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Status of Awareness and Adaptability of Crop Insurance: A Case Study of Kamrup (Rural) District of Assam

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Abstract

Agricultural risk is associated with negative outcomes that arise from imperfectly predictable variables like outbreak of pests and diseases, adverse climatic factors like drought, flood and storm, resource risks like non availability or poor quality of inputs, price risk, which altogether are beyond the control of the farmers. Under such situation crop insurance protects farmers against the various risks that affect them adversely.

The state of Assam is primarily an agricultural economy, where agricultural operations are mostly carried out through traditional means using indigenous tools and implements. The farmers are primarily engaged in sustaining their farming for household management rather than profit maximisation. In this light crop insurance is an important tool in helping the farmers to stand against the adversities arising in agricultural practices. Therefore it becomes very important for the farmers to be aware about the benefits of crop insurance. But sad enough the farmers of Assam are very much illiterate about the basic idea of crop insurance leave alone the prevailing schemes. Therefore in this study we try to check the awareness level of the farmers of the kamrup rural district and understand the impediments that come in the way of understanding and adoption of crop insurance among the farmers.

The state of Assam is primarily an agricultural economy, where agricultural operations are mostly carried out through traditional means using indigenous tools and implements. The farmers of the state are under the vagaries of monsoon. In this light crop insurance is an important tool in helping the farmers to stand against the adversities arising in agricultural practices. Crop insurance is an insurance arrangement aiming at mitigating the financial losses suffered by the farmers due to damage and destruction of their crops as a result of various risks involved. Therefore it becomes very important for the farmers to be aware about the benefits of crop insurance. But sad enough the farmers of Assam are very much illiterate about the basic idea of crop insurance leave alone the prevailing schemes.

As such in this paper, we have tried to analyze about the awareness status of the households regarding agricultural insurance. Kamrup (rural) district was purposively selected for the study. It falls under the Lower Brahmaputra Valley Zone of Assam. Kamrup district is one of the 50 selected districts where MNAIS (Modified National Agricultural Insurance Scheme) is in

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operation. Prior to MNAIS, NAIS (National Agricultural Insurance Scheme) has been in operation since 1999-2000(kharif). MNAIS is an improvement over the NAIS

The NAIS has been launched with an objective of providing insurance coverage and financial support to the farmers in the event of failure of any of the notified crop as a result of natural calamity, pests and diseases. It aims at helping the farmers in stabilizing their farm incomes, particularly in disaster years. All farmers including the sharecroppers, tenant farmers growing the notified crops in the notified area are eligible for coverage.

The scheme covers the following group of farmers:

- a) On a compulsory basis: all farmers growing notified crops and availing loans i.e, the loanee farmers
- b) On a voluntary basis: all other farmers growing the notified crops i.e, non loanee farmers who opt for the scheme.

Comprehensive risk insurance will be provided to cover yield losses due to non-preventable risk, viz.:

- a. natural fire and lightning
- b. storm, hailstorm, cyclone, typhoon, tempest, hurricane, tornado etc.
- c. Flood, inundation and landslide
- d. drought, dry spell
- e. pests/disease etc.

The objectives of the Scheme are as under: -

- i) To provide 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.
- ii) To encourage the farmers to adopt progressive farming practices, high value in-puts and better technology in Agriculture.
- iii) To help stabilize farm incomes, particularly in disaster years.

Salient features of the scheme: In addition to Agriculture Insurance Company of India Ltd., Private sector insurance companies with adequate infrastructure and experience will be allowed on selective basis to implement the scheme by the implementing States from out of the companies short listed by the Department of Agriculture & Cooperation.

Crops covered:

- i. Food crops (Cereals, Millets & Pulses)
- ii. Oilseeds
- iii. Annual Commercial / Horticultural crops

The Crops are covered subject to availability of i) the past yield data based on Crop Cutting Experiments (CCEs) for adequate number of years, and ii) requisite number of CCEs are conducted for estimating the yield during the proposed season.

Ten years historical data is adequate for setting premium rates, fixing indemnity limit and threshold yield etc. Wherever such historical yield data at insurance unit is not available for some years, the data of nearest neighboring unit / weighted average of contiguous units / next higher unit can be adopted, subject to appropriate loading in the premium rate, if necessary. The progress of MNAIS in the selected districts of Dhubri and Kamrup are as given in the table

Table No. 1

Progress of MNAIS in Kamrup (rural) and Dhubri district

Season	Covered Farmers (Nos.)	Area (Hect.)	Premium (Rs.)	Sum Insured (Rs.)	State Govt. Share Of Premium Subsidy	Benefited Farmers (Nos.)
Rabi 2010-11	2097	1564.19	1181044.09	49827659.00	393681.36	Nil
Kharif 2011	4641	3192.02	8020451.09	138876240.58	1927081.93	711
Rabi 2011-12	3942	2670.87	3170956.44	87504799.00	600370.00	299
Kharif 2012	1065 (Dhubri)	825.40	1267802.37	28173386.00	253560.47	-

Review of Literature: Access and availability of insurance changes the attitude of the farmer and induces him to take decisions which, otherwise, would not have taken due to aversion to risk. For example, rain-fed paddy was cultivated in one of the riskiest districts i.e., Anuradhapura district, of Sri Lanka, for the first time in 1962, as insurance facility was available to the farmers (Ray 1971).

It is argued that farmers' own measures to reduce the risk in farming in semi-arid tropical India were costly and relatively ineffective in reducing risk in farming and to adjust to drought and scarcity conditions. The riskiness of farming impinges upon the investment in agriculture leading to sub-optimal allocation of resources (Jodha 1978). Jodha finds that official credit institutions are ill equipped to reduce the exposure of Indian farmers to risks because they cannot or do not provide consumption loans to drought-affected farmers.

It absorbs the shock of crop failure by providing cushion wherein farmer is assured of minimum protection against various natural calamities. Moreover, crop insurance provides right to seek compensation rather than requesting for gratis from the government in the event of crop failures. Thus, crop insurance will help maintain the dignity of the farmer. Even in the years of crop failures, crop insurance assures farmers decent living from their own efforts and not by charity (Ahsan 1985).

The major role played by insurance programmes is the indemnification of risk-averse individuals who might be adversely affected by natural probabilistic phenomenon. The philosophy of insurance market is based on large numbers where the incidence of risk is distributed over individual. Insurance, by offering the possibility of shifting risks, enables individuals to engage in risky activities which they would not undertake otherwise (Ahsan et al., 1982).

K Seeta Prabhu (1986) concluded that crop insurance is a very useful instrument that can lead to increased agricultural production and welfare under specific circumstances. Its usefulness is limited to areas characterised by yield risks of a random nature. However, because of its conspicuousness, it is often hailed as a panacea for all the ills confronting agriculture, and adopted hastily by eager governments wanting to prove their concern for the farming community. In the process, more appropriate but less spectacular measures for agricultural development such as research, extension and input supply tend to get neglected.

It was observed that insured households invest more on agricultural inputs leading to higher output and income per unit of land. Interestingly, percentage increase in output and income is more

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for small farms. Based on 1991 data, CCIS was found to contribute 23, 15, and 29 per cent increase in income of insured farmers in Gujarat, Orissa and Tamil Nadu, respectively (Mishra 1994).

Access to crop insurance also tends to encourage adoption of riskier but more profitable crops, irrespective of whether such crops are covered by the insurance package or not. Surprisingly, the income gain of insured farmers (over their non-insured counterparts) is higher from crops not covered by insurance scheme when compared to income gains from insured crops (Mishra 1994).

However, Quiggin (1991) suggests that it is theoretically possible that moral hazard incentives may induce farmers to increase the use of agricultural inputs that increases dispersion of the distribution of crop yields.

Bhende (2005) did a study on the crop insurance programme CCIS and NAIS and concluded that only few major crops (cereals, pulses and oil seeds) were covered under the CCIS scheme. The scheme was voluntary in nature in the initial phase but was made compulsory for borrowers. The sum insured was equal to the loan amount borrowed. The average number of farmers (holdings) covered under CCIS were less than 5 (4.64) per cent of the total holdings in the country and the average area insured accounted for 4.61 per cent of the gross sown area during the reference period from 1985 through 1999. The claims paid and premium collected for various crops under CCIS varied significantly.

Deshmukh (2012) and khatri (2005) in their study Agricultural Insurance market has shown a tremendous potential. However, in past forty years of its inception it could not gain strong hold in the farming community. Mani and Selvanayaki (2012) concluded that there is lack of awareness among the farmers of Tamil Nadu about the various crop insurance related schemes, and that agricultural insurance has fared poorly, at least in parts, because of the problem of moral hazard and adverse selection. This requires better information dissemination and access to such information should be at a nominal cost.

Objectives:

The main objectives of this paper are as follows:

1. to access the awareness status of the household about crop insurance
2. to access the constraints in adoption of crop insurance.

Methodology: Both primary as well as secondary data has been used for the study. Primary data has been collected with the help of questionnaire from a sample of 100 households. The sample of 100 farmers were further divided into two equal halves; one for the loanee farmers and other the non-loanee farmers in two villages selected randomly i.e, Rangia and Hazo. Secondary data has been collected from Agricultural Insurance Company Limited (AICL) regional office and Directorate of Agriculture, Govt of Assam. The awareness level of the respondents was evaluated by studying the response of the farmers to various questions about the idea of crop insurance and the prevailing schemes, as put in the questionnaire. To analyze the constraints in the adoption of crop insurance in Assam, Garret Ranking Technique has been used. As a first step, the respondents were asked to rank the enlisted factors the order of merit assigned, by the respondents were converted into percentage position using the formula

$$\text{Percentage position} = 100 \times (R_{ij} - 0.5) / N_j$$

Where,

R_{ij} is the rank given for i^{th} factor by j^{th} individual

N_j is the number of factors ranked by the j^{th} individual.

The percentage position of each rank was then converted into scores using the Garret and Woodworth (1969) table. For each factor, the scores of the individual respondents were added together and divided by total number of respondents for whom scores were added. The mean score for all the factors were arranged in the descending order, ranks were assigned revealing the importance of various factors.

Results and Discussion: The outstanding participation of the loanee as well as the non loanee farmers in the study has revealed some interesting results. The average age of the same farmers was around 50 years which didn't vary much among the loanee farmers as well as the non loanee farmers the family size of insured farmers, ie, 5 was bigger than the non-insured farmers, ie, 4 they were better educated and had longer farming experiences. All the farmers were marginal farmers. 35% of the farmers were uneducated, 26% were under matriculate, 23% were matriculate, 14% were higher secondary pass and only 2% were graduate. However the awareness level about the prevailing crop insurance schemes was very poor, nearly 73% of the farmers could not answer the basic question of what crop insurance was. 67 % of the farmers were unaware of the premium rates, documentation regarding claims from the insurance during personnel interaction, many loanee farmers indicated ignorance about the coverage of their crops under the crop insurance further since the compensation was deposited with the borrowers bank account, the farmers didn't know whether they were covered under crop insurance scheme, what was the compensation paid to them and when was it deposited. The participation of methods of mass communication, like television, newspaper, and radio and village fairs is very less in educating the farmers about the same.

A number of constraints are faced by the farmers while adopting a crop insurance scheme. The decision of the farmers to adopt crop insurance scheme depends on various factors. Some of the identified factors are farmer's landholding size, access to loan, age, educational attainment, access to non-farm income, access to irrigation etc.

The farmers have also identified certain drawbacks in the performance of the prevailing crop insurance scheme, such as, inadequate estimation of crop yield loss, low indemnity rate and its delayed payment, and raised concerns over the limited role of Agricultural Insurance Company Limited at grass root level, which according to them was the root cause for many irregularities and misconceptions about the scheme.

Policy Suggestion and Conclusion: Although several attempts have been made by various crop insurance schemes, the success has been limited. The experience shows that crop insurance has fared poorly, at least in part, because of problems related to lack of information that leads to lack of awareness. Therefore better information dissemination is required to mitigate the problem and the access to such information should be made available at nominal cost.

Based on the above results the following policy suggestion have been put forward in consultation with the farmers

1. Yield assessment should be done separately for irrigated and rainfed lands as they differ widely in resource use and performance
2. AICL should have its own office at district and block levels to improve monitoring and earn confidence of the farmers.
3. At the beginning of every crop season, the AICL should organize camps to enroll farmers under the scheme.
4. AICL should take the help of NGOs, mass media, etc to educate the farmers about the prevailing schemes and the benefits from it to ensure greater participation.

5. The delay in settlement of indemnity in case of yield loss to the farmers should be minimized and made hassle free.

Reference:

- AICIL (Agriculture Insurance Company of India Limited), various publications, Regional office, Guwahati.
- Barros Pestana Carlos an Maria Rosa Borges(2005),”*Measuring Efficiency in the Life Insurance Industry with a Stochastic Frontier Model*”, Handbook of Insurance Economics, Boston, (G edition)
- Cummins J. David (1998): “*Analyzing Firm Performance in the Insurance Industry Using Frontier Efficiency Methods*”, Wharton School Center for Financial Institutions, University of Pennsylvania, vol. 98, no.22
- Cummins, J.D. and Zi, H. (1998),” *Comparison of Frontier Efficient Methods: An Application to the U.S. Life Insurance Industry*”, Journal of Productivity Analysis, vol. 10, pp. 131-152.
- Grover Mansi (2004),” *Evaluating Effects of Private Insurance on Forest Landowners Incentives to Sequester and Trade Carbon: Impact of Hurricanes*”,
- Khannen N. an N. Thangavel (2005),”*overview of Indian insurance sector*”, BMI publications.
- Ray Debraj (1997),” *development economics*”, oxford India publications,ch. No. 15
- Sinha Tapen (2004),” *Insurance Sector in India: Towards the 2020 Vision*”, spell bound publishers.
- Suret Jean Marc (1991). "Scale and Scope Economies in the Canadian Property and Casualty Insurance Industry," The Geneva Papers on Risk and Insurance - Issues and Practice, Palgrave Macmillan, vol. 16(2), pp 236-256
- Thakur Shilpa (2010),” *competitiveness in Indian insurance market*”
www.aicl.co.in
www.irda.org.in
www.directorateofagricultureassam.co.in
