









Herb Grower

QP Code: AGR/Q0903

Version: 1.0

NSQF Level: 2

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







Contents

AGR/Q0903: Herb Grower
Brief Job Description
Applicable National Occupational Standards (NOS)
Compulsory NOS
Qualification Pack (QP) Parameters
AGR/N0908: Prepare for cultivation of MAPs
AGR/N0909: Carryout cultivation of MAPs 13
AGR/N0910: Carryout harvesting, post-harvest processing and marketing of MAPs 20
DGT/VSQ/N0101: Employability Skills (30 Hours)
Assessment Guidelines and Weightage
Assessment Guidelines
Assessment Weightage
Acronyms
Glossary







AGR/Q0903: Herb Grower

Brief Job Description

A Herb Grower is responsible for growing medicinal and aromatic plants. In the process, the individual selects a suitable site for cultivation, prepares the site, carries out cultivation and harvests the plants on their maturity. The person also performs post-harvest processing of Herbs including cleaning, packing and labelling.

Personal Attributes

The individual must be physically fit to work for long durations. The person must have attention to detail, problem-solving skills and the ability to co-ordinate with others to achieve the work objectives. Good verbal and written communication skills are the other important attributes required in this job role.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

- 1. AGR/N0908: Prepare for cultivation of MAPs
- 2. AGR/N0909: Carryout cultivation of MAPs
- 3. AGR/N0910: Carryout harvesting, post-harvest processing and marketing of MAPs
- 4. DGT/VSQ/N0101: Employability Skills (30 Hours)

Qualification Pack (QP) Parameters

Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Medicinal and Aromatic Plants Cultivation
Country	India
NSQF Level	2
Credits	7
Aligned to NCO/ISCO/ISIC Code	NCO-2015/6115









Minimum Educational Qualification & Experience	No formal education prescribed with NA of experience
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	29/09/2026
NSQC Approval Date	29/09/2023
Version	1.0
Reference code on NQR	QG-02-AG-01015-2023-V1-ASCI
NQR Version	1.0







AGR/N0908: Prepare for cultivation of MAPs

Description

This OS unit is about preparing to cultivate medicinal and aromatic plants. It includes selecting and preparing the site along with procuring and preparing the propagation material.

Scope

The scope covers the following :

- Select the site for cultivation
- Prepare the field for cultivation
- Plan nursery propagation
- Procure and prepare the plant propagation material

Elements and Performance Criteria

Select the site for cultivation

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

- **PC1.** check the site's meteorological data to ensure it has suitable weather conditions for the cultivation of medicinal and aromatic plants, along with the required exposure to sunlight and effective drainage
- **PC2.** ensure the site is situated away from any graveyards/ crematorium and is free from toxic elements such as industrial wastes and effluents
- **PC3.** ensure the availability of a reliable source of clean water for irrigation along with labour for the farm
- **PC4.** co-ordinate with an approved lab to ensure the total salt concentration, Sodium absorption ratio, Bicarbonate, Boron concentration and micro-pollutants in the water are within the prescribed limits
- **PC5.** ensure the site has accessibility to the relevant markets for the purchase/ regular supply of required inputs and sale of medicinal and aromatic plants grown at the farm
- **PC6.** ensure the site has adequate shading for any plants that require shading for optimal growth

Prepare the field for cultivation

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

- **PC7.** co-ordinate with an authorised lab for soil profiling and soil analysis to determine the physicochemical properties and texture of the soil
- **PC8.** ensure the soil is suitable for the selected MAP crop with the required water holding capacity
- **PC9.** apply the lab-recommended treatment(s) in the prescribed quantity to improve the soil fertility and adjust the pH levels
- PC10. remove rocks, stumps, debris, and shrubs from the field
- **PC11.** till the soil to the recommended tilth to remove weeds and facilitate a favourable environment for planting seeds and seedlings









- **PC12.** prepare the field and/ or mother bed using the appropriate tools and implements safely, following the recommended practices to provide a better rhizospheric environment, soil structure and texture
- **PC13.** erect fences of the recommended height around the field to protect it from external threats such as stray animals
- **PC14.** plant appropriate windbreaks in the field to protect the crop from strong winds and prevent soil erosion

Plan nursery propagation

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

- **PC15.** plan the core nursery activities such as sowing, watering, weeding, nutrient management, pest and disease management, etc.
- **PC16.** prepare an appropriate nursery structure for the hygienic propagation of commerciallyimportant MAPs

Procure and prepare the plant propagation material

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

- **PC17.** select the appropriate MAPs to be grown according to the agro-climatic conditions, market demand and profitability
- **PC18.** procure seeds and propagation material from an authorised seller, ensuring their quality and no damage
- **PC19.** ensure the ready-to-transplant saplings or root cuttings are uniform in size and maturity, both in terms of aerial and underground parts
- **PC20.** determine the correct variety of plant(s) while collecting the planting material from the wild
- **PC21.** check the seeds and planting material to ensure they are free from pests, infection, diseases and any foreign or inert matter
- **PC22.** ensure the seeds chosen for cultivation meet the botanical and varietal purity, are mature and from a recent seed lot
- **PC23.** carry out the prescribed seed treatment according to the target species and planting season
- **PC24.** carry out seedling production following the recommended agronomic practices for the target species under the nursery conditions
- PC25. ensure seedling production is carried according to the field transplantation schedule
- **PC26.** collect stem cuttings from authentic sources for root induction under nursery conditions and subsequent transplantation into the field
- **PC27.** ensure the stem cuttings have uniform length and diameter according to the requirements laid down for the target species
- **PC28.** ensure the stem cuttings have uniform length and diameter according to the requirements laid down for the target species

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. the practices related to conservation and sustainable use of MAPs
- **KU2.** the bio-geographical distribution of different types of MAPs
- KU3. the applicable environmental and human health perspectives









- KU4. the importance and benefits of cultivating of MAPs
- KU5. relevant issues encountered at various stages of production of MAPs
- **KU6.** the factors related to species rarity of medicinal plants
- **KU7.** applicable conservation strategies for varieties of MAPs
- **KU8.** the criteria for selecting a site for the cultivation of medicinal and aromatic plants, such as recommended sunlight exposure, effective drainage, availability of effluent and toxin-free water, conducive weather, etc.
- **KU9.** the importance and process of carrying out soil profiling and soil analysis to determine the physicochemical properties and texture of the soil
- KU10. how to check the suitability of the soil for a crop and its water holding capacity
- **KU11.** the recommended treatment(s) to be applied to the soil to improve its fertility
- **KU12.** the importance of tilling the soil to the recommended tilth to facilitate a favourable environment for growing seeds and seedlings
- KU13. the safe use of the relevant field preparation tools, implements, and PPE
- **KU14.** the recommended practices to be followed to provide better soil structure, texture and rhizospheric environment
- KU15. the importance of erecting fences to protect the field from external threats
- **KU16.** the importance of procuring seeds and propagation material from an authorised seller
- **KU17.** the importance of ensuring the ready-to-transplant saplings or root cuttings are uniform in size and maturity
- **KU18.** the principles of raising and managing seedlings in a nursery
- KU19. the precautions to be taken while collecting the planting material from the wild
- **KU20.** the importance of ensuring that seeds and planting material are free from pests, infection, diseases and any foreign or inert matter
- **KU21.** how to check the seeds chosen for cultivation meet the botanical and varietal purity, and are mature
- KU22. the process of treating seeds according to the target species and planting season
- **KU23.** the recommended agronomic practices to be followed for seedling production according to the target species
- **KU24.** the importance of ensuring seedling production is carried out in the nursery according to the field transplantation schedule
- **KU25.** the importance of collecting stem cuttings from authentic sources for root induction and ensuring they are uniform in length and diameter

Generic Skills (GS)

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

- **GS1.** write work-related notes and 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 shared
- GS5. plan and schedule tasks for efficient use of time









- GS6. co-ordinate with the co-workers to achieve the work objectives
- **GS7.** take quick decisions to deal with any emergencies/ accidents
- **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
Select the site for cultivation	10	14	-	9
PC1. check the site's meteorological data to ensure it has suitable weather conditions for the cultivation of medicinal and aromatic plants, along with the required exposure to sunlight and effective drainage	-	-	-	-
PC2. ensure the site is situated away from any graveyards/ crematorium and is free from toxic elements such as industrial wastes and effluents	-	-	-	-
PC3. ensure the availability of a reliable source of clean water for irrigation along with labour for the farm	-	-	-	_
PC4. co-ordinate with an approved lab to ensure the total salt concentration, Sodium absorption ratio, Bicarbonate, Boron concentration and micropollutants in the water are within the prescribed limits	-	-	-	_
PC5. ensure the site has accessibility to the relevant markets for the purchase/ regular supply of required inputs and sale of medicinal and aromatic plants grown at the farm	-	-	-	_
PC6. ensure the site has adequate shading for any plants that require shading for optimal growth	-	-	-	-
Prepare the field for cultivation	6	8	-	10
PC7. co-ordinate with an authorised lab for soil profiling and soil analysis to determine the physicochemical properties and texture of the soil	_	-	-	_
PC8. ensure the soil is suitable for the selected MAP crop with the required water holding capacity	-	-	-	-
PC9. apply the lab-recommended treatment(s) in the prescribed quantity to improve the soil fertility and adjust the pH levels	-	-	-	-
PC10. remove rocks, stumps, debris, and shrubs from the field	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. till the soil to the recommended tilth to remove weeds and facilitate a favourable environment for planting seeds and seedlings	-	-	-	-
PC12. prepare the field and/ or mother bed using the appropriate tools and implements safely, following the recommended practices to provide a better rhizospheric environment, soil structure and texture	-	-	-	-
PC13. erect fences of the recommended height around the field to protect it from external threats such as stray animals	-	-	-	-
PC14. plant appropriate windbreaks in the field to protect the crop from strong winds and prevent soil erosion	-	-	-	-
Plan nursery propagation	4	6	-	3
PC15. plan the core nursery activities such as sowing, watering, weeding, nutrient management, pest and disease management, etc.	-	-	-	-
PC16. prepare an appropriate nursery structure for the hygienic propagation of commercially-important MAPs	-	-	-	-
Procure and prepare the plant propagation material	10	12	-	8
PC17. select the appropriate MAPs to be grown according to the agro-climatic conditions, market demand and profitability	-	-	-	-
PC18. procure seeds and propagation material from an authorised seller, ensuring their quality and no damage	-	-	-	-
PC19. ensure the ready-to-transplant saplings or root cuttings are uniform in size and maturity, both in terms of aerial and underground parts	-	-	-	-
PC20. determine the correct variety of plant(s) while collecting the planting material from the wild	-	-	-	-
PC21. check the seeds and planting material to ensure they are free from pests, infection, diseases and any foreign or inert matter	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC22. ensure the seeds chosen for cultivation meet the botanical and varietal purity, are mature and from a recent seed lot	_	-	-	-
PC23. carry out the prescribed seed treatment according to the target species and planting season	-	-	-	-
PC24. carry out seedling production following the recommended agronomic practices for the target species under the nursery conditions	-	-	-	-
PC25. ensure seedling production is carried according to the field transplantation schedule	-	-	-	-
PC26. collect stem cuttings from authentic sources for root induction under nursery conditions and subsequent transplantation into the field	-	-	-	-
PC27. ensure the stem cuttings have uniform length and diameter according to the requirements laid down for the target species	_	-	-	-
PC28. ensure the stem cuttings have uniform length and diameter according to the requirements laid down for the target species	_	-	-	-
NOS Total	30	40	-	30









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N0908
NOS Name	Prepare for cultivation of MAPs
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Medicinal and Aromatic Plants Cultivation
NSQF Level	2
Credits	2
Version	1.0
Last Reviewed Date	29/09/2023
Next Review Date	29/09/2026
NSQC Clearance Date	29/09/2023







AGR/N0909: Carryout cultivation of MAPs

Description

This OS unit is about carrying out the cultivation of medicinal and aromatic plants that includes planting and maintaining them.

Scope

The scope covers the following :

- Plant and transplant the seeds and seedlings
- Carry out irrigation and water management
- Carry out plant nutrition management
- Carry out weed management
- Carry out pest and disease management
- Optimise resource utilisation
- Perform waste management

Elements and Performance Criteria

Plant and transplant the seeds and seedlings

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

- **PC1.** check the weather conditions using the government-approved weather forecasting mobile application or website and select an appropriate time for planting and transplanting seeds and seedlings
- **PC2.** uproot healthy seedling from the nursery bed at their optimum stage of growth and transplant them in the field within the recommended time duration
- **PC3.** plant seeds and seedlings in rows as per the layout, maintaining the recommended depth, spacing and moisture
- **PC4.** replenish the plant populations to compensate for losses due to mortality or damage in a timely manner, considering the gestation period of the target crop

Carry out irrigation and water management

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

- PC5. determine the water requirement of the planted medicinal and aromatic plants
- PC6. plan the irrigation cycles and implement them to ensure optimal plant growth
- PC7. use an efficient irrigation or fertigation system to optimise the usage of water
- PC8. follow the recommended water harvesting and conservation practices
- **PC9.** ensure the quality of water through regular testing using an authorised laboratory
- **PC10.** drain out the excess water from the field

Carry out plant nutrition management

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

- **PC11.** determine the micro and macronutrient needs of the plants
- **PC12.** apply the appropriate organic and inorganic fertilisers such as manure and compost to plants as per the requirement









- **PC13.** ensure mineral supplements are used based on a soil analysis conducted for the target crops in an approved laboratory
- **PC14.** arrange for specialised nutritional care for distinct purposes such as root production or enhancement of leafy bio-mass according to the recommended agronomic practices for the target species

Carry out weed management

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

- **PC15.** carry out weeding and hoeing following the recommended cycles to maintain a weed-free field
- **PC16.** carry out the recommended inter-cultural operations such as topping, nipping of buds, pruning, shading, earthing up, etc.
- **PC17.** apply the appropriate herbicides and weedicides in the recommended quantity and follow the relevant Good Agricultural Practices (GAPs) to control the growth of weeds

Carry out pest and disease management

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

- **PC18.** follow the Integrated Pest Management (IPM) practices along with the recommended traditional practices to control pests and disease organically
- **PC19.** check the plants regularly to identify pest and disease infestation
- **PC20.** apply the recommended pesticides and insecticides in the recommended dose and an appropriate time to free the plants from the identified pests and diseases
- **PC21.** follow the recommended mode of pesticide or insecticide application, ensuring personal protection with the use of relevant Personal Protection Equipment (PPE)

Optimise resource utilisation

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

- PC22. optimise the usage of electricity and relevant materials in various tasks and processes
- PC23. connect electrical tools and equipment safely and turn off when not in use
- PC24. plug water leakages to prevent its wastage

Perform waste management

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

- PC25. segregate waste into appropriate categories
- **PC26.** recycle the recyclable waste appropriately and dispose the non-recyclable waste in an environment-friendly manner

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. use of the relevant weather forecasting mobile application or website
- **KU2.** appropriate stage of growth of seedlings to be transplanted in the field from the nursery bed
- **KU3.** the importance of transplanting seedlings within the recommended time duration
- **KU4.** appropriate depth, spacing and moisture to be maintained while planting seedlings
- KU5. how to determine the water requirement of a variety of medicinal and aromatic plants
- **KU6.** the process of planning and implementing irrigation cycle to ensure optimal growth of plants









- KU7. use of irrigation or fertigation system for optimal use of water
- KU8. various water harvesting and conservation practices
- KU9. applicable Good Agricultural Practices (GAPs) for MAPs
- **KU10.** the importance of ensuring the quality of water used for irrigating medicinal and aromatic plants
- KU11. how to determine the micro and macronutrient needs of medicinal and aromatic plants
- **KU12.** the process of applying different types of organic and inorganic fertilizers, manure and compost to plants
- **KU13.** use of mineral supplements specialised nutritional care for distinct purposes such as root production or enhancement of leafy bio-mass in the target species
- **KU14.** various weed management practices and inter-cultural practices such as topping, nipping of buds, pruning, shading, earthing up, etc.
- KU15. safe use of herbicides, weedicides, insecticides and pesticides
- **KU16.** recommended Integrated Pest Management (IPM) practices to be followed to control pests and disease in medicinal and aromatic plants
- KU17. signs of pest and disease infestation in medicinal and aromatic plants
- **KU18.** use of the appropriate Personal Protection Equipment (PPE) for applying using herbicides, weedicides, insecticides and pesticides
- **KU19.** the recommended practices to be followed to prevent transmission of pests and disease from diseased to healthy plants
- KU20. benefits of resource optimisation
- **KU21.** the criteria for segregating waste into appropriate categories
- KU22. how to recycle and dispose different types of waste

Generic Skills (GS)

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

- GS1. make work-related notes and records
- GS2. read and interpret the relevant guides and manuals
- GS3. communicate politely and professionally
- GS4. take quick decisions to resolve work-related issues and minimise the impact on productivity
- GS5. listen attentively to understand the information being shared
- GS6. plan and prioritise tasks to ensure timely completion
- GS7. evaluate all possible solutions to a problem to select the best one
- GS8. co-ordinate with the co-workers to achieve the work objectives







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Plant and transplant the seeds and seedlings	4	8	-	6
PC1. check the weather conditions using the government-approved weather forecasting mobile application or website and select an appropriate time for planting and transplanting seeds and seedlings	-	-	-	-
PC2. uproot healthy seedling from the nursery bed at their optimum stage of growth and transplant them in the field within the recommended time duration	-	-	-	-
PC3. plant seeds and seedlings in rows as per the layout, maintaining the recommended depth, spacing and moisture	-	-	-	-
PC4. replenish the plant populations to compensate for losses due to mortality or damage in a timely manner, considering the gestation period of the target crop	-	-	-	-
Carry out irrigation and water management	6	8	-	4
PC5. determine the water requirement of the planted medicinal and aromatic plants	_	-	_	-
PC6. plan the irrigation cycles and implement them to ensure optimal plant growth	-	-	-	-
PC7. use an efficient irrigation or fertigation system to optimise the usage of water	-	-	-	-
PC8. follow the recommended water harvesting and conservation practices	-	-	-	-
PC9. ensure the quality of water through regular testing using an authorised laboratory	-	-	-	-
PC10. drain out the excess water from the field	-	-	-	-
Carry out plant nutrition management	4	6	-	4
PC11. determine the micro and macronutrient needs of the plants	-	-	_	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. apply the appropriate organic and inorganic fertilisers such as manure and compost to plants as per the requirement	-	-	-	-
PC13. ensure mineral supplements are used based on a soil analysis conducted for the target crops in an approved laboratory	-	-	-	-
PC14. arrange for specialised nutritional care for distinct purposes such as root production or enhancement of leafy bio-mass according to the recommended agronomic practices for the target species	-	-	-	-
Carry out weed management	4	4	-	4
PC15. carry out weeding and hoeing following the recommended cycles to maintain a weed-free field	-	-	-	-
PC16. carry out the recommended inter-cultural operations such as topping, nipping of buds, pruning, shading, earthing up, etc.	-	-	-	_
PC17. apply the appropriate herbicides and weedicides in the recommended quantity and follow the relevant Good Agricultural Practices (GAPs) to control the growth of weeds	-	-	-	-
Carry out pest and disease management	6	10	-	6
PC18. follow the Integrated Pest Management (IPM) practices along with the recommended traditional practices to control pests and disease organically	-	-	-	-
PC19. check the plants regularly to identify pest and disease infestation	-	-	-	-
PC20. apply the recommended pesticides and insecticides in the recommended dose and an appropriate time to free the plants from the identified pests and diseases	-	-	-	-
PC21. follow the recommended mode of pesticide or insecticide application, ensuring personal protection with the use of relevant Personal Protection Equipment (PPE)	-	_	-	-
Optimise resource utilisation	4	2	-	4









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC22. optimise the usage of electricity and relevant materials in various tasks and processes	-	-	-	-
PC23. connect electrical tools and equipment safely and turn off when not in use	-	-	-	-
PC24. plug water leakages to prevent its wastage	-	-	-	-
Perform waste management	2	2	-	2
PC25. segregate waste into appropriate categories	-	-	-	-
PC26. recycle the recyclable waste appropriately and dispose the non-recyclable waste in an environment-friendly manner	_	-	-	-
NOS Total	30	40	-	30









National Occupational Standards (NOS) Parameters

NOS Code	AGR/N0909
NOS Name	Carryout cultivation of MAPs
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Medicinal and Aromatic Plants Cultivation
NSQF Level	2
Credits	2
Version	1.0
Last Reviewed Date	29/09/2023
Next Review Date	29/09/2026
NSQC Clearance Date	29/09/2023







AGR/N0910: Carryout harvesting, post-harvest processing and marketing of MAPs

Description

This OS unit is about carrying out harvesting, post-harvest processing and marketing of MAPs.

Scope

The scope covers the following :

- Harvest the MAPs
- Process the MAPs
- Pack and store the processed MAPs
- Market the MAPs

Elements and Performance Criteria

Harvest the MAPs

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

- **PC1.** determine the appropriate time for harvesting based on required quality parameters set for the end product
- PC2. check the MAPs to ensure they meet the required quality standards for harvesting
- PC3. arrange the required tools and equipment for harvesting the MAPs
- **PC4.** harvest the MAPs protecting them from soil contamination and avoiding incidental and concurrent harvesting of weeds
- **PC5.** collect the MAPs in clean containers taking necessary precautions to avoid cross contamination with other species and other extraneous matters
- PC6. isolate and dispose the toxic weeds following the recommended practices

Process the MAPs

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

- **PC7.** clean the harvested MAPs following the recommended methods such as dry cleaning, wet cleaning or a combination of both
- **PC8.** follow the recommended drying technique to dry the MAPs along with appropriate practices to avoid contamination
- **PC9.** store the dry MAPs under the recommended temperature, humidity and hygienic conditions for an appropriate duration to prevent rotting or degradation
- **PC10.** ensure the processing and storage areas are clean, well-ventilated, and protected from direct sunlight, dust, rain, rodents, insects and livestock
- PC11. carry out sorting and grading of the MAPs on relevant parameters
- **PC12.** select the appropriate packaging material based on the type of produce, quality requirements, and the expected length of storage before consumption

Pack and store the processed MAPs

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









- **PC13.** follow the recommended practices to protect the processed MAPs and packing material from damage and keep them clean and dry
- PC14. pack the dried MAPs taking necessary precautions to avoid undue compacting
- **PC15.** apply labels on the packed MAPs with the necessary information in compliance with the regulatory requirements
- **PC16.** apply the necessary treatment in the storage area to protect the packed MAPs from pests, insects and rodents
- PC17. maintain the recommended temperature, humidity and hygiene in the storage area
- **PC18.** store the organic herbs, non-organic products and produce with strong aromatic compounds separately in batches, avoiding mix up and cross-contamination
- **PC19.** follow the applicable GAPs and sustainable practices to ensure quality of produce and protection of environment as per the applicable regulatory standards

Market the MAPs

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

- **PC20.** identify the market demand and relevant market/ buyers for MAPs, such as eMandi, local traders, exporters, etc.
- PC21. negotiate with the buyer(s) for a profitable price
- **PC22.** arrange an appropriate mode of transport for delivering MAPs to the buyer in a safe and hygienic condition
- PC23. process the payments using the buyer-preferred e-payment method
- **PC24.** maintain the manual and/ or electronic record of sales and payments using the physical registers and/ or the relevant computer application

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** the practice of determining an appropriate time for harvesting MAPs based on the required quality parameters set for the end product
- **KU2.** the process of checking MAPs to ensure they meet the appropriate quality standards required for harvesting
- KU3. the use of appropriate harvesting tools and equipment
- **KU4.** how to harvest plants protecting them from soil contamination, avoiding incidental and concurrent harvesting of weeds
- KU5. the infrastructure required for post-harvest management of MAPs
- **KU6.** the relevant practices to be followed to avoid cross-contamination with other varieties, and extraneous matters during the harvesting
- **KU7.** the relevant practices to be followed to isolate and dispose toxic weeds
- **KU8.** the different methods of cleaning the harvested MAPs, such as dry cleaning, wet cleaning or a combination of both
- **KU9.** the process of drying medicinal and aromatic plants using appropriate accessories such as trays to prevent contamination during the process
- **KU10.** the recommended temperature, humidity and hygienic conditions for storing the dry MAPs









- **KU11.** the importance of ensuring clean and well-ventilated processing and storage areas and protecting them from direct sunlight, dust, rain, rodents, insects and livestock
- **KU12.** the relevant parameters for sorting and grading MAPs
- KU13. the appropriate packaging material to be used for packing processed MAPs
- **KU14.** the recommended practices to be followed to protect the packing material from damage and keep it clean and dry
- **KU15.** the necessary precautions to be taken to prevent undue compacting of dried plants during packing
- **KU16.** the process of labelling the packed plants with the necessary information in compliance with the regulatory requirements
- **KU17.** the necessary treatment to be applied in the storage area to protect the packed plants from pests, insects and rodents
- **KU18.** the importance of maintaining the recommended temperature, humidity and hygiene in the storage area
- **KU19.** the importance of storing the organic herbs, non-organic products and produce with strong aromatic compounds separately in batches
- **KU20.** the applicable GAPs and sustainable practices to be followed during post-harvest processing of MAPs
- KU21. the process of identifying market demand and appropriate buyers for MAPs
- KU22. how to negotiate with buyers
- KU23. the appropriate mode of transport for MAPs
- KU24. use of various e-payment methods
- **KU25.** how to maintain manual and electronic records using physical registers and relevant computer application

Generic Skills (GS)

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

- **GS1.** maintain work-related notes and records
- GS2. read the relevant guides and manuals
- GS3. communicate politely and professionally
- GS4. listen attentively to receive instructions clearly
- GS5. take quick decisions to resolve work-related problems in a timely manner
- GS6. plan and prioritise tasks to ensure timely completion
- GS7. co-ordinate with the co-workers to achieve the work objectives







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Harvest the MAPs	8	10	-	10
PC1. determine the appropriate time for harvesting based on required quality parameters set for the end product	-	-	-	-
PC2. check the MAPs to ensure they meet the required quality standards for harvesting	-	-	-	-
PC3. arrange the required tools and equipment for harvesting the MAPs	-	-	-	-
PC4. harvest the MAPs protecting them from soil contamination and avoiding incidental and concurrent harvesting of weeds	-	-	-	-
PC5. collect the MAPs in clean containers taking necessary precautions to avoid cross contamination with other species and other extraneous matters	-	-	-	-
PC6. isolate and dispose the toxic weeds following the recommended practices	-	-	-	-
Process the MAPs	8	10	-	10
PC7. clean the harvested MAPs following the recommended methods such as dry cleaning, wet cleaning or a combination of both	-	-	-	_
PC8. follow the recommended drying technique to dry the MAPs along with appropriate practices to avoid contamination	-	-	-	_
PC9. store the dry MAPs under the recommended temperature, humidity and hygienic conditions for an appropriate duration to prevent rotting or degradation	-	-	-	-
PC10. ensure the processing and storage areas are clean, well-ventilated, and protected from direct sunlight, dust, rain, rodents, insects and livestock	-	-	-	_
PC11. carry out sorting and grading of the MAPs on relevant parameters	-	_	-	_









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. select the appropriate packaging material based on the type of produce, quality requirements, and the expected length of storage before consumption	-	-	-	-
Pack and store the processed MAPs	8	12	-	6
PC13. follow the recommended practices to protect the processed MAPs and packing material from damage and keep them clean and dry	-	-	-	-
PC14. pack the dried MAPs taking necessary precautions to avoid undue compacting	-	-	-	-
PC15. apply labels on the packed MAPs with the necessary information in compliance with the regulatory requirements	-	-	-	-
PC16. apply the necessary treatment in the storage area to protect the packed MAPs from pests, insects and rodents	-	-	_	-
PC17. maintain the recommended temperature, humidity and hygiene in the storage area	-	-	-	-
PC18. store the organic herbs, non-organic products and produce with strong aromatic compounds separately in batches, avoiding mix up and cross-contamination	-	-	-	-
PC19. follow the applicable GAPs and sustainable practices to ensure quality of produce and protection of environment as per the applicable regulatory standards	-	-	-	-
Market the MAPs	6	8	-	4
PC20. identify the market demand and relevant market/ buyers for MAPs, such as eMandi, local traders, exporters, etc.	-	-	_	-
PC21. negotiate with the buyer(s) for a profitable price	-	-	-	-
PC22. arrange an appropriate mode of transport for delivering MAPs to the buyer in a safe and hygienic condition	-	-	_	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC23. process the payments using the buyer- preferred e-payment method	-	-	-	-
PC24. maintain the manual and/ or electronic record of sales and payments using the physical registers and/ or the relevant computer application	_	-	-	-
NOS Total	30	40	-	30







National Occupational Standards (NOS) Parameters

NOS Code	AGR/N0910
NOS Name	Carryout harvesting, post-harvest processing and marketing of MAPs
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Medicinal and Aromatic Plants Cultivation
NSQF Level	2
Credits	2
Version	1.0
Last Reviewed Date	29/09/2023
Next Review Date	29/09/2026
NSQC Clearance Date	29/09/2023







DGT/VSQ/N0101: Employability Skills (30 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
- 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. understand the significance of employability skills in meeting the job requirements

Constitutional values - Citizenship

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

PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices

Becoming a Professional in the 21st Century

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

PC3. explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, selfmotivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.

Basic English Skills

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

PC4. speak with others using some basic English phrases or sentences

Communication Skills

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

- PC5. follow good manners while communicating with others
- PC6. work with others in a team









Diversity & Inclusion

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

- PC7. communicate and behave appropriately with all genders and PwD
- PC8. report any issues related to sexual harassment

Financial and Legal Literacy

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

- PC9. use various financial products and services safely and securely
- PC10. calculate income, expenses, savings etc.
- **PC11.** approach the concerned authorities for any exploitation as per legal rights and laws *Essential Digital Skills*

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

- PC12. operate digital devices and use its features and applications securely and safely
- PC13. use internet and social media platforms securely and safely

Entrepreneurship

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

PC14. identify and assess opportunities for potential business

PC15. identify sources for arranging money and associated financial and legal challenges *Customer Service*

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

- PC16. identify different types of customers
- PC17. identify customer needs and address them appropriately
- PC18. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

- PC19. create a basic biodata
- PC20. search for suitable jobs and apply
- PC21. identify and register apprenticeship opportunities as per requirement

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. need for employability skills
- 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 basic spoken English language
- KU6. Do and dont of effective communication
- KU7. inclusivity and its importance
- KU8. different types of disabilities and appropriate communication and behaviour towards PwD
- KU9. different types of financial products and services









- KU10. how to compute income and expenses
- **KU11.** importance of maintaining safety and security in financial transactions
- **KU12.** different legal rights and laws
- KU13. how to operate digital devices and applications safely and securely
- KU14. ways to identify business opportunities
- **KU15.** types of customers and their needs
- KU16. how to apply for a job and prepare for an interview
- KU17. apprenticeship scheme and the process of registering on apprenticeship portal

Generic Skills (GS)

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

- **GS1.** communicate effectively using appropriate language
- GS2. behave politely and appropriately with all
- **GS3.** perform basic calculations
- **GS4.** solve problems effectively
- **GS5.** be careful and attentive at work
- GS6. use time effectively
- **GS7.** maintain hygiene and sanitisation to avoid infection







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	1	1	-	-
PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
Constitutional values – Citizenship	1	1	-	-
PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	1	3	-	-
PC3. explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
Basic English Skills	2	3	-	-
PC4. speak with others using some basic English phrases or sentences	-	-	-	-
Communication Skills	1	1	-	-
PC5. follow good manners while communicating with others	-	-	-	-
PC6. work with others in a team	-	-	-	-
Diversity & Inclusion	1	1	-	-
PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8. report any issues related to sexual harassment	-	-	-	-
Financial and Legal Literacy	3	4	-	-
PC9. use various financial products and services safely and securely	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. calculate income, expenses, savings etc.	-	-	-	-
PC11. approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
Essential Digital Skills	4	6	-	-
PC12. operate digital devices and use its features and applications securely and safely	-	-	-	-
PC13. use internet and social media platforms securely and safely	-	-	-	-
Entrepreneurship	3	5	-	-
PC14. identify and assess opportunities for potential business	-	-	-	-
PC15. identify sources for arranging money and associated financial and legal challenges	-	-	-	-
Customer Service	2	2	-	-
PC16. identify different types of customers	-	-	-	-
PC17. identify customer needs and address them appropriately	-	-	-	-
PC18. follow appropriate hygiene and grooming standards	-	-	-	-
Getting ready for apprenticeship & Jobs	1	3	-	-
PC19. create a basic biodata	-	-	-	-
PC20. search for suitable jobs and apply	-	-	-	-
PC21. identify and register apprenticeship opportunities as per requirement	-	-	-	-
NOS Total	20	30	-	-









National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0101
NOS Name	Employability Skills (30 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	2
Credits	1
Version	1.0
Last Reviewed Date	18/02/2025
Next Review Date	18/02/2028
NSQC Clearance Date	18/02/2025

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 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 : 50

(**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/N0908.Prepare for cultivation of MAPs	30	40	-	30	100	20
AGR/N0909.Carryout cultivation of MAPs	30	40	-	30	100	30
AGR/N0910.Carryout harvesting, post-harvest processing and marketing of MAPs	30	40	-	30	100	45
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	5
Total	110	150	-	90	350	100







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
PPE	Personal Protective Equipment
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.