



## **Module 13: Risk Mitigation and Adaptation in Extension and Advisory Services**

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### **Summary**

#### **Module overview**

Extension professionals in Africa work under complex and uncertain environments (ecosystem, socio-economic or political). Equipping extensionists with risk management, mitigation and adaptation skills is key to minimising negative agricultural impacts triggered by unforeseen shocks such as a sharp swing in product and input prices and extreme weather/climate events. This module will focus on approaches to risk and adaptation management, assessment and developing intervention of risk in the agricultural context, resilience in the context of risk, understanding how improved risk planning can increase identification and adaptation of farming strategies, climate change concepts, and how extension professionals can be equipped to better manage risk and uncertainty.

This module aims to familiarise you with risk management and adaptation planning in Extension and Advisory Services (EAS). You will be introduced to the concepts of risk and uncertainty in order to better understand the impact of factors such as market and climate variability in the agricultural sector. You will also be provided with skills, tools and knowledge to address these factors through the use of risk management and adaptation strategies. Remember that this module not only focuses on improving your own risk management capacity but also focuses on your ability to improve the capacity of rural farmers; a primary goal of EAS. The module presents selected standard approaches and tools for assessing climate change risks and adaptation measures. The material in this module draws on lessons learned from different regions and derived from various open access platforms.

#### **Module Performance outcomes**

At the end of this module, you should be able to:

1. Define the concept of risk, uncertainty, resilience and adaptation.
2. Map, analyse, and evaluation risk and adaptation
3. Discuss the obstacles and opportunities arising from risk and adaptation planning
4. Analyze the impact of climate change and climate-induced extreme events
5. Describe the basics of climate change and variability
6. Evaluate the role of EAS in risk assessment and adaptation planning
7. Use risk management and adaptation tools

#### **Units**

##### **Unit 1: Introduction to risk and risk management**

- Understanding concept of risk, uncertainty and risk management
- Mapping of different types and sources of risk
- Risk perception and human behaviour
- Risk identification, measuring, analysis and evaluation

##### **Unit 2: Understanding adaptation in the context of climate change**

- Understanding climate science
- Climate change and agriculture
- Climate change and socio-economics
- Climate change and health
- Example of an adaptation planning and implementation approach



### **Unit 3: The role of EAS in adaptation and risk management**

- Role of EAS in mitigating risks and uncertainty
- Climate forecast
- Market forecast

### **Unit 4: Tools for assessing risk and identifying adaptation strategies**

- Adaptation and risk management tools
- Resilience tools
- Climate and socio-economic forecasting tools
- Data collection and visualisation tools