







# Agri-extension in DRE Applications & Financing

Unit Code: AGR/N7620

Version: 1.0

NSQF Level: 4

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# **Description**

This OS unit is about extension activities involved in the promotion of Decentralised Renewable Energy (DRE) applications used in agriculture & allied sector.

#### Scope

The scope covers the following:

- Assess the demand for DRE Livelihood Applications
- Promote DRE Livelihood Applications
- Facilitate financing for DRE Applications
- Document the impact of adoption of DRE Applications

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

## Assess the demand for DRE Livelihood Applications

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

- **PC1.** Conduct market research to identify the available DRE livelihood applications and their adoption rate
- **PC2.** Assess the potential of deployment of DRE livelihood applications across various sectors in the region
- **PC3.** Coordinate with different government and private organizations working in the DRE applications
- **PC4.** Map the needs of beneficiaries with the relevant DRE applications

#### Promote DRE Livelihood Applications

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

- **PC5.** Spread awareness about the appropriate DRE technologies and related services amongst the relevant stakeholders for livelihood promotion and value enhancement
- **PC6.** Identify the potential beneficiaries for the DRE livelihood applications
- **PC7.** develop relevant communication materials for awareness promotion
- **PC8.** Conduct field demonstration of DRE livelihood applications
- **PC9.** Encourage participation of the beneficiaries and convince them for adopting DRE applications
- **PC10.** Map the technology service providers and help the end users access the best in-class technology / service providers
- **PC11.** Provide skill and capacity building support to identified beneficiaries in operations & maintenance and installation/ fabrication
- PC12. Provide handholding support to the end-users throughout the adoption cycle
- **PC13.** Develop mitigation strategies for the potential risks in the adoption cycle

#### Facilitate financing for DRE Applications

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

- **PC14.** Analyse various Government schemes for their integration with DRE livelihood applications and their adoption
- **PC15.** Identify the financial institutions and other organizations supporting the promotion and adoption of DRE applications









- **PC16.** Sensitize financial Institutions towards lending to DRE enterprises and end users
- **PC17.** Identify innovative financing models for scaling up the adoption of the applications
- **PC18.** facilitate easy access to credit for entrepreneurs and end-users by linking them to existing financing schemes or through new innovative financial instruments

#### Document the impact of adoption of DRE Applications

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

- **PC19.** Develop a strong monitoring and evaluation framework for assessing the sustainability performance of DRE applications
- **PC20.** Assess the impact of DRE applications on diverse population including marginalized groups and women
- PC21. prepare the impact report and suggest recommendations to scale-up the adoption rate
- PC22. Document success stories and broadcast in the print and digital media

## **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** Different types of Renewable Energy (RE)
- **KU2.** Meaning of Decentralised Renewable Energy (DRE)
- **KU3.** Advantages of DRE Systems
- **KU4.** Need for Decentralised Renewable Energy Based Livelihoods
- KU5. State of the DRE sector in India
- **KU6.** DRE Powered Applications in agriculture
- **KU7.** DRE Powered applications in animal husbandry & fisheries sector
- **KU8.** DRE powered applications in non-farm sector
- **KU9.** various DRE technology providers
- **KU10.** business models of DRE livelihood applications in agriculture, agro-processing, dairy, poultry, fisheries, tailoring, etc.
- KU11. Method of Demand Assessment
- **KU12.** Method of developing communication materials- leaflets, flyers, etc.
- **KU13.** Field demonstration methods for DRE applications
- **KU14.** Role of Ministry of New and Renewable Energy (MNRE) in promoting DRE Livelihood applications
- KU15. Various non-Government interventions to promote DRE livelihood applications
- **KU16.** List of Schemes of Ministry of New and Renewable Energy (MNRE) and various other Ministries and Departments pertaining to DRE Applications
- **KU17.** online portals to access the DRE appliances details
- KU18. Financing needs for DRE applications
- **KU19.** Challenges of end-user financing DRE Appliances
- **KU20.** Policies to support end-user financing for solar-powered livelihoods
- **KU21.** Method of impact evaluation of adoption of DRE Applications
- **KU22.** Method of report writing









**KU23.** Use of social and other digital media for information dissemination

# **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 being shared
- **GS4.** communicate politely and professionally
- GS5. plan and prioritize 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









# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Assess the demand for DRE Livelihood Applications	5	5	-	10
<b>PC1.</b> Conduct market research to identify the available DRE livelihood applications and their adoption rate	-	-	-	-
<b>PC2.</b> Assess the potential of deployment of DRE livelihood applications across various sectors in the region	-	-	-	-
<b>PC3.</b> Coordinate with different government and private organizations working in the DRE applications	-	-	-	-
<b>PC4.</b> Map the needs of beneficiaries with the relevant DRE applications	-	-	-	-
Promote DRE Livelihood Applications	10	15	-	10
<b>PC5.</b> Spread awareness about the appropriate DRE technologies and related services amongst the relevant stakeholders for livelihood promotion and value enhancement	-	-	-	-
<b>PC6.</b> Identify the potential beneficiaries for the DRE livelihood applications	-	-	-	-
<b>PC7.</b> develop relevant communication materials for awareness promotion	-	-	-	-
<b>PC8.</b> Conduct field demonstration of DRE livelihood applications	-	-	-	-
<b>PC9.</b> Encourage participation of the beneficiaries and convince them for adopting DRE applications	-	-	-	-
<b>PC10.</b> Map the technology service providers and help the end users access the best in-class technology / service providers	-	-	-	-
<b>PC11.</b> Provide skill and capacity building support to identified beneficiaries in operations & maintenance and installation/ fabrication	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> Provide handholding support to the endusers throughout the adoption cycle	-	-	-	-
<b>PC13.</b> Develop mitigation strategies for the potential risks in the adoption cycle	-	-	-	-
Facilitate financing for DRE Applications	10	10	-	4
<b>PC14.</b> Analyse various Government schemes for their integration with DRE livelihood applications and their adoption	-	-	-	-
<b>PC15.</b> Identify the financial institutions and other organizations supporting the promotion and adoption of DRE applications	-	-	-	-
<b>PC16.</b> Sensitize financial Institutions towards lending to DRE enterprises and end users	-	-	-	-
<b>PC17.</b> Identify innovative financing models for scaling up the adoption of the applications	-	-	-	-
PC18. facilitate easy access to credit for entrepreneurs and end-users by linking them to existing financing schemes or through new innovative financial instruments	-	-	-	-
Document the impact of adoption of DRE Applications	5	10	-	5
<b>PC19.</b> Develop a strong monitoring and evaluation framework for assessing the sustainability performance of DRE applications	-	-	-	-
<b>PC20.</b> Assess the impact of DRE applications on diverse population including marginalized groups and women	-	-	-	-
<b>PC21.</b> prepare the impact report and suggest recommendations to scale-up the adoption rate	-	-	-	-
PC22. Document success stories and broadcast in the print and digital media	-	-	-	-
NOS Total	30	40	-	30









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

NOS Code	AGR/N7620
NOS Name	Agri-extension in DRE Applications & Financing
Sector	Agriculture
Sub-Sector	
Occupation	Information Management
NSQF Level	4
Credits	1.25
Minimum Educational Qualification & Experience	12th grade Pass (or equivalent) OR Completed 2nd year of the 3-year diploma after 10 (in Agriculture/Horticulture/Forestry/Agriculture Engineering/Veterinary Sciences/Animal Husbandry/Diary Technology) OR Previous relevant Qualification of NSQF Level (3.5) OR Previous relevant Qualification of NSQF Level (3) with 3 Years of experience Agriculture and allied sectors
Version	1.0
Last Reviewed Date	30/04/2024
Next Review Date	30/04/2027
NSQC Clearance Date	30/04/2024
Reference code on NQR	NG-04-AG-02548-2024-V1-ASCI
NQR Version	1.0
CCN Category	2