

# Using NGOs to Advance Microinsurance for Weather Risks Among the Rural Poor

4<sup>th</sup> International Microinsurance Conference  
Cartagena, Colombia November 2008

Anne Goes Murphy



# Index Insurance for the Rural Poor

---

- ▶ Index insurance for weather risks is gaining interest as a cost-effective approach to agricultural insurance in lower income countries
- ▶ A major advantage of index insurance can be quick payments of cash to mitigate the crisis as it develops
- ▶ To date 25+ index insurance projects for have been tested around the world
- ▶ Introducing insurance and banking services can enable rural poor to improve resilience to risks
- ▶ There is value to these products but developing new insurance markets for the rural poor is still a challenge

# Examples of Index Insurance

---

- ▶ Mexico- Drought Insurance
  - ▶ FONDEN (natural disaster fund)- index insurance for drought
  - ▶ Agroasemex- public reinsurance program
- ▶ Mongolia- Index-based Livestock Insurance
  - ▶ Sold to herders by local insurance agents from 4 companies
- ▶ India- Rainfall Insurance
  - ▶ Insurance sold to farmers through BASIX (MFI), underwritten by ICICI (insurer)
- ▶ Malawi- Drought Insurance
  - ▶ Index insurance covers loan to buy certified seed
  - ▶ Banks receive indemnity payments to cover the loan

# Constraints to Using Weather Index Insurance as Microinsurance

---

- ▶ Many index insurance products have been crop specific
  - ▶ Difficult to design and complex
  - ▶ Exclude many sources of household (HH) income
  - ▶ Exclude the landless poor
- ▶ Cognitive Failure (low demand for insurance against catastrophic risk)
- ▶ Basis Risk with index-based products—indemnities may not provide complete coverage for loss
- ▶ Delivery Costs—challenge in providing affordable insurance to the rural poor: tradeoff between accessibility and transaction costs

# Overcoming Constraints

---

- ▶ New Product Designs & Delivery Channels are needed that:
  - ▶ Address the needs and livelihood strategies of the rural poor
  - ▶ Account for the broad economic affects of catastrophic weather
  - ▶ Complement broader risk management strategies
  - ▶ Lower transaction costs
  - ▶ Convey greater value to rural HHs

# Natural Disasters and the Rural Poor

---

- ▶ Natural disasters (e.g., drought and flood) devastate poor communities
  - ▶ Natural disaster risk is spatially correlated
  - ▶ Rural areas are disproportionately affected because they tend to be dependent on agriculture
  - ▶ Entire communities can suffer when there is major crop failure and food prices increase
  - ▶ Poor HHs experience longer-term effects than more prosperous HHs
- ▶ Farming, livestock, off-farm labor, selling crafts, etc.
- ▶ Disasters affect HH livelihood portfolios and communities
  - ▶ Rural HHs diversify across a portfolio of livelihood strategies
  - ▶ In rural areas many livelihood strategies are directly or indirectly related to agriculture
  - ▶ Informal risk-sharing relationships tend to break down when everyone is affected

# HH Consequences of Catastrophic Risk

---

- ▶ Catastrophic weather disrupts livelihoods (*ex post* impacts)
  - ▶ Crops
  - ▶ Livestock
  - ▶ Off-farm income (e.g., working on another farm, etc.)
  - ▶ Local food costs may increase
- ▶ Risk of catastrophic weather (*ex ante* impacts)
  - ▶ Low-risk, low-return livelihood strategies
  - ▶ Reduced investment
    - ▶ Durable productive assets
    - ▶ Less fertilizer use
    - ▶ Failure to adopt new technology
    - ▶ Less likely to use enhanced seed varieties

# Responses to Shocks

---

- ▶ Responses of HHs to shocks push them into poverty
  - ▶ Smooth consumption → Sell assets
    - ▶ Sell livestock, land, housing
    - ▶ Results in limited opportunities for enterprise growth
    - ▶ May push below critical threshold leading to poverty trap
  - ▶ Smooth assets → Lower consumption
    - ▶ Reduce spending on food, health care, school fees
    - ▶ Long-term health and developmental consequences
    - ▶ Limits future opportunities to escape poverty



# Informal Risk Management

---

- ▶ Informal risk management tools
  - ▶ Reciprocity relationships within family or community
  - ▶ Semi-formal microfinance
- ▶ Poorest of the poor may be left out of these agreements
- ▶ Social norms may limit these tools
- ▶ Tradeoff for risk management partner:

## Geographically Close Partner

↓ asymmetric information

↓ transaction costs

↑ covariate risks

VS.

## Geographically Separate Partner

↑ asymmetric information

↑ transaction costs

↓ covariate risks

# Product Concept: Livelihoods Index Insurance for Weather Risk

---

- ▶ Rural areas are vulnerable to catastrophic risk in many ways
  - ▶ Both on- and off-farm labor can be affected
  - ▶ Infrastructure damage can disrupt access to jobs, markets
  - ▶ Rural incomes often come from a variety of sources
- ▶ Insuring the overall "livelihood" rather than a single crop yield could have more value to more HHs
- ▶ Similar to business interruption insurance (our experience is that regulators are open to presenting index insurance as a form of business interruption insurance)

# Livelihoods Insurance

---

- ▶ E.g.: HH purchases insurance for a level of liability that pays whenever the insured CAT weather risk occurs
- ▶ Over-insuring is unlikely to be a problem—experience has shown that HHs are more likely to underinsure
- ▶ Benefits over index insurance for a specific crop
  - ▶ Inclusive of HHs with diverse income sources
  - ▶ More inclusive of the landless poor
  - ▶ Straightforward, simple contract structure
  - ▶ Gives HHs more flexibility to adjust production strategies to changing conditions

# Improving Delivery of Microinsurance

---

NGOs could play a significant role in advancing "Livelihoods Insurance"

- ▶ The goal of many NGOs is to support rural livelihoods
- ▶ Lots of interest among donors and NGOs about risk management and adaptation for climate change
- ▶ Linking weather insurance to mitigation and adaptation strategies can help HHs manage climate risk more effectively
  - ▶ Insurance is not a solution to climate change
  - ▶ Insurance can protect against weather extremes, but producers must adapt production strategies to changing climate trends

# Advantages of NGO Linkages

---

Combining insurance with adaptation strategies can reduce risk exposure and protect livelihoods against severe events

- ▶ Complements NGO activities in risk mitigation and rural livelihoods
- ▶ Provide mutual insurance for community groups
- ▶ Can link to other services/benefits
- ▶ Encourage risk management *and* appropriate adaptation
- ▶ Smooth HH income following a disaster
- ▶ Targeted, timely payments
- ▶ Build on existing network for education and access

# Delivery Structures

---

Existing models of NGO linkages:

- ▶ NGO as an intermediary delivery system
- ▶ NGO as the beneficiary for contingent financing for disaster relief

New model could provide direct, targeted benefit to HHs

- ▶ NGO co-finances or purchases an insurance contract on behalf of clients or a community group creating an informal mutual insurance association
  - ▶ Semi-formal risk sharing among clients could allocate indemnities to neediest households—mitigating basis risk problems
  - ▶ If individual losses are low, indemnities could also be used to invest in mitigation

# Practical Considerations

---

- ▶ Insurance laws and regulations dictate what delivery structures are possible in any given country
  - ▶ Each jurisdiction is different
  - ▶ Any legal entity should be able to purchase an insurance contract (NGO, cooperatives)
  - ▶ The purchaser must demonstrate an insurable interest
- ▶ Sustainability of NGO commitment to support product delivery or co-financing

# Conclusions

---

- ▶ NGOs may be in good position to facilitate the use of index insurance for catastrophic events that impact a wide-range of livelihoods
- ▶ Index insurance can be used to protect programs of NGOs that are targeted toward improving the livelihoods of the rural poor
- ▶ Index insurance can be linked to climate adaptation strategies that are being promoted by NGOs
- ▶ NGOs can demonstrate the value of index insurance in the short term by co-financing and this can help create sustainable markets for products like the livelihoods insurance