## Index-based Flood Insurance (IBFI) for Agriculture Risk Management

# Implementation Strategies By eeMAUSAM

## Salient features

- State or District contracts with village level settlements
  - Moral hazard
  - Adverse selection
  - Affordable premium through risk spreading
- Use of data from satellites and drones
- Use of hydrology modeling output for flood prediction and monitoring
- Historical and real-time data from river water gauges
- Near-real time rainfall data from village raingauges
- Participation from Government and Community

## Implementation Process

Activity 1	Opportunity Assessment
Activity 2	Contract Design
Activity 3	Contract Pricing
Activity 4	Development of Contract Administration Tool Kit
Activity 5	Client Education
Activity 6	Farmer Enrolment
Activity 7	Risk Transfer
Activity 8	Contract Monitoring
Activity 9	Claim Processing



## **Opportunity Assessment**

- Reconnaissance survey to analyze the situation
- Site visit to interact with farmers to understand operational issues, frequency and extent of risk
- Verifying availability of historical data
  - Satellite images
  - River cross-section
  - Rainfall data
  - River water level
- Visiting few villages in Muzzaffarpur district
- Finalising locations



## **Contract Design**

- Detailed discussion on prototype among all the stakeholders
- Actual product design starts with collecting detailed data
  - Satellite
  - River cross-section, water level & discharge
  - climatic and agronomic data



## **Contract Pricing**

- Finalizing the contract design and pricing the product
- Discussed with the farmers and finalize the price
- Need modifications in case of any changes in price
- Finalize the contract term-sheet once after incorporating the necessary changes



## Development of Contract Admn. Tool Kit

#### Contains

- Contract term-sheets
- Contract manuals
- Contract monitoring sheets
  - data on flood water level
  - flood extent and duration
  - satellite data
  - weather data received from weather stations
  - recording on if a payout is generated



## Staff training and farmer education

- Training of trainers field staff
- Conduct farmer focus group meetings in the pilot project villages to education farmers
  - Principles of insurance
  - Contract term-sheet, premiums and sum insurance
  - Monitoring and claims process
- Lack of knowledge and often a mistrust of insurance



## Farmer Enrolment

- Collection of premium
- Distribution of necessary information and documents



## Risk Transfer

- Collection of all required documents
  - Proposal forms
  - Farmer / field documents
  - Bank account details
- Submit all the documents required by the insurer
- Timely deposit of premium
- Complet before commencement of risk period



## **Contract Monitoring**

- Carried out during the crop period while contract is active
- Project monitoring
  - Collection of relevant data
  - Distribution of information
  - Timely updates to stakeholders
- Kharif season 2016 i.e., June and December



## Claim Processing

- In case of claim, based on prevailing weather conditions,
  - Contract-monitoring sheet will reveal the amount
  - Insurer will make the payments directly to the insured farmers
- Follow up with the insurer and stakeholders for obtaining required data / information to settle the claims



## Way forward

- Stakeholder meeting to discuss on pilot experiences / challenges and incorporate necessary modifications
- Implement the revised pilot program
- Discuss on pilot experiences and provide suggestions to the industry and the policy makers for future coarse of action



## **Thank You**