



## WEBINAR SERIES

### Overview of the World Bank's Technical Training Program "Agriculture Sector Risk Assessment"

By Åsa Giertz, Agricultural Specialist, World  
Bank's Agricultural Risk Management Team



Washington DC, United States, November 5th , 2015



**FARMD Webinar:**  
*Introduction to Technical Training on Assessing Agricultural Risk  
for Strengthening Resilience: The World Bank Approach*

November 5, 2015



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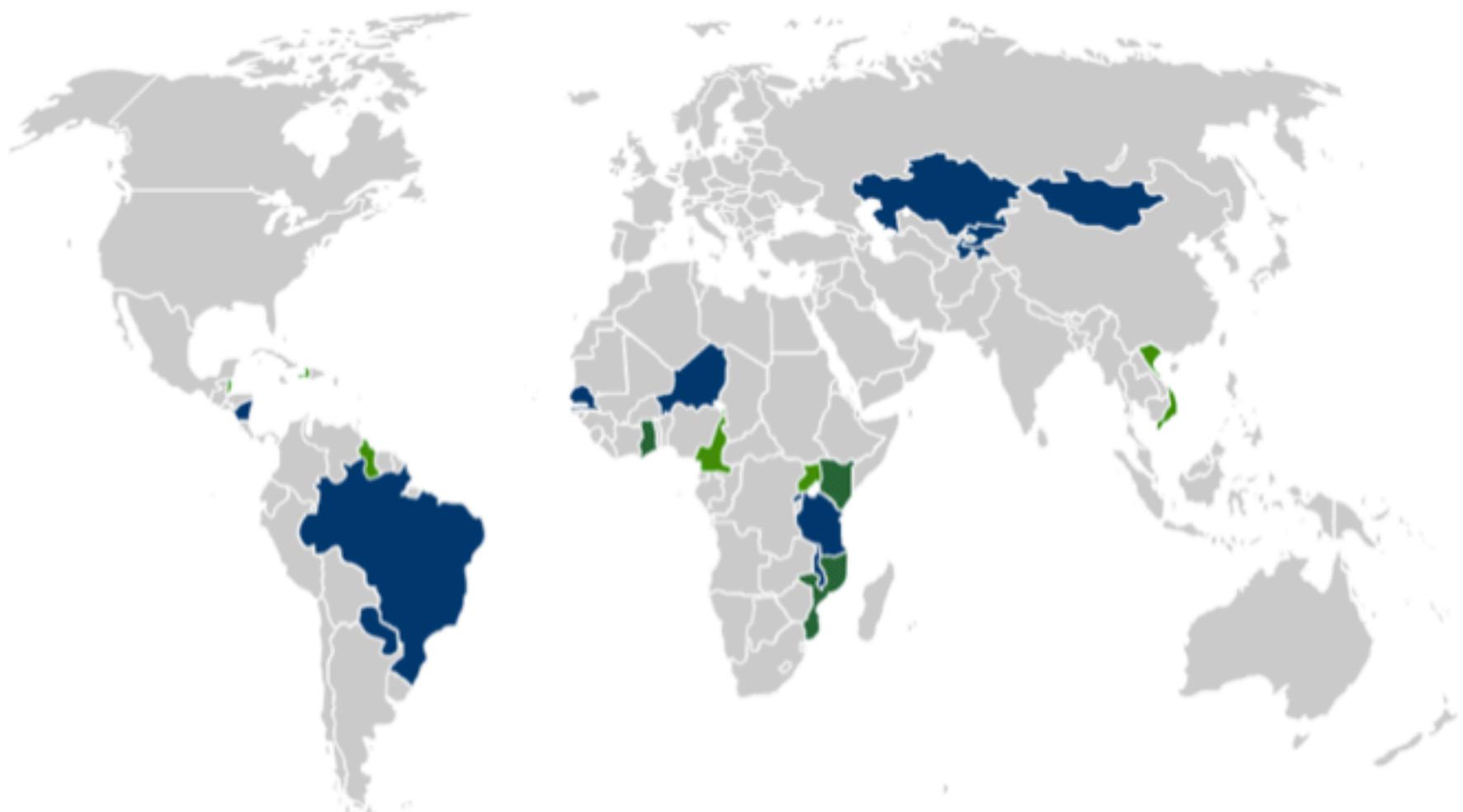


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Education and Research EAER  
State Secretariat for Economic Affairs SECO

#### [Agricultural risks management at the World Bank](#)

- The World Bank has a dedicated Agricultural Risk Management Team in its Agriculture Global Practice
- Work on commodity-specific risks through supply chain risk management
- **Work on systemic risks for the agricultural sector through sector-wide risk management**
- Global knowledge through capacity building, training, FARMED, etc.
- Activities in Africa, Asia, Central Asia, and Latin America

## ARMT's Risk Assessment Portfolio



- Supply Chain Risk Assessment (SCRA)
- Agriculture Sector Risk Assessment (ASRA)
- ASRA & SCRA

Source: ARMT, 2015

## Agricultural risks : Defining the limits

**Risk** : Uncertain, events, leads to losses

- E.g Symptom : yield volatility
- Cause: droughts, flood, pest and disease outbreak, etc

Distinguishing it from :

**Constraint**: Conditions, certain, leads to sub-optimal performance

- Eg. Symptom : Low yields
- Cause : lack of access to inputs, poor technology etc.

**Trend**: Longer term patterns (reversible or irreversible, provides context)

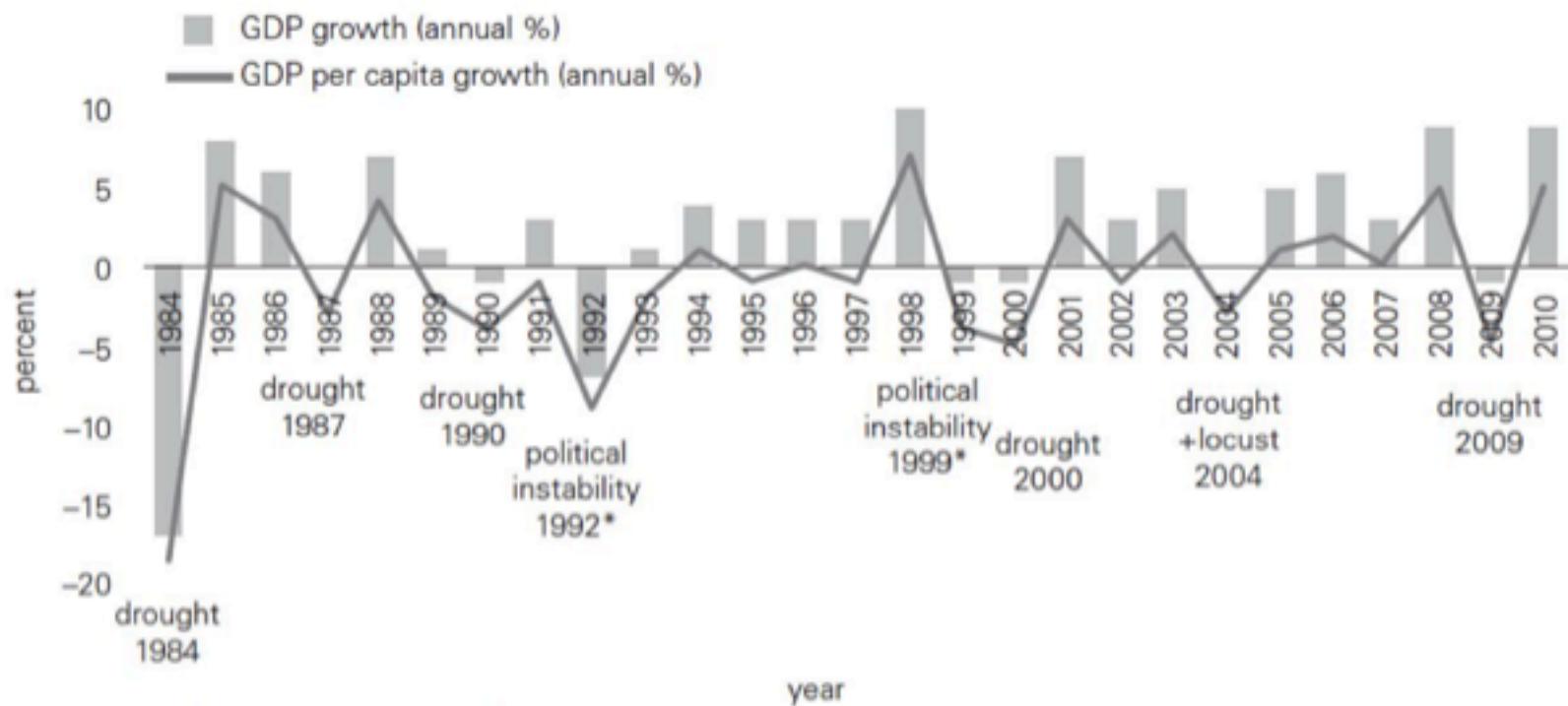
- E.g. Symptom - declining yield
- E.g. Cause – structural changes in agriculture, changes in climatic patterns etc.

But understanding the **linkages and relationships** between these 3 concepts

### Why manage risk and volatility?

- Risks and volatilities are problematic for countries and stakeholders in that they create uncertainty
- Significant resources are often allocated to support segments of the population in times of volatility and after risk events
- Price volatilities are often symptoms, not causes, and it's often more effective to address the underlying risk than the symptoms

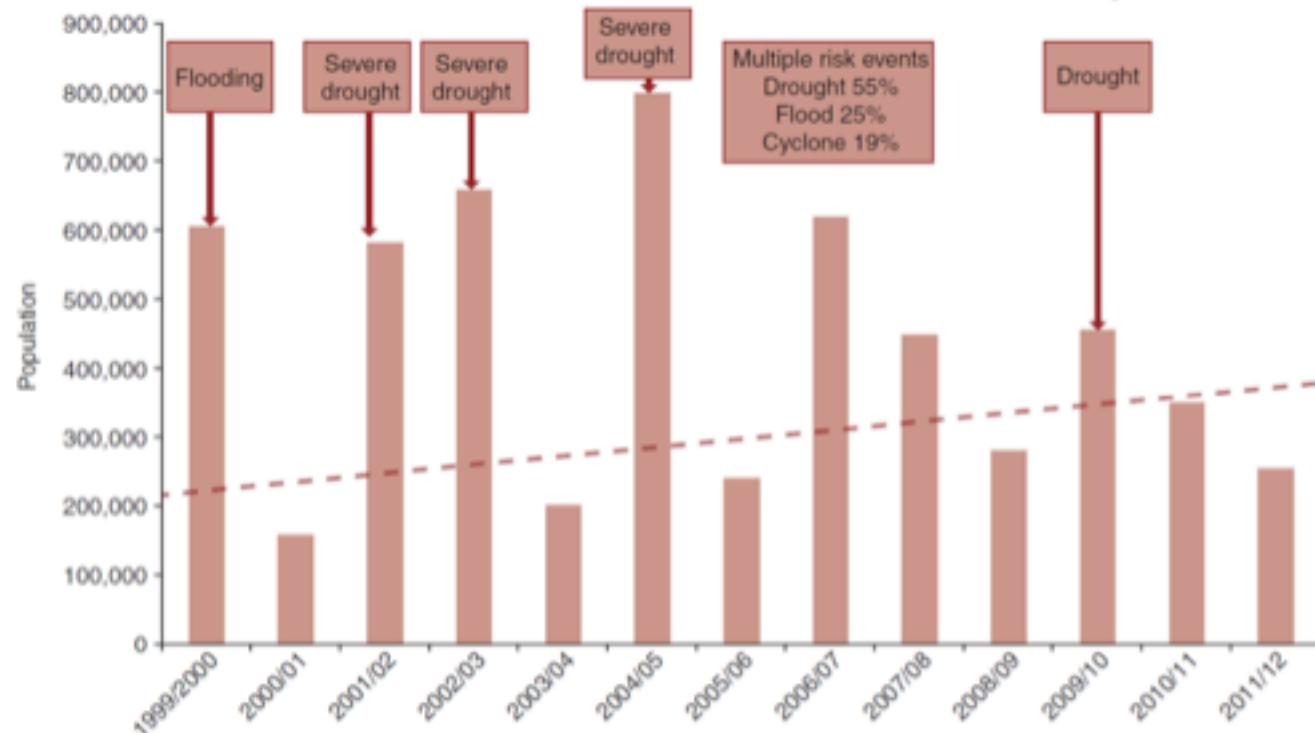
## Growth: Ag. risk driving sector and national GDP growth rate volatility



Sources: World Development Indicators Database, 2012; and Author's calculations.

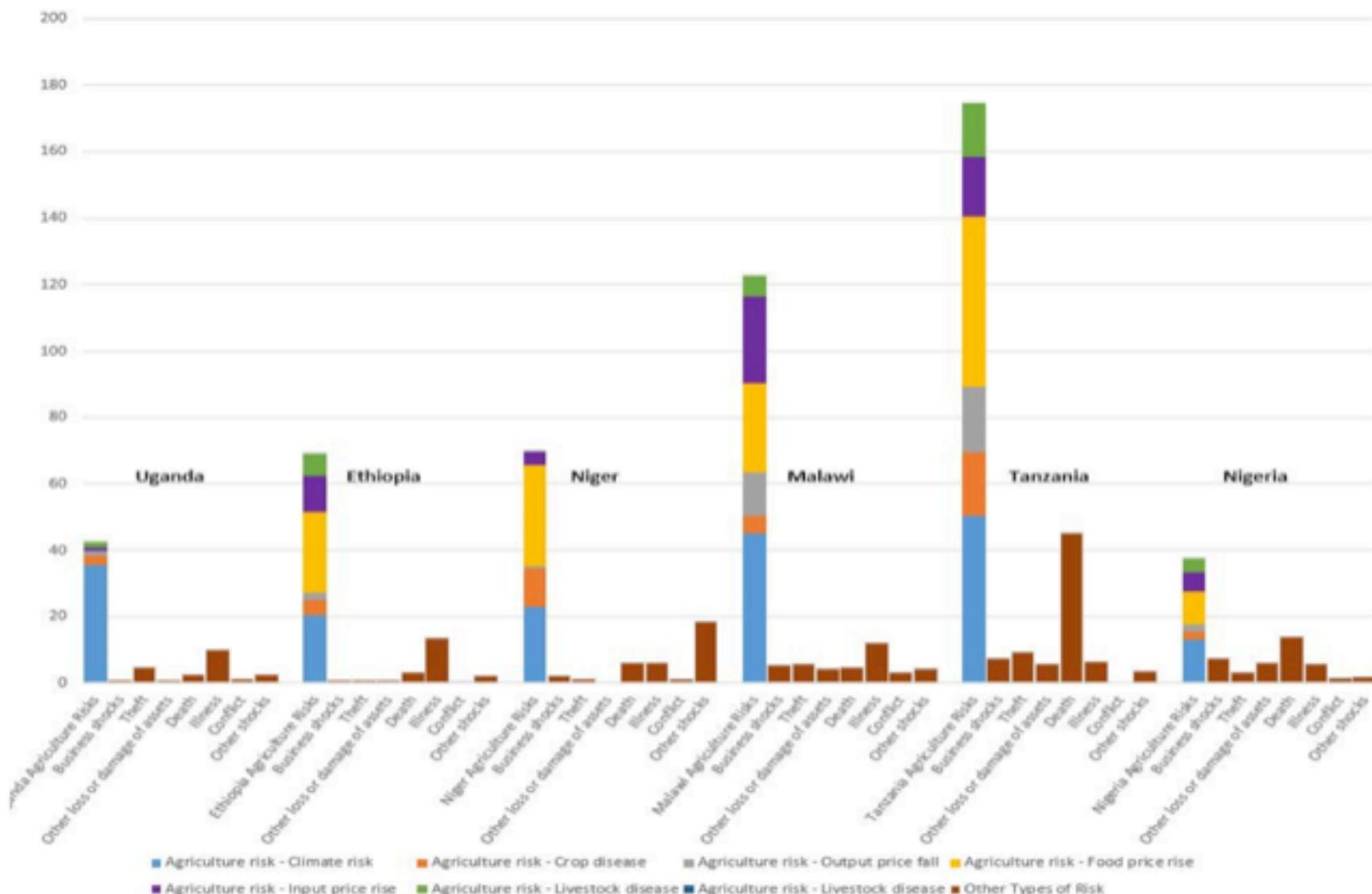
## Food Security: Ag. risk principal cause of transient food insecurity

**FIGURE ES.2. ACUTE FOOD INSECURE POPULATION IN MOZAMBIQUE**



## Poverty: Agricultural risks biggest rural poverty trap

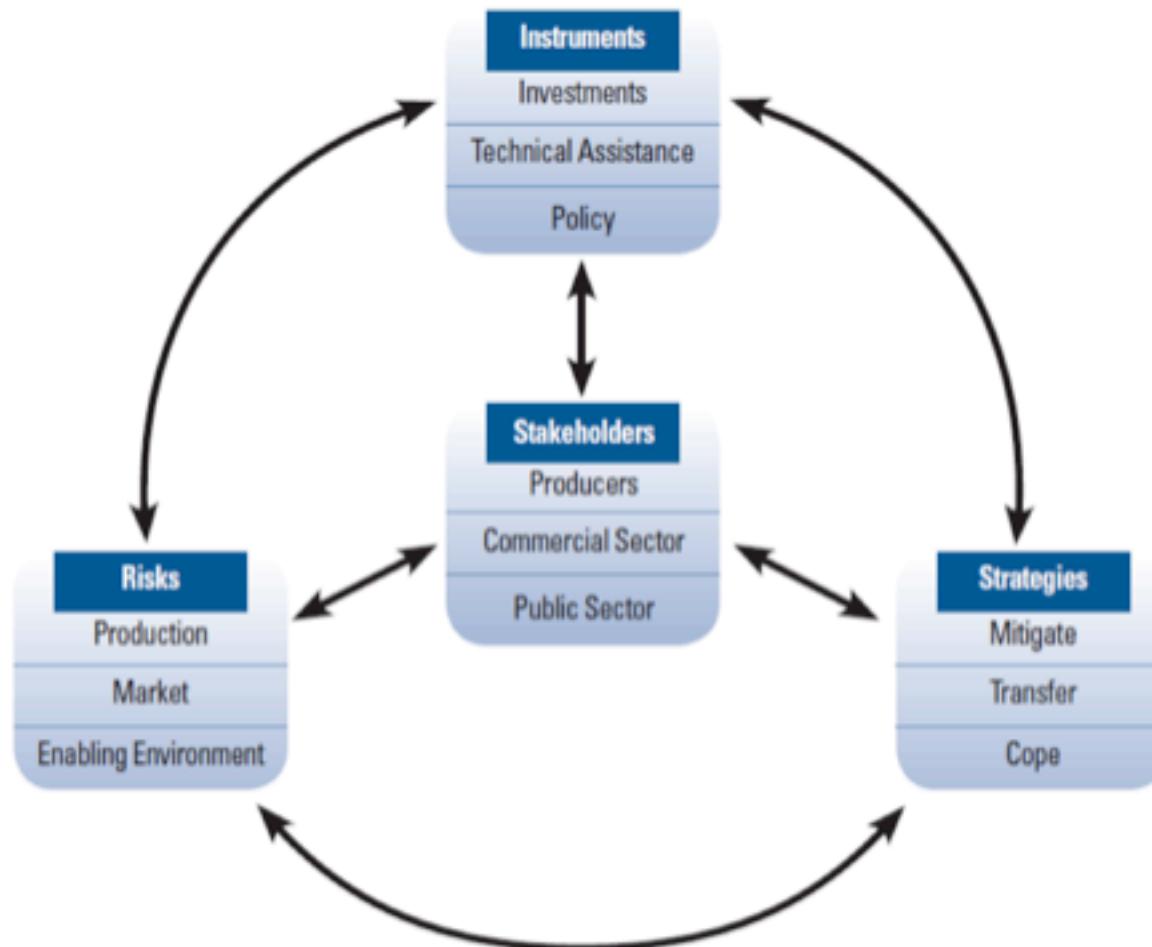
Percentage of Households Experiencing Different Types of Shocks



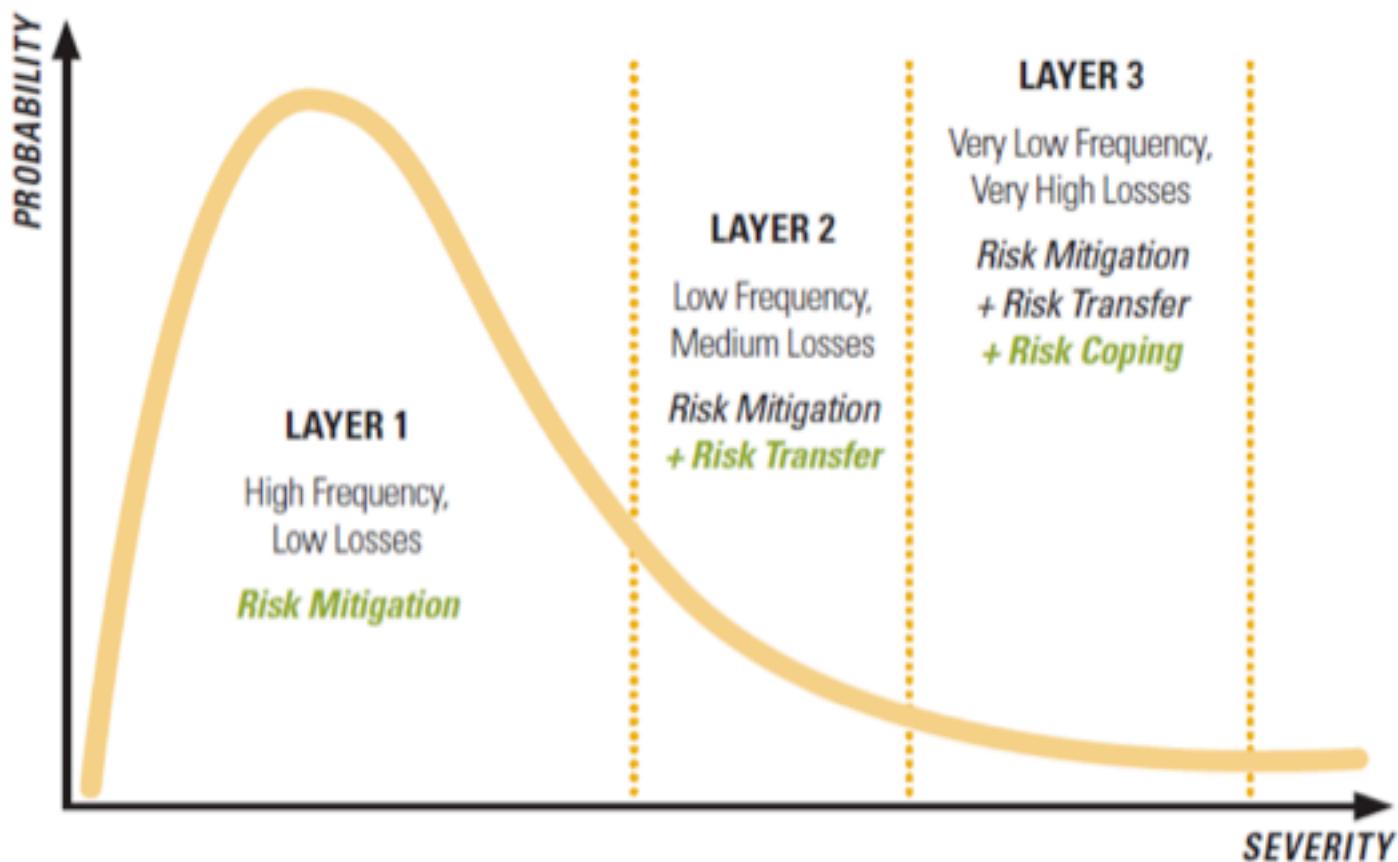
## Cross cutting agenda



## The World Bank's Agricultural Risk Management Framework



## Risk Layering Approach



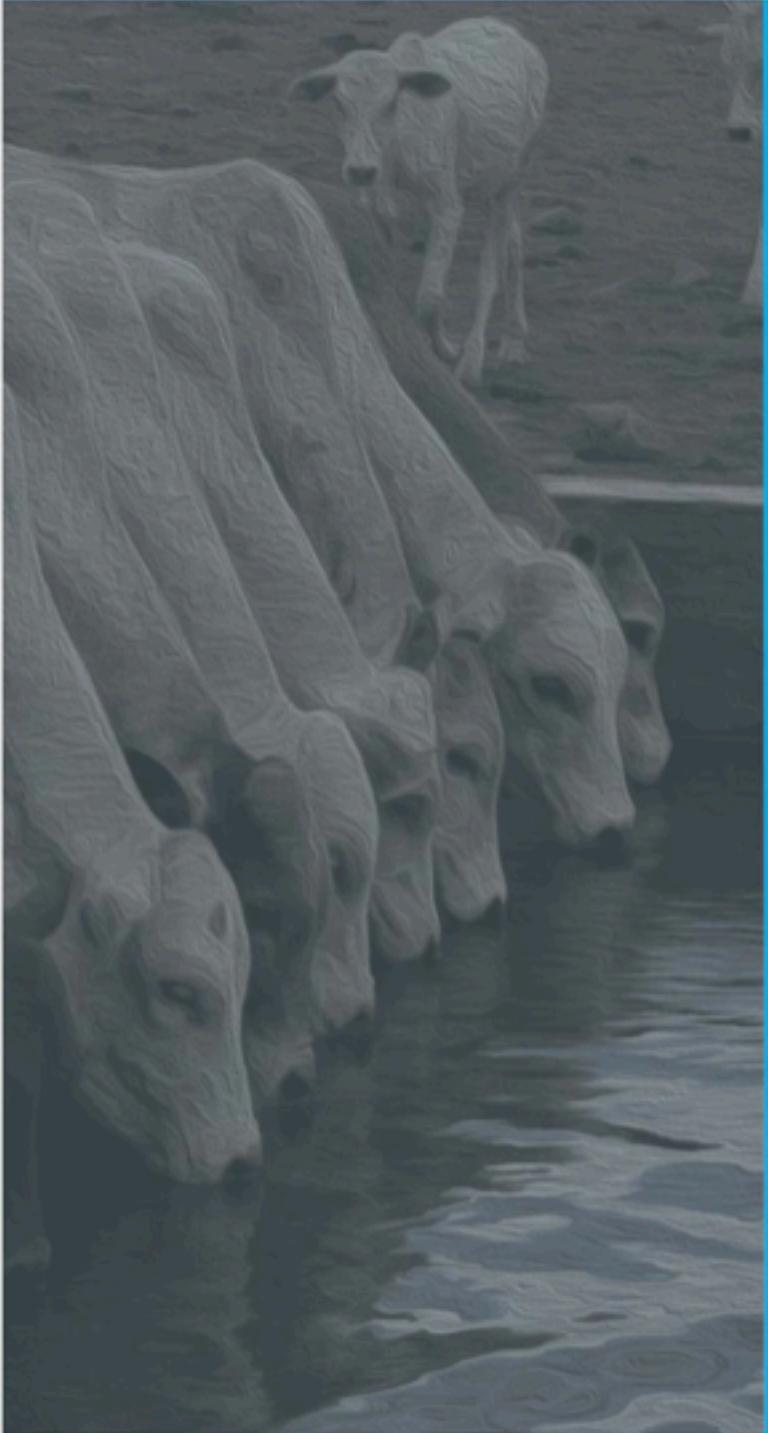
### What have we learned ?

- RM is a process, not a product
- A thorough risk assessment is required to establish “fact over perceptions”
- Focus on causes leads to sustainable solutions, addressing “symptoms” is a less than optimal strategy
- Understanding of the impact pathway of different interventions is important.
- There is role and relevance of all interventions, however, some interventions, depending on specific context, are more important than others.

ARMT's Approach : Risk management is a process, not a one-time intervention



***Expected impacts:*** Reduced volatility, improved stability of agricultural system and incomes; and increased resilience.



# ASRA TRAINING MODULES

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**WORLD BANK GROUP**  
Agriculture

## Where to Find the Training Modules



The screenshot shows the FARM D website. At the top, there is a navigation bar with links for Home, FARM D, Ag-Risk Management, Resources, Risk Assessment, Resilient Supply Chains Dialogue, and Contact Us. A search bar and a 'JOIN FARM D' button are also present. An arrow labeled '1.' points to the 'Resources' link in the navigation bar. On the left, there is a sidebar titled 'Resources' with links for News & Features, Featured Topics, Events, Training Materials, FARM D Library, FARM D Webinars, Practitioner Directory, and Practitioners in Action. Another arrow labeled '2.' points to the 'Practitioner Directory' link in the sidebar. The main content area features a banner for a 'Technical Training Program "Agriculture Sector Risk Assessment"' with a 'Click to Register' button. Below the banner, there is text about the program, a small image of a presentation slide, and a section for 'Target Audience'.

**1.**

**2.**

**Technical Training Program "Agriculture Sector Risk Assessment"**

> Upcoming Webinar: Technical Training Program "Agriculture Sector Risk Assessment" by the World Bank

When: On November 8th, 2015 from 9:00 am EDT to 10:00 am EDT (Convert to your time zone here).

Presentation: by Åsa Giertz, Agricultural Specialist with the World Bank's Agricultural Risk Management Team

The World Bank, through its Agricultural Risk Management Team, has developed a methodology for assessing risk and subsequently conducted risk assessments in nearly 20 countries. The World Bank has synthesized its experience and developed a technical training program on agricultural sector risk assessment to allow practitioners around the world apply this methodology and integrate it in general agricultural policy work. The program was originally introduced as a two-day training in Johannesburg, South Africa, in May 2015.

The program includes core principles for assessing agricultural risks, as well as current state-of-the-art practices in risk assessment and management. The hope is that development practitioners will acquire the skillset to better analyze the agricultural sector, the tools for qualitative and quantitative assessment and for prioritizing mechanisms, and the ability to understand and manage risk more systematically and strategically.

**Target Audience:**

This technical training is geared towards policy makers and development practitioners who are involved in designing and implementing agricultural programs and policies. In particular, technical staff from Ministries of Agriculture, Livestock, and Fisheries or Ministry of Finance and Economic Planning who are engaged in agricultural policy, planning, management, and monitoring might specially benefit from this training.

<https://www.agriskmanagementforum.org/content/training-module-agriculture-sector-risk-assessment>

## Module 1: Conceptual Framework and Operational Approach

- Discusses why conducting agricultural risk assessments is important
- Introduces terminology and concepts
- Provides an overview of the ASRA process and operational approach



## Modules 2-9: Where in the process?



## Module 2: Understanding the Context and Background Research

### Why the context analysis and background research?

- This desk research allows the team to arrive in the field for interviews with stakeholders, fully prepared and with a **preliminary assessment of risks** as well as ready to test some of the working hypotheses regarding the underlying causes of risks and the potential solutions.
- The process of risk assessment starts with this preparatory phase during which **background information is gathered and analyzed**.
- The objective of the preparatory work is to collect preliminary information, get a basic understanding of the agricultural sector, perform simple analysis, and develop initial hypotheses about the key risks and their impacts.

### In this module you will learn to:

- Define the scope of the agriculture sector risk assessment
- Understand economic, agricultural and institutional context
- Conduct background research
- Develop preliminary hypotheses

## Module 3: Data Analysis

### Why do we analyze data and trends?

- Volatilities imply risks for countries and stakeholders in that they create uncertainty
- Provide an overview of what major risks are (production, marketing, enabling environment)
- Give an understanding of how frequent the risks are
- Show the scope of the major risks

### In this module, you will learn to:

- Decide what data to you want to include in your risk assessment
- Analyze data and understand trends Identify underlying causes of volatility

## Module 4: Quantification

### Why do we quantify risks?

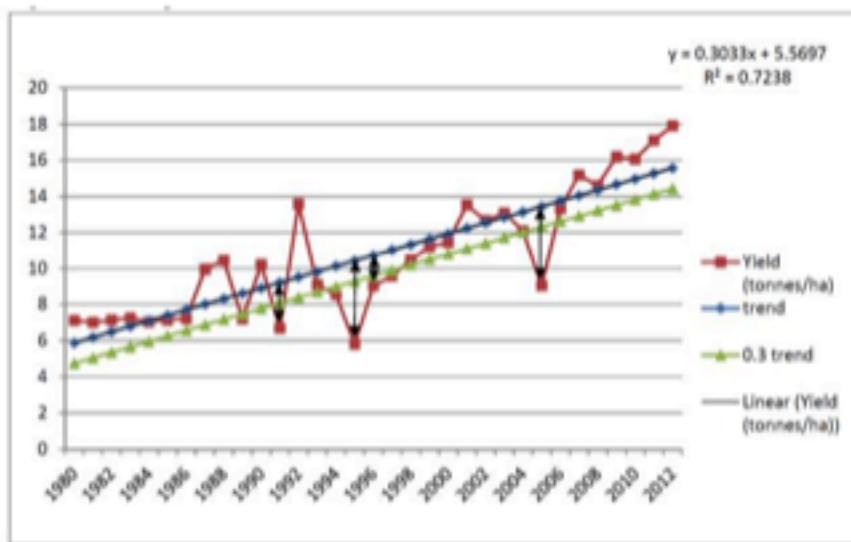
- To have an order of magnitude of the indicative losses in terms of Agriculture GDP.
- To be able to compare or rank the risks in order to facilitate the risk prioritization process
- To justify investing in risk management solutions to reduce the impact of external shocks.
- The findings of these estimations are very useful for fact-finding about the magnitude, causes, affected stakeholders, and their capacity to manage. Completing this estimations before hand makes the field work much more efficient and also useful for stakeholders when presented for discussions.

### In this module you will learn to:

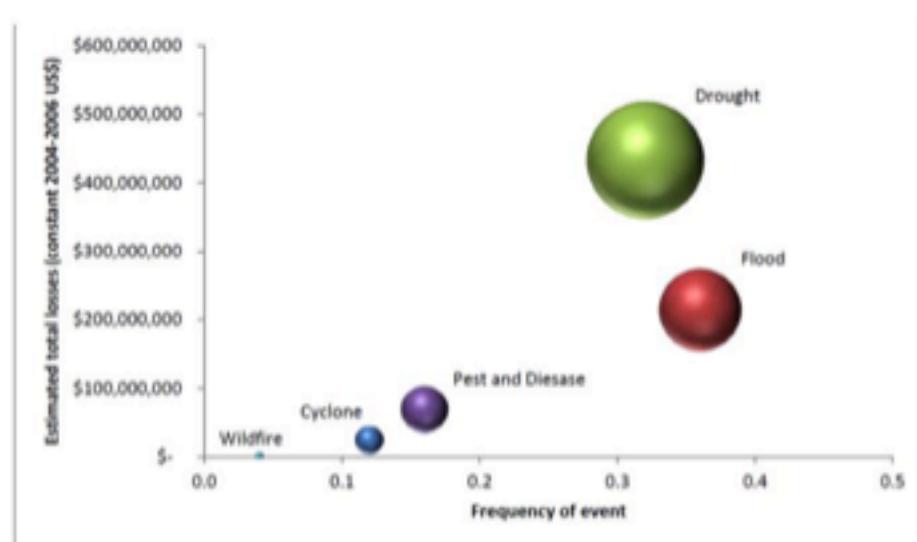
- How to quantify losses through step-by-step methodology
- How to present results
- How to assess price volatility for (i) domestic crops, and (ii) export crops

## Module 4: Quantification *Examples*

**Estimating production losses**



**Visualizing risks**



## Module 5: Field Assessment

### Why do we conduct a field assessment?

- To corroborate the preliminary findings and hypotheses of the desk assessment
- To refine the risk narrative

### In this module you will learn to:

- Assemble a team to conduct the risk assessment
- Plan a field assessment
- Conduct stakeholder consultations

## Module 6: Qualitative Assessment

### Why do we assess risks qualitatively?

- To assess all risks or 'complete' assessments, particularly when there is:
  - Poor quality or incomplete data
  - Difficulty in delineating causality and attribution of losses
- Most typically used to assess impact of market and enabling environment risk

### In this module you will learn to:

- Apply qualitative methods for risk assessment
- How to illustrate qualitative methods

## Module 7:Prioritizing Risk

### Why prioritize risks?

- We prioritize risks in order to better target policies and to optimize the use of resources to minimize the impacts of risks on the sector. This is because:
- Prioritizing risks helps us understand what risks have the biggest impacts on the sector
- It gives us an understanding of where in the sector, supply chain, or geographically most risks occur

### In this module you will learn to:

- Use prioritization filters
- Determine probability of event
- Determine severity of impact
- Assess relative importance of commodity risk
- Develop prioritization matrix

**Module 7:Prioritizing Risk**  
**Example of risk prioritization matrix**

<b>Impact</b>	<b>Low</b>	<b>Moderate</b>	<b>High</b>	<b>Critical</b>
<b>Likelihood</b>				
<b>Highly Probable (1 in 3)</b>	Hail Storms Damage from wild animals	False start of, or shorter than normal, rainy season. Extended dry-spells Higher than average temperatures Pests and diseases	Unpredictable export regulation	
<b>Probable (1 in 5)</b>	Theft of crops Floods		Unpredictable maize market interventions causing price volatilities in the maize market (recent)	
<b>Occasional (1 in 10)</b>			National scale droughts	
<b>Remote (1 in 20)</b>				

## Module 8:Vulnerability Assessment

### **Why do we assess vulnerability in the risk assessments?**

- Adds an additional filter when analyzing volatility and losses
- Helps link risks to other development objectives for better policy
- Helps identify most effective risk management measures

### **In this module you will learn:**

- How vulnerability is defined in the context of agriculture risk
- About the tools available to assess vulnerability
- How to synthesize and illustrate assessment of vulnerability
- How to apply vulnerability assessment to risk prioritization and policy design exercises

## Module 9: Incorporating Climate Change

### Why do we incorporate climate change in the ASRA?

- We want to align weather risk solutions to climate change solutions and avoid maladaptation to climate change
- We want to make sure that larger investments that are made to address identified risks will be relevant also in the agro-climatic conditions that will be in place in a few decades
- We want to understand if there is scope for climate smart agriculture as an agricultural risk management tool

### In this module you will learn how to:

- Understand linkages between climate change impacts and agricultural weather risk
- Incorporate climate change considerations into the risk management framework
- Challenges ahead

**Module 10: Moving on in the process!**



## Module 10: Risk Management Solutions

**In this module you will learn how to:**

- Understand risk management measures and their intended outcomes
- Identify risk management strategies and intervention areas
- Filter risk management solutions
- Conduct a Solutions Assessment
- Develop a RM Strategy and Action Plan

## Module 11: The remaining steps in the process



## Why mainstream agricultural risk management?

- Minimize impacts of risks -> avoid the losses in the first place
- Improve stakeholders' ability to bounce back after shock (i.e. break poverty traps and cycle of shock-recovery-shock)
- Establish systems for risk response instead of risk reaction
- Effective risk management is often win-win or even triple-win for the sector!

### In this module you will learn about:

- Operational considerations for risk management action plans
- Consider entry points for mainstreaming risk management
- Guiding principles for M&E
- Experience from countries



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WEBINAR SERIES

Q&A

By Åsa Giertz, Agricultural Specialist, World Bank's Agricultural Risk Management Team



Washington DC, United States, November 6<sup>th</sup>, 2015