

## A STUDY ON THE KNOWLEDGE AND ATTITUDE ON CROP INSURANCE SCHEME

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## **Abstract**

Indian agriculture is heavily dependent on rainfall which mainly occurs about two and half months during monsoon season. Natural calamity's effect on agriculture yield is much more. The abnormal behaviour of monsoon may cause natural disasters such as drought, floods, cyclones, etc. Agriculture has always been a risky business. Unlike the industrial sector it is subject to the vagaries of the nature. Uncertainty of crop yield is thus one of the basic risks, which every farmer has to face, more or less, in all the developing countries. To cover the risk which may occur in future, there is need to some provision and crop insurance is the only mechanism available to safeguard against production risk in agriculture. The study shows that nearly half of the respondents (48.33 per cent) of the respondents had medium level of knowledge followed by low (37.50 per cent) and high (14.17 per cent) of the respondents possess knowledge level on the crop insurance. **Keywords**: crop insurance scheme, age, education, occupation etc

#### Introduction

Largest livelihood provider in India is agriculture. It plays an important role in Indian economic development. It is facing operational risk in cultivating different crops. Indian agriculture is heavily dependent on rainfall which mainly occurs about two and half months during monsoon season. Natural calamity's effect on agriculture yield is much more. The abnormal behaviour of monsoon may cause natural disasters such as drought, floods, cyclones, etc. Agriculture has always been a risky business. Unlike the industrial sector it is subject to the vagaries of the nature. Uncertainty of crop yield is thus one of the basic risks, which every farmer has to face, more or less, in all the developing countries. To cover the risk which may occur in future, there is need to some provision and crop insurance is the only mechanism available to safeguard against production risk in agriculture

The crop insurance is a potentially more effective risk-shifting mechanism to give protections to all types of farmers and the use of it as a risk management tool has grown rapidly in recent years. Also, the crop insurance subsidies help the farmer on various grounds. They give protection from different natural calamities. Agricultural insurance considerably strengthens the financial security of farmers and reduces the direct and indirect costs on the national economy. In India crop insurance is compulsory for the loanee farmers who borrow loan from banks and other financial institutions. For fulfilling this need the Government of India has made experiments and efforts by introducing various schemes of crop insurance.

## **Materials and Methods**

Knowledge stage, the individual is exposed to the crop insurance scheme, but lack complete information about it. This process occurs by the chance or by the purposeful effect made by the person himself.

It is operationally defined as the behaviour of farmers through which he exposes to the crop insurance scheme, but lack complete information about it. Regarding crop insurance 31 statements were framed and the responses were elicited on 2-point continuum i.e. Known and unknown by assigning a score of 2 and 1 respectively. This procedure was followed by Belgavimath (1994) and Sharmila (2017). Allopart (1935) defined attitude as a mental state of readiness, organisation through experience, exerting a directive and dynamics influence upon individual's response to all objects and situations with which it is related.

To know the attitude of beneficiaries towards crop insurance scheme, schedule was developed. Schedule having (fifteen statements 12 positive statements and 3 negative statements) were related to crop insurance scheme. The response of beneficiaries was recorded on three continuum as 'agree', undecided', and 'disagree' the positive statements were assign 3 score for agree, 2 for undecided and 1 for disagree and the vice versa in case of negative statement. The scoring procedure adopted by Dhande (2017) was followed.

## **Results and Discussion**

The knowledge level of respondents on crop insurance scheme

## Distribution of respondents according to their overall knowledge level on crop insurance scheme

Results of distribution of respondents according to their overall knowledge on crop insurance scheme are presented in Table -1

**Table 1:** Distribution of respondents according to their overall Knowledge level on crop insurance scheme

(n=120)

S. No	Category	Respondents			
5. 110		Number	Per cent		
1.	Low	45	37.50		
2.	Medium	58	48.33		
3.	High	17	14.17		
	Total	120	100.00		

The results in table 1, indicated that most (48.33 per cent) of the respondents had medium level of knowledge followed by low (37.50 per cent) and high (14.17 per cent) of

the respondents possess knowledge level on the crop insurance.

# Distribution of respondents according to their attribute wise knowledge level on crop insurance scheme

Results of distribution of respondents according to their item wise knowledge level on crop insurance scheme are given in Table-2.

## I. Objectives

The mean value of knowledge on objective was 44.17per cent. 47.50 per cent had knowledge about crop insurance encourages farmers to adopt a new technology. Crop insurance helps in maintaining the flow of agricultural credit (45.00 per cent). Crop insurance helps to stabilizing the farm income during disaster period (40.00 per cent). This

might be due to lack of awareness on objectives of the crop insurance scheme.

## **II. Farmers Coverage**

The mean value of knowledge on farmers coverage was found to be 54.58 per cent. Their knowledge level was found to be high on the crop insurance scheme was voluntary basis to Non-loanee farmers (60.00 per cent) followed by compulsory for loanee (49.16 per cent). This is might be due to lack of complete information on farmer's coverage.

## III. Crop Coverage

The mean value of knowledge on crop coverage was found to be 70.42 per cent. Their knowledge level on notified crops was found to be (75.83 per cent) followed by kharif and rabi season (65.00 per cent). This might be due to banks/ Financial institution in the area issuing SAO regularly.

**Table 2:** Distribution of respondents according to the item wise knowledge level

S. No	Statements	Number of Respondents	Per cent			
I	Objectives					
1.	Crop insurance encourages farmers to adopt a new technology in paddy	57	47.50			
2.	Crop insurance helps in maintaining the flow of Agricultural credit	54	45.00			
3.	Crop insurance helps to stabilizing the farm income during disaster period	48	40.00			
	Mean		44.17			
II	Farmers Coverage					
1.	Crop insurance is compulsory to loanee farmers	59	49.16			
2.	Crop insurance is voluntary to Non-loanee farmers	72	60.00			
	Mean		54.58			
III	Crop Coverage					
1.	Notified crops for crop insurance scheme	91	75.83			
2.	Paddy crop raised during kharif and rabi season is also eligible for crop insurance.	78	65.00			
	Mean		70.42			
IV	Risk Coverage					
1.	Crop insurance scheme is one of the risk management tool	96	80.00			
2.	Crop insurance provide comprehensive risk insurance coverage against Localized calamities	57	47.50			
3.	Post-harvest losses coverage covered up to two weeks from harvest	50	41.66			
4.	Settlement of claims up to 25% of sum insured amount paid for prevented sowing/ Pre sowing risk	54	45.00			
5.	Standing crop damage due to drought, dry spells, flood, pest& diseases, fire/lightening, storm/hailstorm	79	65.83			
Mean						
V	Insurance Unit		1			
1.	Crop insurance scheme operates based on Area approach	85	70.83			
2.	Insurance unit will be village or the major growing unit	75	62.50			
	Mean					
VI	Sum Insured					
1.	Sum insured limit for normal coverage to farmers is up to Scale of finance.	24	20.00			
2.	Sum insured amount for paddy crop per acre	64	53.33			
3.	Sum insured amount same for non-loanee and loanee farmer	42	35.00			
	Mean		36.11			
VII	Premium					
1.	Premium rate for Paddy crop in kharif season is 2.0%	56	46.66			
2.	Premium rate for Paddy crop in rabi season is 1.5%	67	55.83			
3.	Premium amount for paddy crop per acre	67	55.83			
	Mean					
VIII	Premium Subsidy		•			
1.	Premium subsidy to be shared by Centre and state government is equal.	66	55.00			
Mean						

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IX	Level of Indemnity			
1.	Indemnity level is calculated based on firka level 18		15.00	
2.	Indemnity level calculated to the paddy crop is 70%, 80%, and 90% 21		17.50	
Mean			16.25	
X	Loss Assessment			
1.	Mobile apps are used for reporting incidents of localized calamities.	91	75.83	
2.	Sowing certificate issued for the crop insurance is issued by agriculture officer of block.		69.16	
3.	Assessment for crop damage due to Post-harvest losses and localized risks will be made on individual farm basis.	62	51.66	
	Mean		65.55	
XI	Threshold Yield			
1.	Threshold Yield is calculated by average yield of last seven years excluding two years of declared calamity if any, multiplied by the level of indemnity of the area.	20	16.66	
Mean				
XII	Crop Cutting Experiment		16.66	
1.	Crop cutting experiment used to access actual yield data	12	10.00	
2.	CCE is conducted by Department of Agriculture		12.50	
3.	Ten CCE'S is to be conducted in firka level	12	10.00	
Mean			10.83	
XIII	Documents Required			
1.	Documents required for getting crop insurance	103	85.83	
Mean			85.83	
XIV	Nodal Agency			
1.	Nodal agencies involved in crop insurance scheme	104	86.66	
Mean			86.66	

## IV. Risk coverage

The mean value of knowledge on risk coverage was found to be 55.99 per cent. Their knowledge level on risk management tool (80.00 per cent), Standing crop damage due to drought, dry spells, flood, pest & diseases, fire/lightening, storm/hailstorm (65.83 per cent), localized calamities (47.50 per cent), prevented sowing/ Pre sowing risk (45.00 per cent) and Post-harvest losses coverage (41.66 per cent). The knowledge level high on standing crop damage due to drought because farmers are belonging to the drought prone area.

#### V. Insurance Unit

The mean value of knowledge level on Insurance unit was found to be 66.67 per cent. The knowledge level on area approach was found to be 70.83 per cent followed by Insurance unit will be village or the major growing unit (62.50 per cent). This might be due to medium level of social participation and extension agency contact.

## VI. Sum Insured

The mean value of knowledge on Sum Insured was found to be 36.11 per cent. The knowledge level on sum insured amount for paddy crop was (53.33 per cent) followed by sum insured amount for non-loanee and loanee farmer (35.00 per cent) and normal coverage (20.00 per cent). This might be due to lack of complete information on sum insured amount for various level of coverage.

## Attitude of respondents towards crop insurance scheme

## Distribution of respondents according to their overall Attitude of respondents towards crop insurance scheme

The results on distribution of respondents according to their Attitude are presented in Table 3

Table 3: Distribution of respondents according to their attitude

(n=120)

S.	Category	Respondents		
No		Number	Per	
			cent	
1.	Less favourable	34	28.33	
2.	Moderately favourable	64	53.34	
3.	Highly favourable	22	18.33	
	Total	120	100.00	

The results in table 3 indicated that Near about more than half of the respondents (53.34 per cent) expressed moderately favourable attitude while 28.33 per cent had less favourable attitude and highly favourable attitude (18.33 per cent). Majority of the respondents had medium level attitude because of their medium knowledge level on crop insurance scheme. This result is in line with the findings of Santosh Devi Samota (2015).

## Distribution of respondents according to the attribute wise Attitude level

The results on distribution of respondents according to their attribute wise Attitude are presented in Table 4.

**Table 4:** Distribution of respondents according to the attribute wise attitude

S. No	Statement	Agree		Undecided		Disagree	
		F	%	F	%	F	%
1.	Crop insurance saves farmers from risk.	62	51.67	45	37.50	13	10.83
2.	Provide relief fund at the time of disaster.	60	50.00	40	33.33	20	16.67
3.	Good for big farmers only.	65	54.17	34	28.33	21	17.50
4.	Insurance not good for small produces.	73	60.83	32	26.67	15	12.50
5.	Crop insurance schemes are well defined.	15	12.50	18	15.00	87	72.50
6.	Insurance make a farmer more relax and confident.	74	61.67	26	21.66	20	16.67
7.	Follows simple formalities	16	13.33	22	18.33	82	68.34
8.	Motivation from banks/financial institutions.	42	35.00	28	23.33	50	41.67
9.	Easily accessible through bank.	39	32.50	62	51.67	19	15.83
10.	Reasonable Premium rate.	29	24.17	30	25.00	61	50.83
11.	Premiums are shared by Government.	78	65.00	27	22.50	15	12.50
12.	Good for loanee farmers to save their savings from risk.	60	50.00	40	33.33	20	16.67
13.	Not for illiterate farmers.	24	20.00	56	46.67	40	33.33
14.	Quick settlement of claims.	21	17.50	22	18.33	77	64.17
15.	Crop insurance is compulsory to farmers.	66	55.00	33	27.50	21	17.50

## I. Crop insurance saves farmers from risk.

It could be observed from the table 19 reveals that more than half of the respondents (51.67 per cent) agree that crop insurance saves farmers from risk followed by 37.50 per cent of the respondents had undecided and 10.83 per cent of the respondents had disagree about it. This might be due to crop insurance helped farmers during the disaster period to overcome their losses.

#### II. Provide relief fund at the time of disaster.

It could be observed from the table 19 reveals that half (50.00 per cent) of the respondents agree that provide relief fund at the time of disaster while 33.33 per cent of the respondents had undecided and 16.67 per cent of the respondents had disagree about it. This might be due to crop insurance helped farmers to manage their economic losses by providing relief at the time of disaster.

## III. Good for big farmers only.

It could be observed from the table 19 reveals that more than half (54.17 per cent) of the respondents agree that crop insurance scheme was good for big farmers only while 28.33 per cent of the respondents had undecided and 17.50 per cent of the respondents had disagree about it. This might be due to constraints faced by farmers in availing benefits of crop insurance scheme.

## IV. Insurance not good for small produces.

It could be observed from the table 19 reveals that more than half (60.83 per cent) of the respondents agree that insurance not good for small produces followed by 26.67 per cent of the respondents had undecided and 12.50 per cent of the respondents had disagree about it. This might be due to coverage of crops in the crop insurance scheme

## V. Crop insurance schemes are well defined.

It could be observed from the table-19 reveals that more than half (72.50 per cent) of the respondents disagree that crop insurance schemes are well defined followed by 15.00 per cent of the respondents had undecided and 12.50 per cent of the respondents had agree about it. This might be due to difficulty in understanding the crop insurance scheme.

## VI. Insurance make a farmer more relax and confident.

It could be observed from the table-19 reveals that more than half (61.67 per cent) of the respondents agree that crop insurance make a farmer more relax and confident followed by 21.66 per cent of the respondents had undecided and 16.67 per cent of the respondents had agree about it. This might be due to crop insurance scheme encourages the farmers to adopt new technologies that makes farmers more relax and confident.

## VII. Follows simple formalities

It could be observed from the table 19 reveals that more than half (68.34 per cent) of the respondents disagree that crop insurance scheme follows simple formalities while 18.33 per cent of the respondents had undecided and 13.33 per cent of the respondents had agree about it. This might be due to difficulty in understanding the crop insurance scheme.

#### VIII. Motivation from banks/financial institutions.

It could be observed from the table 19 reveals that majority (41.67 per cent) of the respondents disagree that motivation from banks/financial institutions for getting crop insurance was enough followed by 35.00 per cent of the respondents had agree and 23.33 per cent of the respondents had undecided about it. This might be due to constraints faced by respondents in availing benefits of crop insurance scheme.

## IX. Easily accessible through bank

It could be observed from the table 19 reveals that more than half of the respondents (51.67 per cent) undecided that crop insurance easily accessible through bank followed by 32.50 per cent of the respondents had agree and 15.83 per cent of the respondents had disagree about it. This might be due to crop insurance was easily accessible by farmers through online comparing to bank.

## X. Reasonable premium rate

It could be observed from the table 19 reveals that majority (50.83 per cent) of the respondents disagree that reasonable premium rate for crop insurance followed by 25.00 per cent of the respondents had undecided and 24.17 per cent of the respondents had agree about it. This might be due to most of the respondents had low level annual income.

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## XI. Premiums are shared by government.

It could be observed from the table 19 reveals that more than half (65.00 per cent) of the respondents agree that premiums are shared by government followed by 22.50 per cent of the respondents had undecided and 12.50 per cent of the respondents had disagree about it. This might be due to premium are shared by government that was reduce the burden of farmers.

## XII. Good for loanee farmers to save their savings from risk.

It could be observed from the table 19 reveals that half (50.00 per cent) of the respondents agree that crop insurance scheme good for loanee farmers to save their savings from risk while 33.33 per cent of the respondents had undecided 16.67 per cent of the respondents had disagree about it. Crop insurance scheme helped to loanee farmers to save their savings at time of disaster period.

## XIII. Not for illiterate farmers.

It could be observed from the table 19 reveals that majority (46.67 per cent) of the respondentshad undecided that crop insurance scheme not for illiterate farmers while 33.33 per cent of the respondents had disagree and 20.00 per cent of the respondents had agree about it. This might be due to constraints faced by farmers in availing benefits of crop insurance scheme.

#### XIV. Quick settlement of claims.

It could be observed from the table 19 reveals that more than half of the respondents (64.17 per cent) disagree that quick settlement of claims in crop insurance scheme followed by 18.33 per cent of the respondents had undecided and 17.50 per cent of the respondents had agree about it. This might be due to delay in settlement of claims.

#### XV. Crop insurance is compulsory to farmers

It could be observed from the table 19 reveals that more than half of the respondents (55.00 per cent) agree that crop insurance is compulsory to farmers followed by 27.50 per cent of the respondents had undecided and 17.50 per cent of the respondents had disagree about it. This might be due to crop insurance is one of the risk management tool. This is in line with the findings of Dakeshar (2018).

#### Conclusion

Indian agriculture is heavily dependent on rainfall which mainly occurs about two and half months during monsoon season. Natural calamity's effect on agriculture yield is much more. This study clearly shows that nearly half of the respondents had knowledge on crop insurance scheme. So we have to conduct more awareness programmes.

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