International Technical Webinar

How to strengthen the capacity to manage risks in agriculture: Experiences from practice

An Overview
of the Four E-learning Courses on Agricultural Risk Management (ARM)

13 October 2021

Dr Kisan Gunjal
International Consultant, Global Food Security
(Former Economist at FAO-UN, Rome and Ex-Professor, McGill University, Canada)
Target Audience

1. Policy Group - Dealing with Policy Formulation:
   • Policy makers, planners, and government officials.
   • Academic learners interested in risk management in agriculture (at basic levels)
   • Development practitioners dealing with ARM

2. Farm Group - Primary Producers and helpers:
   • Farmers,
   • farm management advisors,
   • farmer organizations and communities;

3. Service Group - Intermediaries in Value chain:
   • Service and input providers,
   • Intermediaries dealing with ARM services.
   • Other operators in the agri-food value chains.
Framework: Risk Management Strategy Cycle

1. Understanding risks and identifying them (Course 1)
2. Assessing Risks (Course 2)
3. Identifying ARM Tools (Course 3)
4. Planning, Implementing, dev. Policies (Course 4)
5. M&E (Course 4)

Source: Adapted from PARM (2018)
Understanding the Risk Environment in Agriculture
Get an overview of different types of risks affecting activities in agri-food system, their characteristics, and main causes.

Appreciate potential implications of these risks to farmers and other stakeholders in the agri-food system.

Learn about the holistic approach (interactions of risks, strategies and policies) to risk management in agriculture.

Learn how managing risks can contribute to improved livelihood and food security.
Assessing Risk in Agriculture
Assessing Risk in Agriculture

Learning Objectives

- Get an overview of different qualitative and quantitative methods commonly used to rank and prioritize risks

- Learn about the process and outcome of a risk assessment at the local area and national levels

- Know about risk mapping and risk assessment and management capacity profiles in the country

- Appreciate what key information is required for carrying out a risk assessment process
EXAMPLES of new risks:
Africa: Three waves of COVID-19 - new confirmed cases

**Africa**

Cumulative deaths 147,777 (2.43% vs global rate of 2.04%) (excl. North Africa)
Estimated reduction in 2020 GDP growth in SSA 5.5% (roughly USD 368 mill PPP)

[https://covid19.who.int/]
Composite Vulnerability Index-2 (CVI-2) with equal weights to P1 to P4 Pillars

- **With coping capacity and resilience**, CVI-2 produces a valuable list of priority countries requiring external assistance to deal with the impact of COVID-19 disaster on food security.

- Priority list in CVI-2 includes – **11 LDCs, 8 LLDCs & 1 SIDS**

- Vulnerable countries lacking internal coping capacity (**Burkina Faso, Central African Republic, Mali, and Niger**) move up into this Priority 1 group as compared to CVI-1.

- Those with higher scores on the coping capacity index (**Botswana, Namibia, Sao Tome and Principe, and Tunisia**) move down and out of this group.

- The least vulnerable 5 are- **Morocco, Gabon, Algeria, Mauritius and Egypt**.
Known cases of Ebola Virus Disease

The overall impact of the 2014-15 Ebola crisis on Guinea, Liberia, and Sierra Leone has been estimated at $2.8 billion (World Bank).

Every 6-7 years a major one since 1995?

Source: WHO as cited by CDC; https://www.cdc.gov/vhf/ebola/outbreaks/history/chronology.html
Agricultural Risk Management Tools
Risk Layers: Frequency (Probability) and Severity (Impact) and Management Options

Source: PARM (2018) as adapted from World Bank (2016)
Agricultural Risk Management Tools

Learning Objectives

- Providing an outline of the main on-farm and off-farm ARM tools
- Describing major production, finance, market, and government-support related ARM tools
- Identifying the suitability of these tools alone or in combination for a given situation
- Appreciating the advantages and disadvantages of ARM tools
Selected ARM Tools

- Climate
- Smart Agr
- Ag Diversification
- Asset/Income Strategies
- Production – Farm/Off-Farm
Selected ARM Tools

- Climate Smart Agr
- Ag Diversification
- Asset/Income Strategies
- Agricultural Insurance
- Agri & Micro-Finance
- Weather Index Insurance
- Production – Farm/Off-Farm
- Finance
Selected ARM Tools

- Climate Smart Agr
- Ag Diversification
- Asset/Income Strategies
- Production – Farm/Off-Farm
- Agricultural Insurance
- Weather Index Insurance
- Agri & Micro-Finance
- Warehouse Receipts System
- Contract Farming
- Commodity Exchange/Futures Mkts

Markets

Finance
Selected ARM Tools

Each tool follows the following format:

✓ **What is it?** – Concepts and Characteristics
✓ **Suitability** of the tool (for whom, for what type of risk, for which crops or livestock, where and under what conditions)
✓ **Advantages** (pros - general positive aspects)
✓ **Disadvantages** (cons - general negative points)
✓ **Examples and/or Case studies** – one each, total 12
✓ **Assessment test** for students, and
✓ **List of relevant references** for further information
Agricultural Risk Management Strategy, Policy and Mainstreaming
Capstone Course with 4 lessons:
Developing and implementing ARM strategy at three different levels dealing with what can be done to deal with given risks in a coordinated manner
* HOLISTIC COORDINATED STRATEGIES, * PUBLIC POLICIES and * MAINSTREAMING

Lesson 1: Farm Level (Micro)
- Selecting risks, tools, consolidating & prioritizing ARM strategies
- Farmers’ role in linking with other levels
Capstone Course with 4 lessons:
Developing and implementing ARM strategy at

Lesson 1: Farm Level (Micro)
> Selecting risks, tools, consolidating & prioritizing ARM strategies

Lesson 2: Community/Local Area Level (Meso)
> Tailoring area specific learning tools, holistic, pro-poor advocacy
> Developing local area resources for ARM
Capstone Course with 4 lessons: Developing and implementing ARM strategy at -

Lesson 1: Farm Level (Micro)
- Selecting risks, tools, consolidating & prioritizing ARM strategies

Lesson 2: Community/Local Area Level (Meso)
- Tailoring area specific learning tools, pro-poor advocacy

Lesson 3: National Level (Macro)
- Creating an enabling env. (IIPR), early warning & information systems and policies
Capstone Course with 4 lessons: Developing and implementing ARM strategy at -

**Lesson 1: Farm Level (Micro)**
- Selecting risks, tools, consolidating & prioritizing ARM strategies

**Lesson 2: Community/Local Area Level (Meso)**
- Tailoring area specific learning tools, pro-poor advocacy

**Lesson 3: National Level (Macro)**
- Creating an enabling env. (IIPR), early warning & information systems
  And policies

**Lesson 4: Sustainability Issues**
- The role of gov., capacity dev. & mainstreaming
Concluding Comments

• Of course, **agriculture is dependent on natural elements, so it is prone to risk.** As demonstrated by the **COVID-19 pandemic,** new and more severe threats exist for all those connected to agri-food systems and their food security and livelihoods. But we can learn about different **ways to manage the risk** or to mitigate its impact.

• In general, **developing countries lack the capacity** to deal with these risks. The good news is that it is possible to **develop risk management capacity; resources are available** for human skills building.

• Specifically, about these courses, there are **limitations.** Even though various practical examples and case studies are provided, it is not a hands-on vocational training course. It needs to be supplemented with practical **examples, best practices, and the experiences** of practitioners.

• Also, with the help of additional resources such as detailed **content documents** and other vital references for each course, keener learners can seek much more profound knowledge. Primarily an **academic and guided learning can be set up** based on these courses.

• You can get a **certification badge** after completing each course and the test.
Thank you for your kind attention

Comments, questions are welcome (email: k.gunjal@gmail.com)

Please encourage anyone interested to take these free online courses
At
FAO elearning Academy
https://elearning.fao.org