

## Qualification Pack



# Para Geohydrologist

QP Code: AGR/Q6602

Version: 2.0

NSQF Level: 4

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## Qualification Pack

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### AGR/Q6602: Para Geohydrologist

#### Brief Job Description

A Para Geohydrologist is responsible for carrying out the landscape survey, preparing the Detailed Project Report (DPR), water budgeting for watershed/springshed, and data management for the watershed, springshed and groundwater interventions. The individual is also responsible for guiding in identifying the appropriate site for soil and water conservation and construction of Water Harvesting Structures (WHS) and assisting the village community in capacity-building.

#### Personal Attributes

The individual should have attention to detail, coordination, interpersonal and problem-solving skills. The person should also have good written and verbal communication skills.

#### Applicable National Occupational Standards (NOS)

##### Compulsory NOS:

1. [AGR/N6618: Carry out landscape survey and assist in preparing the Detailed Project Report \(DPR\)](#)
2. [AGR/N6605: Assist in carrying out water budgeting for the watershed/springshed](#)
3. [AGR/N6650: Plan, implement and monitor watershed, springshed and groundwater projects](#)
4. [AGR/N6613: Carry out data management for watershed, springshed and groundwater interventions](#)
5. [AGR/N6604: Guide and support the community in soil and water conservation](#)
6. [AGR/N6621: Assist the village community in capacity-building](#)
7. [AGR/N9903: Maintain health and safety at the workplace](#)
8. [DGT/VSQ/N0102: Employability Skills \(60 Hours\)](#)

#### Qualification Pack (QP) Parameters

<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Forestry, Environment and Renewable Energy Management
<b>Occupation</b>	Watershed Management

### Qualification Pack

<b>Country</b>	India
<b>NSQF Level</b>	4
<b>Credits</b>	13
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/NIL
<b>Minimum Educational Qualification &amp; Experience</b>	12th grade Pass OR 10th grade pass with 2 Years of experience in the relevant field 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)
<b>Minimum Level of Education for Training in School</b>	
<b>Pre-Requisite License or Training</b>	NA
<b>Minimum Job Entry Age</b>	18 Years
<b>Last Reviewed On</b>	NA
<b>Next Review Date</b>	29/03/2026
<b>NSQF Approval Date</b>	29/03/2023
<b>Version</b>	2.0
<b>Reference code on NQR</b>	QG-04-AG-00380-2023-V1-ASCI
<b>NQR Version</b>	1

## Qualification Pack

### AGR/N6618: Carry out landscape survey and assist in preparing the Detailed Project Report (DPR)

#### Description

This OS unit is about carrying out the landscape survey, analysing the geohydrology and assisting in preparing the Detailed Project Report (DPR).

#### Scope

The scope covers the following :

- Carry out landscape survey
- Analyze the geohydrology
- Assist in preparing the DPR

#### Elements and Performance Criteria

##### *Carry out landscape survey*

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

- PC1.** analyze the toposheet map and topography determined through contour lines
- PC2.** demarcate the watershed/ springshed (based on the orientation of geological planes)/ aquifer boundary (based on well data) on the toposheet
- PC3.** calculate the watershed /springshed area on the toposheet
- PC4.** carry out delineation of watersheds and springshed and mapping of water resources in terms of quantity and quality
- PC5.** collect periodic well data to determine water table and aquifer characteristics
- PC6.** collect spring discharge data on a periodic basis

##### *Analyze the geohydrology*

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

- PC7.** analyze the thematic maps, such as geology, geomorphology, lineament maps, etc.
- PC8.** analyze the aquifer and determine the groundwater levels
- PC9.** identify the runoff, recharge and discharge zones in the watershed
- PC10.** evaluate various parameters in the field to identify the relevant zones, such as rock type, soil type, water level, slope, land use, etc
- PC11.** prepare the hydrogeology matrix
- PC12.** undertake a field survey and identify the relevant zones in the watershed area
- PC13.** assist in setting up a monitoring network for water resources, Natural Resource Management (NRM), etc.
- PC14.** prepare the relevant geohydrology reports for the watershed/ springshed/ landscape

##### *Assist in preparing the DPR*

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

- PC15.** determine the requirement of collecting the primary and secondary data, and collect the relevant data from reliable sources

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- PC16.** use an appropriate format for the preparation of DPR
- PC17.** use the relevant types of maps while preparing the DPR
- PC18.** analyze the collected data and to evaluate the strategy and goal of watershed intervention
- PC19.** carry out the PRA exercise and prepare the watershed/springshed plan
- PC20.** map the water resources in the village/GP in terms of quantity and quality
- PC21.** assist in hydrological/ hydrogeological mapping
- PC22.** identify the suitable intervention and develop the DPR
- PC23.** carry out field visits to the site and assess the technical and social feasibility of the plan
- PC24.** prepare the tentative budget

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the significance of geohydrology in water resource planning and development
- KU2.** how to analyze the geohydrology
- KU3.** the difference between ridge area, ridge line, drainage line, etc.
- KU4.** the importance and process of preparing a DPR
- KU5.** various kinds of maps required for DPR
- KU6.** the primary and secondary data collection requirements and relevant sources
- KU7.** how to analyze the relevant data and understand the strategy and goal of water resource intervention accordingly
- KU8.** the process of carrying out the PRA exercise and preparing the water resource development plan
- KU9.** the importance of conducting field visits to assess the technical and social feasibility of the water resource development plan
- KU10.** how to map water resources in the village/GP
- KU11.** the process of hydrological/ hydrogeological mapping
- KU12.** the procedures related to socio-technical concepts and practices in participatory and integrated water resource management
- KU13.** the water resource planning exercises
- KU14.** basic information on soil and water conservation technologies, social mobilization tools, research methodologies and planning tools in water resource management
- KU15.** the significance of springs within mountainous ecosystems
- KU16.** the scope of springs and the more significant role they play in the daily life in the mountains and beyond

## 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

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- 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

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### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Carry out landscape survey</i>	<b>12</b>	<b>15</b>	-	<b>11</b>
<b>PC1.</b> analyze the toposheet map and topography determined through contour lines	-	-	-	-
<b>PC2.</b> demarcate the watershed/ springshed (based on the orientation of geological planes)/ aquifer boundary (based on well data) on the toposheet	-	-	-	-
<b>PC3.</b> calculate the watershed /springshed area on the toposheet	-	-	-	-
<b>PC4.</b> carry out delineation of watersheds and springshed and mapping of water resources in terms of quantity and quality	-	-	-	-
<b>PC5.</b> collect periodic well data to determine water table and aquifer characteristics	-	-	-	-
<b>PC6.</b> collect spring discharge data on a periodic basis	-	-	-	-
<i>Analyze the geohydrology</i>	<b>10</b>	<b>14</b>	-	<b>12</b>
<b>PC7.</b> analyze the thematic maps, such as geology, geomorphology, lineament maps, etc.	-	-	-	-
<b>PC8.</b> analyze the aquifer and determine the groundwater levels	-	-	-	-
<b>PC9.</b> identify the runoff, recharge and discharge zones in the watershed	-	-	-	-
<b>PC10.</b> evaluate various parameters in the field to identify the relevant zones, such as rock type, soil type, water level, slope, land use, etc	-	-	-	-
<b>PC11.</b> prepare the hydrogeology matrix	-	-	-	-
<b>PC12.</b> undertake a field survey and identify the relevant zones in the watershed area	-	-	-	-
<b>PC13.</b> assist in setting up a monitoring network for water resources, Natural Resource Management (NRM), etc.	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC14.</b> prepare the relevant geohydrology reports for the watershed/ springshed/ landscape	-	-	-	-
<i>Assist in preparing the DPR</i>	<b>8</b>	<b>11</b>	-	<b>7</b>
<b>PC15.</b> determine the requirement of collecting the primary and secondary data, and collect the relevant data from reliable sources	-	-	-	-
<b>PC16.</b> use an appropriate format for the preparation of DPR	-	-	-	-
<b>PC17.</b> use the relevant types of maps while preparing the DPR	-	-	-	-
<b>PC18.</b> analyze the collected data and to evaluate the strategy and goal of watershed intervention	-	-	-	-
<b>PC19.</b> carry out the PRA exercise and prepare the watershed/springshed plan	-	-	-	-
<b>PC20.</b> map the water resources in the village/GP in terms of quantity and quality	-	-	-	-
<b>PC21.</b> assist in hydrological/ hydrogeological mapping	-	-	-	-
<b>PC22.</b> identify the suitable intervention and develop the DPR	-	-	-	-
<b>PC23.</b> carry out field visits to the site and assess the technical and social feasibility of the plan	-	-	-	-
<b>PC24.</b> prepare the tentative budget	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	-	<b>30</b>

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### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N6618
<b>NOS Name</b>	Carry out landscape survey and assist in preparing the Detailed Project Report (DPR)
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Forestry, Environment and Renewable Energy Management
<b>Occupation</b>	Watershed Management
<b>NSQF Level</b>	4
<b>Credits</b>	2
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	29/03/2026
<b>NSQC Clearance Date</b>	29/03/2023

## Qualification Pack

### AGR/N6605: Assist in carrying out water budgeting for the watershed/springshed

#### Description

This OS unit is about preparing the water budget based on the availability and utilization of water in the watershed/springshed.

#### Scope

The scope covers the following :

- Assist in carrying out watershed/springshed water budgeting
- Present the water budget to the community/VLI

#### Elements and Performance Criteria

##### *Assist in carrying out watershed/springshed water budgeting*

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

- PC1.** assist in determining the format for data collection for water budgeting
- PC2.** conduct field visits to collect different types of field data
- PC3.** assist in compiling and organizing the data for analysis

##### *Present the water budget to the community/VLI*

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

- PC4.** prepare a poster on water budgeting
- PC5.** coordinate with the village community and VLI to analyze the water budgeting results and prepare a plan
- PC6.** assist in the preparation of water balance, water budget and water security planning with the community
- PC7.** ensure achievement of sustainable water management with a hydrogeological understanding of the target area

#### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the significance of water budgeting in the planning of watershed /springshed interventions
- KU2.** applicable effective water management practices in a watershed/springshed
- KU3.** how to carry out watershed/springshed water budgeting
- KU4.** the importance of promoting effective water management through micro-irrigation systems, such as drip irrigation, sprinklers, etc
- KU5.** the process of collecting various types of field data
- KU6.** the importance of discussing the water budgeting results with the village community before preparing a plan for water use

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- KU7.** the basics of hydraulics such as pressure, flow and hydrological cycle
- KU8.** how to calculate the water requirement for crops, drinking, domestic use, etc.
- KU9.** different types of piping networks, PVC fittings, pumps and their application

## Generic Skills (GS)

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

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

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Assist in carrying out watershed/springshed water budgeting</i>	<b>14</b>	<b>22</b>	-	<b>13</b>
<b>PC1.</b> assist in determining the format for data collection for water budgeting	-	-	-	-
<b>PC2.</b> conduct field visits to collect different types of field data	-	-	-	-
<b>PC3.</b> assist in compiling and organizing the data for analysis	-	-	-	-
<i>Present the water budget to the community/VLI</i>	<b>16</b>	<b>18</b>	-	<b>17</b>
<b>PC4.</b> prepare a poster on water budgeting	-	-	-	-
<b>PC5.</b> coordinate with the village community and VLI to analyze the water budgeting results and prepare a plan	-	-	-	-
<b>PC6.</b> assist in the preparation of water balance, water budget and water security planning with the community	-	-	-	-
<b>PC7.</b> ensure achievement of sustainable water management with a hydrogeological understanding of the target area	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	-	<b>30</b>

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### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N6605
<b>NOS Name</b>	Assist in carrying out water budgeting for the watershed/springshed
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Forestry, Environment and Renewable Energy Management
<b>Occupation</b>	Watershed Management
<b>NSQF Level</b>	4
<b>Credits</b>	1
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	29/03/2026
<b>NSQC Clearance Date</b>	29/03/2023

## Qualification Pack

# AGR/N6650: Plan, implement and monitor watershed, springshed and groundwater projects

## Description

This OS unit is about planning, implementing and monitoring watershed, springshed and groundwater projects.

## Scope

The scope covers the following :

- Plan, implement and monitor watershed projects
- Plan, implement and monitor springshed projects
- Plan, implement and monitor groundwater projects

## Elements and Performance Criteria

### *Plan, implement and monitor watershed projects*

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

- PC1.** mobilize the land owners to participate in planning the use of resources and soil conservation treatments
- PC2.** undertake net planning for area treatment, drainage line treatment and WHS viz. field mapping, existing treatment, proposed treatment, cross-section, volume, re-vegetation measures etc.
- PC3.** focus on gender sensitization and mainstreaming activities requirement
- PC4.** identify the opportunities for women's economic development activities in the region and suggest the appropriate interventions
- PC5.** evaluate the agriculture, livestock and other agri-allied activities in the regions
- PC6.** undertake the Training Need Assessment (TNA) to identify the training need of the watershed community institutions
- PC7.** organize, train and build the capacity of watershed community institutions
- PC8.** estimate the costs for the implementation and management of watershed projects, e.g. area treatment, drainage land treatment, supervision, livelihood intervention, training and capacity building, development of landless and marginalized community members, program management etc.
- PC9.** implement the project components through user groups and watershed project management committees
- PC10.** maintain the record of baseline and change the pattern of the watershed
- PC11.** record the data concerning the intervention activities for the watershed for monitoring and auditing purposes
- PC12.** assist the watershed committees, SHGs and UGs in monitoring compliance with the applicable disciplines/norms and ensuring appropriate action against the violators

### *Plan, implement and monitor springshed projects*

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

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- PC13.** determine the needs and the willingness of the community
- PC14.** identify and prioritize the critical springs for revival and short and long-term monitoring based on the needs of communities
- PC15.** undertake social and technical feasibility surveys to assess the possibility of undertaking the initiative and prepare the Detailed Work Plans (DWPs)
- PC16.** conduct village meetings and PRA with the community, including women, elders and socio-economically marginalized communities
- PC17.** carry out seasonal water budgeting of spring water for different uses
- PC18.** prepare the Village Water Security Plans (VWSPs) using participatory water budget assessments
- PC19.** carry out discharge and quality monitoring manually or by automated instruments
- PC20.** carry out periodic documentation concerning spring discharge and water quality to improve the community's understanding of their resources and help improve management practices
- PC21.** identify the potential recharge areas and propose appropriate measures for optimal recharge and reduced soil erosion
- PC22.** undertake appropriate recharge interventions
- PC23.** revive and conserve springs, and provide water security by adopting scientific methods on springshed management
- PC24.** adopt comprehensive scientific methods viz. hydrogeology and quality assessment of water in implementing relevant regional programs for the benefit of people

### *Plan, implement and monitor groundwater projects*

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

- PC25.** use the relevant maps for planning
- PC26.** assist in the preparation of the Water Security Plan (WSP) through community consultations, focus group discussions, demystifying the process for the community
- PC27.** develop and follow the protocols for water resources management in consultation with the community institutions
- PC28.** perform crop water budgeting concerning demand and supply
- PC29.** develop appropriate treatment interventions in the catchment and command areas, and their financial budgeting
- PC30.** conduct the annual audit and maintain the relevant data related to groundwater accounting
- PC31.** undertake interventions for water harvesting or storage, e.g. rooftop rainwater harvesting, weirs, stop dams, cement check dams, minor irrigation tanks, etc.
- PC32.** undertake appropriate interventions for water supply, e.g. canals, lift irrigation schemes, community lifts schemes, drinking water supply systems, etc.
- PC33.** implement the best practices for water conservation, such as micro-irrigation systems, mulching, application of Farm Yard Manure (FYM) or organic matter, grey water reuse, cultivation of crop varieties with low water requirement, etc.
- PC34.** undertake community-contributed operations and asset maintenance activities, e.g. repairs, de-siltation, restoration etc.
- PC35.** incorporate the water security plan at the regional level

## Knowledge and Understanding (KU)

## Qualification Pack

The individual on the job needs to know and understand:

- KU1.** the importance of mobilizing land owners to participate in planning the use of resources and soil conservation treatments
- KU2.** the process of undertaking net planning for area treatment, drainage line treatment and WHS
- KU3.** the importance of focusing on gender sensitization and mainstreaming activities requirement
- KU4.** different opportunities for women's economic development activities and appropriate interventions
- KU5.** the process of undertaking the Training Need Assessment (TNA)
- KU6.** the process of organizing, training and building the capacity of watershed community institutions
- KU7.** various costs for the implementation and management of watershed projects
- KU8.** the process of implementing the project components through user groups and watershed project management committees
- KU9.** the process of identifying and prioritizing the critical springs for revival and short and long-term monitoring based on the needs of communities
- KU10.** how to undertake social and technical feasibility surveys to assess the possibility of undertaking the springshed initiatives and preparing the DWPs
- KU11.** the importance of including women, elders and socio-economically marginalized communities in water resource development interventions
- KU12.** the process of carrying out seasonal water budgeting of spring water for different uses
- KU13.** how to prepare the Village Water Security Plans (VWSPs) using participatory water budget assessments
- KU14.** how to perform manual and automated spring discharge and quality monitoring
- KU15.** how to identify the potential spring recharge areas and the appropriate measures to be taken for optimal recharge and reduced soil erosion
- KU16.** how to undertake appropriate spring recharge interventions
- KU17.** how to revive and conserve springs by adopting scientific methods on springshed management
- KU18.** the relevant comprehensive scientific methods viz. hydrogeology and quality assessment of water
- KU19.** the process of preparing the WSP for groundwater interventions
- KU20.** the importance of developing and following the protocols for water resource management in consultation with the community institutions
- KU21.** the process of performing crop water budgeting concerning demand and supply
- KU22.** how to develop appropriate treatment interventions in the catchment and command areas
- KU23.** the appropriate interventions for water harvesting or storage, e.g. rooftop rainwater harvesting, weirs, stop dams, cement check dams, minor irrigation tanks, etc.
- KU24.** the appropriate interventions for water supply, e.g. canals, lift irrigation schemes, community lifts schemes, drinking water supply systems, etc.
- KU25.** the best practices for water conservation
- KU26.** the benefits of incorporating the water security plan at the regional level

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### Generic Skills (GS)

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

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

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Plan, implement and monitor watershed projects</i>	<b>10</b>	<b>16</b>	-	<b>10</b>
<b>PC1.</b> mobilize the land owners to participate in planning the use of resources and soil conservation treatments	-	-	-	-
<b>PC2.</b> undertake net planning for area treatment, drainage line treatment and WHS viz. field mapping, existing treatment, proposed treatment, cross-section, volume, re-vegetation measures etc.	-	-	-	-
<b>PC3.</b> focus on gender sensitization and mainstreaming activities requirement	-	-	-	-
<b>PC4.</b> identify the opportunities for women's economic development activities in the region and suggest the appropriate interventions	-	-	-	-
<b>PC5.</b> evaluate the agriculture, livestock and other agri-allied activities in the regions	-	-	-	-
<b>PC6.</b> undertake the Training Need Assessment (TNA) to identify the training need of the watershed community institutions	-	-	-	-
<b>PC7.</b> organize, train and build the capacity of watershed community institutions	-	-	-	-
<b>PC8.</b> estimate the costs for the implementation and management of watershed projects, e.g. area treatment, drainage land treatment, supervision, livelihood intervention, training and capacity building, development of landless and marginalized community members, program management etc.	-	-	-	-
<b>PC9.</b> implement the project components through user groups and watershed project management committees	-	-	-	-
<b>PC10.</b> maintain the record of baseline and change the pattern of the watershed	-	-	-	-
<b>PC11.</b> record the data concerning the intervention activities for the watershed for monitoring and auditing purposes	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> assist the watershed committees, SHGs and UGs in monitoring compliance with the applicable disciplines/norms and ensuring appropriate action against the violators	-	-	-	-
<i>Plan, implement and monitor springshed projects</i>	<b>10</b>	<b>12</b>	-	<b>10</b>
<b>PC13.</b> determine the needs and the willingness of the community	-	-	-	-
<b>PC14.</b> identify and prioritize the critical springs for revival and short and long-term monitoring based on the needs of communities	-	-	-	-
<b>PC15.</b> undertake social and technical feasibility surveys to assess the possibility of undertaking the initiative and prepare the Detailed Work Plans (DWPs)	-	-	-	-
<b>PC16.</b> conduct village meetings and PRA with the community, including women, elders and socio-economically marginalized communities	-	-	-	-
<b>PC17.</b> carry out seasonal water budgeting of spring water for different uses	-	-	-	-
<b>PC18.</b> prepare the Village Water Security Plans (VWSPs) using participatory water budget assessments	-	-	-	-
<b>PC19.</b> carry out discharge and quality monitoring manually or by automated instruments	-	-	-	-
<b>PC20.</b> carry out periodic documentation concerning spring discharge and water quality to improve the community's understanding of their resources and help improve management practices	-	-	-	-
<b>PC21.</b> identify the potential recharge areas and propose appropriate measures for optimal recharge and reduced soil erosion	-	-	-	-
<b>PC22.</b> undertake appropriate recharge interventions	-	-	-	-
<b>PC23.</b> revive and conserve springs, and provide water security by adopting scientific methods on springshed management	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC24.</b> adopt comprehensive scientific methods viz. hydrogeology and quality assessment of water in implementing relevant regional programs for the benefit of people	-	-	-	-
<i>Plan, implement and monitor groundwater projects</i>	<b>10</b>	<b>12</b>	-	<b>10</b>
<b>PC25.</b> use the relevant maps for planning	-	-	-	-
<b>PC26.</b> assist in the preparation of the Water Security Plan (WSP) through community consultations, focus group discussions, demystifying the process for the community	-	-	-	-
<b>PC27.</b> develop and follow the protocols for water resources management in consultation with the community institutions	-	-	-	-
<b>PC28.</b> perform crop water budgeting concerning demand and supply	-	-	-	-
<b>PC29.</b> develop appropriate treatment interventions in the catchment and command areas, and their financial budgeting	-	-	-	-
<b>PC30.</b> conduct the annual audit and maintain the relevant data related to groundwater accounting	-	-	-	-
<b>PC31.</b> undertake interventions for water harvesting or storage, e.g. rooftop rainwater harvesting, weirs, stop dams, cement check dams, minor irrigation tanks, etc.	-	-	-	-
<b>PC32.</b> undertake appropriate interventions for water supply, e.g. canals, lift irrigation schemes, community lifts schemes, drinking water supply systems, etc.	-	-	-	-
<b>PC33.</b> implement the best practices for water conservation, such as micro-irrigation systems, mulching, application of Farm Yard Manure (FYM) or organic matter, grey water reuse, cultivation of crop varieties with low water requirement, etc.	-	-	-	-
<b>PC34.</b> undertake community-contributed operations and asset maintenance activities, e.g. repairs, de-siltation, restoration etc.	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC35.</b> incorporate the water security plan at the regional level	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	<b>-</b>	<b>30</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N6650
<b>NOS Name</b>	Plan, implement and monitor watershed, springshed and groundwater projects
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Forestry, Environment and Renewable Energy Management
<b>Occupation</b>	Watershed Management
<b>NSQF Level</b>	4
<b>Credits</b>	2
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	29/03/2026
<b>NSQC Clearance Date</b>	29/03/2023

## Qualification Pack

# AGR/N6613: Carry out data management for watershed, springshed and groundwater interventions

## Description

This OS unit is about maintaining data appropriate concerning the watershed/ springshed/ groundwater interventions. It also covers effective water management

## Scope

The scope covers the following :

- Maintain the data concerning watershed/ springshed/ groundwater interventions
- Ensure effective water management

## Elements and Performance Criteria

### *Maintain the data concerning watershed/ springshed/ groundwater interventions*

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

- PC1.** maintain the technical maps, well-monitoring, and WHS data
- PC2.** maintain the record of interventions undertaken
- PC3.** collect and maintain the telemetric data, using sensors and appropriate instruments

### *Ensure effective water management*

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

- PC4.** determine the existing water availability and the potential to increase water availability through the supply
- PC5.** perform demand management through the cultivation of low water demanding crop varieties and using the micro-irrigation systems
- PC6.** undertake crop water budgeting exercise
- PC7.** determine the water productivity and water use efficiency
- PC8.** collect and verify data regularly and support data analysis

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** effective data management practices
- KU2.** the importance and process of determining the existing water availability and the potential to increase water availability
- KU3.** the benefit of cultivating low water demanding crop varieties and using the micro-irrigation system
- KU4.** how to undertake crop water budgeting exercise
- KU5.** the appropriate practices to be followed for water productivity and water use efficiency
- KU6.** the importance of collecting and verifying data regularly from the monitoring network

## Qualification Pack

- KU7.** the relevant guidelines on record keeping, reporting and transparency by the organization and funding agency
- KU8.** the use of relevant management tools and techniques in data/ information handling
- KU9.** the relevant research methodologies

## Generic Skills (GS)

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

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

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintain the data concerning watershed/ springshed/ groundwater interventions</i>	<b>14</b>	<b>22</b>	-	<b>16</b>
<b>PC1.</b> maintain the technical maps, well-monitoring, and WHS data	-	-	-	-
<b>PC2.</b> maintain the record of interventions undertaken	-	-	-	-
<b>PC3.</b> collect and maintain the telemetric data, using sensors and appropriate instruments	-	-	-	-
<i>Ensure effective water management</i>	<b>16</b>	<b>18</b>	-	<b>14</b>
<b>PC4.</b> determine the existing water availability and the potential to increase water availability through the supply	-	-	-	-
<b>PC5.</b> perform demand management through the cultivation of low water demanding crop varieties and using the micro-irrigation systems	-	-	-	-
<b>PC6.</b> undertake crop water budgeting exercise	-	-	-	-
<b>PC7.</b> determine the water productivity and water use efficiency	-	-	-	-
<b>PC8.</b> collect and verify data regularly and support data analysis	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	-	<b>30</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N6613
<b>NOS Name</b>	Carry out data management for watershed, springshed and groundwater interventions
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Forestry, Environment and Renewable Energy Management
<b>Occupation</b>	Watershed Management
<b>NSQF Level</b>	4
<b>Credits</b>	1
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	29/03/2026
<b>NSQC Clearance Date</b>	29/03/2023

## Qualification Pack

### AGR/N6604: Guide and support the community in soil and water conservation

#### Description

This OS unit is about surveying the sites, guiding in identifying the appropriate sites for soil and water conservation structures, the construction of Water Harvesting Structures (WHS) and appropriate practices to prevent soil run-off.

#### Scope

The scope covers the following :

- Guide in site selection
- Supervise the construction of WHS
- Control the velocity of run-off to prevent soil erosion
- Maintain the records of interventions

#### Elements and Performance Criteria

##### *Guide in site selection*

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

- PC1.** guide in the selection of appropriate sites for soil and water conservation and the construction of WHS based on geohydrology study and DPR
- PC2.** provide technical guidance for undertaking the necessary interventions
- PC3.** maintain the records of the interventions
- PC4.** assist in reconciling the technical aspects, e.g. site selection, the technical feasibility of the site, etc.

##### *Supervise the construction of WHS*

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

- PC5.** mark the layout accurately
- PC6.** perform effective work site management, including the allotment of work to wage seekers
- PC7.** ensure adherence to the technical specifications concerning Plain Cement Concrete (PCC), Reinforced Cement Concrete (RCC), stone masonry, plaster etc., by guiding the field team

##### *Control the velocity of run-off to prevent soil erosion*

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

- PC8.** construct field bunds to reduce the field size and control the rate of overland flow
- PC9.** carry out levelling or terracing to reduce the slope of the land
- PC10.** constructing contour ditches and diversion channels to remove the excess surface run-off in a controlled manner
- PC11.** apply organic matters to improve the soil structure and increase the infiltration of rainwater
- PC12.** follow the recommended measures, such as growing cover crops/grass to reduce the physical impact of precipitation on the soil surface

## Qualification Pack

**PC13.** carry out conservation tillage to bind the soil surface and reduce the detachment of soil particles

**PC14.** carry out mulching to reduce the soil surface temperature

**PC15.** construct contour hedges and outlets with silt traps to trap the eroded sediments

*Maintain the records of interventions*

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

**PC16.** maintain various field-level records, such as the attendance sheet, stock register, measurement register, etc.

**PC17.** measure the work specification regarding the work carried out in the field

**PC18.** prepare the payment data based on the work carried out

**PC19.** monitor the implementation, operations, maintenance and post-implementation activities

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

**KU1.** the layout marking process

**KU2.** various worksite management practices, such as allotting work to wage seekers

**KU3.** the technical specifications of PCC, RCC, stone masonry, plaster etc.

**KU4.** the importance and process of maintaining various field-level records, such as the attendance sheet, stock register, measurement register, etc.

**KU5.** how to measure the work carried out

**KU6.** how to prepare the payment data based on the work carried out

**KU7.** how to monitor the implementation, operations, maintenance and post-implementation activities

**KU8.** the applicable process standards and procedures for the construction of water harvesting structures

**KU9.** the relevant practices in participatory and integrated water resource management

**KU10.** the benefits and methods of rooftop and rainwater harvesting

**KU11.** the appropriate practices to be followed to prevent soil run-off

## Generic Skills (GS)

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

**GS1.** maintain work-related notes and records

**GS2.** communicate clearly and politely with co-workers and clients

**GS3.** read the relevant literature to get information about the latest developments in the field of work

**GS4.** plan and prioritize tasks to ensure timely completion

**GS5.** listen attentively to understand the information/ instructions being shared by the speaker

**GS6.** coordinate with co-workers to achieve work objectives

**GS7.** take quick decisions to deal with workplace emergencies/ accidents



## Qualification Pack

- GS8.** identify possible disruptions to work and take appropriate preventive measures
- GS9.** evaluate all possible solutions to a problem to select the best one

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Guide in site selection</i>	<b>4</b>	<b>8</b>	-	<b>4</b>
<b>PC1.</b> guide in the selection of appropriate sites for soil and water conservation and the construction of WHS based on geohydrology study and DPR	-	-	-	-
<b>PC2.</b> provide technical guidance for undertaking the necessary interventions	-	-	-	-
<b>PC3.</b> maintain the records of the interventions	-	-	-	-
<b>PC4.</b> assist in reconciling the technical aspects, e.g. site selection, the technical feasibility of the site, etc.	-	-	-	-
<i>Supervise the construction of WHS</i>	<b>5</b>	<b>7</b>	-	<b>5</b>
<b>PC5.</b> mark the layout accurately	-	-	-	-
<b>PC6.</b> perform effective work site management, including the allotment of work to wage seekers	-	-	-	-
<b>PC7.</b> ensure adherence to the technical specifications concerning Plain Cement Concrete (PCC), Reinforced Cement Concrete (RCC), stone masonry, plaster etc., by guiding the field team	-	-	-	-
<i>Control the velocity of run-off to prevent soil erosion</i>	<b>13</b>	<b>16</b>	-	<b>13</b>
<b>PC8.</b> construct field bunds to reduce the field size and control the rate of overland flow	-	-	-	-
<b>PC9.</b> carry out levelling or terracing to reduce the slope of the land	-	-	-	-
<b>PC10.</b> constructing contour ditches and diversion channels to remove the excess surface run-off in a controlled manner	-	-	-	-
<b>PC11.</b> apply organic matters to improve the soil structure and increase the infiltration of rainwater	-	-	-	-
<b>PC12.</b> follow the recommended measures, such as growing cover crops/grass to reduce the physical impact of precipitation on the soil surface	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> carry out conservation tillage to bind the soil surface and reduce the detachment of soil particles	-	-	-	-
<b>PC14.</b> carry out mulching to reduce the soil surface temperature	-	-	-	-
<b>PC15.</b> construct contour hedges and outlets with silt traps to trap the eroded sediments	-	-	-	-
<i>Maintain the records of interventions</i>	<b>8</b>	<b>9</b>	-	<b>8</b>
<b>PC16.</b> maintain various field-level records, such as the attendance sheet, stock register, measurement register, etc.	-	-	-	-
<b>PC17.</b> measure the work specification regarding the work carried out in the field	-	-	-	-
<b>PC18.</b> prepare the payment data based on the work carried out	-	-	-	-
<b>PC19.</b> monitor the implementation, operations, maintenance and post-implementation activities	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	-	<b>30</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N6604
<b>NOS Name</b>	Guide and support the community in soil and water conservation
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Forestry, Environment and Renewable Energy Management
<b>Occupation</b>	Watershed Management
<b>NSQF Level</b>	4
<b>Credits</b>	1
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	29/03/2026
<b>NSQC Clearance Date</b>	29/03/2023

## Qualification Pack

### AGR/N6621: Assist the village community in capacity-building

#### Description

This OS unit is about assisting the village community in capacity-building concerning effective water usage and management of water resources. It also covers managing the logistics for training and workshops.

#### Scope

The scope covers the following :

- Assist in capacity-building
- Manage logistics for training and workshops

#### Elements and Performance Criteria

##### *Assist in capacity-building*

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

- PC1.** assist the community in building skills concerning the identification of recharge or surface storage zones
- PC2.** guide the community regarding appropriate site selection for water harvesting based on hydrogeology
- PC3.** conduct field surveys for slope measurement, demarcation of contour lines using A-Frame, L-section and C-section surveys, etc.
- PC4.** assist the community in developing and implementing protocols
- PC5.** demonstrate the use of relevant tools, web/mobile applications and sensors

##### *Manage logistics for training and workshops*

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

- PC6.** select an appropriate venue and time for training and workshops to ensure maximum participation
- PC7.** ensure the availability of an appropriate facility with the required seating capacity and health and safety arrangements
- PC8.** arrange the appropriate tools, equipment and aids for training and workshops, e.g. audio-visual aids, stationery, relevant literature, refreshments, etc.
- PC9.** 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 building skills in the community for the identification of recharge or surface storage zones
- KU2.** the selection of an appropriate site for water harvesting based on hydrogeology
- KU3.** the importance of conducting field surveys for slope measurement, demarcation of contour lines, L-section and C-section and involving the community in the surveys

## Qualification Pack

- KU4.** the importance and process of conducting training and capacity building of communities and community institutions
- KU5.** how to assist communities in developing and implementing the appropriate protocols
- KU6.** 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

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Assist in capacity-building</i>	<b>16</b>	<b>22</b>	-	<b>16</b>
<b>PC1.</b> assist the community in building skills concerning the identification of recharge or surface storage zones	-	-	-	-
<b>PC2.</b> guide the community regarding appropriate site selection for water harvesting based on hydrogeology	-	-	-	-
<b>PC3.</b> conduct field surveys for slope measurement, demarcation of contour lines using A-Frame, L-section and C-section surveys, etc.	-	-	-	-
<b>PC4.</b> assist the community in developing and implementing protocols	-	-	-	-
<b>PC5.</b> demonstrate the use of relevant tools, web/mobile applications and sensors	-	-	-	-
<i>Manage logistics for training and workshops</i>	<b>14</b>	<b>18</b>	-	<b>14</b>
<b>PC6.</b> select an appropriate venue and time for training and workshops to ensure maximum participation	-	-	-	-
<b>PC7.</b> ensure the availability of an appropriate facility with the required seating capacity and health and safety arrangements	-	-	-	-
<b>PC8.</b> arrange the appropriate tools, equipment and aids for training and workshops, e.g. audio-visual aids, stationery, relevant literature, refreshments, etc.	-	-	-	-
<b>PC9.</b> coordinate with the relevant authorities to get necessary approvals for training and workshops	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	-	<b>30</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N6621
<b>NOS Name</b>	Assist the village community in capacity-building
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Forestry, Environment and Renewable Energy Management
<b>Occupation</b>	Watershed Management
<b>NSQF Level</b>	4
<b>Credits</b>	1
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	29/03/2026
<b>NSQC Clearance Date</b>	29/03/2023

## Qualification Pack

### 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:

## Qualification Pack

- 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

## Qualification Pack

- 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

## Qualification Pack

### Assessment Criteria

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

### Qualification Pack

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

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	AGR/N9903
<b>NOS Name</b>	Maintain health and safety at the workplace
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Generic
<b>Occupation</b>	Generic
<b>NSQF Level</b>	4
<b>Credits</b>	1
<b>Version</b>	4.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	29/03/2026
<b>NSQC Clearance Date</b>	29/03/2023

## Qualification Pack

### 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:

## Qualification Pack

- 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.

## Qualification Pack

**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

## Qualification Pack

- 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

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	<b>1</b>	<b>1</b>	-	-
<b>PC1.</b> identify employability skills required for jobs in various industries	-	-	-	-
<b>PC2.</b> identify and explore learning and employability portals	-	-	-	-
<i>Constitutional values - Citizenship</i>	<b>1</b>	<b>1</b>	-	-
<b>PC3.</b> 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.	-	-	-	-
<b>PC4.</b> follow environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	<b>2</b>	<b>4</b>	-	-
<b>PC5.</b> recognize the significance of 21st Century Skills for employment	-	-	-	-
<b>PC6.</b> 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	-	-	-	-
<i>Basic English Skills</i>	<b>2</b>	<b>3</b>	-	-
<b>PC7.</b> use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
<b>PC8.</b> read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
<b>PC9.</b> write short messages, notes, letters, e-mails etc. in English	-	-	-	-
<i>Career Development &amp; Goal Setting</i>	<b>1</b>	<b>2</b>	-	-

### Qualification Pack

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

### Qualification Pack

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

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	DGT/VSQ/N0102
<b>NOS Name</b>	Employability Skills (60 Hours)
<b>Sector</b>	Cross Sectoral
<b>Sub-Sector</b>	Professional Skills
<b>Occupation</b>	Employability
<b>NSQF Level</b>	4
<b>Credits</b>	2
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	28/02/2026
<b>NSQC Clearance Date</b>	28/02/2023

## 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

## 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/N6618.Carry out landscape survey and assist in preparing the Detailed Project Report (DPR)	30	40	0	30	100	15
AGR/N6605.Assist in carrying out water budgeting for the watershed/springshed	30	40	0	30	100	15
AGR/N6650.Plan, implement and monitor watershed, springshed and groundwater projects	30	40	0	30	100	15
AGR/N6613.Carry out data management for watershed, springshed and groundwater interventions	30	40	0	30	100	15
AGR/N6604.Guide and support the community in soil and water conservation	30	40	0	30	100	15
AGR/N6621.Assist the village community in capacity-building	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
<b>Total</b>	<b>240</b>	<b>295</b>	<b>-</b>	<b>215</b>	<b>750</b>	<b>100</b>

## Qualification Pack

### Acronyms

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

## Qualification Pack

### Glossary

<b>Sector</b>	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.
<b>Sub-sector</b>	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
<b>Occupation</b>	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
<b>Job role</b>	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
<b>Occupational Standards (OS)</b>	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.
<b>Performance Criteria (PC)</b>	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
<b>National Occupational Standards (NOS)</b>	NOS are occupational standards which apply uniquely in the Indian context.
<b>Qualifications Pack (QP)</b>	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.
<b>Unit Code</b>	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
<b>Unit Title</b>	Unit title gives a clear overall statement about what the incumbent should be able to do.
<b>Description</b>	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.
<b>Scope</b>	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.

## Qualification Pack

<b>Knowledge and Understanding (KU)</b>	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.
<b>Organisational Context</b>	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.
<b>Technical Knowledge</b>	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
<b>Core Skills/ Generic Skills (GS)</b>	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.
<b>Electives</b>	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.
<b>Options</b>	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.