









# Seed Grower

QP Code: AGR/Q7106

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







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## AGR/Q7106: Seed Grower

#### **Brief Job Description**

A Seed Grower produces a variety of high-quality seed crops under the supervision of a field supervisor from the seed production company. The person is responsible for preparing the field, sowing, maintaining, harvesting and performing post-harvest processing of the breeder, foundation and certified seeds as per the instructions of the seed production company.

#### **Personal Attributes**

The individual must have good eyesight and problem-solving skills. The person must be physically fit to work for long hours in outdoor settings. Ability to work as per instructions and in co-ordination with others to achieve the work objectives are other important attributes required in this job role.

#### **Applicable National Occupational Standards (NOS)**

#### **Compulsory NOS:**

- 1. AGR/N7124: Prepare for growing crop seeds
- 2. AGR/N7125: Sow and maintain the seed crop
- 3. AGR/N7126: Perform harvesting and post-harvest processing of seed crop
- 4. DGT/VSQ/N0101: Employability Skills (30 Hours)

#### **Qualification Pack (QP) Parameters**

Sector	Agriculture
Sub-Sector	Agriculture Industries
Occupation	Seed Production and Processing
Country	India
NSQF Level	2
Credits	7
Aligned to NCO/ISCO/ISIC Code	NCO-2015/6130.0201









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-01014-2023-V1-ASCI
NQR Version	1.0







## AGR/N7124: Prepare for growing crop seeds

## Description

This OS unit is about preparing to grow seed crop and includes activities such as selecting and preparing the field, arranging the required resources and planning seed sowing.

## Scope

The scope covers the following :

- Select a field for growing seeds
- Prepare the field for growing seeds
- Procure, test and store the seeds
- Arrange the tools, equipment and PPE
- Plan the seed sowing

## **Elements and Performance Criteria**

#### Select a field for growing seeds

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

- **PC1.** select a field for seed production as per the seed production company's instructions, ensuring it has adequate sunlight exposure and water for irrigation
- **PC2.** ensure the field doesn't have high weed incidence and is free of unwanted plants from the previous season's crop
- **PC3.** check the field has effective drainage and aeration for effective control of pest and diseases

#### Prepare the field for growing seeds

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

- **PC4.** collect soil samples from different parts of the field for the purpose of testing
- **PC5.** co-ordinate with the seed production company's lab to get the soil samples tested
- **PC6.** apply the necessary treatment such as farmyard manure, compost and vermi-compost as per the lab's recommendations to enhance the soil fertility
- **PC7.** plough and prepare the field as per the instructions of the seed production company's field supervisor
- **PC8.** maintain the record of soil testing and field preparation as per the documentation requirements of the seed production company

#### Procure, test and store the seeds

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

- **PC9.** select breeder/ foundation/ certified seed varieties to grow in the field as per the company's instructions
- **PC10.** procure healthy seeds of the selected varieties from the seed production company or a vendor approved by them
- PC11. ensure the seeds are genetically pure, contamination-free and uniform in size
- **PC12.** conduct a seed test under supervision of the field supervisor to ensure the seeds have a high germination percentage and vigour









- PC13. use an appropriate method to sort out the chaffy seeds
- PC14. wash the seeds with clean water to remove any unwanted materials
- **PC15.** store the seeds under the recommended temperature and humidity as per the field supervisor's instructions
- **PC16.** apply the necessary treatment in the storage as per instructions to protect the seeds from pests and disease
- PC17. maintain the record of the treatment applied in the storage

Arrange the tools, equipment and PPE

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

- **PC18.** identify the relevant tools, equipment and Personal Protective Equipment (PPE) for sowing the seeds and maintaining the seedlings
- **PC19.** arrange the tools, equipment and PPE as per the requirement
- PC20. ensure the tools and equipment are in working condition

#### Plan the seed sowing

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

**PC21.** plan the sowing of seeds in a way to ensure that there are no heavy rains at the flowering stage of the seed crop and it matures in the summer season to achieve the best quality of seeds

#### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** the criteria for selecting a field for seed production such as adequate sunlight exposure and water for irrigation, low weed incidence, effective drainage and aeration, etc.
- **KU2.** the process of extracting a soil sample from the field and getting it tested from an authorised lab
- **KU3.** the process of applying necessary treatment such as farmyard manure, compost and vermicompost to enhance the soil fertility
- KU4. difference between foundation, breeder and certified seeds
- **KU5.** the criteria for selecting and procuring seed for production such as in-demand, genetically pure, uniform in size, healthy and certified seeds, etc.
- **KU6.** the importance of procuring seeds from a seed vendor approved by the seed production company
- **KU7.** the method of conducting a seed test to check the procured seeds have high germination percentage and vigour
- KU8. the method of sorting out the chaffy seeds
- KU9. the process of washing the seeds to remove any unwanted material
- KU10. appropriate temperature and humidity for storing a variety of seeds
- KU11. importance of ensuring that seed storage is free of pests and disease
- **KU12.** relevant tools, equipment and PPE for sowing the seeds and maintaining the seedlings
- **KU13.** the appropriate season to sow the seeds with the required temperature, wind speed and photoperiod suitable for different varieties of seeds







- **KU14.** importance of sowing the seeds at such a time to ensure that there are no heavy rains at the flowering stage of the seed crop
- **KU15.** the process of planning seed sowing to ensure that seed crop matures in the summer season to achieve the best quality of seeds

## **Generic Skills (GS)**

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

- GS1. write work-related notes
- **GS2.** read the relevant guides, manuals literature to get latest information about the field of work
- **GS3.** communicate clearly and politely
- GS4. listen attentively to understand the instructions being given
- GS5. identify solutions to work-related issues
- **GS6.** plan and prioritise tasks to ensure timely completion
- GS7. take quick decision in case of an emergency/ accident
- GS8. plan effective use of time and resources







## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Select a field for growing seeds	4	8	-	4
<b>PC1.</b> select a field for seed production as per the seed production company's instructions, ensuring it has adequate sunlight exposure and water for irrigation	-	-	-	-
<b>PC2.</b> ensure the field doesn't have high weed incidence and is free of unwanted plants from the previous season's crop	-	-	-	_
<b>PC3.</b> check the field has effective drainage and aeration for effective control of pest and diseases	-	-	-	-
Prepare the field for growing seeds	8	10	-	6
<b>PC4.</b> collect soil samples from different parts of the field for the purpose of testing	-	-	-	-
<b>PC5.</b> co-ordinate with the seed production company's lab to get the soil samples tested	-	-	-	-
<b>PC6.</b> apply the necessary treatment such as farmyard manure, compost and vermi-compost as per the lab's recommendations to enhance the soil fertility	-	-	-	-
<b>PC7.</b> plough and prepare the field as per the instructions of the seed production company's field supervisor	-	-	-	-
<b>PC8.</b> maintain the record of soil testing and field preparation as per the documentation requirements of the seed production company	-	-	-	-
Procure, test and store the seeds	12	12	-	10
<b>PC9.</b> select breeder/ foundation/ certified seed varieties to grow in the field as per the company's instructions	-	-	-	-
<b>PC10.</b> procure healthy seeds of the selected varieties from the seed production company or a vendor approved by them	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC11.</b> ensure the seeds are genetically pure, contamination-free and uniform in size	-	-	-	-
<b>PC12.</b> conduct a seed test under supervision of the field supervisor to ensure the seeds have a high germination percentage and vigour	-	-	-	-
<b>PC13.</b> use an appropriate method to sort out the chaffy seeds	-	-	-	-
<b>PC14.</b> wash the seeds with clean water to remove any unwanted materials	-	-	-	-
<b>PC15.</b> store the seeds under the recommended temperature and humidity as per the field supervisor's instructions	-	-	-	-
<b>PC16.</b> apply the necessary treatment in the storage as per instructions to protect the seeds from pests and disease	-	-	-	-
<b>PC17.</b> maintain the record of the treatment applied in the storage	-	-	-	-
Arrange the tools, equipment and PPE	4	8	-	8
<b>PC18.</b> identify the relevant tools, equipment and Personal Protective Equipment (PPE) for sowing the seeds and maintaining the seedlings	-	-	-	-
<b>PC19.</b> arrange the tools, equipment and PPE as per the requirement	-	-	-	-
<b>PC20.</b> ensure the tools and equipment are in working condition	-	-	-	-
Plan the seed sowing	2	2	-	2
<b>PC21.</b> plan the sowing of seeds in a way to ensure that there are no heavy rains at the flowering stage of the seed crop and it matures in the summer season to achieve the best quality of seeds	-	-	-	-
NOS Total	30	40	-	30









## National Occupational Standards (NOS) Parameters

NOS Code	AGR/N7124
NOS Name	Prepare for growing crop seeds
Sector	Agriculture
Sub-Sector	Agriculture Industries
Occupation	Seed Production and Processing
NSQF Level	2
Credits	1
Version	1.0
Last Reviewed Date	29/09/2023
Next Review Date	29/09/2026
NSQC Clearance Date	29/09/2023







## AGR/N7125: Sow and maintain the seed crop

## Description

This OS unit is about sowing the seeds and maintaining the seed crop to achieve the best quality of seeds.

#### Scope

The scope covers the following :

- Sow the seeds
- Maintain healthy growth of the seed crop
- Identify and remove the weeds
- Control pests and disease

#### **Elements and Performance Criteria**

#### Sow the seeds

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

- **PC1.** sow the seeds as per the field supervisor's instructions, maintaining the recommended planting depth and density for the selected seed varieties
- **PC2.** apply the recommended quantity of farmyard manure on the seeds as per the instructions
- PC3. water the planted seeds with the recommended quantity of water
- **PC4.** maintain the recommended temperature and soil moisture as per instructions to help the seeds germinate

#### Maintain healthy growth of the seed crop

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

- **PC5.** apply water and recommended fertilizers uniformly in the appropriate quantity to maintain healthy growth of the seed crop
- **PC6.** use the isolation distance method under supervision of the field supervisor to maintain the purity of the seed accessions at the pollination stage
- **PC7.** mount the soil near the root region of the seed crop plants to enhance their water and nutrient absorption capacity and help the plants to stand upright
- **PC8.** apply a cover of mosquito net/ paper bags/ nylon stockings on the floral portion of the crop plants as per the bagging technique
- **PC9.** co-ordinate with the field supervisor to identify and remove the crop plants with undesirable characteristics to maintain the genetic purity of the seeds as per the roughing method

#### Identify and remove the weeds

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

- **PC10.** identify varieties of weeds growing among the seed crop during various stages of their growth
- PC11. remove the weeds manually or mechanically as per the field supervisor's instructions
- **PC12.** apply the recommended weedicides in an appropriate quantity as per the manufacturer/ field supervisor's instructions

Control pests and disease









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

- PC13. monitor the seed crop regularly for signs of pest/ disease infestation
- **PC14.** apply the recommended pesticides/ insecticides as per the manufacturer/ field supervisor's instructions to remove and control pests/ insects
- PC15. drain out excess water from the field to prevent the growth of pathogens
- **PC16.** maintain the record of use of fertilizers/ weedicides/ pesticides/ insecticides as per the seed production company's documentation requirements

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** appropriate planting depth and density for a variety of seeds to control disease incidence, weed infestation and uneven ripening
- **KU2.** the process of watering and applying farmyard manure on the sown seeds
- **KU3.** the importance and ways of maintaining the recommended temperature and soil moisture to help the seeds germinate
- **KU4.** recommended fertilizers to be used on varieties of seed crop and the process of applying them uniformly
- **KU5.** the isolation distance method used to maintain the purity of the seed accessions at the pollination stage
- **KU6.** the process of mounting soil near the root region of seed crop plants to enhance their water and nutrient absorption capacity and help the plants to stand upright
- **KU7.** the process of applying a cover of mosquito net/ paper bags/ nylon stockings on the floral portion of the crop plants as per the bagging technique
- **KU8.** the process of identifying and removing the crop plants with undesirable characteristics to maintain the genetic purity of the seeds as per the roughing method
- KU9. how to identify varieties of weeds growing among the seed crop
- **KU10.** the method of removing weeds growing among the seed crop
- **KU11.** the recommended quantity of weedicides and process of applying it
- KU12. signs of pest/ disease infestation in the seed crop
- KU13. the process of safely applying the recommended pesticides/ insecticides on the seed crop
- KU14. how to drain out excess water from the field to prevent the growth of pathogens
- **KU15.** the importance of maintaining the record of fertilizers/ weedicides/ pesticides/ insecticides used on the seed crop

## **Generic Skills (GS)**

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

- GS1. write work-related notes and maintain relevant records
- GS2. communicate politely and professionally
- GS3. read the relevant literature to learn about the latest developments in the field of work
- **GS4.** listen attentively to understand the information/ instructions being shared by the speaker









- **GS5.** plan and prioritise tasks to ensure timely completion
- **GS6.** co-ordinate with the co-workers to achieve the 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







## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Sow the seeds	12	14	-	6
<b>PC1.</b> sow the seeds as per the field supervisor's instructions, maintaining the recommended planting depth and density for the selected seed varieties	-	-	-	-
<b>PC2.</b> apply the recommended quantity of farmyard manure on the seeds as per the instructions	-	-	-	-
<b>PC3.</b> water the planted seeds with the recommended quantity of water	-	-	-	-
<b>PC4.</b> maintain the recommended temperature and soil moisture as per instructions to help the seeds germinate	-	-	-	_
Maintain healthy growth of the seed crop	8	16	-	6
<b>PC5.</b> apply water and recommended fertilizers uniformly in the appropriate quantity to maintain healthy growth of the seed crop	-	-	-	-
<b>PC6.</b> use the isolation distance method under supervision of the field supervisor to maintain the purity of the seed accessions at the pollination stage	-	-	-	-
<b>PC7.</b> mount the soil near the root region of the seed crop plants to enhance their water and nutrient absorption capacity and help the plants to stand upright	-	-	-	-
<b>PC8.</b> apply a cover of mosquito net/ paper bags/ nylon stockings on the floral portion of the crop plants as per the bagging technique	-	-	-	_
<b>PC9.</b> co-ordinate with the field supervisor to identify and remove the crop plants with undesirable characteristics to maintain the genetic purity of the seeds as per the roughing method	-	-	-	-
Identify and remove the weeds	6	4	-	10









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> identify varieties of weeds growing among the seed crop during various stages of their growth	-	-	-	_
<b>PC11.</b> remove the weeds manually or mechanically as per the field supervisor's instructions	-	-	-	-
<b>PC12.</b> apply the recommended weedicides in an appropriate quantity as per the manufacturer/field supervisor's instructions	-	-	-	-
Control pests and disease	4	6	-	8
<b>PC13.</b> monitor the seed crop regularly for signs of pest/ disease infestation	-	-	-	-
<b>PC14.</b> apply the recommended pesticides/ insecticides as per the manufacturer/ field supervisor's instructions to remove and control pests/ insects	-	-	-	-
<b>PC15.</b> drain out excess water from the field to prevent the growth of pathogens	-	-	-	-
<b>PC16.</b> maintain the record of use of fertilizers/ weedicides/ pesticides/ insecticides as per the seed production company's documentation requirements	-	-	-	-
NOS Total	30	40	-	30









## National Occupational Standards (NOS) Parameters

NOS Code	AGR/N7125
NOS Name	Sow and maintain the seed crop
Sector	Agriculture
Sub-Sector	Agriculture Industries
Occupation	Seed Production and Processing
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/N7126: Perform harvesting and post-harvest processing of seed crop

## Description

This OS unit is about harvesting the seed crop and performing post-harvest processing before sending the seeds to the seed processing plant.

## Scope

The scope covers the following :

- Harvest the crop
- Perform post-harvest processing
- Pack and store the seeds
- Transport the seeds to the seed processing plant
- Optimise resource utilisation
- Perform waste management

#### **Elements and Performance Criteria**

#### Harvest the crop

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

- **PC1.** co-ordinate with the field supervisor to check if the seed crop plants have attained complete physiological maturity for being harvested
- **PC2.** select manual or mechanical harvesting method according to the type and quantity of seed crop and field supervisor's instructions
- PC3. harvest the seed crop ensuring minimum loss and damage to the seeds
- **PC4.** thresh the harvested seed crop manually or mechanically as per the field supervisor's instructions to separate the seeds from the seed crop plants
- **PC5.** ensure the seed crop is sufficiently dry before threshing is carried out
- PC6. collect seeds in appropriate bags/ baskets during harvesting
- **PC7.** protect the seeds from contamination during harvesting and avoid mixture with other types of seeds

#### Perform post-harvest processing

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

- **PC8.** clean the seeds using the wet or dry cleaning method according to the type of seed crop and field supervisor's instructions
- **PC9.** carry out winnowing to remove stem bits, petals, husks and other flower parts and debris mixed with the seeds
- **PC10.** carry out sieving using sieves of different gauge sizes according to the need
- **PC11.** dry the seeds under the sun according to the quantity of seeds and conducive weather conditions
- PC12. ensure to shade dry the seeds with high moisture content before exposing them to sun
- PC13. protect the seeds from pests and exposure to moist air during sun drying









- **PC14.** dry a high quantity of seeds mechanically using air blowers under supervision in a well-ventilated space
- **PC15.** co-ordinate with the field supervisor to check the moisture content in the seeds and ensure that they have been dried to the required level

#### Pack and store the seeds

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

- **PC16.** select appropriate bags as per the seed production company's standards to pack the seeds to be sent to the seed processing plant
- PC17. pack the seeds in the bags ensuring no damage to them
- PC18. arrange the seeds in lots according to the variety and label them appropriately
- **PC19.** store the packed seeds in a storage area with the required temperature and humidity before being transported
- **PC20.** stack the seed bags in the storage ensuring the seeds in the bags at the bottom don't suffer damage
- PC21. store the same variety of seeds together and in the correct position

#### Transport the seeds to the seed processing plant

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

- **PC22.** arrange an appropriate mode of transport as per the company standards to ensure the protection of seeds during transit
- PC23. load the seed bags safely in the transport vehicle
- **PC24.** maintain the record of seeds bags loaded and transported to the seed processing plant

#### Optimise resource utilisation

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

- PC25. optimise the usage of water/ electricity/ materials in various tasks/ activities/ processes
- PC26. connect electrical tools and equipment safely and turn off when not in use
- PC27. plug any water leakages to prevent its wastage

#### Perform waste management

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

- PC28. segregate waste into different categories
- PC29. dispose non-recyclable waste appropriately
- PC30. deposit recyclable and reusable materials at the identified location

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. indicators of physiological maturity of a variety of seeds
- **KU2.** the appropriate season and manual/ mechanical methods for harvesting seeds to maintain their quality
- **KU3.** the process of manual/ mechanical threshing of seeds after being harvested and the required moisture level for threshing the seeds
- **KU4.** safe handling of seeds during harvesting to protect them from contamination and mixture with other types of seeds









- KU5. the process of wet/ dry cleaning of seeds
- **KU6.** the process of winnowing to remove stem bits, petals, husks and other parts of the flower and debris mixed with the seeds
- KU7. the process of sieving using sieves of different gauge sizes
- **KU8.** the process of drying the seeds under the sun or mechanically and the appropriate conditions required for that
- KU9. the process of testing the moisture content in the seeds
- KU10. appropriate packing material for seeds and the process to pack and label them
- KU11. the correct process of stacking and storing the seed bags in the storage
- KU12. appropriate temperature and humidity required for storing a variety of seeds
- **KU13.** the appropriate mode of transport to ensure the protection of seeds during transit
- KU14. the correct way of loading the seed bags in the transport vehicle
- KU15. applicable documentation requirements
- KU16. the importance of following environmental and ecological best practices
- KU17. benefits of resource optimisation and ways of efficiently managing various materials
- KU18. common practices of conserving electricity
- KU19. different methods of recycling and disposing different types of waste
- KU20. common sources of pollution and ways to minimise it

## **Generic Skills (GS)**

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

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







## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Harvest the crop	8	6	-	4
<b>PC1.</b> co-ordinate with the field supervisor to check if the seed crop plants have attained complete physiological maturity for being harvested	-	-	-	-
<b>PC2.</b> select manual or mechanical harvesting method according to the type and quantity of seed crop and field supervisor's instructions	-	-	-	_
<b>PC3.</b> harvest the seed crop ensuring minimum loss and damage to the seeds	-	-	-	-
<b>PC4.</b> thresh the harvested seed crop manually or mechanically as per the field supervisor's instructions to separate the seeds from the seed crop plants	-	-	-	-
<b>PC5.</b> ensure the seed crop is sufficiently dry before threshing is carried out	-	-	-	-
<b>PC6.</b> collect seeds in appropriate bags/ baskets during harvesting	-	-	-	-
<b>PC7.</b> protect the seeds from contamination during harvesting and avoid mixture with other types of seeds	-	-	-	-
Perform post-harvest processing	5	6	-	8
<b>PC8.</b> clean the seeds using the wet or dry cleaning method according to the type of seed crop and field supervisor's instructions	-	-	-	-
<b>PC9.</b> carry out winnowing to remove stem bits, petals, husks and other flower parts and debris mixed with the seeds	-	-	_	_
<b>PC10.</b> carry out sieving using sieves of different gauge sizes according to the need	-	-	-	-
<b>PC11.</b> dry the seeds under the sun according to the quantity of seeds and conducive weather conditions	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> ensure to shade dry the seeds with high moisture content before exposing them to sun	-	-	-	-
<b>PC13.</b> protect the seeds from pests and exposure to moist air during sun drying	_	-	-	-
<b>PC14.</b> dry a high quantity of seeds mechanically using air blowers under supervision in a well-ventilated space	-	-	-	-
<b>PC15.</b> co-ordinate with the field supervisor to check the moisture content in the seeds and ensure that they have been dried to the required level	-	-	-	-
Pack and store the seeds	8	10	-	9
<b>PC16.</b> select appropriate bags as per the seed production company's standards to pack the seeds to be sent to the seed processing plant	-	-	-	-
<b>PC17.</b> pack the seeds in the bags ensuring no damage to them	-	-	-	-
<b>PC18.</b> arrange the seeds in lots according to the variety and label them appropriately	-	-	-	-
<b>PC19.</b> store the packed seeds in a storage area with the required temperature and humidity before being transported	-	-	-	-
<b>PC20.</b> stack the seed bags in the storage ensuring the seeds in the bags at the bottom don't suffer damage	-	-	-	_
<b>PC21.</b> store the same variety of seeds together and in the correct position	-	-	-	-
Transport the seeds to the seed processing plant	3	6	-	3
<b>PC22.</b> arrange an appropriate mode of transport as per the company standards to ensure the protection of seeds during transit	-	-	-	-
<b>PC23.</b> load the seed bags safely in the transport vehicle	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC24.</b> maintain the record of seeds bags loaded and transported to the seed processing plant	-	-	_	-
Optimise resource utilisation	3	6	-	3
<b>PC25.</b> optimise the usage of water/ electricity/ materials in various tasks/ activities/ processes	-	-	-	-
<b>PC26.</b> connect electrical tools and equipment safely and turn off when not in use	-	-	-	-
<b>PC27.</b> plug any water leakages to prevent its wastage	-	-	-	-
Perform waste management	3	6	-	3
PC28. segregate waste into different categories	-	-	-	-
PC29. dispose non-recyclable waste appropriately	-	-	-	-
<b>PC30.</b> deposit recyclable and reusable materials at the identified location	-	-	-	-
NOS Total	30	40	-	30









## National Occupational Standards (NOS) Parameters

NOS Code	AGR/N7126
NOS Name	Perform harvesting and post-harvest processing of seed crop
Sector	Agriculture
Sub-Sector	Agriculture Industries
Occupation	Seed Production and Processing
NSQF Level	2
Credits	3
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	-	-
<b>PC1.</b> understand the significance of employability skills in meeting the job requirements	-	-	-	-
Constitutional values – Citizenship	1	1	-	-
<b>PC2.</b> identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	1	3	-	-
<b>PC3.</b> 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	-	-
<b>PC4.</b> speak with others using some basic English phrases or sentences	_	-	-	-
Communication Skills	1	1	-	-
<b>PC5.</b> follow good manners while communicating with others	-	-	-	-
PC6. work with others in a team	-	-	-	-
Diversity & Inclusion	1	1	-	-
<b>PC7.</b> communicate and behave appropriately with all genders and PwD	-	-	-	-
<b>PC8.</b> report any issues related to sexual harassment	-	-	-	-
Financial and Legal Literacy	3	4	-	-
<b>PC9.</b> 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.	-	-	-	-
<b>PC11.</b> approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
Essential Digital Skills	4	6	-	-
<b>PC12.</b> operate digital devices and use its features and applications securely and safely	-	-	-	-
<b>PC13.</b> use internet and social media platforms securely and safely	-	-	-	-
Entrepreneurship	3	5	-	-
<b>PC14.</b> identify and assess opportunities for potential business	-	-	-	-
<b>PC15.</b> identify sources for arranging money and associated financial and legal challenges	-	-	-	-
Customer Service	2	2	-	-
PC16. identify different types of customers	-	-	-	-
<b>PC17.</b> identify customer needs and address them appropriately	-	-	-	-
<b>PC18.</b> 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	-	-	-	-
<b>PC21.</b> 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's to pass the Qualification Pack.

6. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack

Minimum Aggregate Passing % at QP Level : 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/N7124.Prepare for growing crop seeds	30	40	-	30	100	20
AGR/N7125.Sow and maintain the seed crop	30	40	-	30	100	30
AGR/N7126.Perform harvesting and post-harvest processing of seed crop	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







## 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.