

Crop Insurance Schemes

A brief and Developments

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Disclaimer

- The views expressed in this presentation are my own views and do not in any way reflect the views of the Authority on any of topics discussed

Agenda

- The big picture
- Brief description about the Crop Insurance: International and National experience
- Issues observed
- Regulatory provisions
- Peculiar nature of crop insurance
- Issues involved in the Pricing
- Some other facts
- Policyholder's Protection
- What more can be done?

The Big Picture

- During 1950-51 , Agriculture sector contributed 41.9% of GDP
- This has sharply come down to 11.6 % of the GDP during 2012-13
- Much of the decrease is attributed to increased contribution by other sectors of economy in the GDP
- Green Revolution in the 1970s helped in increasing the production levels
- The 80s contributed a lot in the Agriculture growth

The Big Picture-Contd.

- However, still half of the population's livelihood depend on the Agriculture
- There is a steady decline of the land available for Agriculture purposes
- Increasing demand of land for urbanization resulting into lower land available for Agriculture
- Fragmentation of the land is happening at a great pace

The Big Picture-Contd.

- The food grains growth rate except the growth rate of 2000's Decade was largely due to Wheat and Paddy
- Share of Area under cultivation for food grains decreased from 45% in 1950-51 to 42% in 2012-13
- Area under cultivation for paddy hovering around 15%
- Area under wheat is increasing and currently around 10%
- Area under coarse cereals(like millet, maize etc) is heavily reduced from 17% in 1950-51 to 8.5% in 2012-13
- Noticeable increase in area under cultivation for crops like sugarcane, oilseeds

The Big Picture-Contd.

- There is a clear shift in cropping pattern from food crops to non-food crops including commercial crops
- Might pose a serious threat to the country's food security
- This may lead to serious supply side constraints

The Big Picture- Contd.

- However, no immediate threat as the food grain production in 2013-14 was at record 263 million tons(257 in 2012-13)
- In the long run there may be a problem in increasing production due to the above factors
- There is a need of major reorientation in the Agriculture policy

Brief Description- Crop Insurance

- Generally Indemnity or index based product (though other designs are also evident in developed markets)
- Where in insurer compensates the Insured (in this case the farmer)
- For the financial loss incurred due to the destruction of crop by the forces of nature, or other insured perils
- Generally subsidy based

International experience-Summary

- The Federal Crop Insurance Act was passed in USA in 1938 which established the first Federal crop insurance program
- Canada Started an insurance for Hail damage to crops in 1934
- Mexico started Crop Insurance in 1926
- Brazil introduced crop Insurance in the 1950's
- Country wise details in the next slides

Crop Insurance - USA

- The Federal crop insurance program, though effective was still expensive and participation from farmers was low.
- 1980, a legislation passed in USA Congress to decrease costs and increase the participation by partnering with private insurers
- Indemnity (Multi peril), Index based and crop revenue based Insurance is available

Crop Insurance – USA contd.

- It is voluntary
- But to be eligible for crop disaster assistance, there has to be participation.
- Subsidy ranges from 35% to 67% based on coverage %

Crop Insurance-Canada

- The first hail Insurance was started in 1934 and the crop Insurance specifically in 1964.
- The types of products available are
 - Indemnity based Multi-peril Crop Insurance
 - Index based products

Crop Insurance-Canada Contd.

- Crop insurance is voluntary
- Wherever payments are made through disaster program, it is reduced by the estimated amount farmers may receive if crop insurance was undertaken
- Subsidy are available at different levels

Crop Insurance-Mexico

- Government started multi peril crop insurance in 1961
- Premium Subsidies ranging from 45% to 60%
- Premiums not set on Actuarial basis

Crop Insurance-Mexico Contd.

- In 1990, Agroasemex replaced the above arrangement as a public sector crop and Livestock insurance company
- Single Peril Hail, Named peril, Loss of Investment cost and Multi-peril yield based indemnity insurances are available
- Based on strictly commercial principles
- Agroasemex also acted as a stop loss reinsurer

Crop Insurance-Brazil

- PROAGRO, in 1954 a nationwide multi-peril crop Insurance (MPCI) program linked to crop credit
- State governments in Brazil formed their own public sector state-level crop & livestock insurances with high levels of subsidies

Crop Insurance-Israel

- Crop Insurance was first Introduced in 1967
- It is implemented by KANAT whose ownership lies 50% with the government and 50% with the production boards
- It also manages Insurance for Natural Disasters (IND) on behalf of Israeli Government

Crop Insurance-Israel Contd.

- Recently private insurers are also involved in specific crop sectors
- Though participation is voluntary, it is very high ranging from 85% to 90%
- Subsidy is 35% of all crop insurance premium

Crop Insurance-China

- Agricultural insurance was started in 1982
- Initially, People Insurance Co of China(PICC) was the sole insurer
- Since 2002 along with CUIC four specialized insurers underwrite agriculture Insurance policies

Crop Insurance-Japan

- The crop insurance Act, enacted in 1938
- The Agricultural Cooperative Association Law of 1947, provides compensation under the Agricultural Disaster Compensation program
- It consolidates livestock insurance and Crop Insurance

National Experience: Crop Insurance in India

- **Comprehensive Crop Insurance Scheme (CCIS):**
 - The first crop insurance scheme started in India in 1985
 - It covered 15 states and 2 union territories
 - Participation in the scheme was voluntary
 - Annual coverage of around 50 lakh farmers and 8-9 million hectares area

National Experience: Crop Insurance in India

- The scheme was discontinued in 1997 due to heavy losses and disproportionate claims.
- Some experimental insurance schemes were in vogue for a couple of years
- Finally, National Agricultural Insurance Scheme (NAIS) was introduced in 1999-2000
- 50% premium subsidy by Government
- Premiums not set on Actuarial Basis

National Experience: Crop Insurance in India

- NAIS provided coverage for:
 - All food crops (cereals and pulses), oilseeds, horticultural and commercial crops
 - Compulsory coverage for loanee and optional coverage for non-loanee farmers

National Experience: Crop Insurance in India

- NAIS operated on the basis of:
 - Area approach- defined areas for each notified crop for widespread calamities
 - On individual basis- for localized calamities such as hailstorms, landslides, cyclones and floods
- Indemnity Level:60%
- Premium rate:
 - Food Crops /Oil Seeds :1.5% to 3.5%

National Experience: Crop Insurance in India

- Agriculture Insurance Company of India Limited (AIC) formed by the Government of India, took over the implementation of the scheme in FY2003 from GIC.
- In 2010 the a modified scheme MNAIS was started on a pilot basis by the Ministry of Agriculture through AIC.

National Experience: Crop Insurance in India

- MNAIS
 - Insurance coverage and financial support to the farmers
 - In the event of prevented sowing & failure of any of the notified crop
 - As a result of natural calamities, pests & diseases
 - Encouragement to farmers to adopt progressive farming practices, high value in-puts and better technology in Agriculture
 - To help stabilize farm incomes, particularly in disaster years

National Experience: Crop Insurance in India

- After the pilot, the MNAIS scheme was rolled out onpan India Basis
- The major change from NAIS was covering post harvest losses and prevented sowing
- The MNAIS scheme was successful and was implemented across India with the participation of various private General Insurers

National Experience: Crop Insurance in India

- MNAIS Coverage
- Standing crop from Sowing to Harvesting
- Minimum Indemnity level raised from 60% to 70%
- Loanee farmers compulsory cover

National Experience: Crop Insurance in India

- MNAIS Premium Rate & Subsidy
 - Upto 2%: no subsidy
 - Above rate of 2% premium subsidy ranging from 40% to 75% based on premium table
 - Premium not to exceed 6%

National Experience: Crop Insurance in India

- Weather Based Crop Insurance Scheme (WBCIS)
 - It aims to mitigate the hardship of the insured farmers against the likelihood of loss
 - On account of anticipated crop loss resulting from incidence of adverse conditions of weather parameters like rainfall, temperature, frost, humidity etc.
 - Pricing is on actuarial basis

National Experience: Crop Insurance in India

- Need for the WBCIS Scheme
 - Expensive Crop Cutting experiments
 - Delay in processing claims
 - No need to know actual crop loss in WBCIS as payment is index based
 - Claim based on Anticipated loss

National Experience: Crop Insurance in India

- GOI started the NCIP from 1st November 2013 by merging MNAIS, WBCIS and CPIS.
- The farmer can get either MNAIS or WBCIS as per the implementation of the state government
- Some states specifies crops only one of either MNAIS / WBCIS is being implemented

National Experience: Crop Insurance in India

- Indemnity levels revised and only two at 80% or 90% are available
- No choice for the Loanee farmer
- Premium subsidy is available
- Non Loanee farmers can choose either MNAIS or WBCIS

Issues observed

- Area /Weather based Insurance Schemes remain unattractive to farmers
- Even loanee farmers participation is partial despite compulsory clause
- Doubts about yield data provided by CCEs
- Losses do not match claims amount/ actual occurrence

Issues observed-contd.

- Plot level/Micro Climatic conditions not reflected
- Lack of awareness & less penetration in many states
- Need for better crop Insurance program
- Delay in settlement of claims

Regulatory provisions

- Insurance Act, 1938
- Obligations of insurer in respect of rural or unorganised sector and backward classes.
- Section 32 C related to social sectors
- Every insurer... shall discharge obligations specified under section 32B.... as may be specified by regulations made by the Authority and such insurance policies shall include insurance for crops.

Regulatory provisions – Contd.

- Section 64VB exemption for certain Government programs like NAIS particularly in case of govt. subsidies
- Section 64UM has exemption for crop insurance losses (Assessment of Losses by surveyor)
- Applicability of Group Insurance guidelines

Regulatory Provisions-Contd.

Several Initiatives taken by the Authority

- Insurance Repositories
- Micro Insurance Products
- Rural & Social sector obligations
- CSC-SPV for financial inclusion
- Customer education by several means
- Sponsoring consumer education workshops

Peculiar Nature

- Peculiarities of crop insurance
 - Short tailed Business
 - When compared with other forms of property insurance the nature of the risk itself is peculiar in crop insurance.
 - Insurance normally covers property in existence, but here the crop which may not be existing at the time of insurance is insured

Peculiar Nature-Contd.

- When the crop is harvested and the value of the insured item is derived by the farmer, crop insurance ceases
- Loss in crop insurance, can be the following:
 - Actual loss or Estimated loss in yield
 - Prevented sowing
 - Anticipated crop loss resulting from adverse weather conditions

Issues involved in the Pricing

- Lack of past data related to crop yields
- Different Agro-climatic zones-hence one size doesn't fit all
- Quality of data available-reliability and credibility issues
- Affordability of risk based premium by farmers
- Limitation of subsidy provided by government
- Insurance awareness low-hence marketing difficult-difficult to attain economy of scale
- Absence of cost effective distribution channels

Some other facts

- India's crop insurance program is the largest in the world with more than 2.5 crores farmers insured
- But delays in the payment of claims are a major issue
- Still 8.5 crores farmer households remained uninsured

Some other facts

(Rs. in crores)

	FY 2013-14	
Insurer	All LOBs	Crop
AIC	3,441.43	3,441.43
ICICI Lombard	6,851.03	590.15
Iffco Tokyo	2,930.87	201.31
Chola MS	1,855.11	116.74
Tata AIG	2,362.71	32.51

Policy holder protection

- The Authority came out with IRDA (Protection of policyholders), Regulations, 2002
- Key features of the above regulation:
 - Necessary to have a filled in proposal
 - Certificate of Insurance, mandatory covering
 - Period of Insurance; Sum Insured; Premium
 - Perils covered and not covered;
 - Policy terms & conditions
 - Claims procedure
 - Grievance Redressal Procedure

What more can be done

- Existing schemes are area/parametric based
 - Hence we may explore the option of farm level insurance
 - However, issues of Risk mgt, Entrepreneurship at Individual level will remain
- Crop Insurance is basically loan linked
 - Education initiative is needed for farmers
- Quantum of Crop Insurance is Low
 - More subsidy assistance from govt. is needed
 - Need of Innovation in crop Insurance Products

What more can be done-Contd

- Web based services for filling the proposal form
- Faster claim processing and disbursement of claims
- Crop insurance monitoring through GPS
- Satellite based monitoring of crop progress
- Cost effective distribution channel



Thank You