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A coefficient and constraints analysis of Pradhan Mantri Fasal Bima Yojana (PMFBY) in Rajnandgaon district of Chhattisgarh state

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Abstract
The study was conducted an attempt has been made in the study, Performance Analysis of Pradhan Mantri Fasal Bima Yojana in Rajnandgaon district of Chhattisgarh State. Finding of the study revealed that the demographical characteristics that the size of family of the crop insured farms at 5.6 was found relatively smaller than non-crop insured farmers at 5.75. The cases of crop insured beneficiaries, the social group comprised of schedule tribe 64 (47.06 per cent), scheduled caste 20 (14.71 per cent), other backward caste 29 (21.32 per cent) and general 23 (16.91per cent), and in the cases of crop non-crop insured beneficiaries, the social group comprised of scheduled caste 8 (14.29 per cent), schedule tribe 39 (69.64 per cent), other backward caste 4 (7.14 per cent) and general 5 (8.93 per cent). Majority of the farmers participating in the scheme opined that the benefits were of multifarious type. They were able to use higher quantities of resource inputs for crop production (69.04 per cent) and thereby obtain higher yields, which enabled them to improve economic condition. A large number of the farmers (44.64 per cent) belonging to non-crop insured category could not participate in the programme as they were not aware about the crop insurance scheme. Almost (37.5 per cent) farmers expressed lack of premium paying capacity. About 33.93 per cent of non-insured farmers reported that they were not aware of the facilities available and not satisfied with crops covered (39.29 per cent). Almost (46.43 per cent) non-beneficiary farmers reported that they have taken loan from sources other than banks and lack of service / co-operation from the agency (69.64 per cent).

Keywords: Claim, premium ratio, sum insured, beneficiary ratio

Introduction
India has achieved self-sufficiency through food security, but it is still plagued by natural disasters. It was found that the changes in crop yields in the Indian subcontinent were mainly due to changes in weather. Therefore, all these major issues facing Indian farmers remain unchanged, and the Indian government has formulated some strategies to maintain the agricultural sector and try to fight it through natural disasters. Some of these measures include providing tax breaks, abolishing taxes and loan interest, and drought as a flood prevention measure. On the other hand, farmers try to reduce this risk by using modern technology and diversifying farm operations through different measures. Farmers use chemical fertilizers and pesticides flexibly to reduce risks in agronomic practices. However, such obstacles require high funding and there is a lack of quiet among Indian farmers. Therefore, these aspects led the Indian government to formulate crop insurance to fight against the economic losses of farmers in order to maintain the continuity of agricultural activities. Keeping the facts in mind, the Indian government introduced the Pradhan Mantri Fasal Bima Yojana (PMFBY) on February 18, 2016 to reduce agricultural risks and uncertainties and stabilize farmers' incomes. Pradhan Mantri Fasal Bima Yojana is the flagship scheme of the government for agricultural insurance in India in line with the ONE NATION- ONE SCHEME theme. The Chhattisgarh climate is tropical. Due to its proximity to the Tropic of Cancer and its reliance on the monsoons for rainfall, it is hot and humid. The monsoon season runs from late June to October and is a welcome heat respite. Chhattisgarh gets 1,292 millimeters (50.9 in) of rain on average. Agriculture continues to be the main occupation of the overall economy of the State. Here is much need to defence the agricultural incomes of the farmers of Chhattisgarh. The instrument of crop insurance allows the much needed safeguard to crop incomes. Looking to the growth in coverage of crop insurance and its contribution in stabilizing farm income against natural risks and calamities.

Methodology

Sampling technique three blocks namely Ambagarh Chowki, Mohla and Manpur blocks of Rajnandgaon district area was selected purposively for the study as the blocks have highest number of farmers adopting Pradhan Mantri Fasal Bima Yojana as compare to other blocks of the district. A multistage simple random sampling technique (SRS) was adopted to select the block, villages and the respondents in Rajnandgaon district. The details of the sampling techniques at various stages are given as under:

Analytical Procedures

The stated objectives of this study are fulfilled through tabulation and analysis of the data pertaining to study. Simple arithmetic and statistical techniques of analyses viz. average, percentage and standard methods of Constraints analysis was adopted to fulfill the objectives of the study.

Results and Discussion

The relationship between dependent with independent variables regarding PMFBY

Table 1 reveal that the Credit acquisition and Economic motivation were variables like significant relationship at 0.05% level of probability with satisfaction, and Education, Farming experiences, Risk Bearing ability, Attitude towards PMFBY and Knowledge level were showed highly significant relationship at 0.01% level of probability. Whereas Age, caste, occupation, annual income and irrigation facility was not significant relationship at 0.01% level of probability.

Table 1: Correlation of coefficient analysis between independent variable and dependent variable

Sl. No.	Independent variables	Coefficient of correlation (r)
1.	Age	0.0116
2	Education	0.2413**
3.	Caste	0.0143
4.	Farming experiences	0.3626**
5.	Size of land holding	0.1212
6.	Occupation	0.0708
7.	Annual income	0.0004
8.	Credit acquisition	0.1776*
9.	Source of information	-0.0197
10.	Economic motivation	0.1678*
11.	Risk bearing ability	0.3527**
12.	Irrigation facility	0.1592
13.	Attitude towards PMFBY	0.2464**
14.	Knowledge level	0.3394**

** Highly significant at 0.01% level of probability * Significant at 0.05% level of probability

Constraints and opinions of PMFBY

The constraints and opinions of the farmers on various aspects of the crop insurance scheme and suggestions for further improvement in the scheme were obtained from the sample of crop insured and non-crop insured famers and the same are presented in Table 2, 3 and 4 respectively.

Majority of the farmers participating in the scheme opined (Table 2) that the benefits were of multifarious type. They were able to use higher quantities of resource inputs for crop production (69.04 per cent) and thereby obtain higher yields, which enabled them to improve economic condition.

Table 2: Constraints in the adoption of PMFBY scheme given by crop insured farmers

S. No.	Particulars	No. of total insured respondents n=136			
		Yes		No	
		Respondent	%	Respondent	%
1.	Ignorance about PMFBY	45	33.08	81	59.55
2.	Insufficient compensation	91	66.91	45	33.08
3.	Delay in realization of compensation	78	57.35	58	42.64
4.	Difficulties in processing and compensation of paper work.	67	49.26	69	50.73
5.	Ignorance about crops covered under the scheme	75	55.14	61	44.85
6.	Criteria about crop insurance claim is inefficient	89	65.44	47	34.55

Note: Figures in Parentheses indicate percent of total respondents.

During bad kharif year's crop insurance scheme proved to be an effective solution to avoid bad effect of natural calamities (59.52 per cent). Moreover, compensation amount is insufficient (66.91 per cent). Also they needed the compensation in time (61.90 per cent) so that farmers could even sustain if the production is poor because their crops were insured. Many farmers reported ignorance about crop insurance scheme during normal years (35.71 per cent). Also, for them, crop insurance scheme proved to be an effective solution to avoid bad effect of natural calamities (59.52 per cent). PMFBY has a positive correlation with agricultural operations input use, production and net returns per unit of area. Accordingly efforts should be made to include all range of crop loan farmers and non-crop loan farmers providing support in terms of crop insurance premium.

Table 3: Opinion of crop insured farmers about crop insurance

S. No.	Particulars	No. of total insured respondents n= 136			
		Yes		No	
		Respondent	%	Respondent	%
1.	PMFBY acts as safeguard against production losses	88	65.87	48	34.13
2.	PMFBY mitigates the risk of adverse climatic condition	80	59.52	56	40.48
3.	Farmers economic condition improves due to crop insurance	76	56.35	60	43.65
4.	Crop insurance enhances the performance of farm operation	92	69.04	44	30.96

Note: Figures in Parentheses indicate percent of total respondents.

Majority of the farmers did not have much information about the coverage of different crops under the insurance scheme. Therefore, it is suggested that extensive efforts are required to educate the farmers about various aspects and features of the crop insurance scheme at the farmers' level. Many crop insured farmers faced problems related to processing and completion of paper work (45.24 per cent) and formalities in the bank. It is suggested that a dedicated counter with single window clearance should be setup in the bank to deal with the cases of crop insurance. As it has already been found in the study that the crop insurance scheme has a positive correlation with agricultural operations input use, production and net returns per unit of area. They were of the constraints that rate of crop insurance premium is high. 32.54 per cent reported that ignorance about crops covered under the scheme yet majority of the farmers did not have much information about the coverage of different crops under the insurance scheme.

The constraints, opinions and suggestions of the non-participating farmers as indicated in Table 4 A large number of the farmers (44.64 per cent) belonging to non-crop insured category could not participate in the programme as they were not aware about the crop insurance scheme. Almost (37.5 per cent) farmers expressed lack of premium paying capacity. About 33.93 per cent of non-insured farmers reported that they were not aware of the facilities available and not satisfied with crops covered (39.29 per cent). Almost (46.43 per cent) non-beneficiary farmers reported that they have taken loan from sources other than banks and lack of service / co-operation from the agency (69.64 per cent).

Table 5: Constraints and Opinion of non-crop insured Farmer for availing Crop insurance

S. No.	Particulars	No. of total non-crop insured respondents n= 56			
		Yes		No	
		Respondent	%	Respondent	%
1.	Not aware of crop insurance	25	44.64	31	55.36
2.	No faith in scheme / agency Opinion	28	50.00	28	50.00
3.	Lack of premium paying capacity	21	37.5	35	62.5
4.	Not aware of the facilities available	19	33.93	37	66.07
5.	Ignorance about crops covered under the scheme	25	44.64	31	58.73
6.	Not satisfied with area approach	32	57.14	24	42.86
7.	Inadequate publicity of the scheme	30	53.57	26	64.43
8.	Nearest bank at a distance	35	62.5	21	37.5
9.	Complex documentation and process works	32	57.14	24	42.46
10.	Lack of service / co-operation from the bank	39	69.64	17	30.36
11.	No need of insurance opinion	42	75	14	25
12	Delay in claim payment	28	50.00	28	50.00
13.	Not satisfied with indemnity level	24	42.86	32	53.57
14.	Not satisfied with crops covered	22	39.29	34	60.71
15.	Loan has taken from source other than banks	26	46.43	30	53.57

Note: Figures in parenthesis indicate percent of total respondents.

Conclusion

Finding shows that awareness level about PMFBY in study area's 86.03 percent among farmers who were availing crop insurance in scheme. The Credit acquisition and Economic motivation were variables like significant relationship at 0.05% level of probability with satisfaction, and Education, Farming experiences, Risk Bearing ability, Attitude towards PMFBY and Knowledge level were showed highly significant relationship at 0.01% level of probability. Whereas Age, caste, occupation, annual income and irrigation facility was not significant relationship at 0.01% level of probability. During bad kharif year's crop insurance scheme proved to be an effective solution to avoid bad effect of natural calamities (59.52 per cent).

References

1. Aditya KS. Adoption of crop insurance and impact: insights from India, Agricultural Economics Research Review. 2018;31(2):163-174
2. Anonymous. Agriculture Statistics Report 2017. Revenue Department, Govt. of Chhattisgarh, 2017.
3. Bhingardeve SD, Sasane GK, Sonawane HP. Knowledge and adoption of wheat production technology by the farmers. Asian J. Extension Education. 2010;28:148-150.
4. Ghanghas BS. Awareness of Pradhan Mantri Fasal Bima Yojana among farmers of Haryana state, Journal of pharmacognosy and phytochemistry. 2018;7(4):1912-1914
5. Gujji B, Darekar A. Prime Minister's Fasal Bima Yojana (PMFBY): A Case of Its Implementation in Datia District of Madhya Pradesh. International Journal of Management, Technology and Engineering, November/2018, 2019, 8(XI).
6. Jain, Bhagchandra. Jokhim suraksha ke liye Pradhan Mantri Fasal Bima Yojana Khad Patrika. 2019;60(1):17-20
7. Joshi. A study on attitude of farmers towards horticultural development programme in Parbhani district. M.Sc. (Ag.) Thesis. Maharashtra Agricultural University, Parbhani, 2009.
8. Juan He. 2015. Estimating the effect of crop insurance on input use when insured farmers are monitored. Department of Economics, North Carolina State University, Raleigh. http://www4.ncsu.edu/~jhe10.
9. Rajarajan M, Murugesan SV. "Performance analysis of crop insurance schemes in india-an overview." international journal of world research, 2016, i(xxxvi).
10. Rathore VS, Burark SS, Jain HK. Performance of Crop insurance scheme in Udaipur District of Rajasthan. Agricultural Economics Research Review. 2011 January-June;24:25-35. Economics Research Review. Vol.24 January-June 2011, 25-35.
11. Yadav R. Pradhan Mantri Fasal Bima Yojna a path breaking scheme for farmers welfare. kijecbm/ 2017 Jul-Sep;4(3):80-86
12. http://agridept.cg.gov.in
13. https://eands.dacnet.nic.in
14. http://icar.org.in/node/2808.