

Qualification Pack



Krishi Sahayak

QP Code: AGR/Q7603

Version: 1.0

NSQF Level: 3

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AGR/Q7603: Krishi Sahayak

Brief Job Description

Krishi Sahayak is popularly known as Krishi Sakhi or Aajeevika Krishi Mitra (AKM) or Community Resource Person-Agriculture. The individual is responsible for creating awareness and building capacity of farmer/ rural house hold members on agricultural activities and facilitates aggregation and marketing of the agricultural produced for sustainable agriculture-based livelihoods at SHGs/household level. The individual in job is also required to collect various data of each individual farmer/ producer member on various parameter. The individual also provides technical guidance to farmers on various crop cultivation practices and demonstrate improved practices for the same.

Personal Attributes

The individual must be physically fit to work for long durations. The person must have problem-solving skills with the ability to work independently and in coordination with others. The individual must know how to read, write, perform basic calculations and communicate well verbally and in writing.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [AGR/N7612: Comprehend the livelihood perspective of the farming communities](#)
2. [AGR/N7613: Comprehend the Agro-ecology and various interventions that influence the functioning of the ecosystem](#)
3. [AGR/N7614: Establish an Agri-nutrition-garden \(ANG\)](#)
4. [AGR/N7619: Improve Farming Practices by conducting Farmer Field Schools \(FFS\)](#)
5. [AGR/N7615: Cultivate the appropriate crops in the selected area](#)
6. [AGR/N7616: Use relevant farm machinery for the field crop cultivation](#)
7. [AGR/N7617: Analyse the effect of abnormal weather conditions on small holders' agricultural practices for effective management practices](#)
8. [AGR/N7618: Carry out basic farm management](#)
9. [AGR/N9903: Maintain health and safety at the workplace](#)
10. [DGT/SQ/N0101: Employability Skills \(30 Hours\)](#)

Qualification Pack (QP) Parameters

Qualification Pack

Sector	Agriculture
Sub-Sector	Agriculture Industries
Occupation	Information Management
Country	India
NSQF Level	3
Credits	10
Aligned to NCO/ISCO/ISIC Code	NCO-2015/6116.0102
Minimum Educational Qualification & Experience	5th Class with 4 Years of experience (relevant) OR 8th Class with 1 Year of experience (relevant) OR 8th Class (with one year of (NTC/NAC) after 8th) OR 8th Class (Pass and pursuing continuous schooling in regular school with vocational subject) OR Certificate-NSQF (Previous relevant Qualification of NSQF Level 2) with 1 Year of experience (relevant)
Minimum Level of Education for Training in School	8th Class
Pre-Requisite License or Training	NA
Minimum Job Entry Age	16 Years
Last Reviewed On	NA
Next Review Date	17/11/2025
NSQC Approval Date	17/11/2022
Version	1.0
Reference code on NQR	2022/AGR/ASCI/06446
NQR Version	1.0

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AGR/N7612: Comprehend the livelihood perspective of the farming communities

Description

This OS unit is about livelihood perspective of the farming communities and various factors of production and management of the factors that are not in the farmer's control.

Scope

The scope covers the following :

- Comprehend livelihoods and factors of production
- Recognize the Mahila Kisan and her identity as farmer

Elements and Performance Criteria

Comprehend livelihoods and factors of production

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

- PC1.** Enlist Routes to Livelihoods (sources and sinks)
- PC2.** Select a crop/variety to grow for a better return based on Production input, Ecological factors, Market factors etc.
- PC3.** Enlist the Production Input , Ecological factors and Market factors that are under Full control, partial control, beyond control of the individual
- PC4.** Enlist the sources of their family income (i.e cash inflow) and avenues of expenses (i.e cash outflow)
- PC5.** Illustrate how low-cost agriculture can reduce the family expenses and increase income of the farmer
- PC6.** Evaluate the total cash outflow and cash outflow on agricultural inputs and calculate the percentage of cash used for agriculture input purpose
- PC7.** Choose the appropriate ways and means to reduce the sinks (particularly cost of agricultural input)

Recognize the Mahila Kisan and her identity as farmer

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

- PC8.** Enlist the perception on a 'farmer' (male / Female)
- PC9.** Tabulate role of women in farming and various possible interventions to strengthen the identity of women as a farmer.
- PC10.** Prepare the photo chart for women's role in farming (decision maker / labour)
- PC11.** Map the work division in agriculture among male and female farmer
- PC12.** Identify the hindrances for which "women are not considered as a farmer" and map out the possibilities to establish it.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

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- KU1.** Understanding livelihoods; elements of livelihoods and factors of Production
- KU2.** Sources of income and expenditure, how to reduce it
- KU3.** Elements of Resource mapping, Social Mapping and Aspiration mapping
- KU4.** Mapping future aspiration using 7-river tool
- KU5.** Analyzing livelihoods: Assets, Access, Skill perspective
- KU6.** use of sustainable livelihoods frameworks in analysing rural livelihoods
- KU7.** General perception on a `farmer' (male / Female)
- KU8.** Hindrances to become a woman farmer, how to overcome? Why women should be considered as farmer?
- KU9.** Mapping work division in farming
- KU10.** difference between agricultural labour and farmer

Generic Skills (GS)

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

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

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Comprehend livelihoods and factors of production</i>	3	3	-	5
PC1. Enlist Routes to Livelihoods (sources and sinks)	-	-	-	-
PC2. Select a crop/variety to grow for a better return based on Production input, Ecological factors, Market factors etc.	-	-	-	-
PC3. Enlist the Production Input , Ecological factors and Market factors that are under Full control, partial control, beyond control of the individual	-	-	-	-
PC4. Enlist the sources of their family income (i.e cash inflow) and avenues of expenses (i.e cash outflow)	-	-	-	-
PC5. Illustrate how low-cost agriculture can reduce the family expenses and increase income of the farmer	-	-	-	-
PC6. Evaluate the total cash outflow and cash outflow on agricultural inputs and calculate the percentage of cash used for agriculture input purpose	-	-	-	-
PC7. Choose the appropriate ways and means to reduce the sinks (particularly cost of agricultural input)	-	-	-	-
<i>Recognize the Mahila Kisan and her identity as farmer</i>	2	2	-	5
PC8. Enlist the perception on a `farmer' (male / Female)	-	-	-	-
PC9. Tabulate role of women in farming and various possible interventions to strengthen the identity of women as a farmer.	-	-	-	-
PC10. Prepare the photo chart for women's role in farming (decision maker / labour)	-	-	-	-
PC11. Map the work division in agriculture among male and female farmer	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. Identify the hindrances for which “women are not considered as a farmer” and map out the possibilities to establish it.	-	-	-	-
NOS Total	5	5	-	10

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N7612
NOS Name	Comprehend the livelihood perspective of the farming communities
Sector	Agriculture
Sub-Sector	Agriculture Industries
Occupation	Information Management
NSQF Level	3
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	17/11/2025
NSQC Clearance Date	17/11/2022

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AGR/N7613: Comprehend the Agro-ecology and various interventions that influence the functioning of the ecosystem

Description

This OS unit is about various components of Agro-ecosystem and various interventions that influence the functioning of the ecosystem. It also includes the conventional agricultural practices and agro-ecological practices in the context of the ecosystem

Scope

The scope covers the following :

- Comprehend the Agro-ecology and their interdependence

Elements and Performance Criteria

Comprehend the Agro-ecology and their interdependence

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

- PC1.** Tabulate the parts of our ecosystem
- PC2.** Identify living and non-living factors of the ecology and tabulate their interdependence / linkages
- PC3.** Enlist Elements on surface of the earth, soil and water body
- PC4.** Categorize the agricultural / livelihood activities that impact the ecosystem
- PC5.** Recognise ecosystem services / carrying capacity of eco-system
- PC6.** Classify Beneficial and Detrimental practices /activities that impact the ecosystem
- PC7.** Review the current livelihood practices particularly agricultural practices of the farmer
- PC8.** Enlist the current agricultural practices concerning Seed, Plant nutrition, Moisture conservation, Irrigation, Plant protection etc. that are beneficial/detrimental to ecosystem
- PC9.** Tabulate the differences in practices between Conventional and Agro-ecological practices and differences in impacts on ecosystem
- PC10.** Enlist the essential elements a crop plant needs to grow and their sources

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** Living and non-living factors of the ecology and the Linkages / interdependence among these factors
- KU2.** Functioning / Equilibrium / Dynamism in the ecosystem
- KU3.** Positioning agriculture in the local ecosystem
- KU4.** Effect of conventional agricultural practices on ecology
- KU5.** Climate, weather and its impact on agriculture
- KU6.** Difference between Climate and weather

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- KU7.** Instruments used for recording elements of weather (weather data)
- KU8.** Sources of weather data viz. Mobile app, Google search, Television weather report, Radio broadcast etc.
- KU9.** Effect of parameters of climate on crop production
- KU10.** Ecosystem services and carrying capacity of ecosystem
- KU11.** Cropping System and their need
- KU12.** Deteriorating carrying capacity affecting agriculture
- KU13.** Differences in practices between Conventional and Agro-ecological practices and differences in impacts on ecosystem
- KU14.** Extreme climatic conditions / events and response to extreme conditions
- KU15.** Weather elements, weather forecasting, agro-advisory services
- KU16.** Effects of weather elements on agricultural crop.
- KU17.** Recognising ecosystem services / carrying capacity of eco-system
- KU18.** Changes in eco-system /carrying capacity over years (stabilised / enhanced / deteriorated)

Generic Skills (GS)

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

- GS1.** maintain work-related notes and records
- GS2.** read the relevant literature to get the latest updates about the field of work
- GS3.** perform basic calculations
- GS4.** listen attentively to understand the information/ instructions being shared
- GS5.** communicate clearly and politely
- 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
- GS9.** identify possible disruptions to work and take appropriate preventive measures
- GS10.** take quick decisions to deal with workplace emergencies/ accidents

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Comprehend the Agro-ecology and their interdependence</i>	5	10	-	5
PC1. Tabulate the parts of our ecosystem	-	-	-	-
PC2. Identify living and non-living factors of the ecology and tabulate their interdependence / linkages	-	-	-	-
PC3. Enlist Elements on surface of the earth, soil and water body	-	-	-	-
PC4. Categorize the agricultural / livelihood activities that impact the ecosystem	-	-	-	-
PC5. Recognise ecosystem services / carrying capacity of eco-system	-	-	-	-
PC6. Classify Beneficial and Detrimental practices /activities that impact the ecosystem	-	-	-	-
PC7. Review the current livelihood practices particularly agricultural practices of the farmer	-	-	-	-
PC8. Enlist the current agricultural practices concerning Seed, Plant nutrition, Moisture conservation, Irrigation, Plant protection etc. that are beneficial/detrimental to ecosystem	-	-	-	-
PC9. Tabulate the differences in practices between Conventional and Agro-ecological practices and differences in impacts on ecosystem	-	-	-	-
PC10. Enlist the essential elements a crop plant needs to grow and their sources	-	-	-	-
NOS Total	5	10	-	5

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N7613
NOS Name	Comprehend the Agro-ecology and various interventions that influence the functioning of the ecosystem
Sector	Agriculture
Sub-Sector	Agriculture Industries
Occupation	Information Management
NSQF Level	3
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	17/11/2025
NSQC Clearance Date	17/11/2022

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AGR/N7614: Establish an Agri-nutrition-garden (ANG)

Description

This OS unit is about various steps involved in establishing an Agri-nutrition-garden and importance of different components of an ANG

Scope

The scope covers the following :

- Select and prepare the site for establishing an agri-nutrition-garden
- Prepare the field for establishing an agri-nutrition-garden
- Undertake necessary agronomic practices
- Carry out harvesting of agri-nutrition-garden crops

Elements and Performance Criteria

Select and prepare the site for establishing an agri-nutrition-garden

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

- PC1.** Check the site has conducive climatic conditions for establishing an Agri-nutrition-garden and is free from limiting factors such as flooding, drought, extreme heat and cold
- PC2.** Select appropriate site for establishing the Agri-nutrition-garden (ANG) and the selected sited should be free from shade, dampness, big trees and protected from grazing and should be nearer to house at backyard if possible
- PC3.** Select the site which is protected from from livestock viz poultry birds, cattle etc. and have have fertile soils preferably Loamy soil with organic matter content
- PC4.** Coordinate with an authorised lab to determine if the soil is suitable for establishing an Agri-nutrition-garden
- PC5.** Ensure the site is accessible and has availability of quality water for irrigation during critical stages, good drainage options, labour and other inputs
- PC6.** Identify the risks associated with establishing an Agri-nutrition-garden at the site and take appropriate preventive measures
- PC7.** Prepare Field Lay Out of the field as per available space and selected crop requirements
- PC8.** Select the crop by maintaining the crop diversity in an Agri-nutrition garden
- PC9.** Select fresh vegetables and fruits that is available throughout the year
- PC10.** Enlist the Cropping Pattern for the Model Kitchen Garden

Prepare the field for establishing an agri-nutrition-garden

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

- PC11.** Prepare the field for establishing an Agri-nutrition-garden
- PC12.** Create drainage channels in the field for the effective drainage of water
- PC13.** Apply compost/manure as per recommended dose
- PC14.** Carryout ploughing to till or dig up, mix, and overturn the soil
- PC15.** Perform harrowing to break the soil clods into smaller mass

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PC16. Level the field properly

PC17. Plant in flat beds, ridges and raised beds according to crops grown

Undertake necessary agronomic practices

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

PC18. Carry out macro and micronutrient management of selected field crops in AGN

PC19. Manage weed growth in crop fields

PC20. Perform integrated pest and disease management for the field crop

PC21. Perform irrigation management for field crops

Carry out harvesting of agri-nutrition-garden crops

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

PC22. Check the maturity of the crop to ensure its readiness for being harvested

PC23. Select the manual or mechanical harvesting method according to the quantity of the crop to be harvested

PC24. Arrange the necessary tools, equipment and machinery for harvesting the crop and prepare them for use

PC25. Select an appropriate time for harvesting the crop to maintain the required moisture level

PC26. Harvest the crop, ensuring minimum loss

PC27. Check the harvested crops for biological infestation and physical damage, and segregate the infested and damaged crops produce

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. Commonly occurring issues in child and women health and root causes of these

KU2. Influence of Nutrition Garden in healthy diet

KU3. Vision / elements/ components of a model nutrition garden

KU4. malnutrition, their cause and relationship with feeding practices.

KU5. Importance of ANG

KU6. Steps involved in starting ANG

KU7. cropping pattern for the model kitchen garden

KU8. process involved in establishing / changing / modifying the existing agri-nutrition garden

KU9. nutritive value of fruits and vegetables

KU10. proper layout and diversity of crops in an agri-nutrition garden

KU11. hanging vegetable garden/ multi-layer cropping.

KU12. low cost portable vegetable nursery

KU13. Nutritive and medicinal value of Fruits and Vegetables

KU14. principle of harvesting, crop cutting, understanding on production pattern

KU15. pattern of return from ANG

KU16. food sufficiency, food security, social security

KU17. Crop maturity stages and methods of harvesting

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- KU18.** Site Selection, Lay-out and Protection of ANG
- KU19.** Crop Selection and Crop planning for ANG
- KU20.** Seed selection, treatment and nursery raising.
- KU21.** land preparation, planting, spacing
- KU22.** On field lay out and crop selection for the next season

Generic Skills (GS)

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

- GS1.** prepare work-related notes
- GS2.** read the relevant literature to get the latest updates about the field of work
- GS3.** communicate clearly and politely
- GS4.** perform basic calculations
- GS5.** listen attentively to understand the instructions being given
- GS6.** identify appropriate solutions to work-related issues
- GS7.** plan and prioritise tasks to ensure timely completion
- GS8.** take quick decisions to deal with workplace emergencies/ accidents
- GS9.** plan effective use of time and resources

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Select and prepare the site for establishing an agri-nutrition-garden</i>	3	3	-	5
PC1. Check the site has conducive climatic conditions for establishing an Agri-nutrition-garden and is free from limiting factors such as flooding, drought, extreme heat and cold	-	-	-	-
PC2. Select appropriate site for establishing the Agri-nutrition-garden (ANG) and the selected sited should be free from shade, dampness, big trees and protected from grazing and should be nearer to house at backyard if possible	-	-	-	-
PC3. Select the site which is protected from from livestock viz poultry birds, cattle etc. and have have fertile soils preferably Loamy soil with organic matter content	-	-	-	-
PC4. Coordinate with an authorised lab to determine if the soil is suitable for establishing an Agri-nutrition-garden	-	-	-	-
PC5. Ensure the site is accessible and has availability of quality water for irrigation during critical stages, good drainage options, labour and other inputs	-	-	-	-
PC6. Identify the risks associated with establishing an Agri-nutrition-garden at the site and take appropriate preventive measures	-	-	-	-
PC7. Prepare Field Lay Out of the field as per available space and selected crop requirements	-	-	-	-
PC8. Select the crop by maintaining the crop diversity in an Agri-nutrition garden	-	-	-	-
PC9. Select fresh vegetables and fruits that is available throughout the year	-	-	-	-
PC10. Enlist the Cropping Pattern for the Model Kitchen Garden	-	-	-	-
<i>Prepare the field for establishing an agri-nutrition-garden</i>	3	5	-	5

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. Prepare the field for establishing an Agri-nutrition-garden	-	-	-	-
PC12. Create drainage channels in the field for the effective drainage of water	-	-	-	-
PC13. Apply compost/manure as per recommended dose	-	-	-	-
PC14. Carryout ploughing to till or dig up, mix, and overturn the soil	-	-	-	-
PC15. Perform harrowing to break the soil clods into smaller mass	-	-	-	-
PC16. Level the field properly	-	-	-	-
PC17. Plant in flat beds, ridges and raised beds according to crops grown	-	-	-	-
<i>Undertake necessary agronomic practices</i>	3	5	-	5
PC18. Carry out macro and micronutrient management of selected field crops in AGN	-	-	-	-
PC19. Manage weed growth in crop fields	-	-	-	-
PC20. Perform integrated pest and disease management for the field crop	-	-	-	-
PC21. Perform irrigation management for field crops	-	-	-	-
<i>Carry out harvesting of agri-nutrition-garden crops</i>	3	5	-	5
PC22. Check the maturity of the crop to ensure its readiness for being harvested	-	-	-	-
PC23. Select the manual or mechanical harvesting method according to the quantity of the crop to be harvested	-	-	-	-
PC24. Arrange the necessary tools, equipment and machinery for harvesting the crop and prepare them for use	-	-	-	-
PC25. Select an appropriate time for harvesting the crop to maintain the required moisture level	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC26. Harvest the crop, ensuring minimum loss	-	-	-	-
PC27. Check the harvested crops for biological infestation and physical damage, and segregate the infested and damaged crops produce	-	-	-	-
NOS Total	12	18	-	20

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N7614
NOS Name	Establish an Agri-nutrition-garden (ANG)
Sector	Agriculture
Sub-Sector	Agriculture Industries
Occupation	Information Management
NSQF Level	3
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	17/11/2025
NSQC Clearance Date	17/11/2022

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AGR/N7619: Improve Farming Practices by conducting Farmer Field Schools (FFS)

Description

This OS unit is about concept of FFS, Model of FFS, process of operationalization of FFS and Conducting learning sessions

Scope

The scope covers the following :

- Initiate FFS around CRP
- Conduct Training & capacity building of the community
- Use appropriate methods of facilitation

Elements and Performance Criteria

Initiate FFS around CRP

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

- PC1.** Enlist the need for a group platform for cross learning
- PC2.** Assimilate the concept of FFS, their models, objective
- PC3.** Explore the nomenclature that can be used for FFS
- PC4.** Enlist how vital is Women's involvement in Agriculture
- PC5.** Enlist the relevant stakeholders for successful agriculture in the village and their roles and responsibilities
- PC6.** Tabulate the various new and old practices
- PC7.** operationalize the FFS and conduct planned learning sessions

Conduct Training & capacity building of the community

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

- PC8.** plan the training calendar as per need analysis
- PC9.** execute the training & capacity building as per schedule
- PC10.** track progress training & capacity building events
- PC11.** assess the impact training & capacity building events
- PC12.** conduct field visits and demonstrations of various agricultural machineries, tools, implements, equipment and processes
- PC13.** plan and deliver training programs to farmer
- PC14.** assist the farmers in establishing forward and backward linkages with the relevant stakeholder
- PC15.** carryout necessary documentation

Use appropriate methods of facilitation

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

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- PC16.** enlist various elements of communication which assists in enhancing skill to apply those in learning events/training.
- PC17.** Differentiate between one way versus interactive communication
- PC18.** Tabulate difference between Hearing versus Listening
- PC19.** Summarize difference between Feeling (heart) versus Thinking (head)
- PC20.** Compare difference between Open-ended and closed questions
- PC21.** Summarize Do's and don't during facilitation
- PC22.** Supporting facilitator to implement all practices in their farm

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** Concept of Farmer Field Schools (FFS), their objectives, essential elements, characteristics and models
- KU2.** Initiation of FFS around resource persons
- KU3.** Need for a platform for cross learning
- KU4.** Visualization of a model FFS
- KU5.** FFS in response to farming challenge
- KU6.** Farmer field school decision tree
- KU7.** FFS basic learning cycle and follow-up action
- KU8.** Agro Eco System Analysis (AESAs)
- KU9.** Steps involved in conducting FFS and their implementation Strategy
- KU10.** Preparation: Group size, selection of facilitator (CSP), training of facilitators on complete module of AEP
- KU11.** Principles and practices on effective facilitation
- KU12.** Differentiating with examples: hearing-listening; thinking-feeling; Open ended - close ended questions.
- KU13.** Attending (sitting, physical posture), responding (voice-audible, commanding/friendly)-content & feeling
- KU14.** Arriving at do's and don'ts list
- KU15.** attending and responding
- KU16.** difference between Summarising-paraphrasing
- KU17.** Practice on attending, responding and paraphrasing
- KU18.** Various program on Programs for Food Security
- KU19.** Sustainable Development Goals

Generic Skills (GS)

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

- GS1.** maintain work-related notes and records
- GS2.** communicate politely and professionally

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- GS3.** read the relevant literature to get the latest updates about the field of work
- GS4.** listen attentively to understand the information being shared
- GS5.** plan and prioritise tasks to ensure timely completion
- GS6.** take quick decisions to deal with workplace emergencies/ accidents
- GS7.** identify possible disruptions to work and take appropriate preventive measures
- GS8.** evaluate all possible solutions to a problem to select the best one

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Initiate FFS around CRP</i>	3	5	-	5
PC1. Enlist the need for a group platform for cross learning	-	-	-	-
PC2. Assimilate the concept of FFS, their models, objective	-	-	-	-
PC3. Explore the nomenclature that can be used for FFS	-	-	-	-
PC4. Enlist how vital is Women's involvement in Agriculture	-	-	-	-
PC5. Enlist the relevant stakeholders for successful agriculture in the village and their roles and responsibilities	-	-	-	-
PC6. Tabulate the various new and old practices	-	-	-	-
PC7. operationalize the FFS and conduct planned learning sessions	-	-	-	-
<i>Conduct Training & capacity building of the community</i>	3	5	-	7
PC8. plan the training calendar as per need analysis	-	-	-	-
PC9. execute the training & capacity building as per schedule	-	-	-	-
PC10. track progress training & capacity building events	-	-	-	-
PC11. assess the impact training & capacity building events	-	-	-	-
PC12. conduct field visits and demonstrations of various agricultural machineries, tools, implements, equipment and processes	-	-	-	-
PC13. plan and deliver training programs to farmer	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. assist the farmers in establishing forward and backward linkages with the relevant stakeholder	-	-	-	-
PC15. carryout necessary documentation	-	-	-	-
<i>Use appropriate methods of facilitation</i>	3	4	-	5
PC16. enlist various elements of communication which assists in enhancing skill to apply those in learning events/training.	-	-	-	-
PC17. Differentiate between one way versus interactive communication	-	-	-	-
PC18. Tabulate difference between Hearing versus Listening	-	-	-	-
PC19. Summarize difference between Feeling (heart) versus Thinking (head)	-	-	-	-
PC20. Compare difference between Open-ended and closed questions	-	-	-	-
PC21. Summarize Do's and don't during facilitation	-	-	-	-
PC22. Supporting facilitator to implement all practices in their farm	-	-	-	-
NOS Total	9	14	-	17

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N7619
NOS Name	Improve Farming Practices by conducting Farmer Field Schools (FFS)
Sector	Agriculture
Sub-Sector	Agriculture Industries
Occupation	Information Management
NSQF Level	3
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	17/11/2025
NSQC Clearance Date	17/11/2022

Qualification Pack

AGR/N7615: Cultivate the appropriate crops in the selected area

Description

This OS unit is about the package and practice of field crop cultivation on the selected site

Scope

The scope covers the following :

- Select and prepare the site for the field crops cultivation
- Select appropriate seeds and planting materials
- Carry out macro and micronutrient management of field crops
- Manage weed growth in crop fields
- Perform pest and disease management for field crop
- Perform irrigation management for field crops
- Carry out harvesting, post-harvest management and marketing of the field crop

Elements and Performance Criteria

Select and prepare the site for the field crops cultivation

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

- PC1.** select and prepare the site for the cultivation of filed crop
- PC2.** check the site has conducive climatic conditions for the cultivation of field crop and is free from limiting factors such as flooding, drought, extreme heat and cold
- PC3.** coordinate with an authorised lab to determine if the soil is suitable for the cultivation of the proposed crop
- PC4.** address problematic soils as per recommendation
- PC5.** analyse the Physical properties of the soil
- PC6.** ensure the site is accessible and has availability of quality water, labour and other inputs
- PC7.** identify the risks associated with the cultivation of crops at the site and take appropriate preventive measures
- PC8.** create drainage channels in the field for the effective drainage of water

Select appropriate seeds and planting materials

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

- PC9.** select the appropriate varieties of crop such as hybrids to be cultivated based on the climate
- PC10.** procure seeds of the proposed crop from authorized vendor according to the soil conditions, time of planting, cultivation duration, marketability, etc.
- PC11.** treat the seeds correctly by recommended methods
- PC12.** store the treated seeds at the recommended temperature and humidity, ensuring hygienic conditions in the storage area
- PC13.** sow the seeds of proposed field crop as per recommended seed rate by appropriate methods manually or mechanically
- PC14.** prepare the seed sowing equipment, setting the correct specifications for use according to the selected field crop

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Carry out macro and micronutrient management of field crops

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

- PC15.** coordinate with an authorised lab to get the soil sample tested, ensuring the sample is collected from the field, packed and labelled as per the applicable procedure
- PC16.** determine the macro and micronutrients requirements for the crops basis recommendations received from authorized lab
- PC17.** identify the deficiency symptom of macro and micronutrients in the field crop
- PC18.** apply appropriate quantity of nutrients to the soil in recommended dose as per crop requirement and crop stage
- PC19.** prepare compost, farmyard manure, vermicompost, NADEP, Ghanjeevamrut, Dravyajeevamrut, Panchgavya etc. ensuring personal safety
- PC20.** perform soil and water conservation
- PC21.** prepare a soil nutrition supplementation calendar based on the stages of the crop's growth
- PC22.** follow the recommended practices for soil conservation, such as mulching to conserve soil moisture and application of organic fertilisers
- PC23.** maintain the record of nutrients used in the field

Manage weed growth in crop fields

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

- PC24.** inspect the field, bunds, thrashing yard, granary, composting area, and irrigation and drainage channels periodically to identify weed growth in the field crops
- PC25.** maintain the record of observations with respect to weed identification and their growth
- PC26.** perform weed management by appropriate method manually or mechanically
- PC27.** retain the weeds of importance during the weeding process

Perform pest and disease management for field crop

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

- PC28.** use pest and disease-resistant varieties of field crop, ensuring their timely sowing, following the recommended hygiene practices in the field
- PC29.** carry out crop rotation with suitable crops
- PC30.** follow the recommended practices to restrict the entry of pathogens into the field through planting material, irrigation water, workers, tools and equipment, and vectors such as whitefly
- PC31.** Identify pests and diseases in the field crop
- PC32.** identify and remove the diseased crop to prevent the spread of pests and diseases to healthy crop
- PC33.** determine the stage of pest and disease incidence along with the extent of damage and economic threshold levels (ETL) of the pests
- PC34.** co-ordinate with the agricultural extension service agents and diagnostic clinics to determine the causal organism for the disease and its treatment
- PC35.** identify the symptoms of damage by pests and diseases infestation and carryout collection and Profiling of sample based on damage symptom
- PC36.** follow relevant preventive measures to control pests and disease
- PC37.** identify and apply the necessary treatment and undertake necessary management practices
- PC38.** identify natural enemies of the selected field crop pests and adopt them for pest control

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- PC39.** prepare the calendar of occurrence (i.e time of severe damage) of pest
- PC40.** map critical stage of different pests and adopt appropriate preventive measures
- PC41.** follow the recommended safety practices while applying any treatment, such as using the relevant PPE

Perform irrigation management for field crops

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

- PC42.** prepare for field irrigation
- PC43.** set up an appropriate irrigation system such as surface irrigation, drip irrigation, sub-surface irrigation system based on the requirement of the specific field crop
- PC44.** irrigate the field according to the recommended irrigation schedule for the crop, ensuring there is adequate water supply at various stages of crop's growth
- PC45.** maintain the record of field irrigation to ensure irrigation as per the schedule
- PC46.** follow the recommended practices to prevent over and under-irrigation, ensuring there is no waterlogging at any stage of the crop's growth
- PC47.** manage the water usage optimally

Carry out harvesting, post-harvest management and marketing of the field crop

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

- PC48.** check the maturity of the crop to ensure its readiness for being harvested
- PC49.** select the manual or mechanical harvesting method according to the quantity of the crop to be harvested
- PC50.** arrange the necessary tools, equipment and machinery for harvesting the crop and prepare them for use
- PC51.** select an appropriate time for harvesting the crop to maintain the required moisture level harvest the crop, ensuring minimum loss
- PC52.** check the harvested crops for biological infestation and physical damage, and segregate the infested and damaged crops produce
- PC53.** undertake necessary value chain interventions
- PC54.** identify village level purchaser/gatherer who is based in village and procures agricultural produces (vegetable, grain, spices etc.) directly from the farmers.
- PC55.** visit the nearby market where the village level primary purchaser sells the items to comprehend the value chain and basics of the market (4Ps)
- PC56.** process and pack the field crop
- PC57.** manage the inventory and market the produce

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** Principles of land preparation for cultivation/plantation viz site selection, land measurement and preparation (raised bed-ridge and furrow), summer ploughing, land preparation/pulverisation of soil / levelling, bund repair and strengthening, loosening of soil & embankment for habitation etc.
- KU2.** Principle of different method of sowing like line sowing, transplanting, SCI, direct seeded, seed balls etc.

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- KU3.** Types of nursery and its advantages (dry, wet, use of mosquito net/net, tray nursery etc.)
Crop wise
- KU4.** Methods of nursery Preparation
- KU5.** Advanced nursery like poly house, shade house
- KU6.** Preparation of nursery shed net
- KU7.** Maintenance of nursery & Uprooting of Seedlings
- KU8.** Process of Transplanting of field crops
- KU9.** Various types of trellis and its importance
- KU10.** Cropping pattern/system like Paira, intercrop, mixed, alley
- KU11.** Standing crop at milk dough stage/roughing
- KU12.** Crop maturity stages and methods of harvesting
- KU13.** Principle of harvesting, Crop cutting methods (DSR, SCI) , production pattern
- KU14.** Crop production data analysis/yield assessment
- KU15.** Mechanised harvesting
- KU16.** Use of Manual driven transplanter, reaper and threshing & curing, sun drying
- KU17.** Seeds, Grain and planting materials and the source of Quality seed
- KU18.** Quality seed/planting materials and role of Seed in production system
- KU19.** Importance of seed rate, plant spacing
- KU20.** Healthy Seed Selection and Segregation
- KU21.** Sources of seed like Own produce, Neighbours, Market(indigenous/HYV/Hybrid/GM)
- KU22.** Seed quality selection parameters (Weight, size, shape, colour, disease, foreign materials etc)
- KU23.** "process of seed germination testing
- KU24.** "
- KU25.** Process of seed priming, time period of priming and tailored made priming for different seeds variety
- KU26.** Process of seed Treatment, preparation of Beejamrut , Seed treatment using beejamrut /cow urine, Use of bio-fertilizer for seed treatments (Rhizobium/ trichoderma, PSB, Azotobacter, Azospirillum)
- KU27.** Preparation of Beejamrut , Seed treatment using beejamrut /cow urine for seed treatment
- KU28.** Use of bio-fertilizer for seed treatments (Rhizobium/ trichoderma, PSB, Azotobacter, Azospirillum)
- KU29.** Factors that determine seed rate of crops in a given area/Unit and recommended Seed rate as per Local recommendation (SAU, ICAR, KVK) and Optimal use of seeds in a given area/Unit
- KU30.** Seed stages viz. Nucleus, Breeder, Foundation, Certified, Truthful, ODV-Other Distinguishable Variety.
- KU31.** Steps to ensure local seeds supply and seed sovereignty
- KU32.** Process to promote quality seed production
- KU33.** Analysis of packed seed
- KU34.** Selection of mother seeds and adoption of appropriate seed production technology
- KU35.** Cleaning, Sorting, grading, quality control

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- KU36.** Seed Production for own use & storage and Post- Harvest Storage Factors and methods to Preserve Seeds
- KU37.** Grain Seed and Vegetable Seed storage: Factors affecting storage, Non-chemical Scientific method of storage, Different storage structure
- KU38.** Seed replacement rate, quality seed production and Seed bank appropriate to different agro-climatic conditions and restoration of indigenous quality seed
- KU39.** Seed replacement/ restoration
- KU40.** Participatory varietal selection
- KU41.** Use of Drum Seeder for germinated Paddy Seeds
- KU42.** Direct Sowing through Seed Drill
- KU43.** Ways to minimise expenses on seeds and planting materials
- KU44.** Process to minimise loss through early plant establishment and minimise seed borne diseases
- KU45.** Methods to enhance the resilient capacity of crop/plant
- KU46.** Steps to enhance the productivity and profitability
- KU47.** Seeds ,types of seeds and their characterises and labelling
- KU48.** Qualities of non-seed planting materials and of a Good Seed
- KU49.** Non-chemical Scientific method of Grain Seed and Vegetable Seed storage,Factors affecting storage and Different storage structure
- KU50.** General overview of soil like soil is Living, soil characteristics, Soil Texture and structure, soil air, soil temperature, soil Micro-organism and soil food web,Soil formation and its importance, Soil PH, Soil Organic matter, Sand, Silt and clay and its relation to nutrition ,mineral cycle ,characteristics of a good soil and water holding capacity etc.
- KU51.** Process of composting, their need, different types and importance
- KU52.** Materials required for composting and Methods of preparation of compost
- KU53.** Composting of green & green leaf manuring, effects of green manuring and after care of green manuring
- KU54.** Green Manuring- Azolla/ blue-green algae (BGA) and Azolla multiplication/field application
- KU55.** Crop selection and practices like mixed cropping, intercropping and crop rotation, mulching and cover crop
- KU56.** Bio fertilizers (PSB, Rhizobium, Azotobacter, Azospirillum, Potash, waste decomposer) for Soil Health Management and their benefits
- KU57.** Types of Bio-Fertilizers and methods of application of biofertilizers
- KU58.** Organic Matter Decomposers and Mass multiplication of Waste Decomposer
- KU59.** Preparation of FYM, NADEP compost, vermicompost, Pit method of vermicomposting, Ghanjeevamrut, Dravyajeevamrut, Panchgavya, Azolla pit, cattle shed waste etc. For Soil Health Management
- KU60.** Macro and micro nutrients,their functions and recommended dose for crops & importance, nutrition deficiency symptoms, unbalanced nutrition and their deficiency symptoms
- KU61.** Difference between damage symptoms of pest and nutrition deficiency
- KU62.** Different types of Soil-Alluvial, Black, red, yellow, black cotton, laterite
- KU63.** Types of erosion, causing elements, methods of reducing soil erosion, cultural, mechanical, structural and agronomic practices- SGA

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- KU64.** Soil & Water conservation practices(Vegetative and structural measures)- SGA
- KU65.** Soil sample collection, labelling, information to be collected etc. For Soil testing
- KU66.** Information in a soil health card
- KU67.** Convergence with agriculture department for various informations
- KU68.** Addressing problematic soil(like acidic and alkaline soil) by use of green manuring, gypsum ,Lime, paper mill slug
- KU69.** Pest - definition, types,factors for pest outbreak, beneficial and harmful insects ,Harmful insect- their effect and life cycle
- KU70.** Beneficial insect and their importance and use
- KU71.** Reason for crop loss and level of damage caused by pest and symptom of damage cause by pest
- KU72.** Principles of Non-pesticide management and bad effect of chemical pesticide
- KU73.** Need and practices of Non-pesticide management (agronomic, Cultural and Mechanical control)
- KU74.** Types of harmful and beneficial insect and diseases and its critical stages
- KU75.** Identification of pest, diseases and beneficial pest,weeds
- KU76.** Major pests of important winter crops
- KU77.** Identification of major pest of filed crops/important seasonal crops/ vegetable crops and their preventive measures
- KU78.** Symptoms related to Nematode and mycoplasma
- KU79.** Various Non pesticide management(NPM) practices and alterative practices of Non pesticide management
- KU80.** Materials required and method of preparation of concoctions/organic formulations(viz. Handkhata, Agneyastram, Brhamstram, Neemastram, Bael extraction,Mixture of wood ash and castor oil etc.) For NPM practices
- KU81.** Organic decoction/ concoction (bio-fertilisers- bio-pesticides) preparation
- KU82.** Beneficial insect and their importance and use for biological control of pest
- KU83.** Types of storage pest and its management
- KU84.** Profiling of sample based on damage symptom ,calendar of occurrence and preparation of npm practices crop wise
- KU85.** Nature of damage and difference between damage symptoms of pest and nutrition deficiency.
- KU86.** Field crop diseases, their types, symptoms and preventive measures
- KU87.** Manual and mechanised weeding/ water management/ addition of biomass
- KU88.** Natural /mechanical & cultural methods of pest control
- KU89.** Soil moisture relationship for agriculture for field crop cultivation
- KU90.** Importance of - water in agriculture, soil moisture conservation
- KU91.** Calculation of water that received by the one-acre land.
- KU92.** Concept of mulching and how mulching works. Various materials used in mulching
- KU93.** Received rainfall- usage and conservation
- KU94.** Different practices of soil moisture conservation practiced by farmers for agricultural sustainability (viz. mulching / manuring and levelling / bunding etc.) And its benefits

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- KU95.** Different methods , measures and technology of soil and water conservations
- KU96.** Water retention and treatment in situ level of land
- KU97.** Efficient irrigation water management practices like-surface irrigation (border strip method, check basin, furrow, currogating), sub surface irrigation, localised irrigation (drip, earthen pot, jaltripti,)
- KU98.** Scheduling of irrigation in critical irrigation phases of field crop
- KU99.** Various methods of drainage
- KU100.** Various methods to recharge ground water
- KU101.** Process of checking surface flow
- KU102.** Whs on individual land
- KU103.** Diversification in low lands for better rainwater productivity
- KU104.** Water harvesting and diversification
- KU105.** Standing crop after transplanting, water management and green manuring
- KU106.** Process of tracking of farm produces (producer to consumers), actors involved, business at each of the actor's level
- KU107.** Sub-sector of agriculture involved in crop cultivation to sell of produce
- KU108.** Different ypes of actors from different economic and social background
- KU109.** Market and basics of market (4Ps) and what a farmer can do on each of these `P's
- KU110.** Basic concepts related to value addition and value chain intervention so that farmers get better price of their produce
- KU111.** The length of the value chain (village to international market) and number of actors involved in the entire value chain
- KU112.** Price realisation, value addition and some of the factors behind them
- KU113.** Listing of crop wise adoptable practice
- KU114.** Selection of local crops based on seasons - cereals(normal and coarse), pulse, oilseed, vegetables (machan, field and root crops)
- KU115.** Seed to Seed adoptable practices.

Generic Skills (GS)

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

- GS1.** maintain work-related notes and records
- GS2.** read the relevant literature to get the latest updates about the field of work
- GS3.** perform basic calculations
- GS4.** listen attentively to understand the information/ instructions being shared
- GS5.** communicate clearly and politely
- 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
- GS9.** identify possible disruptions to work and take appropriate preventive measures
- GS10.** take quick decisions to deal with workplace emergencies/ accidents

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Select and prepare the site for the field crops cultivation</i>	4	7	-	7
PC1. select and prepare the site for the cultivation of filed crop	-	-	-	-
PC2. check the site has conducive climatic conditions for the cultivation of field crop and is free from limiting factors such as flooding, drought, extreme heat and cold	-	-	-	-
PC3. coordinate with an authorised lab to determine if the soil is suitable for the cultivation of the proposed crop	-	-	-	-
PC4. address problematic soils as per recommendation	-	-	-	-
PC5. analyse the Physical properties of the soil	-	-	-	-
PC6. ensure the site is accessible and has availability of quality water, labour and other inputs	-	-	-	-
PC7. identify the risks associated with the cultivation of crops at the site and take appropriate preventive measures	-	-	-	-
PC8. create drainage channels in the field for the effective drainage of water	-	-	-	-
<i>Select appropriate seeds and planting materials</i>	4	7	-	7
PC9. select the appropriate varieties of crop such as hybrids to be cultivated based on the climate	-	-	-	-
PC10. procure seeds of the proposed crop from authorized vendor according to the soil conditions, time of planting, cultivation duration, marketability, etc.	-	-	-	-
PC11. treat the seeds correctly by recommended methods	-	-	-	-
PC12. store the treated seeds at the recommended temperature and humidity, ensuring hygienic conditions in the storage area	-	-	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. sow the seeds of proposed field crop as per recommended seed rate by appropriate methods manually or mechanically	-	-	-	-
PC14. prepare the seed sowing equipment, setting the correct specifications for use according to the selected field crop	-	-	-	-
<i>Carry out macro and micronutrient management of field crops</i>	4	7	-	7
PC15. coordinate with an authorised lab to get the soil sample tested, ensuring the sample is collected from the field, packed and labelled as per the applicable procedure	-	-	-	-
PC16. determine the macro and micronutrients requirements for the crops basis recommendations received from authorized lab	-	-	-	-
PC17. identify the deficiency symptom of macro and micronutrients in the field crop	-	-	-	-
PC18. apply appropriate quantity of nutrients to the soil in recommended dose as per crop requirement and crop stage	-	-	-	-
PC19. prepare compost, farmyard manure, vermicompost , NADEP, Ghanjeevamrut, Dravyajeevamrut, Panchgavya etc. ensuring personal safety	-	-	-	-
PC20. perform soil and water conservation	-	-	-	-
PC21. prepare a soil nutrition supplementation calendar based on the stages of the crop's growth	-	-	-	-
PC22. follow the recommended practices for soil conservation, such as mulching to conserve soil moisture and application of organic fertilisers	-	-	-	-
PC23. maintain the record of nutrients used in the field	-	-	-	-
<i>Manage weed growth in crop fields</i>	4	8	-	7

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC24. inspect the field, bunds, thrashing yard, granary, composting area, and irrigation and drainage channels periodically to identify weed growth in the field crops	-	-	-	-
PC25. maintain the record of observations with respect to weed identification and their growth	-	-	-	-
PC26. perform weed management by appropriate method manually or mechanically	-	-	-	-
PC27. retain the weeds of importance during the weeding process	-	-	-	-
<i>Perform pest and disease management for field crop</i>	4	8	-	7
PC28. use pest and disease-resistant varieties of field crop, ensuring their timely sowing, following the recommended hygiene practices in the field	-	-	-	-
PC29. carry out crop rotation with suitable crops	-	-	-	-
PC30. follow the recommended practices to restrict the entry of pathogens into the field through planting material, irrigation water, workers, tools and equipment, and vectors such as whitefly	-	-	-	-
PC31. Identify pests and diseases in the field crop	-	-	-	-
PC32. identify and remove the diseased crop to prevent the spread of pests and diseases to healthy crop	-	-	-	-
PC33. determine the stage of pest and disease incidence along with the extent of damage and economic threshold levels (ETL) of the pests	-	-	-	-
PC34. co-ordinate with the agricultural extension service agents and diagnostic clinics to determine the causal organism for the disease and its treatment	-	-	-	-
PC35. identify the symptoms of damage by pests and diseases infestation and carryout collection and Profiling of sample based on damage symptom	-	-	-	-
PC36. follow relevant preventive measures to control pests and disease	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC37. identify and apply the necessary treatment and undertake necessary management practices	-	-	-	-
PC38. identify natural enemies of the selected filed crop pests and adopt them for pest control	-	-	-	-
PC39. prepare the calendar of occurrence (i.e time of severe damage) of pest	-	-	-	-
PC40. map critical stage of different pests and adopt appropriate preventive measures	-	-	-	-
PC41. follow the recommended safety practices while applying any treatment, such as using the relevant PPE	-	-	-	-
<i>Perform irrigation management for field crops</i>	4	8	-	7
PC42. prepare for field irrigation	-	-	-	-
PC43. set up an appropriate irrigation system such as surface irrigation, drip irrigation, sub-surface irrigation system based on the requirement of the specific field crop	-	-	-	-
PC44. irrigate the field according to the recommended irrigation schedule for the crop, ensuring there is adequate water supply at various stages of crop's growth	-	-	-	-
PC45. maintain the record of field irrigation to ensure irrigation as per the schedule	-	-	-	-
PC46. follow the recommended practices to prevent over and under-irrigation, ensuring there is no waterlogging at any stage of the crop's growth	-	-	-	-
PC47. manage the water usage optimally	-	-	-	-
<i>Carry out harvesting, post-harvest management and marketing of the field crop</i>	4	8	-	7
PC48. check the maturity of the crop to ensure its readiness for being harvested	-	-	-	-
PC49. select the manual or mechanical harvesting method according to the quantity of the crop to be harvested	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC50. arrange the necessary tools, equipment and machinery for harvesting the crop and prepare them for use	-	-	-	-
PC51. select an appropriate time for harvesting the crop to maintain the required moisture level harvest the crop, ensuring minimum loss	-	-	-	-
PC52. check the harvested crops for biological infestation and physical damage, and segregate the infested and damaged crops produce	-	-	-	-
PC53. undertake necessary value chain interventions	-	-	-	-
PC54. identify village level purchaser/gatherer who is based in village and procures agricultural produces (vegetable, grain, spices etc.) directly from the farmers.	-	-	-	-
PC55. visit the nearby market where the village level primary purchaser sells the items to comprehend the value chain and basics of the market (4Ps)	-	-	-	-
PC56. process and pack the field crop	-	-	-	-
PC57. manage the inventory and market the produce	-	-	-	-
NOS Total	28	53	-	49

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N7615
NOS Name	Cultivate the appropriate crops in the selected area
Sector	Agriculture
Sub-Sector	Agriculture Industries, Agriculture Crop Production
Occupation	Information Management, Farm Management
NSQF Level	3
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	17/11/2025
NSQC Clearance Date	17/11/2022

Qualification Pack

AGR/N7616: Use relevant farm machinery for the field crop cultivation

Description

This OS unit is about various farm machinery used in the field crop cultivations for primary tillage operations, inter cultural operations and in harvest and post-harvest

Scope

The scope covers the following :

- Use farm Machinery for field crop cultivations
- Maintain the farm machinery

Elements and Performance Criteria

Use farm Machinery for field crop cultivations

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

- PC1.** Enlist the need for small-farm mechanisation in field crop cultivations
- PC2.** Tabulate the women friendly farm machines
- PC3.** Comprehend Custom hiring centre (CHC) governance & management structure
- PC4.** Practice use of relevant farm machinery in primary tillage operations (viz. power tiller, Tractor with MB plough, disc harrow, Nine tine etc), inter cultural operations (viz. various weeders, hoe etc) and in harvest and post-harvest management practices like Reaper

Maintain the farm machinery

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

- PC5.** Carry out on-field trouble shooting of small-farm machinery
- PC6.** Comprehend various books / records required to be maintained at CHC
- PC7.** Coordinate with manufacturers for the critical maintenance

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** Small farm tools and machines and its benefits
- KU2.** women friendly farm machines
- KU3.** Scope for small farm mechanisation like Mini tractor, Small power tiller, Seed drill (hopper), Seed drill (Drum), Small cultivator, Brass-cutter, Small cultivator for hilly terrain, Secateurs, Hand held weeder , 0.1 HP solar pump-set, 0.5 HP electric pump for homestead irrigation, Electric operated paddy thresher etc.
- KU4.** Custom hiring centre (CHC) purposes, Objectives uses, Operationalisation etc.
- KU5.** Custom hiring centre (CHC) governance & management structure
- KU6.** maintenance of equipment and their physical and financial management
- KU7.** Maintenance and their types

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- KU8.** Objectives of Good Maintenance Practices
- KU9.** On-field trouble shooting of small-farm machinery
- KU10.** various books / records required to be maintained at CHC
- KU11.** Insurance of equipment
- KU12.** Use of mechanisation in primary tillage operations like power tiller, Tractor with MB plough, disc harrow, Nine tine etc
- KU13.** Use of mechanisation in inter cultural operations (various weeders, hoe etc)
- KU14.** Use of mechanisation in harvest and post-harvest like Reaper etc

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 information about new developments in the field of work
- GS3.** communicate politely and professionally
- GS4.** listen attentively to understand the information/ instructions being given
- GS5.** identify possible disruptions to work and take appropriate preventive measures
- GS6.** evaluate all possible solutions to a problem to select the best solution
- GS7.** plan and prioritise tasks to ensure timely completion
- GS8.** co-ordinate with the co-workers to achieve the work objectives

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Use farm Machinery for field crop cultivations</i>	5	5	-	5
PC1. Enlist the need for small-farm mechanisation in field crop cultivations	-	-	-	-
PC2. Tabulate the women friendly farm machines	-	-	-	-
PC3. Comprehend Custom hiring centre (CHC) governance & management structure	-	-	-	-
PC4. Practice use of relevant farm machinery in primary tillage operations (viz. power tiller, Tractor with MB plough, disc harrow, Nine tine etc), inter cultural operations (viz. various weeders, hoe etc) and in harvest and post-harvest management practices like Reaper	-	-	-	-
<i>Maintain the farm machinery</i>	5	5	-	5
PC5. Carry out on-field trouble shooting of small-farm machinery	-	-	-	-
PC6. Comprehend various books / records required to be maintained at CHC	-	-	-	-
PC7. Coordinate with manufacturers for the critical maintenance	-	-	-	-
NOS Total	10	10	-	10

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N7616
NOS Name	Use relevant farm machinery for the field crop cultivation
Sector	Agriculture
Sub-Sector	Agriculture Industries, Agriculture Crop Production
Occupation	Information Management, Farm Management
NSQF Level	3
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	17/11/2025
NSQC Clearance Date	17/11/2022

Qualification Pack

AGR/N7617: Analyse the effect of abnormal weather conditions on small holders' agricultural practices for effective management practices

Description

This OS unit is about effect of abnormal weather conditions on small holders' agricultural practices and taking appropriate response to the abnormal weather conditions

Scope

The scope covers the following :

- Analyze the effect of abnormal weather conditions on small holders' agricultural practices
- Plan appropriate response to the abnormal weather conditions on small holders' agricultural practices

Elements and Performance Criteria

Analyze the effect of abnormal weather conditions on small holders' agricultural practices

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

- PC1.** Explore how climate change affects availability, access and absorption aspects of food security
- PC2.** Enlist the effects of parameters of Climate (viz. Temperature, Light, Wind, Humidity etc.) on Crop Production
- PC3.** Analyze the effect of climate change on market (supply/ access/ price)- primary market
- PC4.** Analyze effect of climate change on Sowing/ planting time- crop duration and Soil and water management
- PC5.** Check Yield (quantity and quality) of grain and seed
- PC6.** Summarize the impact of climate change on economy, market, crops
- PC7.** Plan appropriately sowing/ planting time as per climate change requirement
- PC8.** Enlist the need for cropping System to meet the changing climate
- PC9.** Analyse the movement of monsoon wind, how it gets moisture, how it gets created, how it gets reversed in winter etc
- PC10.** Analyse the changes observed in the locality in rains and temperature over years and their impact
- PC11.** Enlist the changes happened in agricultural practices and water harvesting and usable structures in over the years due to climate change
- PC12.** Summarize the impact of Climate Change on livelihoods activities viz. Agriculture, Livestock, fishery etc.
- PC13.** Deliberate three dimensions of sustainable production: environmental, economic and social
- PC14.** Enlist the changes, innovations and adaptations that would be brought to farming practices with regard to water, soil improvement, crop selection etc.
- PC15.** Explore various SGDs options on water-soil-crop
- PC16.** Enlist the factors on which water availability in the region depends

Qualification Pack

Plan appropriate response to the abnormal weather conditions on small holders' agricultural practices

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

- PC17.** Explore various mitigation measures for climate change
- PC18.** Prepare climate change action plan
- PC19.** Frame suitable strategy response to adverse climatic conditions to meet the requirement of different Agro-climatic situation
- PC20.** Chalk out appropriate response to the abnormal weather conditions on small holders' agricultural practices for (i) seed and variety (ii) sowing/ planting time- crop duration (iii) irrigation/ in situ water conservation (iv) Soil and water management (v) Pest incidence
- PC21.** Take timely actions/response to minimize the loss

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** Differentiate between weather and climate
- KU2.** Effect of abnormal wather conditions on small holders' agricultural practices and appropriate response against the same as preventive measures
- KU3.** Different Strategic response to advarse climatic conditions
- KU4.** effect of abnormal weather conditions on small holders' agricultural practices (viz. (i) seed and variety (ii) sowing/ planting time- crop duration (iii) irrigation/ in situ water conservation (iv) Soil and water management (v) Pest incidence etc.) and their strategic response to prevent loss or manage agricultural practices effectively
- KU5.** effect of climate change on market (supply/ access/ price)- primary market
- KU6.** effect of climate change on yield (quantity and quality)- grain and seed
- KU7.** climate change action plan
- KU8.** Framing of Climate resilienant strategic response to advarse climatic conditions and their customization in different Agro-climatic situation
- KU9.** crop diversification, crop rotation/scheduling
- KU10.** increasing moisture holding capacity through green manuring, composting, crop residue, recycling, reduce erosion and top soil loss
- KU11.** rain fall and its distribution in the region and across seasons
- KU12.** Factors influencing crop water requirements
- KU13.** How climate change impacts Hydrological Cycle
- KU14.** Factors affecting on-farm water availability
- KU15.** Effect of major climatic factors on crop water needs
- KU16.** Crop water needs in peak period of various crops compared to the standard grass crop
- KU17.** Managing excessive water and rainfall
- KU18.** Rejuvenation (Recharge) and distribution (irrigation) management
- KU19.** Terrain features (slope, erosion, land use), type and soil profile

Generic Skills (GS)

Qualification Pack

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

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

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Analyze the effect of abnormal weather conditions on small holders' agricultural practices</i>	5	5	-	5
PC1. Explore how climate change affects availability, access and absorption aspects of food security	-	-	-	-
PC2. Enlist the effects of parameters of Climate (viz. Temperature, Light, Wind, Humidity etc,) on Crop Production	-	-	-	-
PC3. Analyze the effect of climate change on market (supply/ access/ price)- primary market	-	-	-	-
PC4. Analyze effect of climate change on Sowing/ planting time- crop duration and Soil and water management	-	-	-	-
PC5. Check Yield (quantity and quality) of grain and seed	-	-	-	-
PC6. Summarize the impact of climate change on economy, market, crops	-	-	-	-
PC7. Plan appropriately sowing/ planting time as per climate change requirement	-	-	-	-
PC8. Enlist the need for cropping System to meet the changing climate	-	-	-	-
PC9. Analyse the movement of monsoon wind, how it gets moisture, how it gets created, how it gets reversed in winter etc	-	-	-	-
PC10. Analyse the changes observed in the locality in rains and temperature over years and their impact	-	-	-	-
PC11. Enlist the changes happened in agricultural practices and water harvesting and usable structures in over the years due to climate change	-	-	-	-
PC12. Summarize the impact of Climate Change on livelihoods activities viz. Agriculture, Livestock, fishery etc.	-	-	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. Deliberate three dimensions of sustainable production: environmental, economic and social	-	-	-	-
PC14. Enlist the changes, innovations and adaptations that would be brought to farming practices with regard to water, soil improvement, crop selection etc.	-	-	-	-
PC15. Explore various SGDs options on water-soil-crop	-	-	-	-
PC16. Enlist the factors on which water availability in the region depends	-	-	-	-
<i>Plan appropriate response to the abnormal weather conditions on small holders' agricultural practices</i>	5	5	-	5
PC17. Explore various mitigation measures for climate change	-	-	-	-
PC18. Prepare climate change action plan	-	-	-	-
PC19. Frame suitable strategy response to adverse climatic conditions to meet the requirement of different Agro-climatic situation	-	-	-	-
PC20. Chalk out appropriate response to the abnormal weather conditions on small holders' agricultural practices for (i) seed and variety (ii) sowing/ planting time- crop duration (iii) irrigation/ in situ water conservation (iv) Soil and water management (v) Pest incidence	-	-	-	-
PC21. Take timely actions/response to minimize the loss	-	-	-	-
NOS Total	10	10	-	10

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N7617
NOS Name	Analyse the effect of abnormal weather conditions on small holders' agricultural practices for effective management practices
Sector	Agriculture
Sub-Sector	Agriculture Industries
Occupation	Information Management
NSQF Level	3
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	17/11/2025
NSQC Clearance Date	17/11/2022

Qualification Pack

AGR/N7618: Carry out basic farm management

Description

This OS unit is about comparative analysis between conventional and Agro Ecological Practice (AEP) in major crops and various interventions in farm-based livelihoods to ensure sustainability

Scope

The scope covers the following :

- Carry out comparative analysis between conventional and AEP in major crops
- Plan for integrated Farming Systems
- Undertake crop planning
- Maintain necessary records for effective management
- Undertake farm Financial Management
- Assimilate market information

Elements and Performance Criteria

Carry out comparative analysis between conventional and AEP in major crops

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

- PC1.** prepare the cost benefit of one crop out of cereal, pulses and oil seeds etc. per acre as per prescribed template
- PC2.** use the appropriate parameters for calculation cost benefit analysis and their presentation
- PC3.** analyse how AEP is faring against the cost benefit analysis compared to conventional methods
- PC4.** enlist the interventions in farm-based livelihoods to ensure sustainability
- PC5.** enlist various kind of interventions that farmer must do in farm based livelihoods to ensure sustainability
- PC6.** tabulate various Issues with Green Revolution
- PC7.** summarize how AEP provides better cost-benefit in each step of farming practices
- PC8.** explore various methods of increasing farm Net Profit
- PC9.** recognize physiological maturity symptoms of some field crops
- PC10.** enlist various market players of the
- PC11.** carry out Cost Benefit Analysis
- PC12.** draw flowchart of farming as a business

Plan for integrated Farming Systems

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

- PC13.** plan for Integrated Farming Systems in the farm which fulfils the need, goal, objectives and assist in overcoming constraints
- PC14.** prepare an Outline of IFS and their sub system as per available farm resources
- PC15.** adopt appropriate IFS as per available resources
- PC16.** maintain the IFS optimally and efficiently

Qualification Pack

Undertake crop planning

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

- PC17.** choose the crop based on agro-climatic condition of the region
- PC18.** take sample of the soil for testing
- PC19.** perform intercropping with suitable and recommended crops (as per the main crop cultivated)
- PC20.** perform crop rotation with suitable crops
- PC21.** interact with agriculture / extension expert for crop planning
- PC22.** choose crop based on the economic advantage

Maintain necessary records for effective management

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

- PC23.** maintain crop production activity record
- PC24.** maintain crop calendars, calendars of weed and insect & pest calendar
- PC25.** maintain record of income and expenditure

Undertake farm Financial Management

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

- PC26.** ascertain total cost of production (land, production practices, labour, equipment, fuel, administrative cost etc.)
- PC27.** maintain records of investment and expenditure
- PC28.** maintain necessary books of accounts
- PC29.** identify government schemes and their eligibility for availing themselves of the same

Assimilate market information

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

- PC30.** identify the nearest market
- PC31.** identify local traders, mandis in the villages and nearby and compare the rates
- PC32.** identify market rates of the produce season wise
- PC33.** arrange cost-effective transportation of produce to the market

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** relevant legislation, standards, policies and procedures at work
- KU2.** relevant health and safety requirements applicable in the work environment
- KU3.** Benefit to cost analysis of -the farm practices and the major crops
- KU4.** Harvest and post harvest- time, stage, farm gate value addition
- KU5.** comparative analysis between conventional and AEP for major crops and their comparative benefits
- KU6.** Issues with Green Revolution
- KU7.** Sustainable agriculture and forms of sustainable farming
- KU8.** best practice that should be adopted so that AEP provides better cost-benefit in each step
- KU9.** interventions in farm-based livelihoods to ensure sustainability

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- KU10.** Benefit of using good quality local seeds versus costly hybrids available in the market
- KU11.** How use of compost reduces cost on chemical fertilizers and also has larger benefits for environment and soil health
- KU12.** Market- locating, access, MSP, timing
- KU13.** concept of food security and the importance of the Green Revolution and the current consequence and need of agro ecological practices in agriculture and critical areas of work, i.e., Seed, Soil, Water, NPM, post-harvest and market access.
- KU14.** each of the best practice as how the AEP provides better cost-benefit in each step
- KU15.** methods of NPM
- KU16.** various types of mulching and their benefits
- KU17.** Ways by which Net Profit can be increased
- KU18.** Common terms used in cost benefit analysis like-expenditure, income ,profit, Net Profit etc.
- KU19.** Physiological maturity symptoms of field crops
- KU20.** How to make Farming as a Business
- KU21.** Concepts of farming systems , Integrated Farming Systems(IFS) and Sub systems of IFS
- KU22.** Need, goal, objectives and Constraints of Integrated Farming Systems
- KU23.** Integration between farm based systems viz.agroforestry, crop- livestock, agriculture - horticulture, poultry- fishery, crop- fishery etc.
- KU24.** Sequential Cropping Systems and multitier cropping system
- KU25.** Concept of Integrated Poultry farming, Integrated Fish Farming
- KU26.** Enriched organic manure for agriculture
- KU27.** Agroforestry systems-its need and benefits
- KU28.** Key attributes of agri-entrepreneurs
- KU29.** different types of motivations, Achievement Imagery (A.I.), its elements
- KU30.** Role of various institution and access to service of the institution
- KU31.** Issues and concern related to Agriculture, Social, economic, cultural, culinary, curative

Generic Skills (GS)

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

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

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Carry out comparative analysis between conventional and AEP in major crops</i>	4	5	-	5
PC1. prepare the cost benefit of one crop out of cereal, pulses and oil seeds etc. per acre as per prescribed template	-	-	-	-
PC2. use the appropriate parameters for calculation cost benefit analysis and their presentation	-	-	-	-
PC3. analyse how AEP is faring against the cost benefit analysis compared to conventional methods	-	-	-	-
PC4. enlist the interventions in farm-based livelihoods to ensure sustainability	-	-	-	-
PC5. enlist various kind of interventions that farmer must do in farm based livelihoods to ensure sustainability	-	-	-	-
PC6. tabulate various Issues with Green Revolution	-	-	-	-
PC7. summarize how AEP provides better cost-benefit in each step of farming practices	-	-	-	-
PC8. explore various methods of increasing farm Net Profit	-	-	-	-
PC9. recognize physiological maturity symptoms of some field crops	-	-	-	-
PC10. enlist various market players of the	-	-	-	-
PC11. carry out Cost Benefit Analysis	-	-	-	-
PC12. draw flowchart of farming as a business	-	-	-	-
<i>Plan for integrated Farming Systems</i>	4	5	-	5
PC13. plan for Integrated Farming Systems in the farm which fulfils the need, goal, objectives and assist in overcoming constraints	-	-	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. prepare an Outline of IFS and their sub system as per available farm resources	-	-	-	-
PC15. adopt appropriate IFS as per available resources	-	-	-	-
PC16. maintain the IFS optimally and efficiently	-	-	-	-
<i>Undertake crop planning</i>	4	5	-	5
PC17. choose the crop based on agro-climatic condition of the region	-	-	-	-
PC18. take sample of the soil for testing	-	-	-	-
PC19. perform intercropping with suitable and recommended crops (as per the main crop cultivated)	-	-	-	-
PC20. perform crop rotation with suitable crops	-	-	-	-
PC21. interact with agriculture / extension expert for crop planning	-	-	-	-
PC22. choose crop based on the economic advantage	-	-	-	-
<i>Maintain necessary records for effective management</i>	2	5	-	5
PC23. maintain crop production activity record	-	-	-	-
PC24. maintain crop calendars, calendars of weed and insect & pest calendar	-	-	-	-
PC25. maintain record of income and expenditure	-	-	-	-
<i>Undertake farm Financial Management</i>	3	5	-	5
PC26. ascertain total cost of production (land, production practices, labour, equipment, fuel, administrative cost etc.)	-	-	-	-
PC27. maintain records of investment and expenditure	-	-	-	-
PC28. maintain necessary books of accounts	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC29. identify government schemes and their eligibility for availing themselves of the same	-	-	-	-
<i>Assimilate market information</i>	3	5	-	5
PC30. identify the nearest market	-	-	-	-
PC31. identify local traders, mandis in the villages and nearby and compare the rates	-	-	-	-
PC32. identify market rates of the produce season wise	-	-	-	-
PC33. arrange cost-effective transportation of produce to the market	-	-	-	-
NOS Total	20	30	-	30

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N7618
NOS Name	Carry out basic farm management
Sector	Agriculture
Sub-Sector	Agriculture Industries, Agriculture Crop Production
Occupation	Information Management, Farm Management
NSQF Level	3
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	17/11/2025
NSQC Clearance Date	17/11/2022

Qualification Pack

AGR/N9903: Maintain health and safety at the workplace

Description

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

Scope

The scope covers the following :

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

Elements and Performance Criteria

Maintain personal hygiene

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

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

Maintain clean and safe workplace

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

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

Administer appropriate emergency procedures

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

Qualification Pack

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

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

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

Generic Skills (GS)

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

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

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

Qualification Pack

Assessment Criteria

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

Qualification Pack

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

Qualification Pack

National Occupational Standards (NOS) Parameters

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

Qualification Pack

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, self-motivation, 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

Qualification Pack

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

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- 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

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	1	1	-	-
PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
<i>Constitutional values - Citizenship</i>	1	1	-	-
PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	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.	-	-	-	-
<i>Basic English Skills</i>	2	3	-	-
PC4. speak with others using some basic English phrases or sentences	-	-	-	-
<i>Communication Skills</i>	1	1	-	-
PC5. follow good manners while communicating with others	-	-	-	-
PC6. work with others in a team	-	-	-	-
<i>Diversity & Inclusion</i>	1	1	-	-
PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8. report any issues related to sexual harassment	-	-	-	-
<i>Financial and Legal Literacy</i>	3	4	-	-
PC9. use various financial products and services safely and securely	-	-	-	-

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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	-	-	-	-
<i>Essential Digital Skills</i>	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	-	-	-	-
<i>Entrepreneurship</i>	3	5	-	-
PC14. identify and assess opportunities for potential business	-	-	-	-
PC15. identify sources for arranging money and associated financial and legal challenges	-	-	-	-
<i>Customer Service</i>	2	2	-	-
PC16. identify different types of customers	-	-	-	-
PC17. identify customer needs and address them appropriately	-	-	-	-
PC18. follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship & Jobs</i>	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	-	-

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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	NA
Next Review Date	30/06/2025
NSQC Clearance Date	30/06/2022

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) will be assigned marks proportional to its importance in NOS. SSC will also lay down the proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on the knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for the theory part for each candidate at each examination/training centre (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on this criterion.
6. To pass the Qualification Pack, every trainee should score a minimum of 50% of aggregate marks to successfully clear the assessment.

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7. 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/N7612.Comprehend the livelihood perspective of the farming communities	5	5	-	10	20	5
AGR/N7613.Comprehend the Agro-ecology and various interventions that influence the functioning of the ecosystem	5	10	-	5	20	5
AGR/N7614.Establish an Agri-nutrition-garden (ANG)	12	18	-	20	50	15
AGR/N7619.Improve Farming Practices by conducting Farmer Field Schools (FFS)	9	14	-	17	40	15
AGR/N7615.Cultivate the appropriate crops in the selected area	28	53	-	49	130	15
AGR/N7616.Use relevant farm machinery for the field crop cultivation	10	10	-	10	30	10
AGR/N7617.Analyse the effect of abnormal weather conditions on small holders' agricultural practices for effective management practices	10	10	-	10	30	10
AGR/N7618.Carry out basic farm management	20	30	-	30	80	10

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National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AGR/N9903.Maintain health and safety at the workplace	40	25	-	35	100	5
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	10
Total	159	205	-	186	550	100

Qualification Pack

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

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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.

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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.