



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

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### **Summary**

#### **Module overview**

Extension professionals in Africa work under complex and uncertain environments with regard to ecosystems, socio-economic and political situations, and so forth. Equipping extensionists with risk management and adaptation skills is key to minimising negative agriculture impacts triggered by unplanned extreme events such as sharp swings in product and input prices or extreme weather events such as floods and droughts. This module provides an introduction to concepts on risk planning in extension and advisory services (EAS). The module will focus on approaches to risk and adaptation management; assessment and developing intervention of risk in the agriculture 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 EAS can best manage risk and uncertainty. 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 open access sources.

#### **Module Learning Objectives**

1. Enhance understanding and uptake of risk management and planning in EAS;
2. Explore ways to better understand and represent risk and uncertainties in agriculture systems;
3. Enhance the understanding of the climate change impacts in relation to risk and adaptation;
4. Equip extension professionals with the skills, tools and knowledge enabling them to plan around risk and uncertainty

#### **Module Performance outcomes**

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

1. Understand the concept of risk, uncertainty, resilience and adaptation.
2. Able to map, analyse, and evaluation risk and adaptation
3. Discuss the obstacles and opportunities arising from risk and adaptation planning
4. Understand the impact of climate change and climate-induced extreme events
5. Basic understanding of climate change and variability
6. Understand 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 risk and uncertainty
- 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