

Attitude of farmers on *Pradhan Mantri Fasal Bima Yojana* in Tumkur district of Karnataka

Abstract

To remove the inherent flaws in the existing crop insurance schemes Pradhan Mantri Fasal Bima Yojana was launched in India since 2016. This scheme has ensured farmers to pay lesser premium to insure their crops. Even though scheme is farmer friendly, many farmers have not accepted and adopted the scheme. Hence, there is a need to study on the factors affecting the attitude levels of the farmers on the new crop insurance scheme. Therefore, the study was undertaken in Tumkur district of Karnataka. A total of 120 farmer beneficiaries of Pradhan Mantri Fasal Bima Yojana were selected for the study by using the proportionate random sampling technique. Sixteen independent variables were selected based on judges' relevancy rating and were quantified using measurement devices. The data were collected using a pretested structured interview schedule and suitable statistical tools were used to analyze the data. Majority of the respondents (48.33%) had a favourable attitude towards the scheme. The variables, namely, age, education, land holding, annual income, farming experience, extension contact, extension participation, social participation, scientific orientation, risk orientation, economic motivation, credit orientation and crops cultivated had positive and significant association at five per cent level. Cosmopolitaness and achievement motivation had positive and significant association at one per cent level. The study revealed that the attitude of farmers has played a pivotal role for complete acceptance of developmental programme of the government such as Pradhan Mantri Fasal Bima Yojana.

Key words: Attitude, crop insurance, Karnataka, Pradhan Mantri Fasal Bima Yojana, Tumkur.

INTRODUCTION

Agriculture plays a vital role in India's economy. Majority of the rural households depend on agriculture as their principal means of livelihood. Agriculture being the function of physical, socio-institutional, techno-economic factors which are dynamic in nature keeps on changing with the objective of increasing production and generation of food grain surplus. Our farming is still subjected to the natural calamities and uncertainties in crop yield. Therefore, there is a need to provide relief measure to the farmers in the event of crop failure due to natural calamities in which the entire crop is lost. As a result of such losses, crops not only deprive farmers and their families for food but also liquidate their investments. Under such circumstances the insurance of crops against such risk can be immense value to them.

The Pradhan Mantri Fasal Bima Yojana (PMFBY) was introduced in kharif 2016 to have a One Nation-One Scheme. It was created by replacing earlier two schemes such as

National Agricultural Insurance Scheme and Modified National Agricultural Insurance Scheme by embodying their prime features and eliminating their inherent drawbacks. It aims to reduce premium load on farmers and ensure crop assurance to be settled promptly for the whole covered amount. The major objectives of the Scheme were (i) Financial aid is given to the farmers who have suffered from crop loss or damage, (ii), Helping the farmers to persevere their farming and increase their income, (iii) Motivating the farmers to take up the innovative and good farming practices, (iv) Ensuring credit worthiness of the farmers, diversifying the crop and enhancing the agricultural development and competitiveness in addition to safeguarding farmers from production hazards.

It is an insurance service for farmers for their yield loss. The scheme covers all food grain, oilseed and horticultural crops. The premium rate for *kharif*, *rabi* and horticultural crops is 2 per cent, 1.5 per cent and 5 per cent, respectively. Many insurance schemes are available for the farmers, but few of them are known to the farmers. Generally a favourable attitude is prerequisite for adoption/acceptance of any innovative technologies including developmental programmes/schemes. So, it is necessary to know the attitude of farmers towards PMFBY and its association with their profile characteristics. Keeping these aspects in view, the present study has been conceptualized with the objective of analyzing the relationship between the profile characteristics of farmer beneficiaries and their attitude towards PMFBY.

METHODOLOGY

Ex-post facto research design was used for this study. The study was conducted in Tumkur district of Karnataka state during the year 2020-2021. Tumkur district was purposively chosen for the study as it is having highest number of farmers enrolment (1,55,247) and highest number of beneficiaries (67,057) of PMFBY in the central dry zone of Karnataka State. From Tumkur district, Pavagada and Sira taluks were selected for the study, based on the highest number of enrolment and beneficiaries of the PMFBY. The village-wise information relating to PMFBY was obtained from the Department of Agriculture, Tumkur. The six villages having the highest number of beneficiaries in Pavagada and Sira taluks were selected. 60 respondents were selected from each taluk. From each village, 20 beneficiaries were randomly selected for the study. Thus, the total sample constituted to 120 farmers. The data were collected from 120 respondents through personal interview by using well structured interview schedule. The data collected from the respondents were scored, tabulated and analyzed using suitable statistical methods.

A total of sixteen independent variables were selected based on judges' rating for the study and these variables were quantified with the help of available measurement procedures.

Sl. No	Variables	Empirical measurement
Dependent variable		
	Attitude of farmers towards PMFBY	Scale developed by Jamanal and Natikar (2019) with slight modifications
Independent Variables		
1.	Age	Chronological age of the farmers
2.	Education	Procedure followed by Hiremath (2000)
3.	Annual income	Scale developed by Pandya (2010)
4.	Land holding	Scale developed by Pandya (2010)
5.	Farming experience	Procedure followed by Binkadakatti (2008)
6.	Extension contact	Scale developed by Hiremath (2007) with slight modifications
7.	Extension participation	Procedure followed by Nagesh (2006) with slight modifications
8.	Cosmopolitaness	Procedure followed by Desai (1981)
9.	Mass media exposure	Procedure followed by Meti (1990) and Kiran Kumari (1991)
10.	Social participation	Procedure followed by Saravanakumar (1996) with suitable modifications
11.	Scientific orientation	Scale developed by Supe (1969)
12.	Achievement motivation	Scale developed by Reddy (1996)
13.	Risk orientation	Procedure followed by Nagaraja (1989)
14.	Economic motivation	Scale developed by Supe (1969) with suitable modifications
15.	Credit orientation	Scale developed by Beal and Sibley (1967)
16.	Crops cultivated	Procedure followed by Kerur (2014) with slight modifications

The dependent variable was attitude of farmers towards *Pradhan Mantri Fasal Bima Yojana*. In the present study, attitude was conceptualized as positive, neutral or negative feelings of respondents towards the various features of PMFBY. The scale developed by Jamanal and Natikar (2019) was used with suitable modifications to ascertain the attitude level of respondents towards PMFBY. The scale contained 23 statements each measured on five point continuums namely *strongly agree, agree, undecided, disagree* and *strongly*

disagree. The weightages 5, 4, 3, 2 and 1 for each positive statement and 1, 2, 3, 4 and 5 for each negative statement were assigned. The attitude score of respondents was the sum of his/her scores for all the statements pertaining to the attitude towards PMFBY. Thus the possible score for respondent's attitude towards PMFBY ranges between minimum of 23 and maximum of 115.

RESULTS AND DISCUSSION

Profile characteristics of farmer beneficiaries of PMFBY

Evidently the study depicted that more than two fifth of the respondents (41.67%) belongs to middle aged group (35-50 years), 30.00 per cent had middle school education, 46.67 per cent belongs to medium farmers (2-4 acres) and 43.33 per cent belongs to medium farming experience (15-30 years). It was noticed that majority of the farmers (53.33 %) belongs to medium annual income group (Rs. 50,001 – Rs.1,00,000). About 45.00 per cent belongs to medium mass media exposure, 63.33 per cent belongs to high level of cosmopolitaness, 48.33 per cent had medium extension contact, 60.00 per cent had medium extension participation and 46.67 per cent had medium social participation. The study revealed that 51.67 per cent belongs to the medium achievement motivation, 48.33 per cent belongs to medium scientific orientation, 53.33 per cent belongs to medium level of risk orientation, 56.67 per cent had medium economic motivation. About half of the beneficiaries (50.00%) had medium credit orientation and 46.67 per cent belonged to high crops cultivated category.

Attitude level of respondents of PMFBY

It is observed from the Table 2 that nearly half of the respondents (48.33%) had favourable attitude, 33.34 per cent had more favourable attitude and 18.34 per cent had less favourable attitude towards PMFBY. As most of the beneficiaries had favorable attitude towards the scheme, extension personnel should concentrate on these taluks by providing required information, efforts to be made to increase the attitude and knowledge in them. These taluks had to be considered as model taluks for PMFBY implementation for the coming years. The awareness and knowledge about getting benefits from the PMFBY scheme and their satisfactory conditions might have led them to develop favourable attitude.

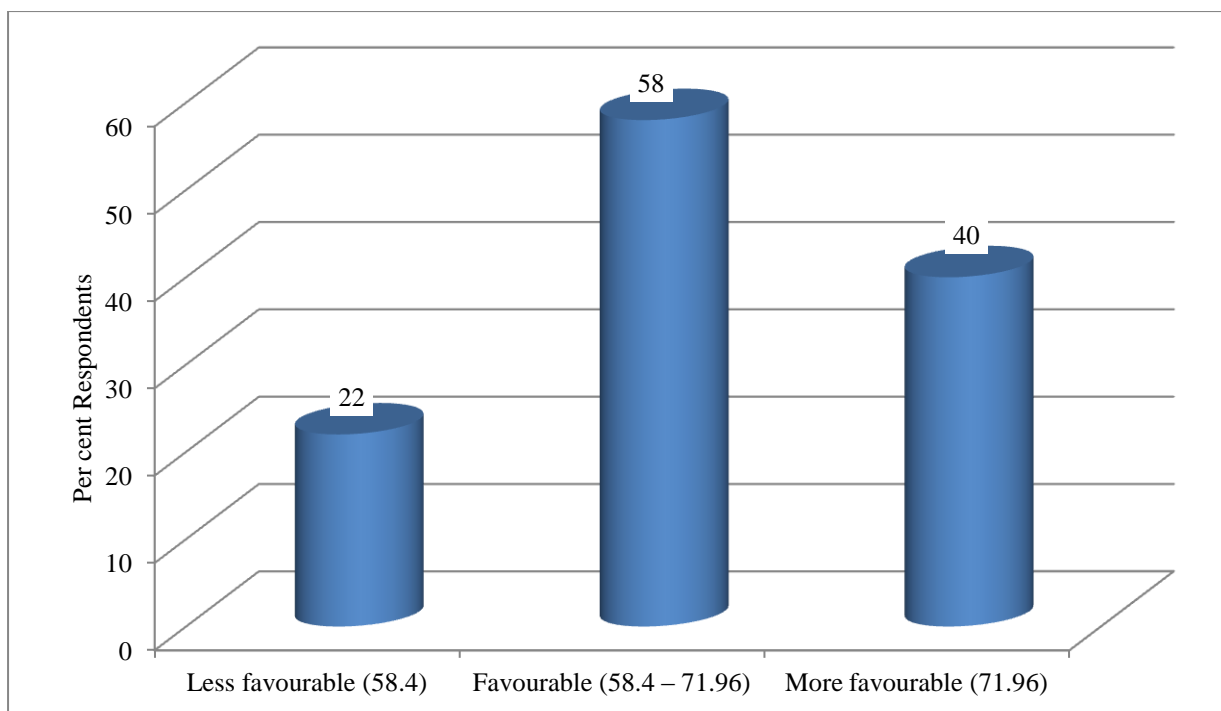


Fig. 1. Overall attitude level of beneficiaries of PMFBY

Association between attitude and personal, socio-economic and psychological characteristics of beneficiaries

The results presented in Table 3 reveals that, when chi-square test was applied to ascertain the association of personal characteristics with the attitude level of beneficiaries towards PMFBY variables like age, education, land holding, farming experience had a positive and significant association. The reason might be beneficiaries age varies from middle to young, they were educated, their landholding and experience in farming from many years, hence they developed the favourable attitude towards the PMFBY. These findings are in line with results of Gulkari (2011).

The variables like annual income, extension contact, extension participation, had a positive and significant association at 5 per cent level, whereas cosmopolitaness had a positive and highly significant association at 1 per cent level of signifcance, mass media exposure and social participation had no association with farmers attitude towards the scheme. These findings are line with the results of Gulkari (2011), Ramakant *et al.*, (2012), Nisha *et al.*, (2014), Kalita *et al.*, (2017), and Patel, *et al.*, (2018).

Out of six variables such as scientific orientation, risk orientation, economic motivation and crops cultivated had a positive and significant association at 5 per cent level with attitude. Variables like achievement motivation had a positive and significant association at 1 per cent

level. The reason might be the beneficiaries had more visits relating to agriculture, they were capable to take risk, for them work comes first, hence they form more favourable attitude towards PMFBY. These findings are in the result of Singh and Yadav (2012). Attitude of vegetable growers towards *Pradhan Mantri Fasal Bima Yojana* was found to be medium. The Government departments, NGOs and other extension functionaries who are in constant contact with farming community need to take into account the profile characteristics of the beneficiaries while planning and executing the PMFBY as these characteristics were found to influence their attitude. Attitude is very important for successful adoption or acceptance of any programme or scheme. Frequent reinforcement of ideas through mass media would create favourable attitude towards PMFBY. *Pradhan Mantri Fasal Bima Yojana* (Crop insurance scheme) is a reliable alternative because it safeguards the farmers during natural calamities and sustains production system.

CONCLUSION

The study reveals that most of the beneficiaries had favorable attitude towards the scheme. Therefore, extension personnel should focus on Pavagada and Sira taluks in Tumkur district of Karnataka for providing required information on the scheme to farmers. Publishing advertisements in newspapers and broadcasting and telecasting feature stories on PMFBY through All India Radio, Dooradarshan and social media, besides awareness programmes of government department officials, acted as catalysts in forming favourable attitude towards PMFBY. There should be a creation of linkage to panchayaths with other developmental departments to provide information regarding the scheme. Specialized personnel to be placed to provide timely technical assistance to the farmers through various policies and programmes. Reminding farmers through online platforms, simplifying procedure of the registration process and during claim settlement. Creation of separate PMFBY cell at village and block level, more advertisement on the scheme helps to reap the benefits by majority farmers. So, that they safeguard their crop and also prevent their crop losses from the unforeseen situations.

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Table 1. Personal, Socio-economic and Psychological characteristics of beneficiaries of PMFBY

(n=120)

Sl. No	Characteristics	Category	Frequency	Percentage
1.	Age	Young (<35 years)	38	31.67
		Middle (35-50 years)	50	41.67
		Old (>50 years)	32	26.67
2.	Education	Illiterate	12	10.00
		Primary school	26	21.67
		Middle school	36	30.00
		High school	20	16.67
		PUC	14	11.67
		Graduation	8	6.67
		Post-graduation	4	3.33
3.	Land holding	Small Farmers (up to 2 acres)	42	35.00
		Medium Farmers (2 acres – 4 acres)	56	46.67
		Big Farmers(>4 acres)	22	18.33
4.	Farming Experience	Low (up to 14 years)	28	23.33
		Medium (15 – 30 years)	52	43.33
		High (> 30 years)	40	33.33
5.	Annual Income	Low (Up to Rs. 50,000)	36	30.00
		Medium (Rs. 50,001 – Rs.1,00,000)	64	53.33
		High (Above Rs. 1, 00,000)	20	16.67
6.	Extension Contact	Low (6.72)	22	18.33
		Medium (6.72 -8)	58	48.33
		High (8)	40	33.33
7.	Extension participation	Low (9.79)	14	11.67
		Medium (9.79 – 11.51)	72	60.00
		High (11.51)	34	28.33
8.	Cosmopolitaness	Low (7.99)	16	13.33
		Medium (7.09 – 8.87)	28	23.33
		High (8.87)	76	63.33

9.	Mass media exposure	Low (7.06)	28	23.33
		Medium (7.06 – 8.66)	54	45.00
		High (8.66)	38	31.67
10.	Social participation	Low (1.24)	38	31.67
		Medium (1.24 – 2.22)	56	46.67
		High (2.22)	26	21.67
11.	Scientific orientation	Low (8.19)	36	30.00
		Medium (8.19-9.41)	58	48.33
		High (9.41)	26	21.67
12.	Achievement motivation	Low (13.63)	22	18.33
		Medium (13.63 – 14.69)	62	51.67
		High (14.69)	36	30.00
13.	Risk orientation	Low (8.01)	32	26.67
		Medium (8.01-9.35)	64	53.33
		High (9.35)	24	20.00
14.	Economic motivation	Low (22.43)	24	20.00
		Medium (22.43-25.69)	68	56.67
		High (25.69)	28	23.33
15.	Credit orientation	Low (1.87)	32	26.67
		Medium (1.87-3.25)	60	50.00
		High (3.25)	28	23.33
16.	Crops cultivated	Low (3.60)	24	20.00
		Medium (3.60-4.66)	40	33.33
		High (4.66)	56	46.67

Table 2. Overall attitude level of beneficiaries of PMFBY

(n=120)

Mean and SD	Category	Frequency	Percentage
Mean- 65.18 SD- 13.57	Less favourable (58.4)	22	18.33
	Favourable (58.4 – 71.96)	58	48.33
	More favourable (71.96)	40	33.33

Table 3. Association between profile characteristics of the respondents with their attitude regarding PMFBY

(n=120)

Sl. No.	Characteristics	Chi-square value	
		Beneficiaries	C-value
1	Age	11.71*	0.83
2	Education	23.55*	0.94
3	Annual income	12.95*	0.85
4	Land holding	11.50*	0.82
5	Farming experience	11.82*	0.83
6	Extension contact	12.50*	0.85
7	Extension participation	11.06*	0.81
8	Cosmopolitaness	15.68**	0.89
9	Mass media exposure	6.45 ^{NS}	0.58
10	Social participation	10.07*	0.79
11	Scientific orientation	12.40*	0.84
12	Achievement motivation	23.50**	0.94
13	Risk orientation	11.82*	0.83
14	Economic motivation	12.65*	0.85
15	Credit orientation	12.52*	0.85
16	Crops cultivated	12.54*	0.85

NS=Non-significant, *=Significant at 5% level, **=Significant at 1% level