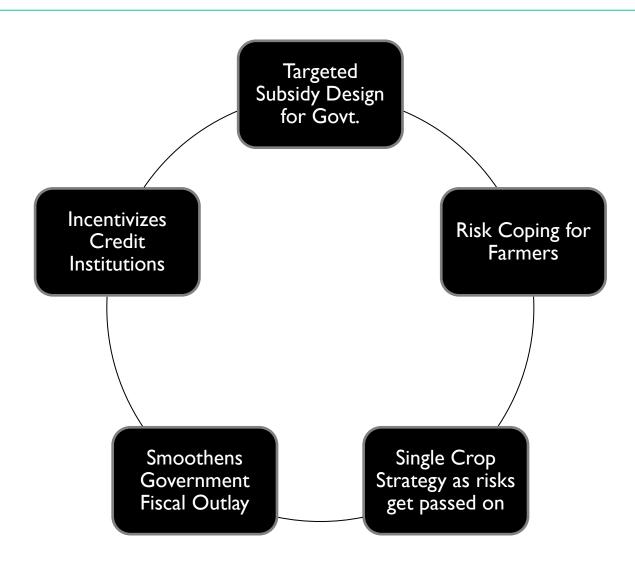
# Problems and Challenges of Agricultural Insurance Underwriters

## Africa-Asia Conclave on Loss and Damage due to Climate Change

Mayur Ankolekar Consulting Actuary

August 25, 2016 Nairobi

#### Rationale for Agricultural Insurance



## Agricultural Insurance Markets Themes and Undercurrents

**Product Development** 

Reinsurer led
Or
Underwriter led

**Subsidy Structure** 

Premium
Or
Information
Dissemination

**Product Design** 

Or
Index based

**Claims Process Drivers** 

Technology + Redress
Mechanism
Or
Technology Only

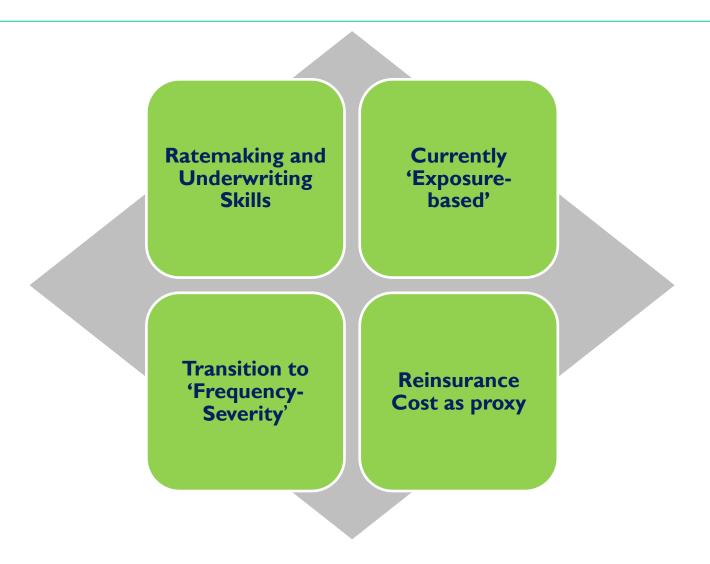
**Distribution Channel** 

Loan Providers (Involuntary)

Or

**Groups (Voluntary)** 

#### Product Development – Reinsurer led or Underwriter led



#### **Subsidy – for Premium or Information**

Premium
Subsidy doesn't
differentiate
between the
rich and the
poor farmer

Few subsidy models can meet target e.g. School meal

Subsidy for information is smart e.g. Jan Dhan in India (120 million policyholders)

Premium Subsidy risks programme sustainability

#### **Product Design – Indemnity or Index based**

Index triggers not easy to comprehend High basis risks when triggers are 'easy'

Indemnity based products need 'prompt and fair' claims process

Experience rating i.e. sum insured based on Moving Average of Yield can enhance the Index offering

#### Claims process, Distribution

Technology e.g.
Smart phones
can be used to
pay claims faster

Link claims to the farmer's bank account

Lenders as distributors restrict the programme to borrowers only

Voluntary
uptake e.g.
Affinity Groups
can deliver
themes like
'economies of
scale'

### **Country Experiences in brief**

#### **Vietnam**

- Fully Subsidized Trial Insurance Programme in select provinces
- Area Yield Index Product: Sales process and communication?
- Low uptake after the trial period
- Skills of underwriters and pricing specialists did not develop, mostly reinsurer-driven product supply
- As market didn't deepen, ditto to tertiary support systems e.g. redress mechanism, experience rating in pricing, capital modeling, etc.

## **Country Experiences .. Contd.**

#### **Malawi**

- Weather Index Product, driven by 'need to borrow'
- Pooling of premiums at the 'Insurance Association of Malawi' a body of general insurers
- High willingness of underwriters to insure farmers, but demand is lacking
- Very low loss ratio over 10-year period, so farmers didn't see value
- Cost of borrowing still remains upward of 40% pa
- In a couple of years, volumes were extremely low pricing?
- Other products e.g. Mtetezi developed for contract tobacco farmers.

## **Country Experiences .. Contd.**

#### **India**

- Substantially (Premium) Subsidized Insurance Programme (Equivalent of USD 2.5 billion of premium in the current year), farmer pays ~2%
- Pricing being exposure based is difficult to replicate across different crops across different regions
- Pricing and underwriting skills as well as data repositories need to develop e.g. EWS at sowing is not rewarded in pricing
- Recent initiatives at product design that combines a) index and b) indemnity, and uses technology to corroborate claims information
- Three year rolling period for underwriting promises to increase interests under the bidding model
- State plays a role in loss assessment. Redress mechanism e.g. agricultural insurance consumer forum needs to develop.

