



CROP INSURANCE: FARMERS PERCEPTION AND AWARENESS –A STUDY WITH SPECIAL REFERENCE TO KODAGU DISTRICT

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Abstract:

Farming is inherently one of the riskiest economic activities. Crop insurance is one alternative to manage risk in yield loss by the farmers. It helps in stabilization of farm production and income of the farming community. This paper has reported the results of a survey of 50 farmers conducted to evaluate their perception and awareness about crop insurance schemes in Kodagu district of Karnataka because this region receives very high rainfall compared to other regions of the state. Though different crop insurance scheme is operating since 2002, majority of respondents in the study area are not aware about these schemes, implementing agency and who pay's compensation. Almost all respondents are in the wrong perception that banks will pay compensation and they are the implementing agency. Majority of the farmers mentioned that they even don't know that they have included under crop insurance schemes. Financial security, protection from the loss and compulsion by the banks were the reasons for opting crop insurance. Further more than 80% of respondents are not aware of extent of coverage, premium paid, last date of premium to be paid, procedure for insuring crops and method of loss determination. Farmers gave suggestions for improving existing schemes and they want quick settlement of claims which is usually takes more than one year. The study concludes with various suggestions for increasing the awareness level of the farmers for ensuring better penetration of crop insurance in Kodagu district.

Keywords: Crop insurance, Risk, Awareness, Perception

Introduction

Indian economy is large and diverse with a number of major sectors that include manufacturing, agriculture, and services. Agriculture is classified as a primary sector and is assigned a significant role for providing employment, income and fulfillment of hunger needs and principal source of livelihood for more than 58% of the population of this country.

Farmers engaged in agriculture are exposed to various risks. In India, agricultural risks arise through climate variability, frequent natural disasters, yield and price uncertainties, weak rural infrastructure, imperfect markets and lack of financial services.

Crop insurance is recognized to be a basic instrument for maintaining stability in farm income. It is a unique weather-based insurance scheme designed to provide insurance protection against losses in crop yield resulting from fire, lightning, storm, cyclone, hailstorm, tornado, tempest, typhoon, flood, inundation and landslide, draught, and pest/disease. The scheme covers food crops (cereals, millets, and pulses), oilseeds, and annual commercial/ horticulture crops. The premium rates range from 1.5 % to 3.5% of the sum insured for food and oilseed crops. In the case of commercial and horticultural crops, the actuarial rates are charged.

Karnataka state in India, with more than 75 percent of its land being in the rain fed region, is the second largest drought-prone state in India (after Rajasthan). The State has participated in every crop insurance program introduced in India since 1972.

About Kodagu District:

Kodagu is located on eastern slopes of Western Ghats. Kodagu district is well- known for coffee plantation. Much of Kodagu is used for agriculture. Paddy fields are found on the valley floors, with coffee and pepper Agro forestry in the surrounding places. The most common plantation crop is coffee, especially of the Arabica and Robusta variety. It is the second coffee production region, after Baba Budangiri hills in Chikkamagalur district in India. Coffee revenue has helped Kodagu to become one of the richest districts in India. For coffee and paddy growers in Kodagu district rainfall is the biggest sources of risk. According to information from Coffee board of India and Agriculture Insurance Company, the main reason for cause of these yield risk is due to deficit/excess rainfall, excess temperature, humidity, strong winds and pest diseases. Among these rainfall plays a dominant role. In July and august rainfall is intense and there are often showers into November. Yearly rainfall exceeds 4000milimeters in some areas.

Review of Literature

Pandaraiah, Sashidhar (2015) revealed that the government's role was restricted in advertising the risk mitigating strategies in agriculture. Short- term credit was distributed to small farmers by co- operative banks and medium-term loans by commercial banks, and it was suggested that there is a need to publicize the information to small and medium farmers about crop insurance. Social participation and education must be given to the farmers to increase awareness.

Mukesh (2015) in his research paper discussed the benefits and issues of Crop Insurance of India. The study showed that access to loan, off-farm income, education, region extensively influence for the adoption of crop insurance. Landholding-size had a positive influence on the income of farmers. Time consuming procedure, lack of motivation and information from officials, on-availability of crop loan were the major drawbacks.

Objective of the study

1. To analyze the awareness of farmers towards crop insurance schemes.
2. To ascertain perception and opinion of farmers regarding existing crop insurance schemes.

Research methodology:

Research design:

The present study is descriptive in nature. Sample size selected for the study was 50 farmers. The study was conducted in Madikeri taluk of Kodagu District (Karnataka) by interviewing 50 insured and non- insured farmers spread over 10 villages in Madikeri taluk. The simple random sampling method was used for data collection. The sampled respondents were in the categories of small, marginal and large farmers cultivating all crops majorly covering coffee and paddy in different seasons.

Sampling technique:

The data was processed with the help Simple statistical techniques such as Percentage analysis.

Primary data:

The structured questionnaires were developed and randomly been issued to 50 selected respondents to get the information for analysis. First part of the questionnaire contains socio economic profile of the respondents and second part concerning awareness about crop Insurance scheme. The study involved survey of farmers who have been covered under Crop Insurance and availed credit from banks, called Loanee farmer and farmers who were not availed any credit from the financial institution, called non-loanee farmer.

Secondary data

Secondary data was elicited from various publications such as journals, Research articles, reports, Internet, Farmers bulletin, Agriculture Insurance Company limited, Report of the Committee to Review the Implementation of Crop Insurance Schemes in India and Economic Survey 2015-16.

Data analysis and interpretation

Socio-economic characteristics of farmers were presented in Table-1. Majority of the respondents were in the age group of above 50 years (38%). Number of youngsters was found low. Male respondents (78%) were active in farm operation than women (22%). Most of the respondents possessed education above graduate level (38%), followed by higher secondary education 36% and 8% of the respondents were illiterate. It can be said that literates prefer to have insurance. Majority of the respondents belonged to Hindu religion (98%). About 38% of the respondents fall under Backward Class followed by 36% of the respondents fall under general category and 26% fall under scheduled caste and tribe. Out of 50 respondents 74% of the respondents were male, 22% female and 4% were widow. 40% of the respondents were having membership in farmer's co-operative society, and in youth groups. 14% of the respondents were the members of SHG's and other banks. These respondents had more awareness on agriculture risk mitigation and on crop insurance.

Table 1: Socio-Economic Characteristics of the respondents:**Source: Primary Data**

Parameters		No. of respondents	Percentage (%)
Age	Up to 30 Years	05	10
	31 to 40 Years	09	18
	41 to 50 Years	17	34
	Above 50 Years	19	38
	Total	50	100
Gender	Male	39	78
	Female	11	22
	Total	50	100
Educational Qualification	Illiterate	04	08
	Primary	09	18
	Higher Secondary/Diploma	18	36
	Graduate and Above	19	38
	Total	50	100
Religion	Hindu	46	98
	Muslim	04	08
	Christian	-	-
	Total	50	100
Caste	Scheduled Caste/Tribe	13	26
	Backward Class	19	38
	General	18	36
	Total	50	100
Marital Status	Married	37	74
	Unmarried	11	22
	widow	02	04
	Divorced	-	-
	Total	50	100
Membership	None	23	46
	SHG's	07	14
	NGO's	-	-
	others	20	40
	Total	50	100
Size of Family	Up to 3 Members	11	22
	4 to 5 Members	21	42
	More than 5 Members	18	36
	Total	50	100

Table 2: Source of income from various categories of occupation:**Distribution of annual income among sample farmers:**

Table 2 is the evident of distribution of annual income among respondents showed that 26% of the respondents were in higher income group and 20% of the respondents above 150000. Majority of the respondents belong to medium category and 14% of the respondents were in lower income category. This implies the respondents were mostly small and marginal level farmers. The income distribution was not affected much in risk mitigation tactics in agriculture

in selected area. Out of 50 respondents 62% of the respondents were considering agriculture as their main sources of income.

Income categories	Number of respondents		Percentage (%)	
Below 25000	07		14	
25001-50000	09		18	
50001-75000	03		06	
75001-100000	08		16	
100001-150000	13		26	
150001-175000	10		20	
Total	50		100	
Variables	Main Source		Secondary Source	
	No. of respondents	Percentage (%)	No. of respondents	Percentage (%)
Agriculture	31	62	19	38
Cattle, Poultry, etc	-	-	05	10
Agricultural Wages	-	-	-	-
Small trade/Business	04	8	14	28
Money Lender / Landlord	-	-	02	4
Government Employee	12	24	08	16
Private Employee	-	-	-	-
Pensioner	03	6	-	-

Source: Primary Data

Table 3: Total number of years involved in farming activity:

Table 3 implies the total number of years the respondents were involved in farming activity. It reveals that 36% of the respondents involved in farming activity from 10-20 years and 30% of the respondents possessing their operation from 20-30years.

Years	No. of respondents	Percentage (%)
0-10	11	22
10-20	18	36
20-30	15	30
30-40years	06	12

Source: Primary Data

Major crops produced in the study area are Paddy, coffee, Pepper, ginger, vegetables, vanilla, orange and aracanut by small farmers with land holdings of up to 5 acres (32%) by medium sized farmers with land holdings of 14% and 54% of the respondents were large farmers with land holding of above 10 acres. Most of the respondents (39%) had own irrigated land.

Table 4: Reason for destruction of the crop:

The farmers were asked about major risks which affects their crop production. In the study area more/less rain (62%) was the major reason for destruction of crop loss. Animal/bird attack place 10%, insect attack place 12% and unseasonal rain place 16% in crop production losses.

Reasons	No. of respondents	Percentage (%)
Insect attack	06	12
More/less rain	31	62
Drought	-	-
Flood	-	-
Animal/ Bird Attack	05	10
Lack of electricity	-	-
Unseasonal rain	08	16
Power problem	-	-
Non availability of inputs (seeds, fertilizer, pesticide)	-	-
Total	50	100

Source: Primary Data**Table 5: Awareness among farmer about Agricultural Insurance Schemes:**

1. Out of total 50 respondents 10% of the respondents were fully aware about NAIS, 38% of the respondents were partially aware of NAIS and 52% of the respondents were not aware of NAIS.
2. It is evident from the survey that 6% of the respondents were fully aware of coffee insurance scheme, 30% of the respondents were partially aware of coffee insurance scheme and 64% of the respondents were not aware of coffee insurance scheme. It was observed that no respondents were aware of Varsha Bhima crop insurance scheme, Modified National Agriculture insurance scheme (MNAIS), livestock and poultry insurance.
3. Out of 50 respondents 8% of the respondents were fully aware of extent of crops coverage, 40% of the respondents were partially aware of extent of crops covered and 52% of the respondents were not aware of the extent of crops covered.
4. Out of 50 respondents 56% of the respondents were fully aware about the premium to be paid by them, 44% of the respondents were not aware of last date of insuring the crop and only 30% of the respondents were partially aware of last date for insuring the crop.
5. The study showed that out of 50 respondents 20% of the respondents were fully aware of procedure for insuring crop. 30% of the respondents were partially aware of procedure for insuring crop and 50% of the respondents were not aware about the procedure.
6. It was observed that no respondents were aware of method of loss determination and methods of compensation determination.
7. It was observed that 30% of the respondents were partially aware about Agriculture Insurance Corporation (AIC) and 52% were unaware of AIC.
8. Majority of the respondents were aware about agriculture department (46%), Grameena Bank (64%) and Commercial banks (48%).
9. Out of the total respondents 82% of the respondents obtained crop loan and 76% of the respondents opined that loan amount sanctioned by bank was not sufficient.

Sl. No.	Particulars	Aware fully		Aware Partially		Not aware	
		Respondents	%	Respondents	%	Respondents	%
A	Type of Insurance:						
1	Agricultural Insurance Scheme						
a	National Agricultural Insurance Scheme(NAIS)	05	10	19	38	26	52
b	Coffee Insurance Scheme	03	06	15	30	32	64
c	Varsha Bhima	-	-	-	-	50	100
d	Weather Based Crop Insurance Scheme	-	-	3	6	47	94
e	Rainfall Insurance Scheme	-	-	09	18	41	82
f	Modified National Agricultural Insurance Scheme	-	-	-	-	50	100
h	Pradhan Manthri Fasal Bima Yojana	08	16	38	76	04	8
2	Live stock Insurance	-	-	-	-	50	100
3	Poultry	-	-	-	-	50	100
B	Components of Insurance	04	8	20	40	26	52
1	Extent coverage						
2	Premium to be paid	28	56	13	26	9	18
3	last date of insuring crops	-	-	28	56	22	44
4	procedures for insuring crops	10	20	15	30	25	50
5	Method of loss determined	-	-	-	-	50	100
6	Method of compensation determined	-	-	-	-	50	100
C	Implementing Agency						
1	Agriculture insurance Corporation(AIC)	09	18	15	30	26	52
3	Agriculture department	27	54	23	46	-	-
4	Banks	50	100	-	-	-	-
D	Agency Paying Compensation						
1	Agriculture department & Horticulture department	33	66	17	34	-	-
2	Animal Husbandry department	06	12	09	18	35	70
4	Grameen bank	18	36	32	64	-	-
5	Commercial bank	26	52	24	48	-	-

Source: Primary Data

Table 6: Sources of obtaining information about Crop Insurance Program:

Farmers acquire information about Crop insurance Program from various sources including Radio (24%), Television (18%), Kisan sabha(18%)Agriculture department(14%) and remaining is the portion of newspaper, mobile and village sabha play an important role in disseminating information about various insurance schemes implemented by the public and private companies.

Reasons	No. of respondents	Percentage (%)
Newspaper	2	4
Radio	12	24
Television	9	18
Mobile	05	10
Insurance agent	-	-
Kian sabha	09	18
Village sabha	06	12
magazine	-	-
Agriculture department	07	14
Total	50	100

Source: Primary Data

Table 7: Reason for insuring the crop:

This table specifies the reasons for insuring the crop. Out of 50 respondents 64% of the respondents insure crops to protect against losses, for maintaining plantation/horticulture (24%). The respondent’s opinioned crop insurance is compulsory by the bank.

Reasons	No. of respondents	Percentage (%)
To Protect against losses	32	64
Plantation / Horticulture	12	24
Compulsion by the Bank	06	12
Total	50	100

Source: Primary Data

Table 8: Alternative measures taken by farmers in case of crop loss:

Traditional and informal risk managing mechanisms like borrowings from friends, neighbors and relatives and through jewel loan was the major risk management strategy used by farmers in study area to mitigate crop production risks, followed by bank loan. Crop insurance plays a minor role as risk management instruments in study area.

Variables	Always		Frequently		Sometimes		Very Rarely		Never	
	Respondents	%	Respondents	%	Respondents	%	Respondents	%	Respondents	%
Bank Loan	44	88	-	-	3	6	3	6	-	-
Sale of Fixed Assets	-	-	-	-	-	-	-	-	-	-
Sale of Livestock	-	-	-	-	-	-	-	-	-	-
Crop Insurance	-	-	-	-	07	14	41	82	02	24
Friends & Relatives	10	20	12	24	17	34	-	-	11	22
Moneylenders	-	-	-	-	32	64	09	18	09	18
Government Relief	-	-	-	-	-	-	50	100	-	-

Source: Primary Data

Findings:

1. After discussion with the farmers it was observed that the farmers were not willing to take crop insurance because they think there may be corruption at the time of compensation and it will be lengthy process and the services of financial institutions are not satisfactory.
2. Out of total farmers majority of farmers were not well educated hence they don’t know the procedure of crop insurance. They insure their crops with the help of other educated persons and due to banks pressure. Hence, they were not interested to understand the procedure of crop insurance scheme.
3. The awareness about crop insurance schemes is poor due to lack of proper interaction with in local level, and due to the lack of effective image building and awareness of officers of implementing agency.
4. Implementing agency failed to advertise crop insurance process in simple language which is easily understandable to the illiterate people.
5. Most of the farmers do not have detailed information about different insurance schemes, implementing agency and agency paying compensation.

6. Due to inadequate information and inadequate publicity of crop insurance schemes farmers are not opting for crop insurance.
7. The farmers perceive that the crop insurance is mainly suits for large farm size farmers and its extent in risk sharing is very low. They also considered that the premium rate is not affordable by small and marginal farmers.

Suggestions:

1. Guidance should be given from the government authorities, financial institutions and Village Panchayat members to the farmers about the operation and procedure of crop insurance.
2. The service providers have to look on the product innovations and appropriate distribution channel to make crop insurance reach more effectively to all the farmers covering different risks.
3. Claim settlement process must be reduced and it must reach to the respondent's earliest.
4. Regular orientation programs/ counseling camps should be arranged by banks and insurance authorities at village level to increase the awareness of crop insurance scheme.
5. Mutual efforts of NGOs, financial institutions and governments are required to improve the reach to the crop insurance scheme.
6. Information about crop insurance scheme should be advertised more in the form of television, radio, internet, magazines, and newspapers.
7. Awareness must be created among farmers regarding different crop insurance schemes available to famers, procedure for insuring crops, methods of loss and compensation determined, and different agencies implementing and paying compensation.

Conclusion:

Agriculture is subjected to risk and uncertainties such as flood, drought, damages due to pest infestations, hail storms, etc. to protect the farmers from these risks and uncertainties, various schemes are being implemented by the central and state governments in Kodagu district. The Crop insurance scheme aimed at mitigating the losses and helps in stabilizing the income at the farm level through the promotion of the technology and thereby increasing the investment in agriculture. Government of India had implemented different schemes of crop insurance for the farmers such as the Pradhan Mantri fasal bima yojana, National Agriculture insurance scheme, Rainfall Insurance Scheme for Coffee Growers, Weather Based Crop Insurance Scheme; Varsha Beema etc. the various schemes launched from time to time in the country have served very limited purpose. The coverage in terms of area, number of farmers and value of agricultural output is very small. Proper steps to be taken by the insurance company to increase the crops coverage, area approach, reduce the premium rate and reduce the formalities in claims.

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