



Climate Risks and Insurance : The Case of Crop Insurance in Bangladesh

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Outline of Presentation

- ❧ **Climate Risk Assessment in Bangladesh**
- ❧ **Insurance as an Instrument of Adaptation to Climate Change Impacts (CCI)**
- ❧ **Adaptation-related Models & Products of Insurance Elsewhere and in Bangladesh**
- ❧ **Gaps and Challenges in Existing Models & Products**
- ❧ **The Research Project on Crop Insurance of the DoE, undertaken by NSU**

Climate Risk assessment in Bangladesh

- ∞ Immediate warning & ex-post disaster management is well developed in Bangladesh
- ∞ Vulnerabilities, **not risks**, have been addressed by several national & int'l assessments
- ∞ Risk is a combination of 2 factors:
 - **Probability of climate hazard x Impacts/Effects**
- ∞ Trends in natural hazards non-linear – so predicting the likelihood of future events is difficult
- ∞ Lack of data & capacity for ex-ante assessment of risks

Insurance as an Adaptation Instrument to CC

- ∞ **Most risks to natural resource-based sectors, on which livelihoods of the poor depend, emanate from climate change & variability**
- ∞ **Credit & savings services are inadequate when households are exposed to risks, that are beyond their means to cope with**
- ∞ **For floodplain countries like Bangladesh, structural measures are often found less effective; so, non-structural measures like insurance might prove better for adaptation of the poor & farmers**
- ∞ **Article 4.8 of the UNFCCC and 3.14 of the Kyoto Protocol has included insurance as a mechanism to address the risks from CC**
- ∞ **Bangladesh NAPA has included microinsurance as a priority project**

Adaptation-related Models of Insurance

∞ **Micro Insurance (MI)** for the non-farmer poor provide different types & products for Life, Health, Disability, Property, etc. to low-income HHs

∞ **Crop Insurance:** includes insurance of crops, cattle, fisheries, forestry, sericulture, etc

- **Individual approach:** based on individual plot or farm

- **Area Approach:** based on av loss in a homogenous area

 - **Weather Insurance:** a new model based on occurrence of a weather event rather than on actual losses in an area; variants are Rainfall/Drought Insurance

∞ **Weather Risk Market:** deals with catastrophic risks - Cat Bonds to pool large volume of covariate risks on global scale

MI Products under the MFI-NGOs in Bangladesh

Insurer	Products	targets	Since
BRAC	Life (term)	Members	1990
Grameen Bank	Life, loan	Members	early 1990s
ASA	Life (Endowm)	MC users	1993
Grameen Fisheries Foundation	Livestock (all risks)	Borrowers	late 1990s
Grameen Kalyan	Health	Members & family	
Gono Sasthya	Health	Suburban poor	
Padakhep	Life, Fire, Livestock (partial)	Members	
Ghasful	Life (Endowm)	Urban poor	1999

MI products under Commercial Insurers

Insurer	Type	Products	Targets	Since
Delta Life	Life (Endow)	Grameen & Gano Bima	Low-income Rual Poor Urban Poor	1988 1994
National Life	Life (Endow)	Jano	Rural/Urban Poor	1996
Homeland Life	Life (Endow)	Palli	Rural poor	1996
SBC (Govt) & others	Non-life	Personal Accidents	Urban poor	1977

Features of Commercial & Non-Commercial MI

- Ω **Extremely limited scale of MI under both commercial & non-commercial insurers - life/loan insurance focused, limited health MI growing under the NGOs**
- Ω **Policy amounts range bet \$100 to \$1000 only**
- Ω **MI products under commercial insurers targeted at low income group, not the poor**
- Ω **MI under MFI-NGOs - kind of Self-Insurance, which defeats the principle of wider risk-pooling**

Model and Status of CI in Bangladesh

- ❧ **CI started in 1981 on individual approach, by a Govt-owned insurer**
- ❧ **Farmers belonging to Cooperatives were insured - this went against the principle of wider risk pooling**
- ❧ **The premium rate was uniform, which encouraged adverse selection**
- ❧ **The scheme covered all perils & indemnity coverage was 80%**
- ❧ **CI was as an extremely losing concern – over 500% loss**
- ❧ **A New CI Project is under consideration , with**
 - **involving the public & private insurers**
 - **initially a sub-district is (Upazila) to pilot the project,**
 - **a CI Project Fund of Tk. 4 crores (US\$ 600,000) from public resources**
 - **covering all perils & crops of paddy, wheat, potato, jute & sugarcane**

Gaps and Challenges

- ∞ Existing loan/life insurance products do not cover property or asset losses from any kind of disaster
- ∞ CI is nowhere financially viable, without govt support
- ∞ Admn costs are heavy in MI or CI
- ∞ Lack of interests in CI among the NGOs & private insurers
- ∞ Problems of moral hazard & adverse selection
- ∞ Lack of data, funds, manpower & enabling environment
- ∞ There is no system of mutual insurance or reinsurance either in MI or CI
- ∞ Huge demand for MI not yet effective due to prevailing culture, lack of awareness & premium costs

Research Project on CI of the DoE/NSU

Ω Based on analysis of the factors behind success & failure of CI elsewhere & in Bangladesh, the project intends to focus on:

- How CI fits with community livelihoods & existing risk mgt strategies – demand side**
- How to involve the NGO & private insurers in the scheme**
- How to make CI financially & institutionally sustainable**
- Mobilization of national & int'l resources for cross-subsidization & reinsurance, and**
- Developing concrete strategies & guidelines for putting CI scheme on a sustainable track**

Proposed Methodology

- ∞ **Content analysis of secondary info on Bangladesh & elsewhere**
- ∞ **Primary data collection from**
 - **GOs, NGOs & private sector agents**
 - **3 project sites**
 - **Satkhira as a cyclone & flood-prone area**
 - **Rajshahi as a drought-prone area, &**
 - **Sunamganj as a flash-flood area**
- ∞ **A sample size of 450 farmers (150 each from 3 areas, with 50 from each category of big, medium & small farmers)**
- ∞ **Purposive sampling from 3 most vulnerable unions of the project areas**

Thank You