Research Papers

Problems and Prospects of Indian Agricultural Insurance – An Overview

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Abstract

Risk is an integral part of agriculture. Agricultural producers face a series of risks affecting the income and welfare of their households. These are mainly production risks related to: weather conditions, pests and diseases, market conditions etc. To mitigate risk farmers had developed various strategies but these strategies are not that affective. Crop insurance protects farmers from financial losses that result from natural causes such as drought, excessive moisture, hail, wind, frost, insects and disease. Crop insurance is an institutional measure to manage risk efficiently. In India the performance of crop insurance is very poor and riddled with many problems. But there is lot of scope for improvement and making it an effective risk management tool.

Introduction

The livelihood of a large proportion of the world's rural poor is dependent on agriculture. It is the main source of income for them. Some earn their income directly from agriculture and others are indirectly dependent on it. It is well known that weather is an important production factor in agriculture but unfortunately, this production factor can hardly be controlled. Agricultural production is unstable because of its dependence on weather and inherent biological uncertainties in managing crops, and it has traditionally been considered as a risky venture.

Agriculture in India has been described as a gamble in the hands of rains and, in addition, numerous natural and economic factors add to the uncertainty. A crop failure means not only the loss of a season, family income but also of the capital invested in the crop. As most of the farmers are resource poor and belong to small and marginal category their capacity to bear such loss is very limited, the resulting adversity of farmers lead to their failure to pay rents and taxes, loss of purchasing power and mounting debts. This leads to reduced harvesting and curtailment of agricultural operations in the subsequent seasons consequently increasing the unemployment among agriculture labour. Crop failures affect also the flow of raw materials to agro-industries. This way the entire economy of the country is affected by crop losses of which the farmers are direct and worst victims. In the interest of stabilizing the economy, it is, therefore, clear that adequate protection should be provided to the farmers to continue their agricultural operations unhampered and the economy undisturbed.

Concept of Agriculture Insurance

In general, insurance is a form of risk management used to hedge against a contingent loss. The

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conventional definition is the equitable transfer of a risk of loss from one entity to another in exchange for a premium or a guaranteed and quantifiable small loss to prevent a large and possibly devastating loss.

A contract of indemnity by which, for a specified premium, one party promises to compensate another for the financial loss incurred by the destruction of agricultural products from the forces of nature, such as rain, hail, frost, or insect infestation. Crop insurance protects farmers from financial losses that result from natural causes such as drought, excessive moisture, hail, wind, frost, insects and disease. Agricultural insurance is a special line of property insurance applied to agricultural firms. In recognition of the specialized nature of this type of insurance, insurance companies operating in the market either have dedicated agribusiness units or outsource the underwriting to agencies that specialize in it. Agricultural insurance is not limited to crop insurance, it also applies to livestock, bloodstock, forestry, aquaculture, and greenhouses.

Vulnerability of Agriculture

Agricultural production and farm incomes are frequently affected by natural disasters such as droughts, floods, cyclones, storms, landslides and earthquakes. Vulnerability of agriculture to these disasters is compounded by the outbreak of epidemics and man-made disasters such as fire, sale of spurious seeds, fertilizers and pesticides, price crashes etc (Raju and Chand, 2008). All these events severely affect farmers through loss in production and farm income and in most cases they are beyond the control of farmers.

Besides the risk caused due to natural uncertainty, for majority of farmers the price received for the crops grown is not remunerative as minimum support price is provided for only a few crops. In recent times, mechanisms like contract farming and futures trading have been established, which are expected to provide some cushion against price fluctuations directly or indirectly. Its implementation and reach however is debatable, particularly in the Indian context where around eighty per cent of farmers are poor belonging to marginal and small category (GOI, 2005). And they are the direct and primary victims of such risks (Patil and Borude, 1993).

Informal Risk Coping Mechanism

In order to cope with various risks, farmers had developed number of risk management strategies. These can be grouped as risk-reducing and risk coping strategies (Walker and Jodha, 1986). Risk reducing (ex-ante) activities are crop diversification, inter-cropping, mixed cropping or cultivation of drought or flood resistant crops, engaging in non-farm or off farm activities etc. Risk coping (ex-post) activities are sale of assets, stored produce, transfers from relatives, borrow for consumption, and increase labour participation and migration. Generally these mechanisms are not that effective to support their livelihood requirements and many a times these strategies result in the neglect of agriculture.

Need for Crop Insurance

In such a scenario, it is necessary to have a mechanism like crop insurance which would enable the farmers to transfer their agricultural risks to a third party. In broader sense agricultural insurance provides the option for the farmers to manage the risk efficiently and also enable them to go for successive cultivation in the next season. Therefore, failure of crops is not a constraint to continue agriculture, unless it has negative impact on farming. Failure may act as a push factor to go for some other survival strategies. Hence such a process neither supports the livelihood of the farmers nor conducive for the growth of agriculture economy.

Features of Agriculture Insurance

· The sum insured generally equals the value of the threshold yield of the insured crop.

· A farmer can get an insurance for an amount greater than the value of the threshold yield by paying premiums at commercial rates

· In case a farmer takes a loan for his crops, the sum insured is at least equal to the amount of crop loan advanced

· Insurance charges for loanee farmers are in addition to the loan charges

- While all loanee farmers are automatically covered under the scheme, non-loanee farmers need to approach the nearest banks within the stipulated time
- Crop loans disbursed through Kisan Credit Cards are also eligible for this scheme
- In case of damages caused by widespread calamities, claims are settled on area approach basis. Any insured crop in a notified area recording a yield which is lower than the guaranteed yield (calculated on the basis of crop estimation surveys by the state government) automatically becomes eligible for an insurance claim.
- However, in case of areas notified for experimentation of individual loss assessment, the farmer needs to intimate the crop loss within 48 hours to the local revenue or agriculture department.

Agriculture Insurance Schemes in India

The aim of crop insurance is to protect the farmers from crop failure on account of natural calamities such as drought, flood, hail storm, cyclone, fire, pests, diseases etc. Crop insurance is not totally new to India. However so far very little benefit has been derived from it. The Comprehensive Crop Insurance Scheme (CCIS) introduced in 1985 had limited scope. It was a credit-linked insurance and the aim was to restore the credit worthiness of the farmers for the ensuing season. The National Agricultural Insurance Scheme (NAIS) was introduced in 1999-2000 in the place of CCIS in all the states. The new scheme is available to all farmers and not only to the farmers who have taken short-term loans as in the case of CCIS and it now extended to farmers growing commercial and horticultural crops.

The State-wise analysis of coverage under the scheme reveals that the demand for crop insurance is concentrated in the states where crop grow under rain-fed conditions and natural risks are higher. The level of crop insurance penetration and coverage under the scheme is presented in Table - 1. The top seven states in terms of coverage under the scheme are Andhra Pradesh, Gujarat, Madhya Pradesh, Maharashtra, Uttar Pradesh, Karnataka and Rajasthan and they account for 78 per cent of farmers covered, 80 per cent of sum insured, 84 per cent of premium and around 80 per cent of the total claims. Amongst the states with the highest participation of farmers under NAIS are Maharashtra (19 per cent), Andhra Pradesh (15 per cent) and Madhya Pradesh (12 per cent).

It can be seen from the table - 2 that the year-wise participation of the states in the crop insurance scheme has increased from nine to twenty five states. Similarly, the coverage both in terms of number of farmers and area under crop insurance has increased. But when we look at the premium claim percentage, it gives a very miserable performance of NAIS. In all the years of operation of the scheme the claims were more than the premium collected and the difference ranges from 191 percentages to 545 percentages.

Table -1: Level of Penetration and Coverage under National Agricultural Insurance Scheme in Major States of India, During 1999 to 2007

Sl. No	Name of the State	Level of penetration (crore)	Farmers covered (lakhs)	Sum insured (crore)
1	Andhra Pradesh	22.01	165 (14.9)	24497 (21.4)
2	Gujarat	22.20	83 (7.5)	16066.6 (14.1)
3	Karnataka	10.24	77 (7.0)	8804 (7.7)
4	Madhya Pradesh	30.51	136 (12.5)	12618 (11)
5	Maharashtra	18.63	189 (18.6)	10782 (9.4)
6	Orissa	24.54	82 (7.4)	7964 (6.9)
7	Rajasthan	52.85	91 (8.4)	8769 (7.7)
8	Uttar Pradesh	11.29	97 (8.8)	9946[8.7]
9	West Bengal	16.08	56 (5.0)	4031 (3.5)
	All India	15.96	1104 (100)	114186 (100)

Source: Agriculture Insurance Company of India
Note: Figures in parenthesis denote percentages to the total

Table -2: Year-wise Number and Area Covered, Sum-insured, Premium Collected and Claims Settled

Sl.No	*Year*	*No. of covered States / UT's*	*Farmers covered (lakhs)*	*Area covered (lakh)*	*Sum-insured (Rs.crore)*	*Premium (in crore)*	*Total Claims (crore)*	*Percentage Claim*
1	1999-00	9	5.8	7.8	356	5	8	160
2	2000-01	18	105	163.3	8506	235	1281	545
3	2001-02	20	106.6	160.4	9001	292	559	191
4	2002-03	21	121	195.7	11270	365	2013	552
5	2003-04	23	123.9	188.3	11164	347	1150	331
6	2004-05	25	162.2	296.1	16945	535	1199	224
7	2005-06	25	167.2	277.5	18589	555	1398	252
8	2006-07	25	179.1	273	21352	610	2249	369

Source: Compiled from Economic Survey (2007-2008).

Working of the Scheme and its Viability

Crop insurance is not so widespread in India and it is riddled with a number of problems. There are problems of coverage, the problems of delayed payments, problems of assessment, problems of awareness and understanding and finally problems of viability.

Traditional crop insurance suffers from many problems

The important problems are:

· Moral hazard
· Adverse selection
· Multiple agencies and their huge administrative cost which are hidden in government budgets
· Lack of reliable methodology for estimating and reporting crop yields due
· Delays in settlement of claims.

The following measures to are needed to improve in the crop insurance scheme

v It should be affordable and accessible to all kinds of rural people.
v It compensates for catastrophic income losses to protect consumption and debt repayment capacity.
v It is practical to implement given the limited kinds of data available.
v It avoids the moral hazard and adverse selection problems.

Conclusion

The importance of crop insurance as a better risk management tool cannot be underestimated due to its poor financial performance. Looking the interest of the vast majority of population dependent on agriculture there is genuine need for protecting the interest of farmers by introducing the crop insurance effectively.

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