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# Study on Awareness Level of the Respondents Regarding Crop Insurance in Cooch Behar District of West Bengal, India

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#### Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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#### ABSTRACT

Crop yield and income from farm is always under frequent threat of natural disasters. Crop insurance is considered to be a basic instrument for ensuring stability of farm income by promoting and encouraging technology, investment and credit flow. Still it is not much popular among our farmers. Hence, the study was conducted to understand the awareness level of respondents towards crop insurance in the district of Coochbehar in West Bengal. The study was carried out in Mathabhanga-2 and Cooch Behar -2, blocks of Coochbehar district of West Bengal. The state, district and villages were selected purposively. From three villages namely Tenganmari, Khagribari, Bara Simulguri, Baghmara 100 respondents, were selected randomly.

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Data were collected from individual farmers with interview schedule and processed through corelation coefficient and multiple regressions. Farmers of the present study are aware of the crop insurance but not about different components of insurance. They are aware of bank and agricultural departments but not about other implementing agencies.

Keywords: Crop insurance; crop protection; natural calamities; investment and credit flow.

# 1. INTRODUCTION

Crop yield and income from ranch is generally under incessant danger of cataclysmic events like dry season, tornado, floods, avalanches, tempests and guake. Ahsan et al. [1] reported that major role played by insurance programmes is the indemnification of risk averse individuals who might be adversely affected by natural probabilistic phenomenon. Next to these, there are man-made calamities like offer of deceptive seeds, pesticides, composts, fire, cost crashes and so on. This large number of occasions seriously influences our ranchers' pay and are generally not influenced quite a bit by. Crop protection is viewed as an essential instrument for guaranteeing security of homestead pay by advancing and empowering innovation. speculation and credit stream. Jodha [2] a good crop insurance programme combines both self as well as mutual help principle. Crop insurance brings in security and stability in farm income. Crop insurance is considered to be a basic instrument for ensuring stability of farm income by promoting and encouraging technology, investment and credit flow. Atwood et al. [3] reported that availability of crop insurance in a setting with price supports allows producers to service higher levels of debt with no increase in risk.

The basic idea behind the crop insurance is that the loss incurred by the few farmers is technically shared by others in an area, engaged in similar activities. Also, resources accumulated in good years are being compensated with losses incurred in bad years. As a measure of safety state government and central government has started various crop insurance schemes as tools for maintaining risks and uncertainties. Since the farmers can claim compensation as a matter of right in case of compensation, crop insurance is recognized to contribute self -reliance and selfrespect among farmers [4-6]. Thus, it provides farmers protection against natural calamities which is otherwise beyond their control. Mishra [7]. It is observed that CCIS had a collateral effect as reflected through the increased loan amount per borrower and reduction in the proportion of non-borrowers among small

farmers. In this manner, it gives ranchers security against normal disasters which is generally outside of their reach. Suresh Kumar and others [8] revealed that social participation and Education level enhance awareness about innovative products in crop insurance.

## 2. MATERIALS AND METHODS

The present study was carried out with the farmers of Coochbehar 2 and Mathabhanga 2 block of Coochbehar district in the state of West Bengal. Random sampling technique was adopted for the selection of respondents from the selected villages purposively namelv. Tenganmari, Khagribari, Bara Simulguri and Baghmara and 25 numbers of respondents were selected from each village. Thus, a total of 100 respondents were selected for the purpose of the study. The male or female head were chosen for interview, which was done purposely for accurate collection of information. Farmer's awareness of crop insurance scale was composed of fully aware. partially aware and not aware with corresponding scores 2, 1 and 0 respectively.

## 3. RESULTS AND DISCUSSION

The Table 1 shows the level of awareness of the respondent farmers with respect of different insurance products like crop insurance, livestock insurance, insurance of the agricultural equipment, insurance of farm machineries and poultry insurance. The mean awareness on the type of insurance available is 0.502, which is very low.

The Table 2 presents the awareness level of respondent farmers with respect to different components associated with insurance like the total extent to which the product ensures the coverage, the amount of premium required to purchase the particular product, the last date till which the insurance can be done, the crop insurance procedure in details and the process by which the insurance product can be purchased. The mean awareness on different components associated with insurance is 0.78, which is not a good level.

SI. No	Type of insurance	Fully aware(2)	Partially aware(1)	Not aware(0)
1.	Crop insurance	99	01	0
2.	livestock insurance	30	68	2
3.	Agriculture equipment	23	28	49
4.	Farm Machinery	09	23	68
5.	Poultry	03	54	43

Table 1. Awareness on type of insurance product

Mean awareness of Awareness on type of insurance product = 0.502

Table 2. Awareness on different components associated with insurance	Table 2.	Awareness on	different con	nponents as	sociated with	insurance
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SI. no.	Components of insurance	Fully aware (2)	Partially aware (1)	Not aware (0)
1.	Extent of Coverage	19	25	56
2.	Premium to be paid	21	56	23
3.	Last date of insuring crop	46	32	22
4.	Procedures for insuring crops	11	31	58
5.	Method	07	37	56

Mean awareness of different components associated with insurance= 0.78

#### Table 3. Awareness about different implementing agency

SI. No.	Implementing agency	Fully aware (2)	Partially aware (1)	Not aware (0)
1.	Agriculture crop insurance	39	14	47
2.	Life Insurance of India	19	16	65
3.	Agriculture department	79	18	3
4.	Bank	94	3	3

Mean awareness of different implementing agency=1.28

#### Table 4. Awareness about agencies paying compensation

SI. no.	Agency paying compensation	Fully aware (2)	Partially aware (1)	Not aware (0)
1.	Agriculture department	93	4	3
2.	Horticulture department	27	17	56
3.	Animal Husbandry department	20	60	20
4.	Agriculture insurance corporation	01	6	93
5.	Gramin Bank	99	1	0
6.	Commercial Bank	0	4	96
7.	Insurance company	9	46	45

Mean awareness of Agencies paying compensation=0.91

The Table 3 shows the level of awareness of the respondent farmers about different implementing agencies like Agriculture crop insurance company, Life insurance of India, different agriculture departments and various banks. The mean awareness level of which is only 1.28.

The Table 4 shows the awareness level of the respondent farmers about compensation paying agencies like Agriculture department, Horticulture department, Animal insurance corporation, Garmin Bank, Commercial bank, Insurance company. The mean awareness level of this is 0.91% which is again not satisfactory.

The Table 5 presents the multiple regression to estimate the effect of regression of each of the independent variables on consequent variable awareness. It elicited that the casual variable satisfaction level has exerted strong regression impact through its percentile contribution to the  $R^2$  value of 14.9 percent. It indicates that the higher satisfaction level brings more awareness among the respondents. However, it has been observed that the selected variable altogether couldn't explain the dependent variable awareness to a good extend. There are many more variables that may explain the awareness level of the respondent towards crop insurance.

Variables	Un-standardized coefficients		Standardized coefficients	T value
	Beta	Std. error	Beta	
Age	024	.046	058	524
Farming Experience	.212	.186	.166	1.136
Gross Cropped Area	282	.241	187	-1.169
Satisfaction Level	.641	0.206	.333	3.116**
Utilisation of information source	158	.165	096	954
Attitude	076	.160	052	475
Affordability	-0.324	.350	097	924

Table 5. Regression analysis of independent variables and awareness level

R<sup>2</sup>=14.9%

#### 4. CONCLUSION

It has been found that the independent variable satisfactory level have shown positive significant relation with the awareness of the respondents towards crop insurance. Majority of the respondents were aware about the crop insurance and the majority of respondents are only having contact with the state agriculture department when compared to other institutions.

#### CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

#### **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

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