CROP INSURANCE IN INDIA – A STUDY

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INTRODUCTION

All over the world agriculture is synonymous with risk and uncertainty. Agriculture contributes to 24% of the GDP and any change has a multiplier effect on the economy as a whole. Economic growth and agricultural growth are inextricably linked to each other. Crop insurance helps in stabilization of farm production and income of the farming community. It helps in optimal allocation of resources in the production process.[1]

Indian Government has been concerned about the risk and uncertainty prevalent in agriculture. As all of us are aware about the unfortunate deaths of farmers in Maharashtra who got caught in a debt trap and the devastating effect it had on their families. In this article, we try to trace the genesis of the crop insurance scheme and its effectiveness. We have attempted a comparison of the Indian scenario vis-à-vis the scenario in Western nations.

HISTORY OF CROP INSURANCE IN INDIA

A crop insurance scheme linking institutional credit (crop loan based on area approach) was suggested by Prof.Dandekar in 1976 & this scheme called as CCIS[1] was implemented from kharif 1985 on all-India level.

The objectives of the scheme were:

* financial support to farmers in the event of crop failure - as a result of drought, floods.

* credit eligibility of farmers after a crop failure for the next crop season.

All natural risks were covered excluding nuclear and war risks. Premium as well as the indemnity rate for notified crop were uniform for all insured farmers irrespective of their actual yield. Indemnities were paid to all insured farmers when average output of a given area fell below the normal output. The CCIS was in operation until Rabi 1999.

[1] CCIS - Comprehensive Crop Insurance Scheme

On June 23,1999 the Prime Minister launched a new crop insurance scheme called Rashtriya Krishi Bima Yojana (RKBY) under the National Agricultural Insurance Scheme(NAIS). Participation in RKBY was compulsory for farmers growing notified crops and availing crop loans from formal credit Institutions. In case of loanee farmers, the Sum insured was equal to the amount of crop loan advanced. The farmer had the option to insure the amount equivalent to the value of threshold yield of the insured crop. A farmer may also insure his crop beyond the value of threshold yield level upto 150% of average yield of notified area on payment of premium at commercial rates.

The risks covered under the NAIS are:

➢ Fire & Lightning

➢ Storm, Cyclone, Hailstorm, Typhoon, Tempest, Hurricane, Tornado

➢ Flood, Inundation & Landslide

➢ Drought, Dry spells

➢ Pests / Diseases

Exclusions : War, nuclear risks, malicious damage.

Under NAIS, premium rates are 3.5% of sum insured for bajra and oilseeds, 2.5% for other Kharif crops, 1.5% for wheat and 2% for other Rabi crops. Small and marginal farmers are entitled to a premium discount of 10%. In the case of commercial / horticultural crops, actuarial rates are being charged.

NAIS is being implemented by 23 states and two Union territories. During the last 12 crop seasons (from Rabi 1999-2000 to Kharif 2005), 7.51 crore farmers have been covered over an area of 12.2 crore hectares insuring a sum of Rs.70,696 crore. Claims paid Rs.7207 crore against premium income of Rs.2226 crore benefiting more than two crore farmers in the implementation of NAIS so far.

Government set up an organization called Agriculture Insurance Company of India Ltd (AIC) with support from the general insurance companies and NABARD for effective implementation of the above scheme.

All major cereals and pulses and oilseed crops were covered under CCIS and few horticultural crops like onion, potato were covered in NAIS. Spread of CCIS was poor. But the CCIS has helped financial institutions to reduce overdues and maintain the flow of crop loans / short term credit at least in areas where indemnities were paid by the GIC of India.

There are also other schemes like 'Varsha Bhima', 'Sowing failure policy[2]' being operated on a pilot basis.

EFFECTIVENESS OF THE SCHEMES

Agricultural output is greatly influenced by vagaries of nature. Some of the current responses to adverse weather conditions include changes in cropping patterns (shift to less remunerative more sturdy crops) and reduced input usage and low technology adoption. Government subsidies on fertilisers, power and interest on debt is available to farmers.

Multi peril crop insurance has been tried out in various forms, but the effectiveness of these measures has been, regrettably, low. This insurance can only be provided by government agencies due to unpredictable weather risk and co-variate risk of crop damage / failure over a large area.

Crop insurance is cumbersome to administer and prone to losses. Claims ratio have been around 500 per cent. Insurance companies may feel that crop insurance is a liability – there is a feeling that it is not a profitable proposition at all. Estimating crop loss due to an unexpected weather event is difficult so also estimation of potential yield and actual yield. This is why weather insurance is needed.

CROP INSURANCE IN USA

In USA, crop insurance is clearly identified as risk management option. The Noninsured Crop Disaster Assistance Program (NAP), managed by USDA's Farm Service Agency, provides financial assistance to producers of noninsurable crops when low yields, loss of inventory occurs due to natural disasters. Multiple Peril Crop Insurance (MPCI) policies are available for most insured crops. Other policies are being tested on a pilot scale. Some of the plans are:

1) Yield risk plan – indemnity is paid based on the difference between yield insured and actual harvest.

2) Group risk plan – A county index is used as the basis for determining the loss. When the county yield for the insured crop falls below the trigger level chosen by the farmer, an indemnity is paid.

3) Dollar plan – Sum insured is based on cost of growing a crop in a specific area. A loss occurs when the annual value of the crop is less than the amount of insurance.

Weather insurance as a panacea to ills of crop insurance

Weather insurance seeks to address drawbacks of existing scheme and aims at focusing on risk mitigation in an economically viable manner. It is prevalent in countries like US, UK and Canada. In India, ICICI Lombard pioneered this insurance as a weather risk mitigation tool with the twin objectives of

➢ protecting farmers from the vagaries of weather

➢ promote sustainable resource allocation.

The insurance product insures the farmer for his cost of inputs against an uncontrollable weather related parameters that can affect the output. For example, if deficient rainfall adversely affects yield, then farmer is insured against this peril. Based on historical data, the yield and rainfall are correlated to arrive at a rainfall index.

The Finance minister has clearly highlighted risk mitigation as a tool for rural development and welfare. He has delved on weather insurance as one of the three tools of risk mitigation, the others being crop insurance and income insurance.

WHAT DOES THE FUTURE PORTEND

There are about 100 million farmers in India who work the hardest and yet seem to suffer the most. Their occupation is fraught with the highest risk as it is totally at the mercy of nature. It becomes the primary duty of Government to think of the welfare of farmers which would necessitate thinking of ways and means of reducing the risk in farming.

Crucial aspect of agriculture is weather. It can make or break a farmer's fortune. If rains fail, crops fail. If rains

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[2] If rain fails, then cost of sowing is reimbursed.

come at the wrong time, then this also results in crop failure.

In addition to Rs.500 crore allocation for NAIS, the Government has allocated Rs.100 crore towards weather insurance. There is a crying need to educate farmers on the insurance schemes. The Government should use formal and informal networks to spread awareness in this area. The State Governments can be made accountable to ensure that farmers enroll in crop insurance schemes through the co-operative sector and get some benefit when burdened by natural calamities.

AIC has plans to move beyond Crop Insurance towards a novel weather based insurance scheme as an alternative to NAIS. AIC is looking at a comprehensive package that includes farmers' huts, tools, implements, animals besides crops – all this is of course subject to IRDA approvals.

Weather-based insurance products will help the farmer in faster claim settlement. This could also mean lower premiums for farmers buying these insurance products. Differential rate of premium based on the variability in yield levels in the past and movement towards premium rates based on actuarial principles… these are some of the areas that need to be focused on. A good risk assessment tool needs to be developed so that both farmers and insurers benefit. This can happen if insurers work closely with institutions specialising in statistical research.

Agricultural insurance schemes are being subsidised on a global scale. To become self-sustainable, premium rates have to increase. But the experience of USA and Brazil shows that this leads to so much of a drop in the participation that the insurance programme would have to be discontinued.

In the event of crop failure or damage, the farmer receives indemnity payment only for the difference between threshold yield and average yield and that too for the loan amount. If the expected revenue from the crop is insured (as in USA) then this would be more desirable. Farmers can then manage their consumption needs in the event of crop failure. The need of the hour is introduction of a range of innovative insurance products covering diverse risks. Some have hinted at schemes like excess rainfall insurance, draught insurance schemes, sowing failure risk cover etc.

Instead of one-size fits all approach, we can look at linking the risks with the type of crops. More importantly, the Government subsidy on insurance schemes has to reach the farmer who needs it the most.