



# An Innovative Study of Socio – Economic Profile and Crop Insurance of Farmers in Barak Valley of Assam

## KEYWORDS

Crop Insurance, Loan, Farmers, Barak valley

**Sishirendu Das and D.C Ray**

Department of Ecology and Environmental Science, Assam Central University, Silchar, Silchar – 788 011.

**ABSTRACT** Agriculture production and farm income in India are frequently affected by natural disasters and most of the farmer family are totally depend on the agricultural output and their disposal income but due to crop loss they find severe problems and sometimes it is being the reason for suicides as most of them are taking loan from institutional or non institutional agencies and they have to repay the debt. Crop insurance is a means of counteracting the uncertainties involved in crop production. A survey was conducted during July 2010 to June 2012 in the villages of three districts of Barak Valley. A schedule was prepared and extensive survey work was done for collect information about the socio economy of the farmers.

## INTRODUCTION

Agriculture production and farm income in India are frequently affected by natural disasters such as droughts, floods, cyclones, storms, landslides and earthquakes. Susceptibility 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). Its consequences can be seen in the form of reduced farm income, and uncertain output. The worst affected are the small farmers, as they are more vulnerable to crop losses and prices fall. They find it extremely difficult to pay back the loans they have incurred to grow crops and survive (S. Mohankumar and R.K.Sharma, 2006). Crop insurance is a means of counteracting the uncertainties involved in crop production. Crop insurance is a device through which the uncertainty faced by an individual is transferred to an agency or insurer through their participation in large number for which they pay a premium i.e., the total risk is shared by all the participating farmers (Mallikarjun, 2005). A crop insurance scheme to be based on homogeneous area approach and the linking of insurance with crop loans (Dandekar, 1976). In India crop insurance has been subsidized by the central and state governments, managed by the General Insurance Corporation (GIC) and delivered through rural financial institutions, usually tied to crop loans.

## MATERIAL AND METHODS

A schedule was prepared for collection of useful information regarding general profile of the farmers in Barak valley comprising three district of Assam viz., Cachar, Karimganj, Hailakandi. Geographically the study sites are situated at longitude of 24041/ 29.9// N and latitude of 920 45/ 25.9// E with the altitude of about 36 meter above mean sea level. One more schedule was used to collect information on land holding information about farm insurance and main reason for crop damage and loan debt investment of the farmers of this valley. A detailed survey was conducted using these schedules in six villages in three districts of Barak valley and two villages from each district. The districts are coded as Cachar (1), Karimganj (2), Hailakandi (3). Face to face interview was conducted among purposively selected 300 farmers from the villages of three districts of Barak valley. Selection of the respondents was conducted by using a stratified random sampling technique. Accordingly, the respondents were classified into self employed in agriculture and agriculture labour. The status of the household occupation is considered on the basis of type of work done in majority of the days during last 365 days. Farm families in the selected villages were categorized into five categories on the basis of size of landholding: (a) Farmers having no land, classified as landless (b) Farmers having land equal to or less than 0.5 ha, classified as mar-

ginal (c) Farmers having land more than 0.5 ha but equal to or less than 2 ha, classified as small (d) Farmers having land more than 2 ha but equal to or less than 4.0 ha, classified as medium and (e) Farmers having land more than 4 ha, classified as large.

## RESULTS AND DISCUSSION

**Table 1. General profile of farmers of Barak Valley.**

Type of farmers	Number of households studied in the three districts of Barak Valley			Mean $\pm$ S.D
	Cachar	Karim-ganj	Haila-kandi	
<b>1. Age of head of farmer's family</b>				
Young (20-35 years)	17	12	11	13.33 $\pm$ 3.21
Middle (36 – 50 years)	34	32	43	36.33 $\pm$ 5.86
Old (51 & above)	49	56	46	50.33 $\pm$ 5.13
<b>2. Education</b>				
Illiterate	9	16	19	14.67 $\pm$ 5.13
Up to Primary	19	21	24	21.33 $\pm$ 2.52
High School	38	47	53	46 $\pm$ 7.55
Above High School	34	16	4	18 $\pm$ 15.10
<b>3. Household Type</b>				
Agriculture (Self employed)	93	90	95	92.67 $\pm$ 2.51
Agriculture (Labour)	7	10	5	7.33 $\pm$ 2.51
<b>4. Family size</b>				
1 - 5	19	17	12	16 $\pm$ 3.60
6 - 10	64	69	71	68 $\pm$ 3.60
11 - 15	15	14	15	14.67 $\pm$ 0.57
16 – 20	2	0	2	1.33 $\pm$ 1.15
<b>Type of land holding</b>				
Large	13	9	15	12.33 $\pm$ 3.05
Medium	45	43	48	45.33 $\pm$ 2.52
Small	18	19	17	18 $\pm$ 1.00
Marginal	17	19	15	17 $\pm$ 2.00
Land less	7	10	5	7.33 $\pm$ 2.52

General Profile of the farmers: The above Table 1 Shows the general profile of the farmers in the selected villages of Barak Valley. It was found that majority of the farmers were having medium size land. An attempt was made to classify the sample farmer's according to their land possessed. The household type shows that majority of the farmers having their own land and hence is self employed in agriculture, a small number of the farmer's are only engaged as agricultural labourer.

**Table 2. Status of crop insurance in three districts of Barak Valley.**

Farmers responses about the farm insurance	Type of farmer															
	Large				Medium				Small				Marginal			
	1	2	3	%	1	2	3	%	1	2	3	%	1	2	3	%
No of farmers insured their crop	4	3	7	37.84	5	7	11	16.91	3	4	4	20.37	1	2	4	13.72
No of farmers not insured their crop	7	4	5	43.24	21	24	29	54.41	5	10	6	38.89	8	7	5	39.22
No of farmers not aware of crop insurance	2	2	3	18.92	19	12	8	28.68	10	5	7	40.74	8	10	6	47.06

Note: Code 1 = Cachar District; 2= Karimganj District; 3= Hailakandi District.

Status crop Insurance: In the present study it was found that only large farmer's mainly prefer to insure their crop as compared to other type of farmers. Around 47.06% (Table 2) of the marginal farmers were not even aware about the crop or farm insurance. The large farmer's insured their crop because they believed that crop insurance is a more efficient risk management tool than the traditional risk reducing strategies, such as inter cropping, mixed farming, integration of farm etc

(Shashi kiran, 2012). The major limitation of crop insurance as opined by the farmer's of the valley is inadequate compensation, delay in the settlement of compensation and lack of proper information about the scheme to the farmers. They also gave their opinion for the improvement of the scheme which include, covering market risk and giving more advertisements to popularize as well as help them in getting more information regarding crop insurance scheme. It was indicated that there was a lack of supervision by the bank officials after disbursement of loan for the follow up programme. The same type of activities was also reported by lyengar, 1989.

**Table 3. Farmer's opinion towards crop loss.**

Farmers opinion towards crop loss	Type of farmer															
	Large				Medium				Small				Marginal			
	1	2	3	%	1	2	3	%	1	2	3	%	1	2	3	%
Plant diseases	2	1	4	18.92	10	8	5	16.91	2	4	4	18.51	3	3	2	15.69
Pest damage	8	4	4	43.24	17	16	20	38.97	5	5	4	25.93	5	4	5	27.45
Climatic factors	1	2	2	13.51	5	5	5	11.03	4	2	1	12.96	2	1	2	9.80
Use of excess chemical pesticides	2	1	3	16.22	8	12	10	22.06	5	4	5	25.93	5	5	3	25.49
Low quality input/ seed	0	1	2	8.11	5	2	8	11.03	2	4	3	16.67	2	6	3	21.57

Note: Code 1 = Cachar District; 2= Karimganj District; 3= Hailakandi District.

Farmer's opinion towards crop loss: The detail about the farmer's opinion towards crop loss in this valley was presented in Table 3. Majority of the farmers of the valley believed that pest damage was the major threat to the crop loss irrespective of their land size. The second major reason for crop loss was due to use of excess chemical pesticides in the crop field. Among the large farmer's, a small portion (8.11%) opined that the crop loss was due to low quality input or seed.

**Table 4. Loan and debt status of farmers in three districts of Barak Valley.**

Type of farmer	Loan above or = 1,00,000				Loan between 50,000 - 99,999				Loan between 49,999 - 5,000				Loan below 5,000 - 500				No loan			
	1	2	3	%	1	2	3	%	1	2	3	%	1	2	3	%	1	2	3	%
	Large	5	3	6	37.84	2	2	4	21.62	1	2	2	13.51	2	1	2	13.51	3	1	1
Medium	2	4	10	11.76	4	7	12	16.91	14	20	8	30.88	19	9	15	31.62	6	3	3	8.82
Small	0	0	1	1.85	2	1	1	7.41	5	4	7	29.63	6	7	5	33.33	5	7	3	27.78
Marginal	0	0	0	0	0	0	0	0	4	2	7	25.49	10	14	4	54.90	3	3	4	19.61

Note: Code 1 = Cachar District; 2= Karimganj District; 3= Hailakandi District.

Loan and debt status of farmers: (Table 4) showed that loan taken was higher in case of large farmers and very less in case of marginal and small farmers. It is seen that 27.78% of marginal farmers do not have any loan debt at all. The major reason for the loan taken by large farmers was mainly for the purchase of agricultural commodities and inputs in terms of machinery, pesticides, manual labours etc. to maintain and manage the cultivation practices of their land, whereas the small and marginal farmers have very less agricultural input expenses.

**CONCLUSION**

During the survey for the present study it is suggested by the elder farmers that there is a need to extend the scheme to

safe guard the farming community of the valley. The awareness about the crop insurance is limited among farmers in this Valley of Assam hence mass awareness programme for promoting crop insurance is needed. Crop insurance should be compulsory irrespective of loaned or non loaned farmers. Calculation of agricultural loan and crop insurance scheme premium and other benefits pertaining to loan should be transparent and easily accessible. Creating awareness among the farmers about agricultural loan, agricultural scheme, and crop insurance can improve the socio-economic condition of the farmer's in Barak valley of Assam.

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