolving conflicts among the group members and follow up, if required	-	-	-	-
Identify the convergence opportunities	8	11	-	8
PC13. utilize other existing funding resources to complement and supplement components of watershed management for achieving scalability	-	-	-	-
PC14. converge with the existing government programs	-	-	-	-
PC15. create community-led funds through voluntary contributions by the user groups to improve the longevity of the recharge measures and sustainability of initiatives	-	-	-	-
PC16. coordinate with the panchayat and identify the convergence opportunities	-	-	-	-
NOS Total	30	40	-	30









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N6629
NOS Name	Assist in the planning, implementation, monitoring and review of watershed programs
Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Watershed Management
NSQF Level	4
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023









AGR/N6635: Assist in the planning, implementation, monitoring and review of springshed programs

Description

This OS unit is about assisting in the planning, implementation, monitoring and review of springshed programs.

Scope

The scope covers the following:

- Assist in data collection and ground-truthing
- Facilitate the formation and operation of WUAs /water governance institutions
- Assist in community mobilization, livelihood creation and capacity building
- Assist in identifying funding sources and carrying out convergence

Elements and Performance Criteria

Assist in data collection and ground-truthing

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

- **PC1.** collate secondary data on springs, land use and demographic dependence
- **PC2.** determine the geographical location of springs
- **PC3.** command area under spring, crops patterns, present users on spring water for various use etc.
- **PC4.** identify the sources of springs and diagnose the issues impacting their discharge
- **PC5.** determine the spring discharge and its water quality
- **PC6.** analyse the impact of climate change on catchments and reduction of discharge from the springs
- **PC7.** carry out mapping and collate the relevant information concerning the springs of interest in a geographical area in a standard format manually or electronically
- **PC8.** use the Remote Sensing (RS) and GIS technologies, such as LiDAR for spring inventories, as appropriate
- **PC9.** carry out geo-tagging and documentation concerning land use, ownership, and demographic information on springs
- **PC10.** perform a systematic data monitoring of rainfall, spring discharge, and water quality

Facilitate the formation and operation of water governance institutions

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

- PC11. assist in making institutional arrangements for springshed management
- **PC12.** facilitate the formation and operation of village-level institutions
- **PC13.** assist the VLIs in building their capacities concerning the spring inventory and monitoring using a citizen science model

Assist in community mobilization, livelihood creation and capacity building

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









- **PC14.** identify the context-specific and interactive mobilization tools to create awareness among the community
- **PC15.** explain the scientific concepts in the local language using simple terms to the community
- **PC16.** use 3D models/visual aids to explain the relevant concepts to the community
- **PC17.** assist the institutions in building their technical capacity concerning data collection, planning, management, and uses
- **PC18.** create awareness among the local communities about water security and nature-based solutions
- PC19. mobilize the communities through the relevant mobilization activities
- **PC20.** facilitate the inclusion of local and traditional knowledge in the planning and implementation of springshed management
- **PC21.** ensure active participation of local communities in the implementation of springshed management projects
- PC22. assist in the formation and capacity building of WUGs/VLIs
- PC23. adopt the Gender Equality and Social Inclusion (GESI) approach in springshed management
- PC24. promote gender mainstreaming and social inclusion
- **PC25.** identify the water-use priorities, recharge and discharge area protection protocol, benefit-sharing norms, and financial transparency for the WUGs
- **PC26.** assist in creating protocols for the operations and maintenance WUGs
- **PC27.** 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.
- PC28. ensure the availability of spring enumeration data to the community
- **PC29.** facilitate peer-to-peer learning through exposure visits to successful project sites and case studies

Assist in identifying funding sources and carrying out convergence

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

- **PC30.** utilize other existing funding resources to complement and supplement components of springshed management for achieving scalability
- **PC31.** converge with the existing government programs
- **PC32.** create community-led funds through voluntary contributions by the user groups to improve the longevity of the recharge measures and sustainability of initiatives
- **PC33.** utilize payments for ecosystem services as a funding mechanism for springshed management

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** basic groundwater management practices
- **KU2.** the application of geology and hydrogeology in water resource management
- **KU3.** the best practices for the utilization of springs and aguifers
- **KU4.** the process of springshed development









- **KU5.** the benefits of the springshed management program
- **KU6.** the benefits of pre-feasibility surveys in springshed management
- **KU7.** the secondary sources of information for springs
- **KU8.** the tools for undertaking feasibility surveys and water budgeting exercises with communities
- **KU9.** the critical springs for prioritized interventions from a community's perspective
- **KU10.** the key parameters of interest for spring inventory
- **KU11.** the use of relevant mobile apps for spring inventory
- **KU12.** the estimated numbers of declining or dry springs in the target region
- **KU13.** the use of springs by local communities
- **KU14.** the trend of spring discharge, rainfall and water quality of springs
- **KU15.** How different land uses, including forest and human habitation, and local geology affect spring behaviour across different typologies
- **KU16.** the tools for creating awareness and enhancing community participation in water resource management
- **KU17.** how to build ownership and sustainability in springshed management projects with communities
- **KU18.** how the strengthening of institutional mechanisms at the grassroots level can ensure the sustainability of springshed management
- KU19. how to strengthen the existing VLIs to undertake springshed management
- **KU20.** how to identify community leaders for spearheading projects
- **KU21.** how to encourage communities to lead springshed management
- **KU22.** the advantages of state and national-level consortiums on springshed management
- **KU23.** the examples of state-level consortiums for springshed management
- **KU24.** the applicable management protocol for springshed management
- **KU25.** the water management practices relevant to springshed management
- **KU26.** the recharge interventions suitable for different Land-use and Land-cover (LULC) types, topographies, elevation, hydrogeology, etc.
- **KU27.** the effect of forests, agriculture and other land uses on spring discharge and quality
- **KU28.** the connections between springs across local-watershed-basin scales
- **KU29.** the benefits of isotope analysis
- **KU30.** different sources of funding available through convergence and the examples where convergence has helped scale up springshed management
- **KU31.** the importance of convergence in springshed management and the relevant authorities to be contacted for the purpose
- **KU32.** How can communities be encouraged to lead SM
- **KU33.** the importance of financial support from communities for springshed management
- **KU34.** the concept of baseflow in hydrology
- **KU35.** different characteristics of springs
- **KU36.** the uses of a spring chamber
- **KU37.** the concept of diversion-based irrigation

Generic Skills (GS)









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

- **GS1.** maintain work-related notes and records
- **GS2.** read the relevant literature to get information about the latest developments in the field of work
- GS3. listen attentively to understand the information/ instructions being shared by the speaker
- **GS4.** communicate clearly and politely with co-workers and clients
- GS5. coordinate with co-workers to achieve work objectives
- **GS6.** plan and prioritize tasks to ensure timely completion
- **GS7.** identify possible disruptions to work and take appropriate preventive measures
- GS8. take quick decisions to deal with workplace emergencies/ accidents
- GS9. evaluate all possible solutions to a problem to select the best one









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Assist in data collection and ground-truthing	8	11	-	8
PC1. collate secondary data on springs, land use and demographic dependence	-	-	-	-
PC2. determine the geographical location of springs	-	-	-	-
PC3. command area under spring, crops patterns, present users on spring water for various use etc.	-	-	-	-
PC4. identify the sources of springs and diagnose the issues impacting their discharge	-	-	-	-
PC5. determine the spring discharge and its water quality	-	-	-	-
PC6. analyse the impact of climate change on catchments and reduction of discharge from the springs	-	-	-	-
PC7. carry out mapping and collate the relevant information concerning the springs of interest in a geographical area in a standard format manually or electronically	-	-	-	-
PC8. use the Remote Sensing (RS) and GIS technologies, such as LiDAR for spring inventories, as appropriate	-	-	-	-
PC9. carry out geo-tagging and documentation concerning land use, ownership, and demographic information on springs	-	-	-	-
PC10. perform a systematic data monitoring of rainfall, spring discharge, and water quality	-	-	-	-
Facilitate the formation and operation of water governance institutions	5	8	-	5
PC11. assist in making institutional arrangements for springshed management	-	-	-	-
PC12. facilitate the formation and operation of village-level institutions	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. assist the VLIs in building their capacities concerning the spring inventory and monitoring using a citizen science model	-	-	-	-
Assist in community mobilization, livelihood creation and capacity building	10	13	-	10
PC14. identify the context-specific and interactive mobilization tools to create awareness among the community	-	-	-	-
PC15. explain the scientific concepts in the local language using simple terms to the community	-	-	-	-
PC16. use 3D models/visual aids to explain the relevant concepts to the community	-	-	-	-
PC17. assist the institutions in building their technical capacity concerning data collection, planning, management, and uses	-	-	-	-
PC18. create awareness among the local communities about water security and nature-based solutions	-	-	-	-
PC19. mobilize the communities through the relevant mobilization activities	-	-	-	-
PC20. facilitate the inclusion of local and traditional knowledge in the planning and implementation of springshed management	-	-	-	-
PC21. ensure active participation of local communities in the implementation of springshed management projects	-	-	-	-
PC22. assist in the formation and capacity building of WUGs/VLIs	-	-	-	-
PC23. adopt the Gender Equality and Social Inclusion (GESI) approach in springshed management	-	-	-	-
PC24. promote gender mainstreaming and social inclusion	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC25. identify the water-use priorities, recharge and discharge area protection protocol, benefitsharing norms, and financial transparency for the WUGs	-	-	-	-
PC26. assist in creating protocols for the operations and maintenance WUGs	-	-	-	-
PC27. 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.	-	-	-	-
PC28. ensure the availability of spring enumeration data to the community	-	-	-	-
PC29. facilitate peer-to-peer learning through exposure visits to successful project sites and case studies	-	-	-	-
Assist in identifying funding sources and carrying out convergence	7	8	-	7
PC30. utilize other existing funding resources to complement and supplement components of springshed management for achieving scalability	-	-	-	-
PC31. converge with the existing government programs	-	-	-	-
PC32. create community-led funds through voluntary contributions by the user groups to improve the longevity of the recharge measures and sustainability of initiatives	-	-	-	-
PC33. utilize payments for ecosystem services as a funding mechanism for springshed management	-	-	-	-
NOS Total	30	40	-	30









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N6635
NOS Name	Assist in the planning, implementation, monitoring and review of springshed programs
Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Watershed Management
NSQF Level	4
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023









AGR/N6636: Assist in the planning, implementation, monitoring and review of groundwater programs

Description

This OS unit is about assisting in the planning, implementation, monitoring and review of groundwater programs.

Scope

The scope covers the following:

- Assist in collecting primary data and ground-truthing
- Facilitate the formation and operation of water governance institutions
- Identify the convergence opportunities

Elements and Performance Criteria

Assist in collecting primary data and ground-truthing

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

- **PC1.** identify the need to collect different types of data, such as water table, rainfall, water quality, etc.
- PC2. follow an appropriate approach for data collection, mapping, and analysis
- **PC3.** undertake ground-truthing of the collected data
- **PC4.** guantify the groundwater discharge
- **PC5.** follow the baseline data collection methods for different parameters

Facilitate the formation and operation of water governance institutions

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

- **PC6.** undertake the appropriate Participatory Rural Appraisal (PRA), such as the mapping of aguifers, wells, borewells, crop fields, etc.
- **PC7.** facilitate the formation and operation of water governance institutions, Water User Associations (WUA), Farmer Groups, Village Level Institutions (VLI), etc.
- **PC8.** mobilize the community to take up groundwater project interventions
- **PC9.** organize, train and assist the community institutions in capacity-building
- **PC10.** create awareness among the community members regarding the importance of groundwater
- **PC11.** coordinate with the regional federations involved in groundwater restoration activities
- PC12. assist in developing appropriate bylaws for water management and usage
- **PC13.** identify the need for new interventions and technologies through exposures visits

Identify the convergence opportunities

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

- **PC14.** utilize other existing funding resources to complement and supplement components of groundwater management for achieving scalability
- **PC15.** converge with the existing government programs









- **PC16.** create community-led funds through voluntary contributions by the user groups to improve the longevity of the recharge measures and sustainability of initiatives
- PC17. coordinate with the panchayat and identify the convergence opportunities

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** the importance of maintaining the water table
- **KU2.** the process of aquifer Mapping
- KU3. how to read different types of maps
- **KU4.** the benefits of a Water Security Plan and how to prepare one
- **KU5.** the concept of geohydrology

Generic Skills (GS)

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

- **GS1.** maintain work-related notes and records
- **GS2.** read the relevant literature to get information about the latest developments in the field of work
- **GS3.** listen attentively to understand the information/ instructions being shared by the speaker
- **GS4.** communicate clearly and politely with co-workers and clients
- GS5. coordinate with co-workers to achieve work objectives
- **GS6.** plan and prioritize tasks to ensure timely completion
- **GS7.** evaluate all possible solutions to a problem to select the best one









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Assist in collecting primary data and ground-truthing	10	14	-	10
PC1. identify the need to collect different types of data, such as water table, rainfall, water quality, etc.	-	-	-	-
PC2. follow an appropriate approach for data collection, mapping, and analysis	-	-	-	-
PC3. undertake ground-truthing of the collected data	-	-	-	-
PC4. quantify the groundwater discharge	-	-	-	-
PC5. follow the baseline data collection methods for different parameters	-	-	-	-
Facilitate the formation and operation of water governance institutions	12	16	-	12
PC6. undertake the appropriate Participatory Rural Appraisal (PRA), such as the mapping of aquifers, wells, borewells, crop fields, etc.	-	-	-	-
PC7. facilitate the formation and operation of water governance institutions, Water User Associations (WUA), Farmer Groups, Village Level Institutions (VLI), etc.	-	-	-	-
PC8. mobilize the community to take up groundwater project interventions	-	-	-	-
PC9. organize, train and assist the community institutions in capacity-building	-	-	-	-
PC10. create awareness among the community members regarding the importance of groundwater	-	-	-	-
PC11. coordinate with the regional federations involved in groundwater restoration activities	-	-	-	-
PC12. assist in developing appropriate bylaws for water management and usage	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. identify the need for new interventions and technologies through exposures visits	-	-	-	-
Identify the convergence opportunities	8	10	-	8
PC14. utilize other existing funding resources to complement and supplement components of groundwater management for achieving scalability	-	-	-	-
PC15. converge with the existing government programs	-	-	-	-
PC16. create community-led funds through voluntary contributions by the user groups to improve the longevity of the recharge measures and sustainability of initiatives	-	-	-	-
PC17. coordinate with the panchayat and identify the convergence opportunities	-	-	-	-
NOS Total	30	40	-	30









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N6636
NOS Name	Assist in the planning, implementation, monitoring and review of groundwater programs
Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Watershed Management
NSQF Level	4
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

- 1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
- 2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
- 3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
- 4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
- 5. In case of successfully passing only certain number of NOSs, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.
- 6. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack









Minimum Aggregate Passing % at QP Level: 70

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

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AGR/N6625.Collect data and carry out ground-truthing for water resource planning	30	40	0	30	100	15
AGR/N6626.Facilitate the formation and operation of water governance institutions	30	40	0	30	100	15
AGR/N6601.Mobilize and organize the community for water resource project interventions ensuring community ownership	30	40	0	30	100	15
AGR/N6602.Strengthen the community institutions by training and capacity building	30	40	0	30	100	15
AGR/N6627.Assist in conducting the social and regulatory audits and maintain the relevant data	30	40	0	30	100	15
AGR/N9903.Maintain health and safety at the workplace	40	25	-	35	100	5
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	-	-	50	5
Total	210	255	-	185	650	85

Elective: 1 Watershed









National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AGR/N6629.Assist in the planning, implementation, monitoring and review of watershed programs	30	40	0	30	100	15
Total	30	40	-	30	100	15

Elective: 2 Springshed

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AGR/N6635.Assist in the planning, implementation, monitoring and review of springshed programs	30	40	0	30	100	15
Total	30	40	-	30	100	15

Elective: 3 Groundwater

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AGR/N6636.Assist in the planning, implementation, monitoring and review of groundwater programs	30	40	0	30	100	15
Total	30	40	-	30	100	15









Acronyms

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









Glossary

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









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