

## Breakout 3: Risk Management: Pricing, Insurance, Guarantees

---

### *“The Use of Price and Weather Risk Management Instruments with Examples from Tanzania and Morocco”*

#### **Authors**

Erin Bryla, Julie Dana, Ulrich Hess, Panos Varangis (all-World Bank)

#### **Summary and Key Findings**

This paper looks at innovative ways to deal with both price and yield risk in order to give small land holders greater access to finance. It includes case studies from Tanzania and Morocco. Innovations like market-based price risk management and index-based yield insurance can be used to improve the ability of financial institutions to offer their services to agricultural producers.

---

### *“Agricultural Insurance in Latin America: Where Are We?”*

#### **Authors**

Mark Wenner and Diego Arias (all-Inter American Development Bank)

#### **Summary and Key Findings**

This paper reviews the weaknesses of traditional crop insurance programs and highlights new developments in Latin America that hold promise of making agricultural insurance more accessible, more efficient, and more sustainable. In the last 12-15 years, new insurance products have emerged, such as area yield and weather index insurance products, which appear to be more cost effective and eliminate moral hazard issues. The principal lesson learned from the experience of developed countries is, not to replicate the expensive program of the past, but to use available knowledge and expertise to design and implement insurance programs that avoid the classic obstacles to an efficient delivery of agricultural insurance.

---

### *“USAID’s Development Credit Authority: Guarantees for Rural Financing”*

#### **Authors**

John Wasielewski and Stavely Lord (all-USAID/DCA)

#### **Summary and Key Findings**

The paper provides an overview of USAID’s Development Credit Authority (DCA), a guarantee mechanism intended to mobilize local capital in rural areas. Under the program, development credit can be applied to a specific project or set of projects through four different credit guarantees: loan guarantees, loan portfolio guarantees, portable loan guarantees and bond guarantees. The DCA enables banks to overcome traditional reliance on excessively collateralized loans and other market imperfections that impede lending into creditworthy sectors. For every dollar a Mission devotes to a DCA guarantee, financial institutions can offer an average of \$35 in private-sector loans. Program challenges include limited knowledge and understanding of the program; need for more coordination and participation from Missions and banks during the development stages of the guarantee; and a need for improved monitoring, information collection and on-going communication at Mission and local bank levels.

---

**Breakout #3**  
Risk Management: Pricing, Insurance, Guarantees

Moderator: Lawrence Johnson  
Case Studies: The Use of Price and Weather Risk Management Instruments  
Presented by: Erin Bryla (World Bank)  
Mark Wenner (IDB)  
John Wanlowski (USAID) in place of Stavely Lord

*Session Notes (taken by Arthur Queenan):*

**Lawrence Johnson** introduced the presenters and outlined the increasingly important place Risk Management plays in international development.

**Erin Bryla** (World Bank):

World Bank has been involved with two risk products:

1. Price risk instruments – (discussed by Erin Bryla)
  2. Weather risk instruments – (discussed by Ulrich Hess)
- The impact of price risks: (1) limit the farmer's ability to plan; and (2) may encourage the farmer to misallocate resources.
  - The perspective of the World Bank Group has been that institutional banks / investors have avoided offering these products to the poor, primarily for two reasons:
    3. Credit Size – is small and therefore limits its attractiveness; and
    4. Unawareness of the International Market – on behalf of the farmer limits their ability to enter the risk management market.
  - The World Bank is involved with three pilot projects in:
    5. Tanzania – largest pilot because 20% of export is coffee
    6. Nicaragua
    7. Uganda

In Tanzania, if prices drop, the Coop will absorb the losses. World Bank worked to set a minimum price for the coop.

**Ulrich Hess** (World Bank):

Discussed weather risk instruments.

- Traditional crop insurance represents a prohibitively high cost.
- Weather risk instruments compares a measurable, objective and correlated risk.

- In Nigaragua, farmers are compensated for each millimeter below established average rainfall, resembling a put option.
- In Morroco, there is a particularly strong correlation between grain output and rainfall. Morroco's GDP is 17% agriculture based. Historically, government has been relied upon to bail out farmers during droughts. The government has worked with only one state bank - CNCA - and will not take risks with small farmers.

**Mark Wenner** (Inter America Bank):

Discussed farmer risk management.

- Traditionally, Latin American farmers have managed risk via: crop diversification. Crop insurance products are limited in developing countries to rain / hail insurance.
- The percent of crops covered by insurance is: 46% in US, 55% in Canada, and 8% in Mexico. Part of the problem lies in the fact that some government involvement can make it difficult for private, innovative companies to enter the market.
- IDB has begun to establish technical cooperative studies and explore weather based products. One such project involves an irrigation district in Mexico.

**Diego Arias** (consultant with Inter America Bank):

- In Mexico, the CAN allocates water across irrigation districts which causes uncertainty and risk for the farmers. IDB has been involved structuring a guarantee on water rights.
- In 1988, the Irrigation Management Transfer (IMT) project was taken over by the Water User Association (WUA).
- IDB is currently researching the issues / questions: (1) what a farmer will pay; (2) will banks underwrite the guarantees; and (3) the fact that the CNA currently controls the reservoirs.
- Rainfall insurance contracts could be purchased by the Water Authorities, in order to provide financial retribution if the WUA's guaranteed water rights were not honored.

**John Wasielewski** (USAID):

- Discussed how USAID approach has worked through credit authorities to guarantee credit worthy loans that include training and technical assistance.
- Officers in the field have been involved with issuing bonds.
- Emphasis has been to grow an opportunity with minimum investment.

## **QUESTIONS / ANSWERS:**

1. USAID – how have farmers managed risk in the absence of market products?

Answer – farmers have over diversified their crop and need to better manage risk. Giving choices to the people is the key. Also, some farmers give “gifts” in lieu of payments for as high as 18% of their crop, this is clearly too high.

2. WORLD BANK – how is banks helping resource allocation?

Answer - Morocco has used tariffs to keep the price of wheat high. It was also pointed out that weather risk insurance covers all crops, not just wheat.

3. OHIO STATE UNIVERSITY – what are the costs of different risk management strategies?

Answer – no robust instrument, but index insurance offers a more viable solution. IDB has been in the process of talking with farmers to learn what it would take to get them to participate.

Comment by Jerry Skees – it is vital to link micro-lending & insurance; risk insurance is not a panacea, rather it is just one tool.