

## Farmers Perception and Awareness about Crop Insurance in Karnataka

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### ABSTRACT

*The study on farmers perception and awareness of crop insurance was conducted in North Eastern parts of Karnataka because region receives very less rainfall compared to other part of Karnataka and people of this region always suffering from drought, they continue to suffer. The study revealed that average size of family among borrowers and non borrowers was seven. Most of them (44%) are illiterate and 25% were education up to primary level. Level of education, family size and experience in farming did not show any significant difference between among the district selected for study. However, farm size and crop income, which generally corresponds to farm size, were significantly higher in Gulbarga district compared to Koppal and Raichur districts. Though NAIS crop insurance scheme is operating since 2002-03 in the study area majority of respondent (>80%) are not aware that who is implementing agency and who pay's compensation. Almost all respondents are in the wrong perception that banks will pay compensation and are the implementing agency. More than three fourth of the insurance beneficiaries mentioned that bank compulsion was the motivation for opting insurance. Financial security, good experience from others was the region for opting crop insurance. Further more than 80% of respondents are not aware of extent of coverage premium paid, last date, procedure for insuring crops and method of loss determination and compensation worked out by agriculture insurance company. Respondent farmers were suggested for improving existing scheme and they want quick settlement of claims which is usually taking more than one year. Around three fourth of the beneficiaries suggested to consider adverse weather condition prevailed during flowering and pod formation stage. National Agriculture Insurance Scheme (NAIS) in operation needs to be continued with modification and simplification of modalities of indemnity, loss assessment, settlement of compensation and disbursement procedure.*

#### **Key words:**

Agriculture production and farm incomes 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 flections etc. All these events severely affect farmers through loss in production and farm income and these are not in the control of farmers. With the growing commercialization of agriculture, the magnitude of loss due to unfavorable eventualities is increasing. In dryland farming, drought is severely affecting farmers through loss in production. Drought is a situation of lower than normal rainfall and it is as much a management issue as a technical one.

Drought management and mitigation will be important for the future sustainability of agriculture production, productivity and livelihoods.

Agricultural insurance is considered as an important mechanism to address the risk of output and income resulting from various natural and man made events. Agricultural Insurance is a means of protecting the agriculturist against financial losses due to uncertainties that may arise agricultural losses from all unforeseen perils beyond their control (AIC, 2008). Unfortunately, agricultural insurance in the country has not made much headway even though the need to protect farmers from agriculture variability has been a continuing concern of agriculture policy. Crop insurance is one method by which farmers can stabilize farm

income and investment and guard against disastrous effect of losses due to natural hazards or low market prices. It is not only stabilizes the farm income but also helps the farmers to initiate production activity after a bad agricultural year. It cushions the shock of crop losses by providing farmers with a minimum amount of protection. It spreads the crop losses over space and time and encourages farmers make more investments in agriculture. However, one need to keep in mind that crop insurance should be part of overall risk management strategy. Insurance comes towards the end of risk management process. Insurance is redistribution of cost of losses of few among many, and cannot prevent economic loss.

The question of introducing an agriculture insurance scheme was examined soon after the Independence in 1947 and different crop insurance scheme's like PCIS, CCIS, ECIS, PSSCI, FIIS, Sookha Suraksha Kavach, NAIS, WBCIS, etc. were implemented in the country over a period of time. All major cereals, pulses and oilseeds crops were covered under CCIS and few horticulture crops like onion, potato were covered in National Agricultural Insurance Scheme (NAIS). Among different crop insurance products, NAIS is popular one and has been implemented throughout the country. Presently government is planning to replace NIAS and implement WBCIS because crop insurance specifically indemnifies the cultivator against shortfall in crop yield. However, Weather Based Crop Insurance (WBCI) is based on the fact that weather conditions affect crop production even when a cultivator has taken all the care to ensure good harvest. The WBCI scheme is operating on pilot basis in 16 district of Karnataka.

Hyderabad Karnataka region receives very less rainfall compared to other part of Karnataka and people of this region always suffering from drought, they continue to suffer. However, there is no much awareness about crop insurance in Hyderabad Karnataka region. In the situation of the drought and flood, perception and awareness of crop insurance scheme's will helps us to document the draw backs of current policy and to suggest appropriate policy measures in correcting the lacunae of existing crop insurance policy. In view of the above, the study is focused on below mentioned specific objectives.

1. To study the socio-economic profile of the respondents who availed crop insurance.

2. To ascertain perception and awareness of crop insurance and
3. To document the opinion of farmers regarding draw backs of existing crop insurance scheme.

## METHODOLOGY

In order to understand ground level working of National Agricultural Insurance Scheme (NAIS) primary data were collected from the Hyderabad-Karnataka region. The study involved survey of farmers who have been covered under NAIS and availed credit from banks, called Loanee farmer and a control sample of farmers who were not availed any credit from the financial institution, called non-loanee farmer. The main aim of the field survey was to know the perception, awareness and extent of benefits accrued by farming community, who availed crop insurance both loanee and non-loanee farmers of NAIS. The study was conducted in the North-Eastern parts of Karnataka comprising Bellary, Bidar, Gulbarga, Raichur, Koppal and Yadgir districts, which are economically, educationally and agriculturally backward region of Karnataka state.

As per the set objectives of the study, the primary data from sample farmers were collected by personal interview method by using pre-tested structured questionnaire prepared for the purpose. The time series data on insurance were elicited from secondary sources.

The multistage random sampling technique was adopted in designing sampling frame for the study. In the first stage, three districts namely Gulbarga, Koppal and Raichur were selected based on the incidence and severity of drought during 2010-11. Similarly, in the second stage, one to two taluks were selected based on farmers enrollment for the crop insurance scheme. In the third stage, 30 farmers from selected taluks of the district were selected at random in view of spread out of insured farmers in different in different villages. Thus, the sample size constituted of 30 for each district and 90 for the study as a whole. Further, while selecting the villages in the selected taluks for identifying the insured farmers information was collected from lead banks offices of concerned districts.

## RESULTS AND DISCUSSION

Socio-economic characteristics of loanee and non-loanee farmers are presented in Table-1. Average size of family among borrowers and non borrowers was seven. Most of them (44%) are illiterate and 25% were education up to primary level. Level of education, family

size and experience in farming did not show any significant difference between among the district selected for study. However, farm size and crop income, which generally corresponds to farm size, were significantly higher in Gulbarga district compared to Koppal and Raichur districts. The average amount of

money borrowed from bank was almost same in all the selected districts of study area. The districtwise analysis revealed that majority of the farmers belongs to medium category followed by small and large in Koppal and Raichur districts, whereas small farmers dominated in the sample in Gulbarga district.

**Table 1. Socio-economic characteristics of sample farmers of study area**

S.No.	Particulars	Gulbarga	Koppal	Raichur	Overall
1	Age (years)	46.46	47.68	49.20	47.77
2	Experience in farming(years)	22.14	23.83	20.84	22.27
3.	Education (No.)				
a	Illiterate	8.00	16.00	20.00	44.00
b	Primary	9.00	11.00	4.00	24.00
c	Secondary	10.00	1.00	5.00	16.00
d	College & above	3.00	2.00	1.00	6.00
4.	Family size (No.)	6.70	7.30	6.97	6.99
5.	Land holding (Acre)				
a	Rainfed	5.57	2.80	1.94	3.44
b	Irrigation	0.40	1.23	2.22	1.28
c	Fallow	—	—	—	—
d	Total	5.97	4.03	4.16	4.72
6.	Household income (Rs.)				
a	Crop (Rs.)	14,355	10,758	9,273	11,462
b	Live stock (Rs.)	1,563	1,135	1,220	1,306
c	Others (Rs.)	2,720	1,100	1,290	1,703
7.	Average amount borrowed (Rs)				
a	Commercial/ Grameen Banks	27,880	25,656	28,500	26,754
b	Co operative societies	10,500	—	23,269	21,567
c	Private money lender/Others	—	27,000	—	27,000

The survey also revealed that major source of income is from crop (11,462) followed by livestock (Rs.1,306) and other source (Rs.1,703). However, district wise comparison indicated that Gulbarga district farmers have higher income from crop enterprise compare to Koppal and Raichur districts and same trend was observed in livestock and other source of income. This might be mainly due to higher land holding in Gulbarga district.

Though NAIS crop insurance scheme is operating since 2002-03 in the study area majority of respondent (>80%) are not aware that who is implementing agency and who pay's compensation. Almost all respondents are in the wrong perception that banks will pay compensation and are the implementing agency (Table-2). Views of sample farmers were solicited various dimensions of insurance. These include motivation and experience with agricultural insurance and opinion on premium rate. More than three fourth of the insurance beneficiaries mentioned that bank compulsion was the

motivation for opting insurance. Financial security, good experience from others was the region for opting crop insurance.

The borrowers were asked what type of agriculture insurance they know, who is the implementing agency and who pay's compensation (Table-3). The study revealed that 13% of respondents are fully aware of crop insurance and equal percent were not aware of the NAIS scheme. Further more than 80% of respondents are not aware of extent of coverage premium paid, last date, procedure for insuring crops and method of loss determination and compensation worked out by agriculture insurance company. Further, most of the farmers are in the opinion that banks are the implementing agencies, who are implementing crop insurance scheme. Further, almost all respondents informed that compensation will be paid by lion (Agri. & Hort. Dept.) department through banks.

Borrower/farmers were suggested the improvement and respondents made several suggestions for

**Table 2. Awareness about Agriculture Insurance**

S.No.	Particulars	Aware fully		Aware partially		Not aware	
		No.	%	No.	%	No.	%
A	Type of Insurance						
1.	Crop insurance	12.00	13.33	66.00	73.33	12.00	13.33
2.	Livestock insurance	5.00	5.56	12.00	13.33	73.00	81.11
3.	Agriculture equipment	2.00	2.22	9.00	10.00	79.00	87.78
4.	Farm machinery	2.00	2.22	9.00	10.00	79.00	87.78
5	Poultry	—	—	3.00	3.33	87.00	96.67
B	Components of Insurance						
1	extent coverage	4.00	4.44	14.00	15.56	72.00	80.00
2	Premium to be paid	2.00	2.22	7.00	7.78	81.00	90.00
3	last date of insuring crops	6.00	6.67	13.00	14.44	71.00	78.89
4	procedures for insuring crops	—	—	—	—	90.00	100.00
5	Method of loss determined	—	—	—	—	90.00	100.00
6	Method of compensation determined	—	—	—	—	90.00	100.00
C	Implementing Agency						
1	Agriculture crop insurance	2.0	2.22	19.00	21.11	69.00	76.67
2	Life Insurance of India.	—	—	—	—	—	—
3	Agriculture department	7.0	7.78	5.00	5.56	78.00	86.67
4	Banks	81.00	90.00	6.00	6.67	3.00	3.33
D	Agency Paying Compensation						
1	Agriculture department	5.00	5.56	3.00	3.33	82.00	91.11
2	Horticulture department	—	—	—	—	—	—
3	Animal Husbandry department	—	—	—	—	—	—
4	Agriculture Insurance Corporation	3.00	3.33	—	—	87.00	96.67
5	Grameen bank	58.00	64.44	15.00	16.67	17.00	18.89
6	Commercial bank	24.00	26.67	11.00	12.22	55.00	61.11

**Table 3. Source of information for opting Crop Insurance**

S.No.	Perception	Components	No. of farmers	Rank	Percentage
1.	Source of information about insurance	Commercial bank	37	II	41.11
		Grameen Bank	76	I	84.44
		Neighbors/Fellow farmer	23	III	25.56
		News papers	08	VI	08.89
		Gram sevak of Agril.department	17	IV	18.89
		NGO's	09	V	10.00
2.	Service required for availing insurance	Rural agent at village level like LIC	77	I	85.56
		Raith Samparak Kendra (RSK)	63	III	70.00
		Bank/ Co -operative societies	38	IV	42.22
		Exclusive staff for creating awareness	67	II	74.44
		Services of Talati/Gram sevak	21	V	23.33

improving existing scheme (Table-4). Majority of the farmers want quick settlement of claims which is usually taking more than one year. Around three fourth of the beneficiaries suggested to consider adverse weather condition prevailed during flowering and pod formation stage. Insurance service at door step, sufficient time for opting insurance (notification should be done well in advance), simplified procedure and wide publicity for creating awareness are impotent suggestion opined by respondents. Respondents were suggested to consider

actual crop condition/ actual loss, rain fall and other weather parameters for working out compensation (indemnity).

The source of information through which they are aware of crop insurance indicated that grameen and commercial banks, Neighbors and gram sevak were the most preferred media through which awareness on crop insurance should be created. At present service for insurance to loanee farmers is provided by the concerned institution like Co-operative society or

Table 4. Constraints opined by Crop Insurance farmers/ respondents

S. N.	Particular	No. of farmers	Rank
1	Inadequate publicity and less time given for opting insurance	82	II
2	Not aware of crop insurance procedures and facilities available	87	I
3	Procedural difficulties and complex procedure	67	V
4	Difficult to produce no-dues certificate from other banks	47	VII
5	Lot of time waste due to single bank staff allotted for crop insurance	33	VIII
6	Assessment of loss by officials was biased	69	IV
7	No compensation even loss is happening due to crop failure	76	III
8	Indiscriminate in assessing loss and	57	VI

Commercial bank. Nearly 85 present borrowers' respondents suggested that rural agent at village level like LIC agent should facilitate insurance services. Some respondents want exclusive staff in bank and RSK will also is help to opt insurance.

## CONCLUSION

There is need to establish separate Crop Insurance Wing in Agriculture Department to overcome the existing constraints in the present scheme. Agriculture Department is not implementing scheme properly as expressed by more than 80 % of respondents. Further, they don't know any procedural and other information about Crop Insurance. Hence, there is need to create awareness about Crop Insurance through effective use of RSK service or appointing Crop Insurance Agent like LIC agent to provide insurance service at the farmers door step as suggested by more than 90 % of respondents. Most of the farmers are illiterate and do not understand the procedural and other requirements of formal financial institutions. While the institutional loanees are insured compulsorily under the NAIS, about 40 per cent of the Non-loanee farmers avail insurance voluntarily in H-K region. This is quite indicative of the enormous insurance potential that exists for addressing the needs of the farming community and enhancing the overall efficiencies, which can mitigate the adverse impacts of uncertainties, which is on the individual farmers. Need to formulate policy in such way that Non-loanee farmers should be encouraged more by providing doorstep service and subsidy in premium payment.

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