

Microinsurance Solutions for Climate-Related Risks



Natural Catastrophes – Challenges for Insurers and Reinsurers
Insurance Institute of India, Mumbai, 20th March 2012

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- Natural catastrophes and low-income people
- Challenges for microinsurance
- MIA's experience
- New approach: participatory multi-peril microinsurance

What is a Disaster?



Probabilistic definition?

- Low probability
- High severity

Quantitative definition?

- # deaths
- # injured
- Economic loss

UNDHA 2001 definition?

- A disaster is a serious disruption of the functioning of society, causing widespread human, material or environmental losses which exceed the ability of affected society to cope on its own resources.

Vulnerability



- High risk in Asian developing countries
- Risks exacerbated by climate change



- Poor people are often among the most vulnerable



Why defining?

What is our perspective on events?

What does it imply?

Example: Floods in Bihar

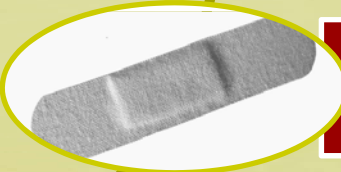
- Bihar is India's most flood-prone state (73% of area, 76% of population)
- Kosi Flood in August 2008:
 - Heavy monsoon rains, poor maintenance → embankment breach
 - Affected ~3 million people in Bihar, killed hundreds of people and livestock, destroyed 300,000 houses and damaged at least 340,000 ha of crops



Floods are a recurrent risk in Bihar: every year



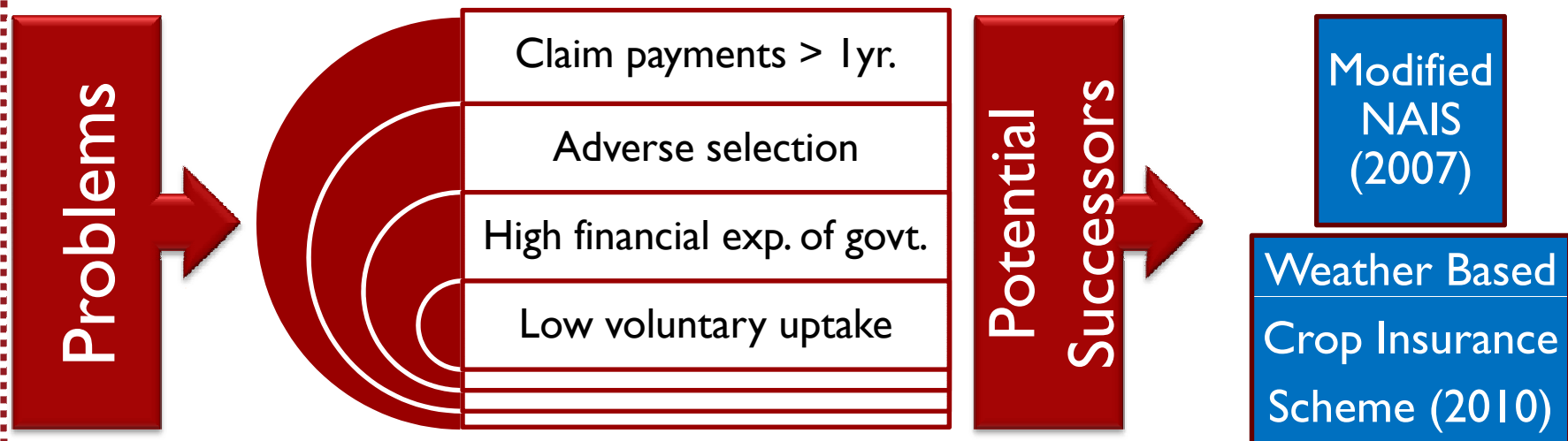
Life and health, crop and livestock of people are affected simultaneously



Not much done by government/state and other agencies except post-disaster

Example: National Agricultural Insurance Scheme in India

- Since 1985 govt. offers crop insurance (CCIS → NAIS in 1999/2000)
- Covering crop failure due to natural calamities, pests and diseases
- ~ 25 million farmers p.a.
- Mandatory for borrowers + voluntary for others
- Area yield based approach
- Highly subsidized



Challenges with (CAT) Insurance for Bottom of Pyramid (BoP)

- Supply-driven
- Focusing on low frequency and high risk
- Not considering risks holistically
- Dependency on subsidies for certain risks
- Lack of data
- Lack of trust

Indemnity-based

- High transactions costs
- High moral hazard

Index-based

- High basis risks

What is needed?

Needs-driven approach

Offered insurance has to be relevant

Risks have to be viewed holistically for BoP people

Value proposition of insurance has to be understood

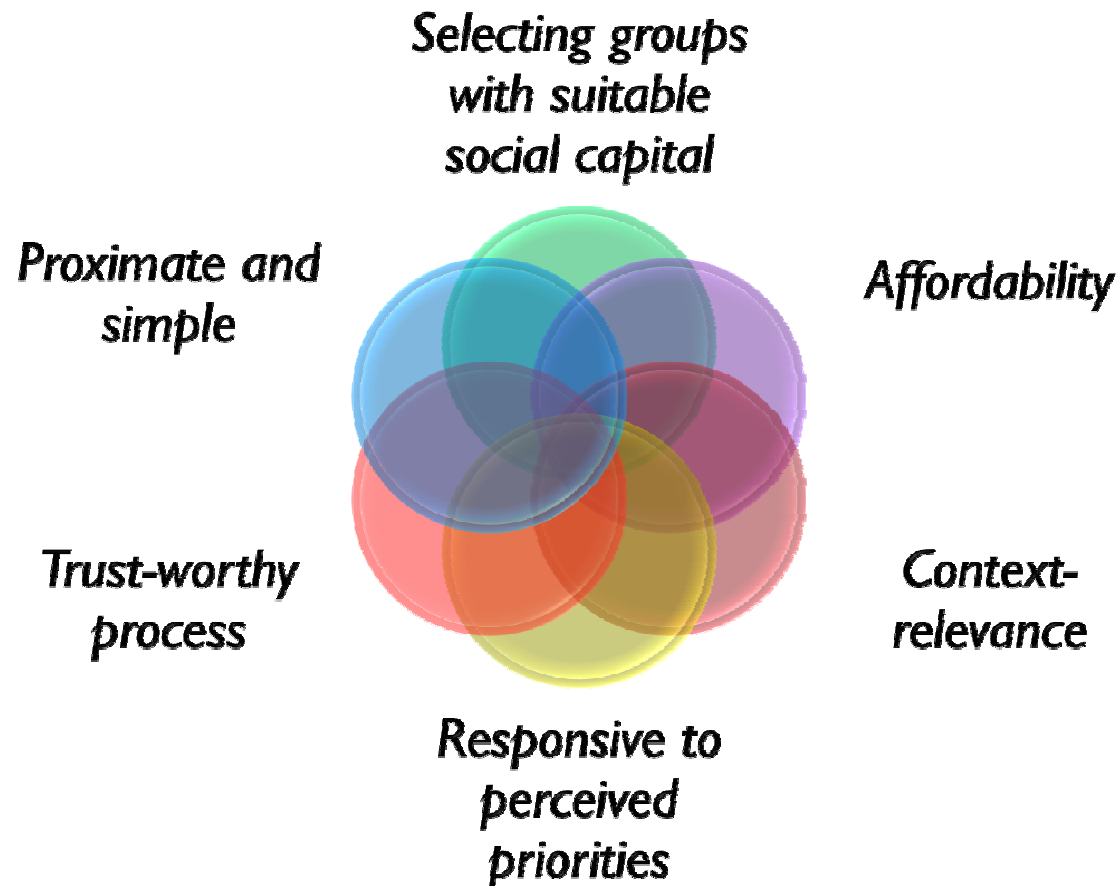
Insurance failures to be reduced

Operational costs to be minimized

Location-specific data (freq. & severity of events)

Actuarial pricing

Six-pronged essential features



MIA's Experience: Ability to Pay

“Affordability” = what the group views as affordable

Measuring WTP is Complex
Enhancing WTP is a slow process

Willingness to pay is heuristic, not objective

Subsidies not always available

“Insurance is for the rich, we are too poor to pay”



MIA's Experience: Prioritized Risks

Must respond to perceived, prioritized risks



MIA's Experience: Proximate and simple solutions

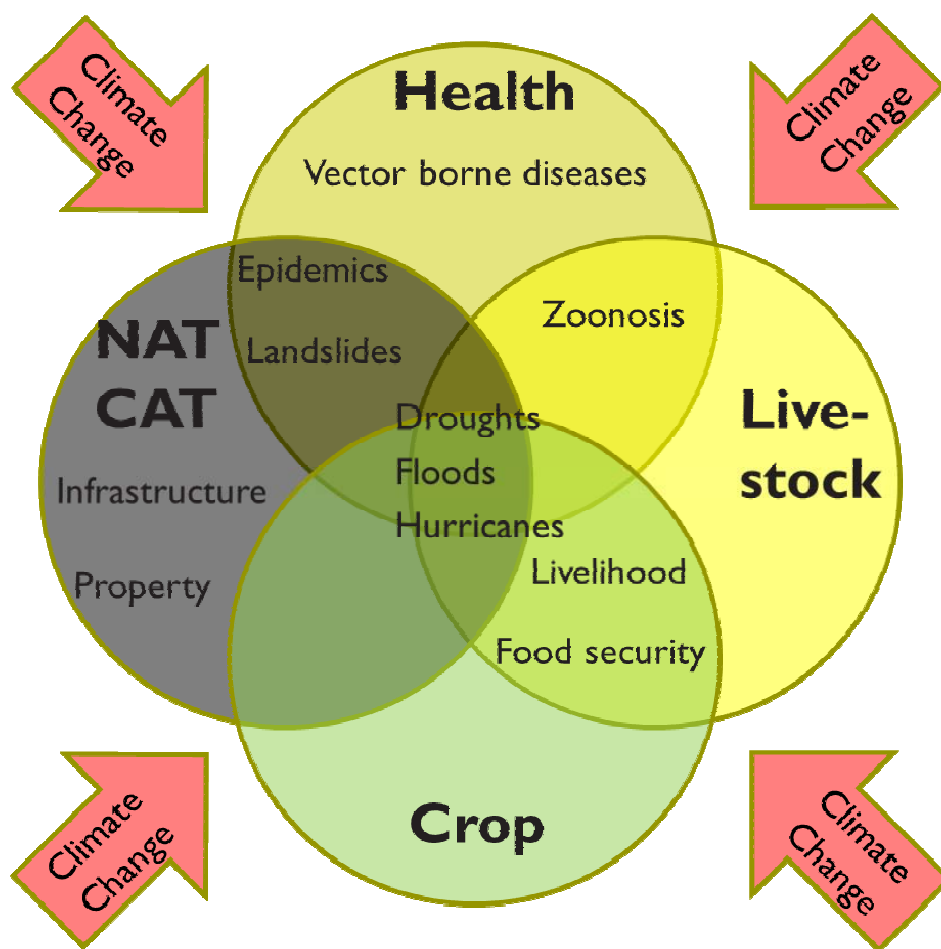
Proximate: everything localized (info, claim submission, payments)

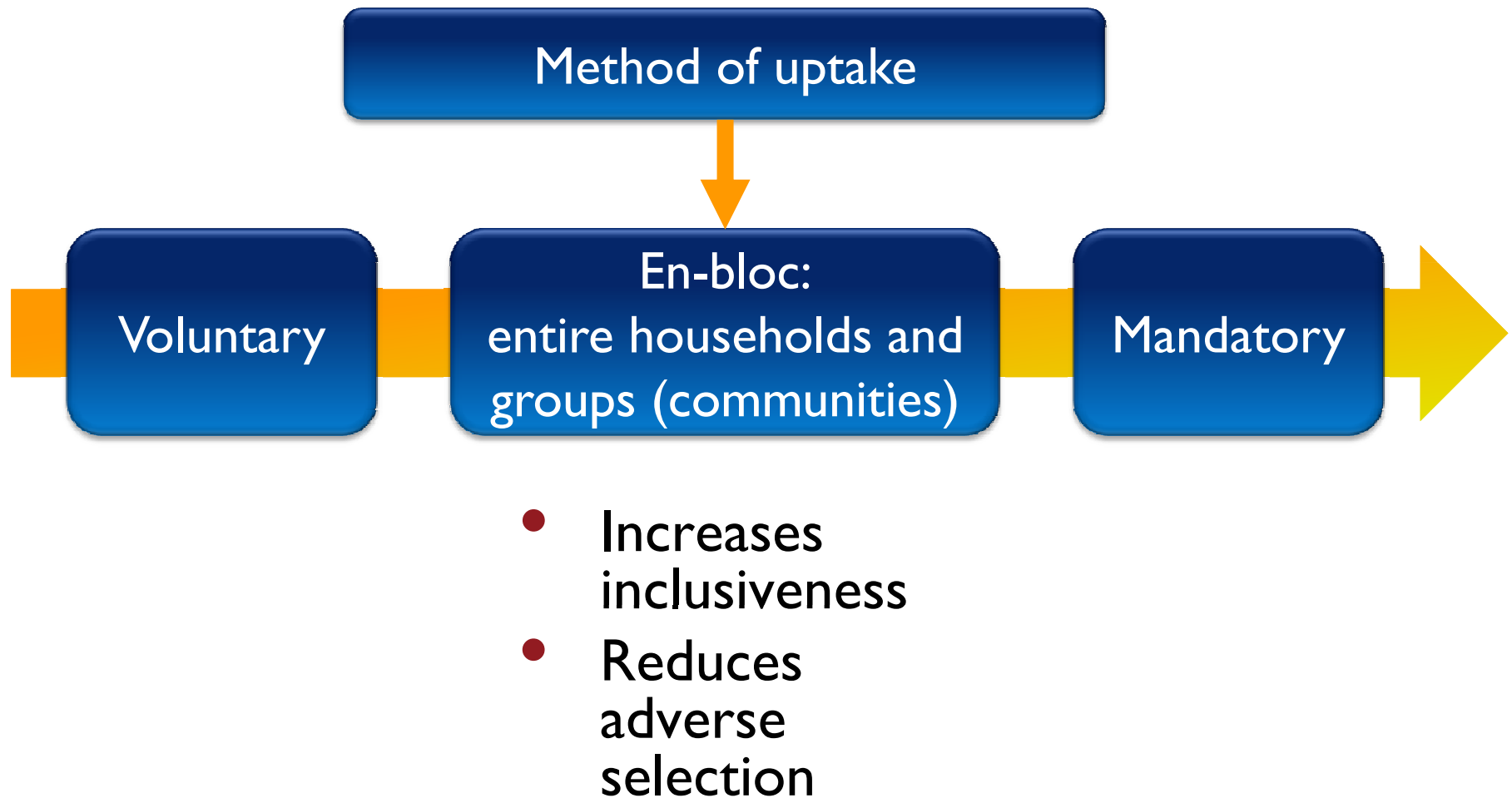
Simple: what we can explain we can understand



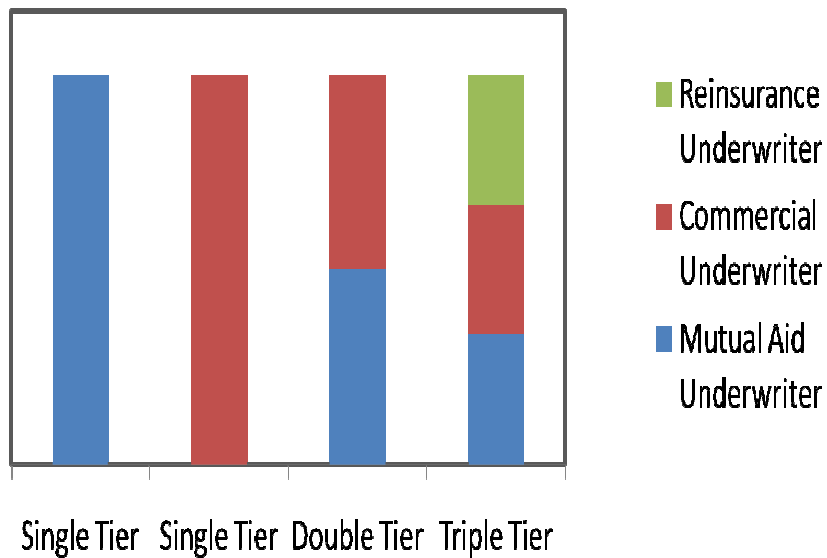
New Microinsurance Approach for Climate-Related Risks

Multiple risk coverage instead of single risk solution





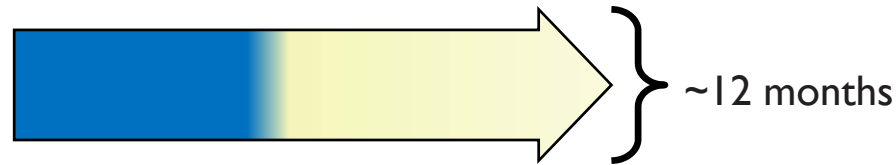
Multiple underwriters



Example: Crop component of composite package:

- First layer: community
- Second layer: commercial underwriters
- Weather / area yield-based index
→ covariate risks
- Assessment of individual losses within the community
→ idiosyncratic risks

Implementation Process: Initiating



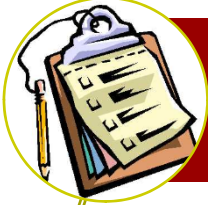
Due Diligence on NGO Partner

- To check suitability of field partner for implementation



Initiation workshop

- To get buy-in from field partner(s)



Baseline study

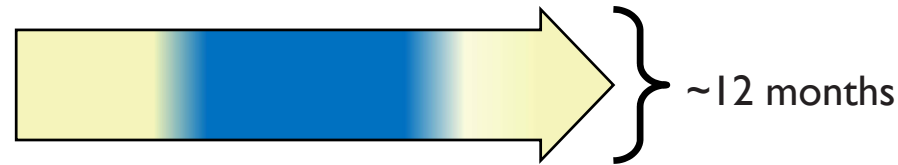
- Primary, secondary data collection → Pricing and impact assessment



Design workshop

- Development of business process, MIS

Implementation Process: Involving



Awareness tools development workshop



Benefit options consultation



Facilitator training for awareness campaigns



Conducting awareness campaign



Communities find consensus on insurance coverage



Benefit package finalization workshop

Implementation Process: Launching



Selection and training of insurance scheme office bearers



Set up of supporting infrastructure for scheme



Enrollment



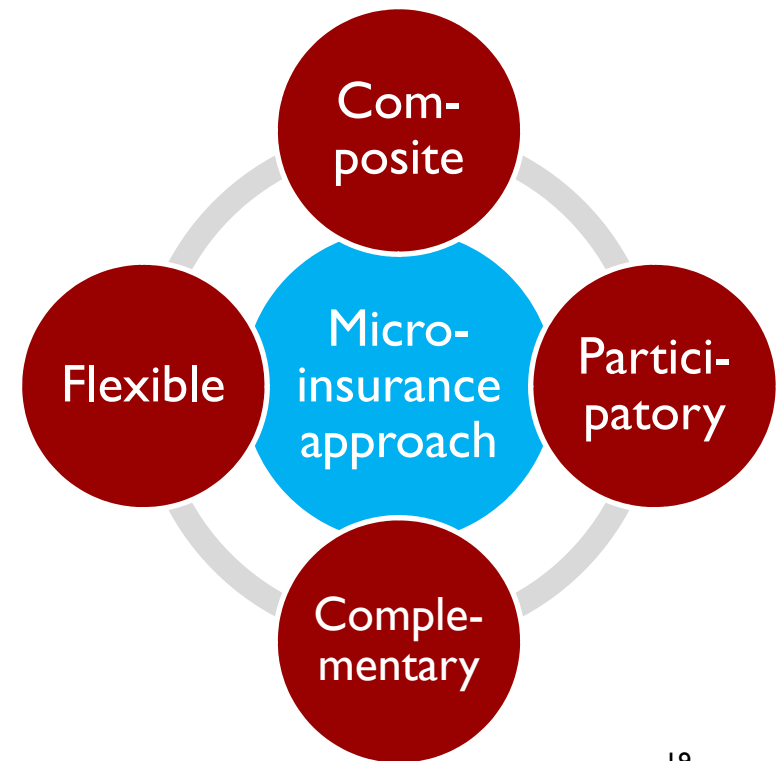
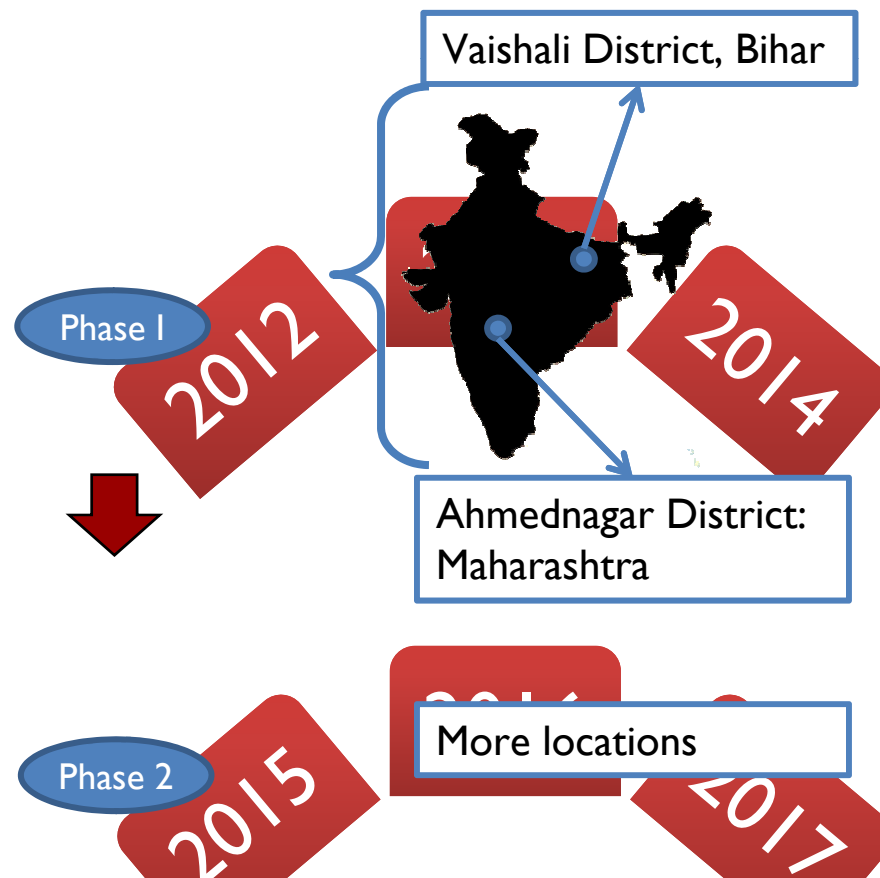
Launch the scheme



Hand holding support after launch

Microinsurance Project on Climate Change Related risks

Project goal: Enhance the resilience of vulnerable communities to climate change by developing pro-poor microinsurance solutions.





Thank you very much for your attention!