

INSURANCE EFFECTIVENESS: CLIMATE CHANGE ADAPTATION AND DISASTER RISK REDUCTION

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OUTLINE

- Important objectives to be met
 - DRR and CCA benefits
 - Evidence for effectiveness
 - Alternatives for insurance
- Preliminary results from case studies
- Conclusions

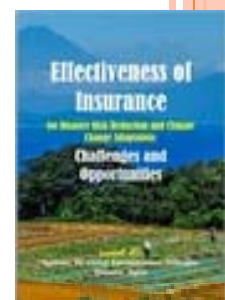
APN FUNDED PROJECT

- Title: Assessing community risk insurance initiatives and identifying enabling policy and institutional factors for maximizing climate change adaptation and disaster risk reduction benefits of risk insurance
- Donor: Asia Pacific Network for Global Change Research (APN) under ARCP funding stream.
- Collaborators: IGES, EeMausam India Ltd., IAfD, UKM-SEADPRI and UPLB
- Duration: 2.5 years starting from Jan 2014.

Please refer to <http://www.iges.or.jp/en/natural-resource/ad/riskspreading.html>

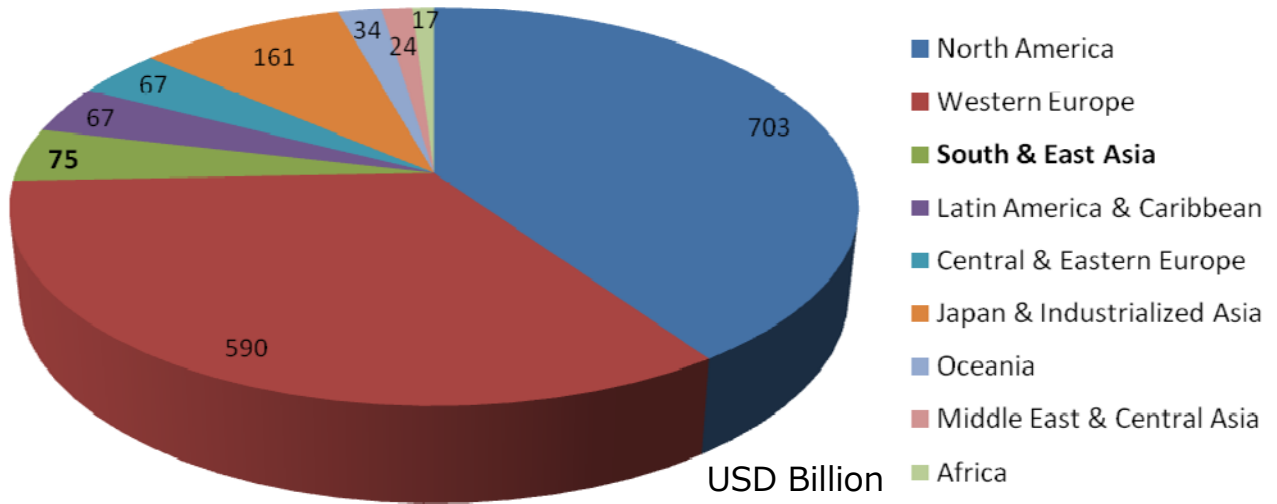
OBJECTIVES

- 1:** To identify technical, socio-economic, institutional and policy barriers limiting penetration of risk insurance
- 2:** To assess climate change adaptation and disaster risk reduction benefits and costs accrued through risk insurance initiatives
- 3:** To identify enabling environment to scale up risk insurance: What policy and institutional processes can help scaling up risk insurance
- 4:** To sensitize policy makers and other stakeholders about options for scaling up the risk insurance



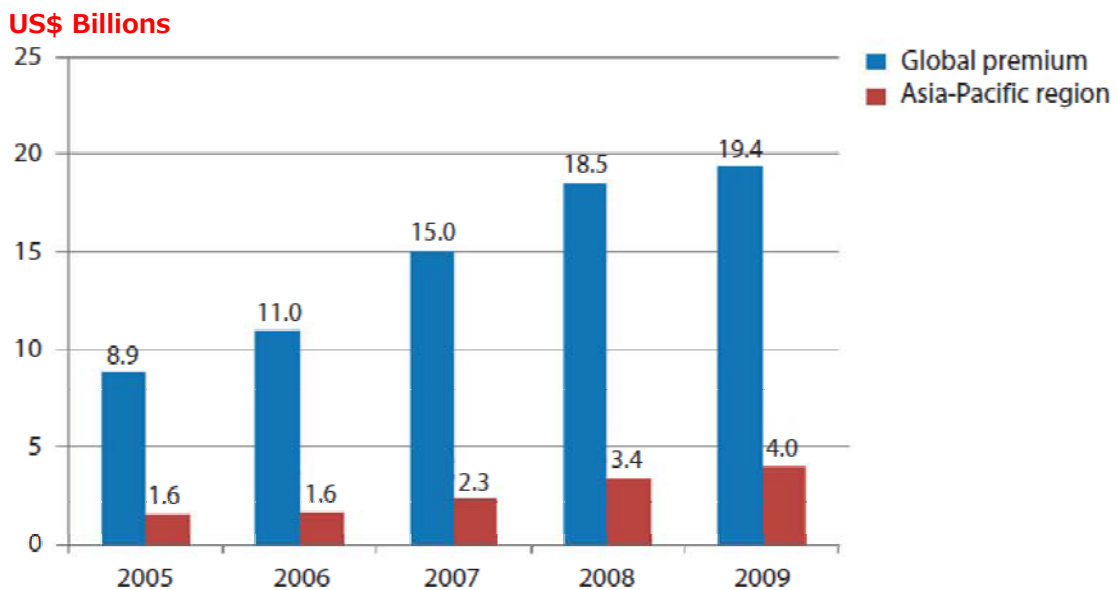
IS THE INSURANCE A GO-TO-TOOL FOR THE MOST VULNERABLE?

Non-life Insurance Premiums



Prabhakar et al., 2013

GROWTH IN AGRICULTURAL INSURANCE PREMIUMS 2005-2009



Source: Global Premiums Iturrioz, 2010

THREE IMPORTANT QUESTIONS FOR DEVELOPING COUNTRIES

- **Issue I:** Other than the 'perceived' **benefits of insurance**, what evidence do we have on how insurance is benefiting communities leading to a longer term DRR and CCA outcomes?
- **Issue II:** How to make insurance **affordable** while conveying the true cost of the risk and especially reaching out to the most vulnerable?
- **Issue III:** What alternative approaches exist for those last mile communities who cant get benefit from the insurance?

ADVANTAGES OF INSURANCE: DO WE HAVE ENOUGH EVIDENCE?

- Emphasis on risk mitigation compared to response
- Provides a cost-effective way of coping financial impacts
- Covers the residual risks uncovered by the other risk mitigation mechanisms.
- Stabilizes rural incomes: reduce the adverse effects on income fluctuation and socio-economic development.
- Provides opportunities for public-private partnerships.
- Reduced burden on government resources for post-disaster relief and reconstruction.
- Helps communities and individuals to quickly renew and restore the livelihood activity.
- Depending on the way the insurance is designed, the insurance mechanism can address a wide variety of risks emanating from climatic and non-climatic sources.

WHAT ABOUT EVIDENCE?

- Our literature review has suggested that there is no sufficient evidence on how insurance (especially agriculture insurance) is proving effective on the ground. What kind of social and economic benefits insurance is offering leading to **disaster risk reduction** and **climate change adaptation** outcomes?

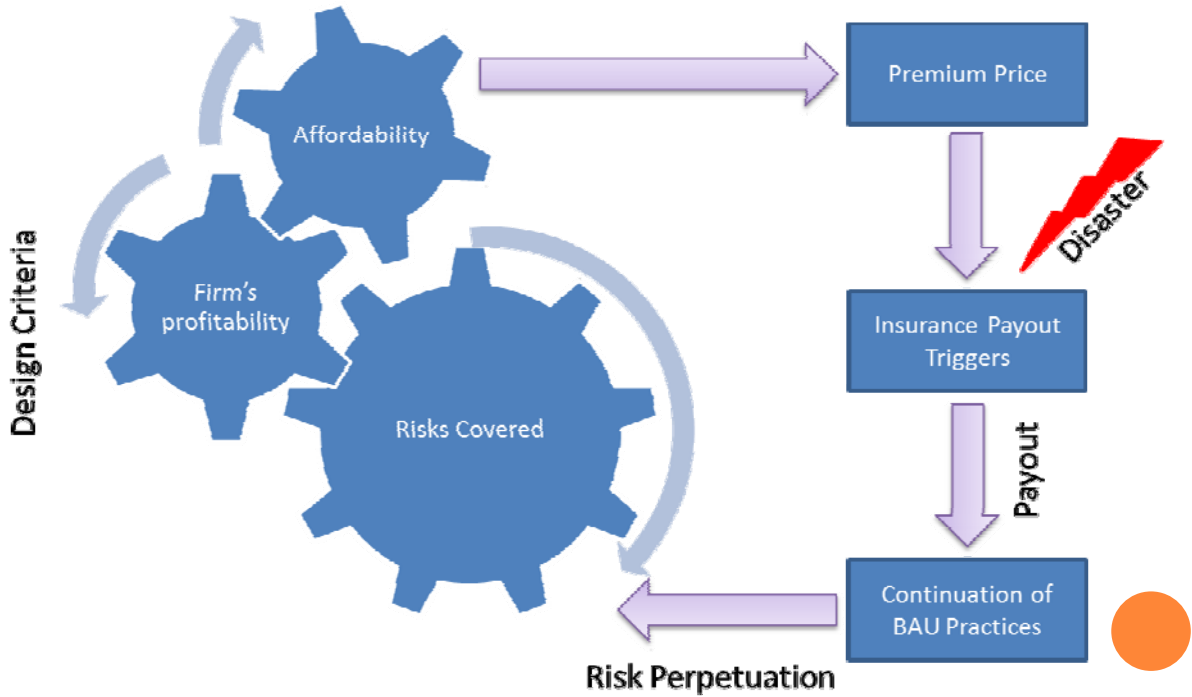


Will mere paying back of loss amount lead to CCA and DRR benefits?

- Promoting high risk and profit seeking behavior (with implications for basis risk)
- Indulgence in business as usual crop management practices, resulting in no net risk reduction.
- Subsidies for premiums do not convey the price-of-the-risk signal to farmers leading to no change in crop production practices and no net reduction in cost of risk.
- Most of these issues are often linked to not just how the insurance is designed but also what kind of support services (e.g. education on risk management) goes to the insurance buyers so that they make informed decisions.

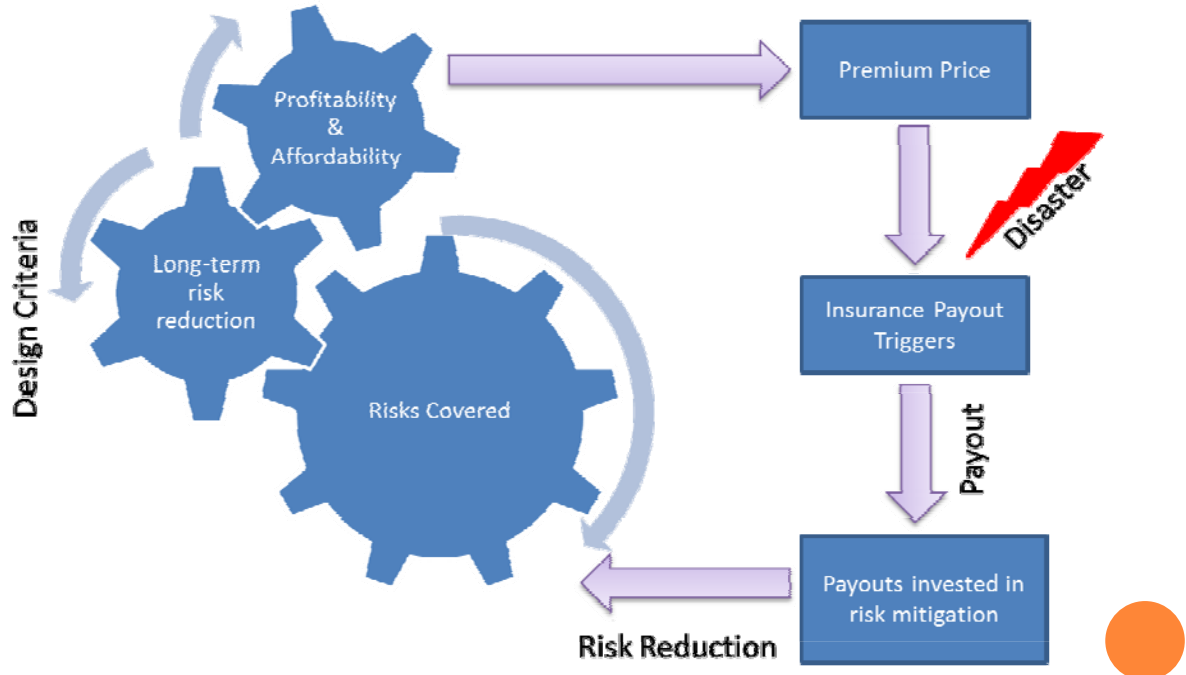


CYCLE OF RISK PERPETUATION



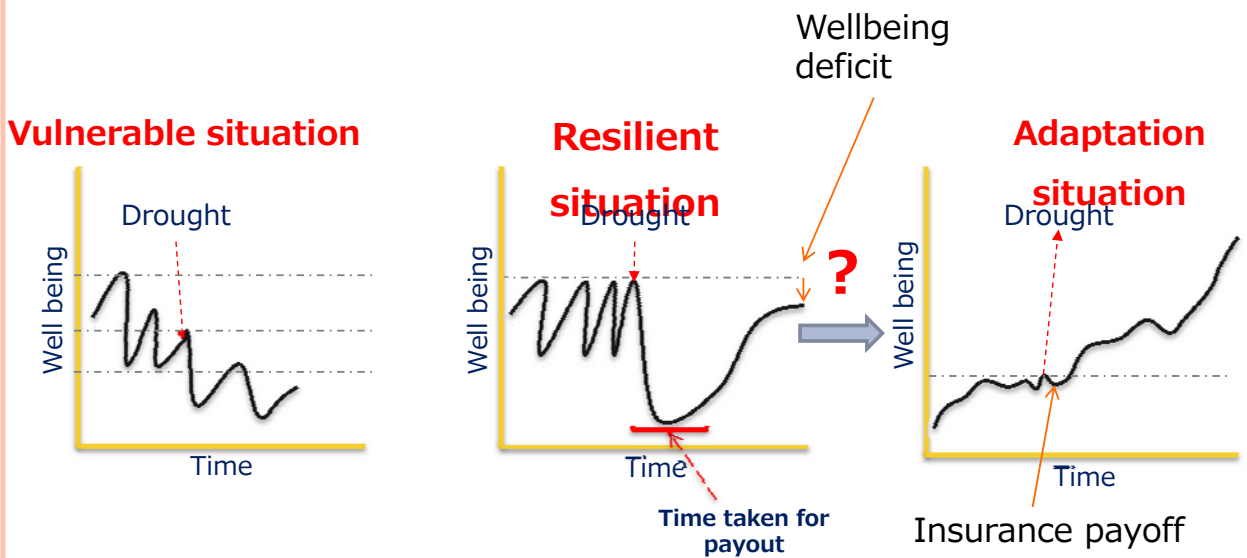
Prabhakar et al., 2015

SPIRAL OF RISK REDUCTION



Prabhakar et al., 2015

RESILIENCE OR ADAPTATION?



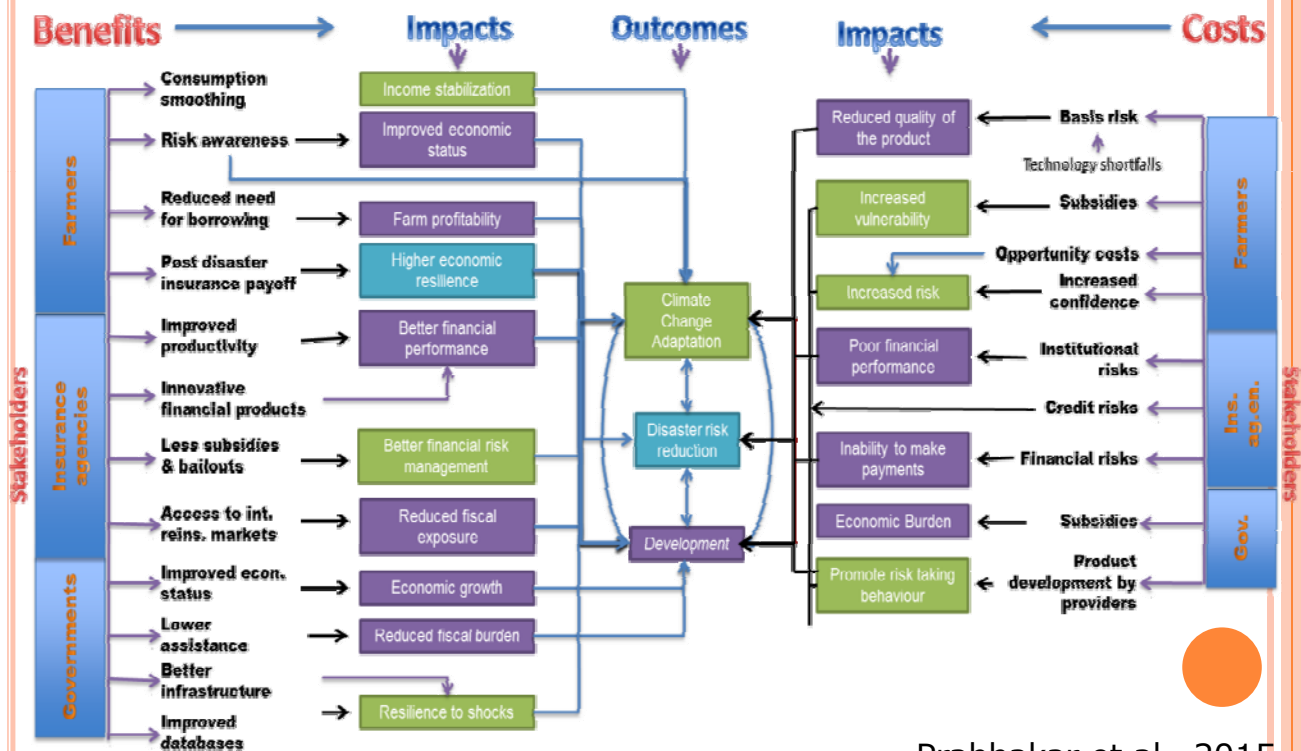
Prabhakar et al., 2015

IS THE INSURANCE STILL A GO-TO-TOOL FOR THE MOST VULNERABLE AND POOR?

- High insurance costs
- High residual risks
 - Urban areas: Poorly developed risk mitigation options such as structural standards, land use/urban planning etc.
 - Rural/agriculture: Only 35-40% of Indian agriculture is irrigated.
- Poorly developed re-insurance industry
- Poor availability of data to assess risks for designing risk insurance systems (e.g. weather data and data on crop loss)
- Willingness to pay: Cultural and perceptual issues with

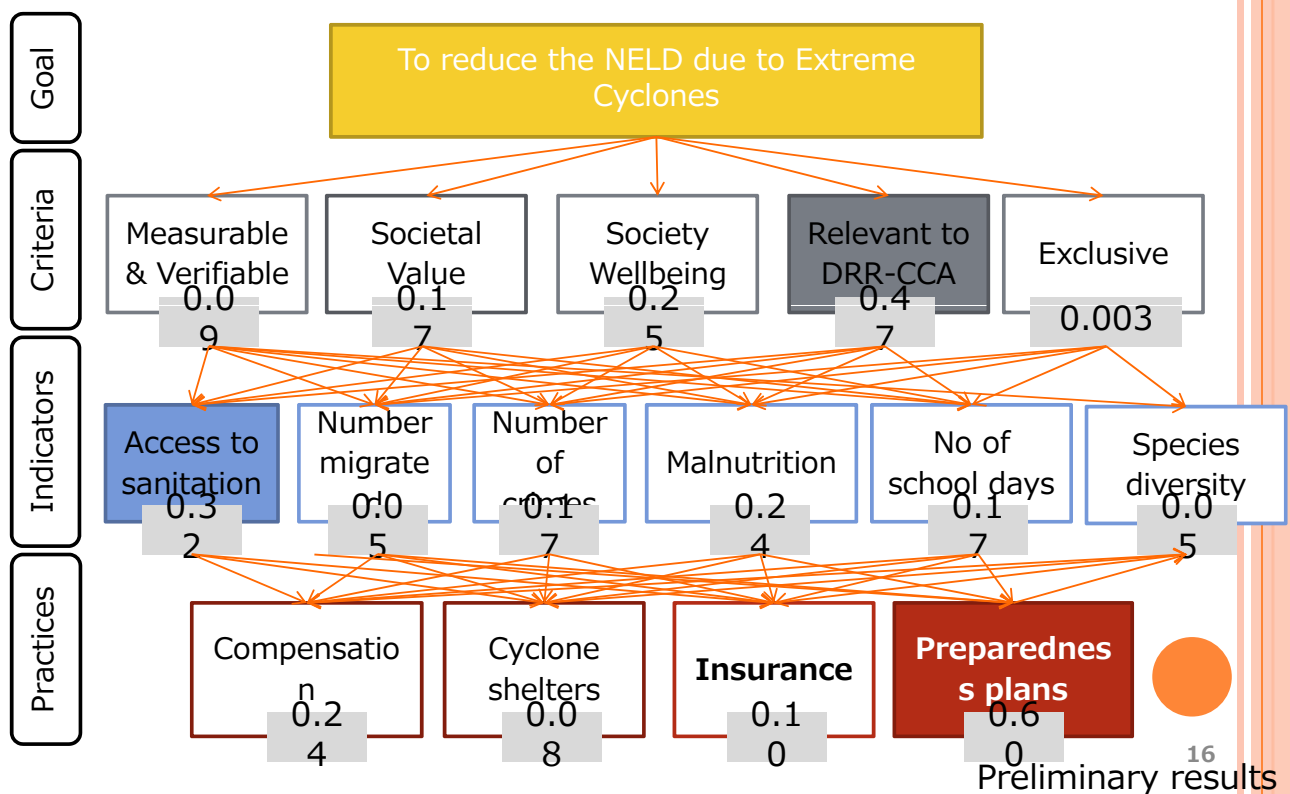
Given these limitations, should we still be thinking insurance as a go-to-tool for the most vulnerable? What are the alternative financial risk management approaches can we think?

COSTS AND BENEFITS OF INSURANCE



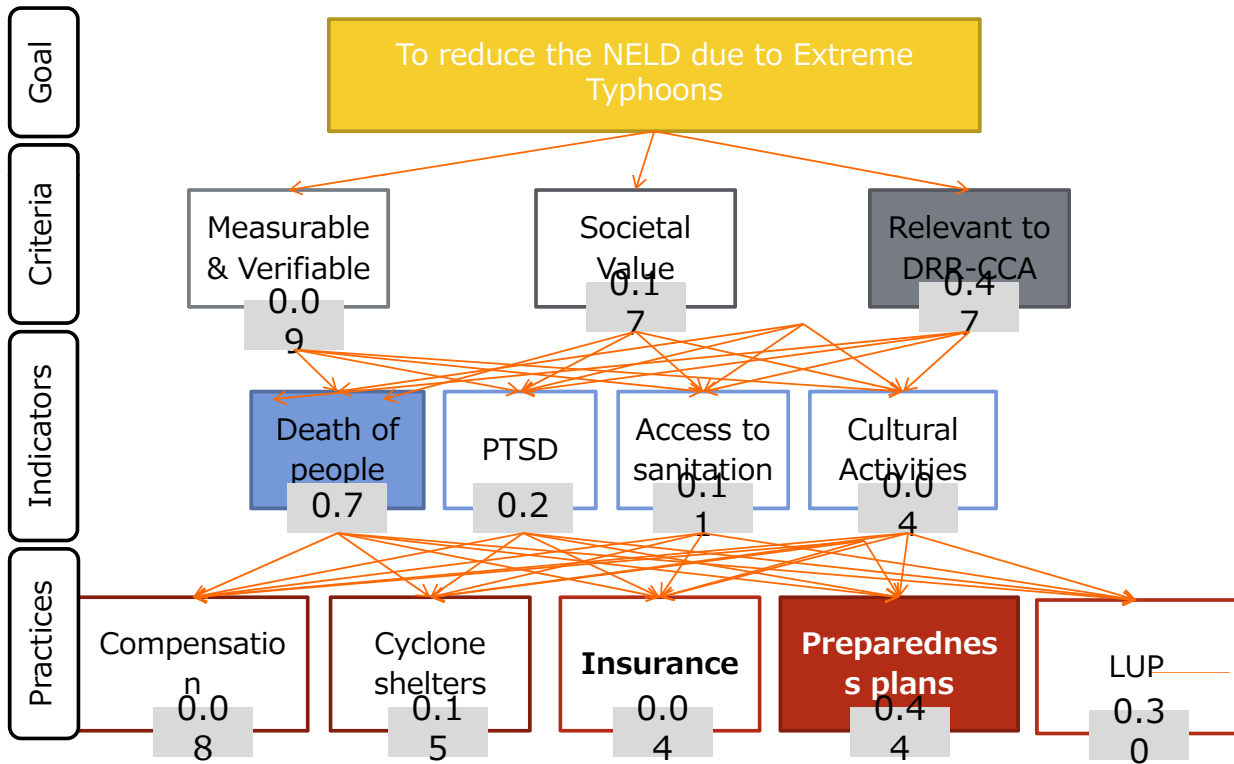
Prabhakar et al., 2015

HOW EFFECTIVE INSURANCE IS FOR LOSS AND DAMAGE: BANGLADESH



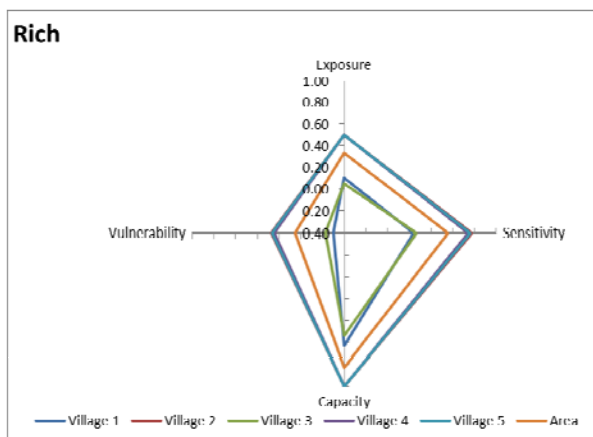
16 Preliminary results

HOW EFFECTIVE INSURANCE IS FOR LOSS AND DAMAGE: JAPAN

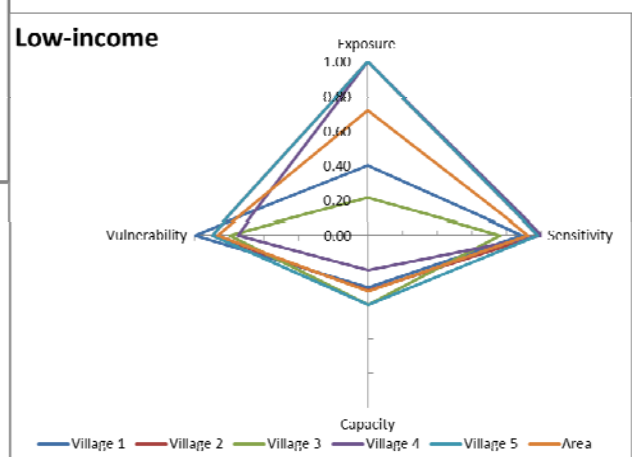


MALAYSIA CASE STUDY: VULNERABILITY ASSESSMENT

Rich farmers

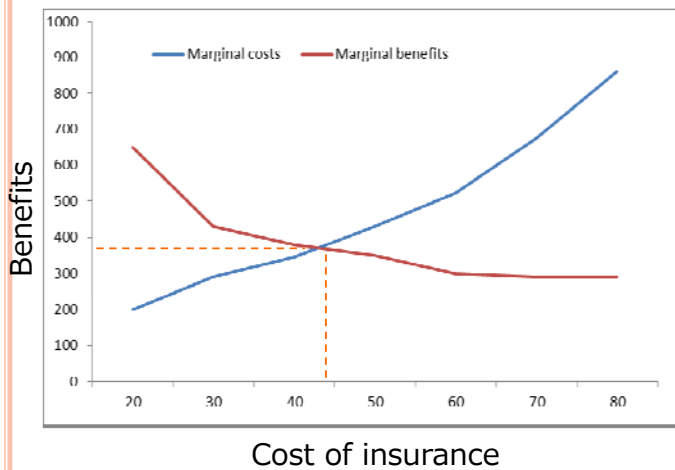


Low-income farmers



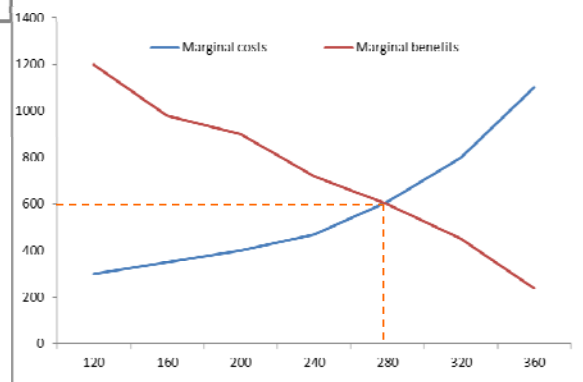
Based on author's unpublished preliminary results

MALAYSIA CASE STUDY: MARGINAL COSTS AND MARGINAL BENEFIT OF INSURANCE FOR RICH AND POOR FARMERS

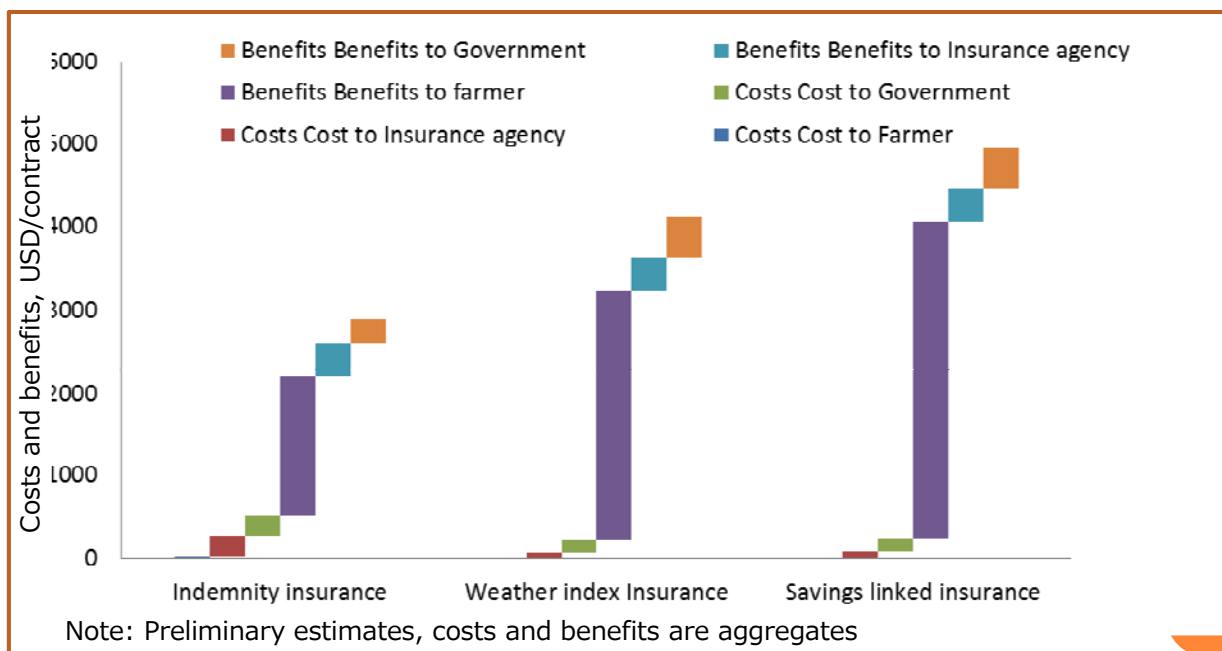


Rich farmers: Farmers practicing better agriculture practices (8.4 units of benefits per unit of cost)

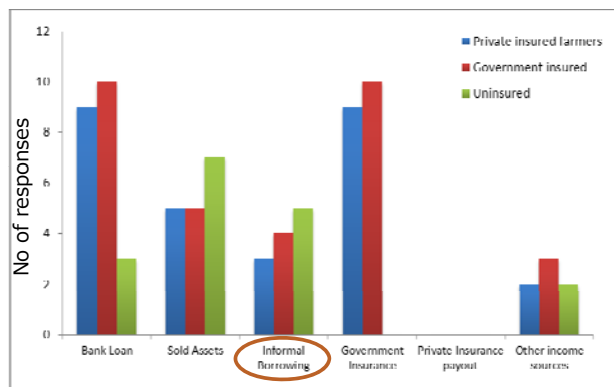
Low income farmers: Farmers practicing traditional agriculture practices prone to weather and climatic vagaries (2 units of benefits per unit of cost)



INDIA CASE STUDY: COMPARISON OF COSTS OF INDEMNITY AND WEATHER INDEX INSURANCE



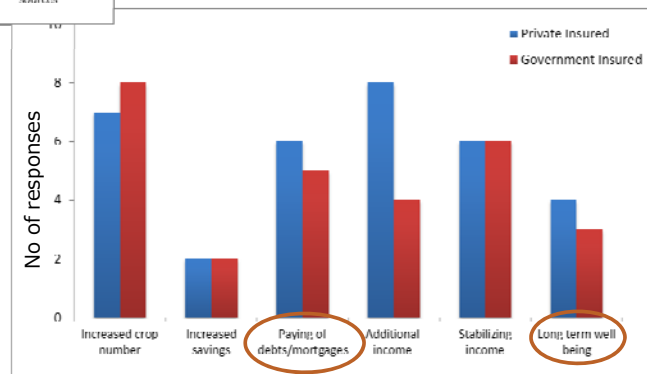
CASE STUDY FROM INDIA



Impact of insurance on

- Borrowing after disaster
- Repayment of loans
- Long-term wellbeing

Based on pilot opinion surveys in Andhra Pradesh, India



CONCLUSIONS

- Insurance costs are higher for the vulnerable farmers and hence there is a need to introduce mechanisms that off-sets these costs.
- Savings linked insurance can provide a good means of making insurance attractive to low-income farmers and it can be combined with the WII.
- Insurance probably need to be used as a more targeted tool than as a blanket approach.
- More study results are expected to segregate the costs and benefits in terms of DRR and CCA using a framework that differentiates these outcomes.

PUBLICATIONS FROM OUR TEAM

- Effectiveness of Insurance for Disaster Risk Reduction and Climate Change Adaptation: Challenges and Opportunities, In Effectiveness of Insurance for Disaster Risk Reduction and Climate Change Adaptation: Challenges and Opportunities, Editor: SIVAPURAM Prabhakar and Joy J. Pereira, Juan M. Pulhin, Gattineni Srinivasa Rao, Henry Scheyvens, Jay Cummins, Research Report, 2015/1, Language: English.
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- Insurance for Long-term Post-Disaster Recovery and Adaptation, In International Conference on Mountain People Adapting to Change. Solutions Beyond Boundaries Bridging Science, Policy, and Practice, Author: Prabhakar, SVRK, Presentations, 2014/11, Language: English.
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THANK YOU!