Community Barriers That Makes Insurance A Difficult Tool in Risk Reduction

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Overview

- Characteristics of Insurable Risk
  - Does Risk Exposures in Agriculture Meets Characteristics of Insurable Risks
  - Community Barriers
  - Possible Intervention
- Red Alerts
Insurable Risk

- Large exposure unit
- Accidental Loss
- Measurable Loss
- Determinable Loss
- Not Catastrophic
- Economically Feasible Premium
Large Number of Exposure Units

Law of large numbers
- Actual Loss = Probable Loss

Issues/Barriers
- Age, Education, Risk Perception, Farm Size
- Relief Dependence & Willingness to Pay
- Accessibility

Intervention
- Bottom-up Education
- Moving from Individual to Group Farming
- Product Innovation
Although 70.5% farmers suggested that crop insurance should be alternative to the government financial aid program, only a third claims that they have good understanding on crop insurance.

- Younger farmers are more likely to purchase crop insurance.
- Farm Size
Issues/Barriers

Acessibility
- Strengthening Distribution Channel – MFI, AgroBank, Post Office
- Product Innovation – 160 agricultural insurance products in China (Yanli, 2009)

Relief Dependence Willingness to Pay
- 58% of farmers relied on government support to come out of loss
- WTP RM27.38 per hectare per season for RM13,000 sum insured.
- 26% farmers are unwilling to pay for the bid amount given to them
- 76% of those unwilling to pay believed that government should subsidize the premium
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Loss Must Occur by Chance

Unit of Exposures are Randomly Selected

Issues/Barriers
- Moral Hazard
- Adverse Selection

Intervention
- Product Innovation – Multiple year cover
- Compulsory Participation
Moral Hazard

- Moral hazard exist in crop insurance (Goodwin & Smith, 2003, Bourgeon & Chambers 2013)
- Contracts with multiple years of cover mitigate moral hazard (Vercammen & Van Koofen, 1995)

Adverse Selection

- Not enough evidence to claim that adverse selection exists in crop insurance
- 1 study indicates farmers participate to take advantage of the subsidies
Unit of Exposures are Randomly Selected

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Loss Must Occur by Chance
Loss Must Be Measurable

Total Loss = Frequency x Severity
Pure Premium = Average Loss
Gross Premium = Pure Premium + Loading

Issues/Barriers
- Lack of Data

Intervention
- Comprehensive Data on Risk Factors
- Incentive for Group Farming
- Sharing of Data Among Insurers
Loss Must Be Determinable

Time, Place & Cause of Loss

Issues/Barriers
- Fair Assessment
- Lack of Trust

Intervention
- Comprehensive Database of Farmers
- Trained and Independent Loss Adjusters
- Index-Based Product
Issues/Barriers

Lack of Data for Underwriting
- Accurate database of farmers
- Different characteristics of infrastructure - farming practices
- Lack of historical yield data (Rao, 2010)

Actuarially Fair Premium/Fair Loss Assessment
- Lack of expertise
- Lack of historical data
- Farmers indicate lack of trust in loss assessment
Loss Must Be Determinable

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Loss exposure should be independent
Individual losses are not severe

Issues/Barriers
- Exposure to Climate Risk is Systemic Risk
- Losses are severe and farmers take time to recover

Intervention
- Promoting self-insurance at local level
- Spreading of Risk Across Countries/Regions
Issues/Barriers

High amount of loss
- Is government disaster relief program sustainable?
- Is disaster relief program comprehensive?

Speed of recovery
- Timeliness of aid
- Some farmers have not come out of loss
Loss Must Be Determinable

Time, Place & Cause of Loss

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Intervention
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Premium Must Be Economically Feasible

Affordable to Consumers and Profitable to Insurers

Issues/Barriers
- Low Income Farmers and Highly Dependence on Agriculture
- High Risk Leading to High Premium

Intervention
- Promoting Off-Farm Income
- Innovative Premium Collection
- Product Design
- Risk Management Strategies
- Lower Administrative Cost
• More than 50% of farmers are in the low income category
• Majority (52.5%) owned/leased less than 2 hectare paddy farm

• Systemic Risk
• The relatively high cost of insurance, have further made it more difficult to design, a workable crop insurance scheme (Rao, 2010)
Premium Must Be Economically Feasible

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Risk Management Techniques

- Risk Avoidance
- Risk Control
  - Loss Prevention
  - Loss Reduction
- Risk Financing
  - Risk Retention
  - Risk Transfer via Insurance
  - Alternative Risk Transfer
- Non-insurance Transfer
- Internal Risk Reduction
Red Alerts

- Insurance does not prevent the occurrence of losses
- Each country has unique experiences thus crop insurance implementation must be personalized
- Require Public-Private Partnership
Main reference


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