AN ANALYSIS OF PERCEPTION AND SATISFACTION LEVEL OF FARMERS TOWARDS CROP INSURANCE: A STUDY OF DAKSHINA KANNADA DISTRICT

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Abstract:

India is an agriculture oriented country where dominant form of occupation is agriculture. It plays a vital role in Indian Economy. 70 % of the rural households depend on agriculture for their livelihood. According to the estimates of Central Statistics Office (CSO), the share of agriculture and related sectors (including agriculture, forestry, livestock and fishery) was 17.9 per cent in the year 2018-19. Government of India is striving to develop Indian economy by boosting agricultural development and farmer's welfare. Farming business involves a variety of risks such as uncertainties in weather conditions, prices, yields, Government procedures, global market conditions, and other factors that impact the income of farmers. In this background the government has introduced crop Insurance to protect farmers from production risk because of unfavorable weather. The research study is based on primary survey conducted to analyze the satisfaction level among crop insurance holders. The study was based on questionnaire with a sample consisting of 100 respondents. The results were analyzed using simple percentage analysis and chi-square test. Findings reveal that educational qualification have no significant relationship with farmer's level of satisfaction towards crop insurance.

Key Words: Agriculture, Crop insurance, Farmers, satisfaction & natural calamity

"When the Natural disaster looms on the horizon, whether it is a draught, flood, hailstorm, or in any case tornado, we know that crop insurance will keep us in business."- Kenneth Wood

Introduction:

Agriculture in India is the backbone of the economy, about 2/3rd of our population both directly and indirectly engaged in agriculture and this dependence has not come down over the years in line with its contribution to the economy. India is the seventh largest economy in the world and is the 15th fastest developing country in the world with GDP growth rate of 7.168 percent in 2018-19 (IMF World Economic Outlook April 2019). India accounts for 7.68 per cent total global agricultural output production. In the world, out of total

economic production, Agriculture sector contribution is just 6.1 percent. India has ranked within the world's five largest producers of over 80% of agricultural produce items including cash crops such as coffee and cotton.

Agricultural sector involves high risk factors and uncertainties when compared to other major manufacturing and service sectors. In the stage of growing impact of climate change with frequent droughts, increase in temperature, uneven rainfalls, floods and hurricanes results in crop failures and huge economic loss to the farming community. Farming community is the most vulnerable group in every economy.

Crop insurance is one of the most powerful tools which can be used in agriculture to protect the economic losses incurred by farmers. It transfers financial risk burden across the time and space through reinsurance arrangements at international markets. There by crop insurance mitigates risk in agriculture. Crop insurance enhances productivity and attains long term stabilization in farm incomes. This will save the small and marginal farmers from poverty traps who hold just less than two acres of agricultural land with few limited financial options and heavily depends on only agricultural income and its importance becomes more for farmers in purely rain fed areas without irrigation facilities.

Evaluation of Crop Insurance in India:

National Agriculture Insurance Scheme (NAIS):

National Agriculture Insurance Scheme (NAIS) was introduced from 1999-2000 by replacing the Comprehensive Crop Insurance Scheme (CCIS) with the main objective to protect the farmers against the loss arising out of natural calamities such as floods, draught, cyclone, hailstorm, fire, pests and diseases. The scheme was available to both loanee and non-loanee farmers irrespective of their size of landholding. Agriculture Insurance Company of India implements the National Agriculture Insurance Scheme (NAIS). Presently the scheme is being implemented by 24 states and 2 union territories. During the period March 2012, claims of about Rs.24, 246 crores have been paid against premium income of about Rs.7580 crore benefiting about 511 lakh farmers of the country.

Weather Based Crop Insurance Scheme (WBCIS):

Weather based Crop Insurance Scheme (WBCIS) is a unique Weather based Insurance Product designed to provide insurance protection against losses in crop yield resulting from adverse weather incidences. It provides payout against adverse rainfall incidence (both deficit & excess) during Kharif and adverse incidence in weather parameters like frost, heat, relative humidity, un-seasonal rainfall etc. Total number of farmers insured during 2012 in Karnataka under WBCIS is 602794 with 756763ha area insured, and Rs. 99901(in lakhs). Claims paid during the period were Rs.7849 (in lakhs).

New Crop Insurance schemes – Pradhan Mantri Fasal Bima Yojana (PMFBY)

Keeping in view the representations from States/UTs on account of increase in premium rates & farmers' share in premium, capping on premium rates and reduction in sum insured etc., NAIS has been reviewed, and a new scheme namely, Pradhan Mantri Fasal Bima Yojana (PMFBY) has been approved in place of MNAIS/NAIS for implementation from Kharif 2016 season.

Performance level of Agriculture in Karnataka:

Karnataka is one of the main food crops producing states in India. It produces 5.02 per cent of total food grains in the country. As per 2010-11 agricultural censuses the state has total geographical area of 190.50 lakh hectares. Out of the area 121.62 lakh hectares, 64 per cent of total area is cultivable land, 120.59 lakh hectares is gross cultivable area, and net cultivable area is 99.4 lakh hectares in 2011-12, 82 per cent is net sown area, cropping intensity is 124 per cent. Karnataka state is the second highest drought prone area next to Rajasthan in India. The state receives average annual rainfall of 1156 mm, of which south west monsoon is the main rainy season, during this season state receives 73% rainfall of total annual rainfall and all main agricultural activities are made in this season. 70% of crops production is done in south west monsoon rainy season which is the kharif season. Out of the total agricultural crops, cereals occupy 49%, pulses occupy 24 %, oilseeds 15%, cotton 6 %, sugar cane 5% and 1% is occupied by tobacco. When we glance at the model of Karnataka states agricultural land holdings, 76.44% of them are belong to marginal and small farmers. Together they just hold 40% of area. The medium size farmers hold 59% of land area and large farmers hold just 1%. Marginal and small farmers grow more food crops in the rain fed areas. The medium and large farmers grow commercial, annual and horticultural crops since they need more irrigation and investment facilities.

Need and Scope of the study:

The present The study broadly aims at analyzing the Perception and Satisfaction level of farmers in Dakshina Kannada District and   analyses the opinion of farmers on the utilization of crop insurance which included benefits of crop insurance, problems relating to the crop insurance, satisfaction of crop insurance schemes and risks involved in crop insurance. The present study makes efforts to understand reasons behind this low penetration in crop insurance program and to find possible solutions to improve the farmer's enrolment in the crop insurance schemes and uplifting of their economic conditions.

Review of Literature:

Goudappa, Reddy and Chandrashekhar(2012) in their paper "Farmers Perception and Awareness about Crop Insurance in Karnataka" conducted study in the North–Eastern parts of Karnataka comprising Gulbarga, Bidar, Bellary, Koppal Raichur, and Yadgir districts. The aim of the study was to know the awareness, perception and extent of benefits accrued by farming group by using multistage random sampling technique. The results found that more than 80% of respondents were unaware of extent of coverage premium paid, procedure for insuring

crops last date, method of loss and compensation determination by agriculture insurance company. 40 % of the non loanee farmers availed crop insurance voluntarily in H-K region.

Bindiya Kunal Soni and Jigna Trivedi(2013)in their study "Crop Insurance: An Empirical study on Awareness and Perceptions" opinioned that National Agricultural Insurance Scheme is a most important step forward to insure risk of millions of farmers whose source of revenue depends on agriculture in India. This study conducted to understand the existing scenario of crop insurance in India with a special reference to Gujarat. The study suggested that Kisan Sabha, and TV programmes would be more efficient in spreading the awareness of crop insurance and there is a requirement for frequent interaction between banks, farmers and government agency to make NAIS successful. Less awareness, lack of co-operation from banks and the risky procedures involved in obtaining crop insurance were the reasons for not availing crop insurance.

Uvaneswaran and Mohanapriya (2014) in their article "Farmers Perception and Awareness about Crop Insurance in Tamilnadu – A Descriptive Analysis" a survey questionnaire given to 150 farmers of Erode district based on Convenience sampling method under different agro- ecological situations and opinioned that Agriculture is a risky activity subjected to natural disasters. The study found that major risk in agriculture were non availability of workers and draught, limited numbers of farmers were aware of crop insurance, farmers were dissatisfied with the existing insurance schemes and Only paddy crop was insured. The study suggested that awareness about crop insurance would be created through hoardings, television, radio, and SMS's. Clarification of doubts of the farmers in local languages and implementation of weather based crop insurance schemes in Erode district would be helpful to increase farmer's awareness.

Pandaraiah, Sashidhar (2015) in their article "Crop Insurance: Farmer's perception and awareness A study in Kuram Pally village of Kanagal Mandal of Nalgonda district , Telangana State" has made an attempt to investigate the perception and awareness on Crop Insurance schemes by surveying 100 farmers. The study revealed that government's role is restricted in advertising the risk mitigating strategies in agriculture. Short term credit is distributed to the small farmers by Co operative banks and medium term loans by Commercial banks and 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.

Objectives of the study:

1. To study the socio- economic profile of the farmers in the study area.
2. To examine the satisfaction level of the farmers about Crop Insurance.

Hypotheses:

H0: There is no significant relationship between the levels of satisfaction of farmers about Crop Insurance and their educational qualifications.

H1: There is significant relationship between the levels of satisfaction of farmers about Crop Insurance and their educational qualifications**.**

Research Methodology:

Data collection:

The primary Data were collected from the farmers by using interview schedule. The secondary data have been obtained from various secondary sources such as newspapers, magazines, journals, books, websites of statistical abstracts of Karnataka, Reserve Bank of India, and Ministry of Agriculture.

Sampling method:

The data has been collected from the different farmers in Dakshina Kannada district of Karnataka. The villages under the study are Aranthodu, Sampaje,jalsoor, Bellare and Konaje of Karnataka. The sample study consists of marginal, small and large farmers. On the basis of Convenience Sampling method 100 farmers have been selected for the present study those who have availed crop insurance including loanee and non loanee farmers. Majority of the respondents in the study area belong to the farming community. A well structured questionnaire has been used to collect data from respondents. The study had been carried out during the month April to July 2019.

Framework of Analysis:

To analyze the collected data, the following tools are used

1. Simple percentage analysis

2. Chi-square analysis

Analysis and Interpretation:

1. **Simple Percentage Analysis:**

Table1. Demographic Profile of the Respondents

Factors	No. of Respondents	Percentage
Gender		
Male	78	78
Female	22	22
Total	**100**	**100**
Age		
Upto 30 Years	5	5
31 to 40 Years	20	20
41 to 50 Years	45	45
Above 50 Years	30	30
Total	**100**	**100**
Educational Qualification		
Illiterate	5	5
Primary	47	47

Higher Secondary/Diploma	29	29
Graduate and Above	19	19
Total	**100**	**100**
Marital Status		
Married	59	59
Unmarried	40	40
Widow	1	1
Divorced	-	-
Total	**100**	**100**
Sources of Income		
Farming	48	48
Non Faming	30	30
Both	22	22
Total	**100**	**100**
Annual Income of household **Farming**		
below 1, 00,000	20	20
1,00,000 - 200,000	20	20
200,000 – 3, 00,000	6	6
3, 00,000 – 4, 00,000	2	2
Total	**48**	**48**
Non- Framing		
below 1, 00,000	18	18
1,00,000 - 200,000	11	11
200,000 – 3, 00,000	1	1
3, 00,000 – 4, 00,000	-	-
Total	**100**	**100**
Status of land holding		
Marginal Farmer	26	26
Small Farmer	24	24
Semi- Medium farmer	23	23
Medium Farmer	24	24
Large Farmer	3	3
Total	**100**	**100**

Total years of Farming experience		
Below 10 years	37	37
10-20 years	45	45
20-30 years	16	16
30-40 years	3	3
Total	**100**	**100**

Source: Primary data

Inference: Table.1 describes the demographic profile of the respondents towards Crop insurance. Out of 100 farmers who were taken for the study, it has been identified that most (78%) of the population are male, (45%) whose age group is under 41 to 50 Years, most (29%) of the respondents educated up to SSLC, depending mainly on (48%) farming activities for the sources of revenue having monthly income(22%) of above 1,00,000. 26% of the farmers are marginal farmers and (45%) of the respondents having 10-20 years of farming experience.

Table2. Perception of farmers towards Crop Insurance:

Sl No	Particulars	SA %	A %	N %	DA %	Total %
1	Protects against loss or damage of crops	100	-	-	-	100
2	Gives financial security	-	60	32	08	100
3	It helps in reducing the risks	-	70	20	10	100
4	Premium rate is reasonable	-	9	11	80	100
5	Follows simple formalities	-	73	-	27	100
6	Easily accessible through bank	-	45	33	22	100
7	Adequate publicity	30	-	1	69	100
8	Covers wide range of crops	-	10	-	90	100
9	Crop insurance schemes are well defined	-	23	19	58	100
10	Quick settlement of claims	-	72	-	28	100
11	Premiums are shared by Government	42	13	33	12	100
12	Structured compensation payouts	-	29	41	38	100
13	Compulsory coverage for loanee farmers	42	33	25	-	100
14	Voluntary coverage for non-loanee farmers	-	49	-	51	100
15	Rainfall variations reduce crop yields	100	-	-	-	100

Source: Primary data

Inference: Table.2 portrays opinion of farmers towards Crop Insurance. 100% of the respondents strongly agree that Crop insurance protects against loss of crops, 68% of the respondents agree that Crop insurance provides

protection, majority (70%) of the respondents agree crop insurance helps in reducing risks.80% of the respondents disagree that premium rate is reasonable.73% of the respondents agrees crop insurance follows simple formalities.100% of the respondents strongly agrees that rainfall variation reduces crop risks.

Testing of Hypothesis:

Table no.3 Level of satisfaction and educational qualifications

Educational Qualification	Level of Awareness				
Illitrate	1	1	2	1	5
Primary Education	3	16	8	20	47
Higher Education	4	7	1	17	29
Graduate	3	5	1	10	19
Total	11	29	12	48	100

Source: Primary data

2. Chi-square test:

Table no.4 Computation of Chi Square

Observed Frequency	Expected Frequency	$O - E$	$(O - E)^2$	$\dfrac{(O - E)^2}{E}$
1	0.55	0.45	.2025	1.7762
1	1.45	-0.45	.2025	0.1396
2	0.6	1.4	1.96	3.2667
1	2.4	-1.4	1.96	0.8167
3	5.17	-2.17	4.7089	0.9108
16	13.63	2.37	5.6169	0.4120
8	5.64	-2.36	5.5696	0.9875
20	22.56	-2.56	6.5536	0.2905
4	3.19	0.81	0.6561	0.2057
7	8.14	-1.41	1.9881	0.2363
1	3.48	-2.48	6.1504	1.7674
17	13.92	3.08	9.4564	0.6815
3	2.09	0.91	0.8281	0.3962
5	5.51	-0.51	0.2601	0.0472
1	2.08	-1.28	1.6384	0.7185
10	9.12	0.88	0.7744	0.0849
100	**100**	**-4.72**	**48.526**	$x^2 = $**12.7377**

Source: Primary data

d.f. = (r-1) (c-1), = (4-1) (4-1) =3 X 3= 9

0.05 for 9 d.f =16.919

Inference: Since the calculated value of x^2 is less than the tabulated value (16.919), it is not significant. Hence, null hypothesis may be accepted at 5% level of significance and it can be concluded that there is no significant relationship between the levels of satisfaction of farmers about Crop Insurance and their educational qualifications.

Findings:

1. It is compulsory for the farmers to apply for crop Insurance for availing crop loan from the bank. It was identified that majority of the respondents were unaware of the existing crop insurance schemes.

2. The awareness and satisfaction levels of farmers about crop insurance in the study areas is not satisfactory. Most of the farmers are not aware about the existing crop insurance schemes of the government.

3. It is the opinion of farmers that the maximum crop loss arises due to less rain as compared to pests and natural calamity.

4. Farmers are not satisfied with premium subsidy provided by the government and service providers.

5. Majority of the respondents expresses that there is inadequate publicity of crop insurance.

6. Compensations are not paid out regularly to the respondents in the study area.

Suggestions:

1. All crops need to be covered under crop insurance to make the scheme as an effective risk mitigating tool.

2. Procedure to purchase Crop Insurance should be made easy.

3. The government should arrange for some meetings to popularize their crop insurance among the farmers.

4. There is a necessity to improve the advertisement about crop insurance through news papers, magazines and provide more publicity in local TV channels.

5. Agents and officers are required to frequently contact the policy holders and educate the features of the policies offered in crop insurance.

Conclusion:

Agriculture in India is highly subjected to production and natural risks. It is the time now for the government to accord top priority to agriculture. Hence it is necessary to protect formers from natural calamities and other agricultural risks. In this background, the government of India introduced many crop insurance schemes. Insurance companies are playing a major role to help the farmers. In order to encourage the farmers, the insurance company should understand the needs of the farmers, but understanding farmers is difficult, since it is related to psychology of farmers and also depends on a variety of factors, which have a direct bearing on climatic changes. The study concludes that farmers play an important role in crop insurance; once the farmers are satisfied they will bring more prosperity to the nation.

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