

National Occupational Standards



Fundamentals of On-farm strategies to mitigate climate risks

Unit Code: AGR/N6504

Version: 1.0

NSQF Level: 4

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Description

This OS unit is about Fundamentals of On-farm strategies to mitigate climate risks for any enterprise including agriculture & allied activities.

Scope

The scope covers the following :

- Review climate and enterprise data
- Identify and analyse climate risks and opportunities
- Prepare climate risk management strategies

Elements and Performance Criteria

Fundamentals of On-farm strategies to mitigate climate risks

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

- PC1.** Obtain and interpret historical climate data, including any natural disasters, from a range of sources
- PC2.** Identify weather and climate risk factors
- PC3.** Collect information on normal and significant climate events and their impact on natural and rural systems
- PC4.** Detail current and historical property and enterprise production
- PC5.** Review short and long term enterprise goals to ensure they fit within climatic constraints
- PC6.** Source and update climate and enterprise data according to enterprise requirements

Identify and analyse climate risks and opportunities

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

- PC7.** Analyse forecasted chances of seasonal climate for the enterprise region
- PC8.** Identify climate risks and opportunities for the site and enterprise region
- PC9.** Determine impact of different weather and climate risk factors on production
- PC10.** Use qualitative and quantitative techniques to analyse risks and opportunities
- PC11.** Evaluate importance of climate variability and significant climate events
- PC12.** Outline practices to address a range of different climate variability risks and opportunities
- PC13.** Identify contingency options for enterprises and the business

Prepare climate risk management strategies

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

- PC14.** Analyse climate variability and seasonal climate forecasts
- PC15.** Predict the impact of climate variability on the environment, property value and equity
- PC16.** Identify production/business strategies that address major climate risk factors
- PC17.** Identify production/business strategies that include consideration of insurance to cover loss in the event of significant or unusual climate activity
- PC18.** Prepare financial forecasts for all strategies according to enterprise guidelines

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PC19. Review preferred production, enterprise or alternative strategies and select options appropriate for the enterprise

PC20. Document strategies to manage risks associated with variable climate

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** types and sources of data used to record weather patterns
- KU2.** qualitative and quantitative techniques to analyse risks
- KU3.** impact of weather and climate on production/business activities
- KU4.** difference between weather and climate
- KU5.** causes of general patterns of weather and climate over India
- KU6.** climate variability and climate change impacts for local region
- KU7.** property and enterprise management decisions affected by the current and predicted climatic variability
- KU8.** recognition of climate risks and opportunities
- KU9.** seasonal climate forecasting systems and related indicators
- KU10.** contingency planning including natural disaster planning for site
- KU11.** a definition of risk management, including the identification, assessment, and prioritisation of risks followed by coordinated and economical application of resources to minimise, monitor and control the probability and/or impact of events
- KU12.** potential impacts of climate change on land and natural resource management
- KU13.** strategic options and planning in response to climate variability for a range of seasons (normal, drier or wetter than normal)
- KU14.** how to calculate financial returns for different strategic options
- KU15.** digital applications to access, record and analyse data
- KU16.** principles for decision-making, based on the variable climate and seasonal climate forecasts.

Generic Skills (GS)

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

- GS1.** make work-related notes
- GS2.** read the relevant literature to get the latest updates and information about new technologies
- GS3.** communicate professionally with clients and co-workers as per the business code of conduct
- GS4.** listen attentively to understand the information/ instructions being given by the speaker
- GS5.** plan and schedule tasks to ensure timely completion
- GS6.** identify possible disruptions to work and take preventive measures
- GS7.** apply domain knowledge and experience to suggest appropriate solutions to customers
- GS8.** take quick decisions in case of any emergencies/ accidents

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Fundamentals of On-farm strategies to mitigate climate risks</i>	10	10	-	10
PC1. Obtain and interpret historical climate data, including any natural disasters, from a range of sources	-	-	-	-
PC2. Identify weather and climate risk factors	-	-	-	-
PC3. Collect information on normal and significant climate events and their impact on natural and rural systems	-	-	-	-
PC4. Detail current and historical property and enterprise production	-	-	-	-
PC5. Review short and long term enterprise goals to ensure they fit within climatic constraints	-	-	-	-
PC6. Source and update climate and enterprise data according to enterprise requirements	-	-	-	-
<i>Identify and analyse climate risks and opportunities</i>	10	15	-	10
PC7. Analyse forecasted chances of seasonal climate for the enterprise region	-	-	-	-
PC8. Identify climate risks and opportunities for the site and enterprise region	-	-	-	-
PC9. Determine impact of different weather and climate risk factors on production	-	-	-	-
PC10. Use qualitative and quantitative techniques to analyse risks and opportunities	-	-	-	-
PC11. Evaluate importance of climate variability and significant climate events	-	-	-	-
PC12. Outline practices to address a range of different climate variability risks and opportunities	-	-	-	-
PC13. Identify contingency options for enterprises and the business	-	-	-	-
<i>Prepare climate risk management strategies</i>	10	15	-	10

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. Analyse climate variability and seasonal climate forecasts	-	-	-	-
PC15. Predict the impact of climate variability on the environment, property value and equity	-	-	-	-
PC16. Identify production/business strategies that address major climate risk factors	-	-	-	-
PC17. Identify production/business strategies that include consideration of insurance to cover loss in the event of significant or unusual climate activity	-	-	-	-
PC18. Prepare financial forecasts for all strategies according to enterprise guidelines	-	-	-	-
PC19. Review preferred production, enterprise or alternative strategies and select options appropriate for the enterprise	-	-	-	-
PC20. Document strategies to manage risks associated with variable climate	-	-	-	-
NOS Total	30	40	-	30

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N6504
NOS Name	Fundamentals of On-farm strategies to mitigate climate risks
Sector	Agriculture
Sub-Sector	
Occupation	Climate Change and Risk Mitigation (Environment Conservation)
NSQF Level	4
Credits	1.25
Minimum Job Entry Age	NA
Minimum Educational Qualification & Experience	<p>12th grade Pass (or equivalent) with 1 Year of experience relevant experience in Agriculture and Allied sectors OR 10th grade pass and pursuing continuous schooling (for 2-year program) OR 10th grade pass with 3 Years of experience relevant experience in Agriculture and Allied sectors OR Previous relevant Qualification of NSQF Level (3.5) with 1.5 years of experience relevant experience in Agriculture and Allied sectors OR Previous relevant Qualification of NSQF Level (3) with 3 Years of experience relevant experience in Agriculture and Allied sectors</p>
Version	1.0
Last Reviewed Date	30/05/2024
Next Review Date	30/05/2027
NSQC Clearance Date	30/05/2024
Reference code on NQR	NG-04-AG-02649-2024-V1-ASCI
NQR Version	1.0
CCN Category	2