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Attitude of wheat growers towards Pradhan Mantri Fasal Bima Yojana

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ABSTRACT

The study was carried out during 2018 in Jaipur region of Rajasthan state as this region depicted to have the highest number of farmers registered under Pradhan Mantri Fasal Bima Yojana (PMFBY) in comparison to other regions of the state. A semi-structured interview schedule was used to collect the data from the respondents. The results of the study revealed that majority of the beneficiary (62.22%), non-beneficiary (64.45%) and overall respondents (63.33%) had neutral attitude towards Pradhan Mantri Fasal Bima Yojna. There was similarity found in the rank assignment pattern regarding attitude of beneficiary and non-beneficiary respondents about Pradhan Mantri Fasal Bima Yojna, though there was a difference in the magnitude of Mean Percent Scores (MPS) of beneficiary and non-beneficiary farmers. A positive and significant association was found between the attitude and some selected characteristics like education, age, occupation, exposure to mass media and contact with extension agency. The factors like caste, social participation, annual income, land holding, source of irrigation, information seeking behaviour and information sharing behaviour have not shown any significant contribution to the multiple regression analysis and were non-significantly associated with attitude of overall respondents.

Keywords: Attitude, Beneficiary, Non-beneficiary, PMFBY, Wheat growers

Wheat (*Triticum aestivum*) being a *rabi* season crop is the prime food grain and ranks second after rice in India. It is mostly consumed in the north and north-western parts of the country. The area of wheat in India is 29.58 million ha (MH) and production is 99.70 million tons (MT) (FAO 2018). In Rajasthan, the area and production of wheat is 3.05 MH and 11.28 MT, respectively (Anonymous 2017-18). According to a report of National Crime Records Bureau (NCRB), the main reason of farmers' suicide was that they were forced to get credit at a very high rate of interest from private money lenders. Farmers had no help for their crop loss in the form of subsidy for price of fertilizers, indemnity, etc. So, crop insurance is the only answer to save the farmers from risky and unprotected farming systems. Thus, Pradhan Mantri Fasal Bima Yojana (PMFBY) was brought into force by the Government of India in 2016. PMFBY is a scheme which enables the feeling of self-respect and self-reliance among the farmers of the country, as they have full right to claim compensation during crop loss and with better crop insurance. Thus, no doubt the academic literature boasts of linking crop insurance to farmers' welfare (Cole *et al.* 2017).

According to Hogg and Vaughan (2005), an attitude is a kind of formation and setting of trust, impressions, and behavioural bent towards objects, groups, events or symbols that are socially remarkable. Attitude is that state of readiness concerned with one's mental processes and is organized with experience, thus exerting a directive and has dynamic impact on a person's reaction towards different objects and situations. Number of researches have proved that attitude is an important component associated with acceptance or rejection of any idea, practice or thought. Farmers' attitude has a critical role in the implementation of any innovation or new technology in farming system. Therefore, realizing the importance of crop insurance as a means for managing uncertainties in agriculture, this research study was conceived with an objective to find out the attitude of the farmers towards PMFBY.

MATERIALS AND METHODS

Jaipur region of Rajasthan was selected purposely as it has the largest number of farmers registered under Pradhan Mantri Fasal Bima Yojana when compared with other regions of the state. Jaipur region comprises four districts namely; Ajmer, Jaipur, Dausa and Tonk. The Jaipur district was selected purposely on the basis of largest number of registered farmers under Pradhan Mantri Fasal Bima Yojana among all the districts of the state. Three *tehsils,* viz. Chomu, Kotputli and Kisangarh-renwal were again selected purposely due to highest number of farmers registered under Pradhan Mantri Fasal Bima Yojana in these tehsils. Further, two villages from each *tehsil*; Nangal Bharda and Astikalan

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from Chomu; Nangal Panditpura and Rai Karanpura from Kotputli and Badhal and Itawa from Kisangarh Renwal were selected for the present investigation. The user respondents were selected through proportionate random sampling and were called as beneficiaries of PMFBY because they had benefited under PMFBY. Equal number of non-beneficiary respondents from the same villages were also selected randomly who have not been benefitted under Pradhan Mantri Fasal Bima Yojana and they were called as non-beneficiary respondents. Thus, a total 180 respondents, *i.e.* 90 beneficiaries and 90 non-beneficiary respondents formed the sample of the present investigation representing six villages. Based on the past review of researches in relation to various dimensions of Pradhan Manti Fasal Bima Yojana, a modified scale of Samota (2015) was used for the purpose of data collection on five-point continuum with responses in the form of "Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree" and accordingly 5, 4, 3, 2 and 1 scores were assigned for positive statements and 1, 2, 3, 4 and 5 were the scores for negative statements. On the basis of the obtained scores, three categories of respondents were made such as "Favourable, Neutral and Unfavourable". Further, on the basis of scores in each item of the scale, weighted mean percent score value was also calculated for each dimension. Analysis of the data was done using statistical tools like frequency distribution, percentage, mean, standard deviation, mean percent score, rank correlation, t-test as well as multiple linear regression.

RESULTS AND DISCUSSION

Attitude of wheat growers towards PMFBY: Data revealed that majority of the beneficiary (62.22%) and non-beneficiary (64.45%) respondents had neutral attitude towards Pradhan Mantri Fasal Bima Yojana. Very few beneficiary respondents, i.e. 08.88% and 24.44% of non-beneficiary farmers had unfavourable attitude towards Pradhan Mantri Fasal Bima Yojana. Further, 28.90% of the beneficiary respondents and 11.11% of the non-beneficiary respondents had favourable attitude towards Pradhan Mantri Fasal Bima Yojana. If we see the data irrespective of beneficiary and non-beneficiary respondents, data reveals that 63.33% of the respondents had neutral attitude towards Pradhan Mantri Fasal Bima Yojana followed by favourable (20.00%) and unfavourable (16.67%) attitude towards Pradhan Mantri Fasal Bima Yojana, respectively. The results reveal that a majority of farmers had neutral attitude towards PMFBY as the farmers were not fully aware of the correct procedure of availing insurance for their failed crops and as reported by the farmers of the study area, the insurance agents were not easily approachable at the time of natural calamities to help them in insurance claims. The findings are similar to the findings of Jambuvant (2017) who also revealed that a majority of the farmers showed moderately favourable attitude towards crop insurance schemes.

Ranking of statements on attitude of wheat growers towards PMFBY: Table 1 illustrates the distribution of beneficiary, non-beneficiary and overall respondents as per the obtained mean percent scores in respect of their attitude towards various statements of Pradhan Mantri Fasal Bima Yojana. Data reveals that the beneficiary respondents had ranked "PMFBY can help farmers to go for agricultural operations" as first as it had the highest mean percent score of 89.11 followed by "PMFBY helps in building up self-reliance of farmers" as second with mean percent score of 88.44 and "PMFBY can help me sustain safely during natural calamities like flood, high/low temperature, humidity and drought" was ranked third (85.77 MPS), respectively. Low mean percent scores, i.e. 48.44, 47.33 and 39.77 were obtained for the statements, "there is adequate provision of compensation in PMFBY," "PMFBY more accessible to rich people only" and "lesser improvement in relation to agriculture credit". The data (Table 1) also indicates that "PMFBY is more accessible to rich people only" had ranked first by the non-beneficiary respondents with a mean percent score of 80.88 followed by "claim passed under PMFBY is inadequate" and "lesser improvement in relation to agriculture credit" was ranked second (79.55 MPS) and third (76.00 MPS), respectively. The lowest scores were observed for non-beneficiaries for the statements, "PMFBY can help farmers to go for agricultural operations", "economic standard of farmers improves after adopting PMFBY" and "many crops are covered under PMFBY scheme" with mean percent scores of 46.44, 46.00 and 45.77, respectively.

If we look at data (Table 1), irrespective of beneficiary and non-beneficiary respondents; data depicts that "claim passed under PMFBY is inadequate" was accorded first rank (77.55 MPS) by the overall respondents followed by "it is very difficult to get claim under PMFBY" and "PMFBY can help me sustain safely during natural calamities like flood, high/low temperature, humidity and drought" ranked second (74.21 MPS) and third (73.99 MPS), respectively. Samota (2015) in a study conducted with farmers of Udaipur district of Rajasthan found that farmers can sustain safely in drought years through crop insurance. The lowest scores were recorded by the overall respondents for the dimensions; lesser improvement in relation to agriculture credit", "I get compensation in time and premium of PMFBY is not reasonable" with mean percent scores of 57.88, 49.44 and 48.66, respectively, which means the overall respondents had unfavourable or neutral attitude towards these dimensions of Pradhan Mantri Fasal Bima Yojana. An effort was also made for finding out the relationship among the ranks assigned by the beneficiary and non-beneficiary wheat growers by applying rank correlation test. The value of rank correlation (r_s) was 0.66 which shows positive and significant at 1% level of significance, leading to a conclusion that there was a similarity in ranks assignment patterns of attitude of beneficiary and non-beneficiary respondents towards Pradhan Mantri Fasal Bima Yojana, though there was a difference in the magnitude of MPS of beneficiary and non-beneficiary wheat growers.

Relationship between socio-personal, socio-economic and communication pattern characteristics with attitude:

Table 1 Ranking of statements on attitude of wheat growers towards PMFBY

Statement	Respondents					
	Beneficiary respondents (n= 90)		Non-beneficiary respondents (n= 90)		Overall respondents (N= 180)	
	MPS	Rank	MPS	Rank	MPS	Rank
PMFBY can help farmers to go for agricultural operations (+)	89.11	I	46.44	XVI	67.77	VII
PMFBY helps in building up self-reliance of farmers.(+)	88.44	II	47.33	XIV	67.89	VI
The economic standard of farmers improves after adopting PMFBY (+)	85.11	IV	46.00	XVII	65.55	IX
PMFBY can help me sustain safely during natural calamities like flood, high/low temperature, humidity and drought (+)	85.77	III	62.22	X	73.99	III
The claims of PMFBY are provided within the expected time (+)	65.77	IX	66.00	IX	65.89	VIII
There is adequate provision of compensation in PMFBY (+)	48.44	XVI	70.44	VII	59.44	XV
I am satisfied with the provider of PMFBY Services (+)	48.66	XV	73.55	V	61.10	XIV
Premium of PMFBY is not reasonable (-)	50.66	XIII	46.66	XV	48.66	XVIII
PMFBY is more accessible to rich people only (-)	47.33	XVII	80.88	I	64.10	XI
PMFBY aims at supporting sustainable production in agriculture sector (+)	78.66	VII	59.77	XI	69.21	V
PMFBY is encouraging farmers to adopt innovative and modern agricultural practices (+)	81.55	V	48.22	XIII	64.88	X
I get compensation in time (+)	50.00	XIV	48.88	XII	49.44	XVII
Claim passed under PMFBY is inadequate (-)	75.55	XI	79.55	II	77.55	I
Many crops are covered under PMFBY scheme (+)	79.77	VI	45.77	XVIII	62.77	XIII
Only few agriculture insurance companies are under PMFBY scheme (-)	55.77	VIII	71.55	VI	63.66	XII
Formalities to get crop insurance in the banks are easy (+)	77.33	XII	70.22	VIII	73.78	IV
It is very difficult to get claim under PMFBY (+)	72.66	X	75.77	IV	74.21	II
Lesser improvement in relation to agriculture credit (-)	39.77	XVIII	76.00	III	57.88	XVI

r_s= rank correlation, MPS= Mean Percent Score r_s = 0.66. **Significant at 0.01 level of probability t = 3.60**

The data (Table 2) depicts the regression relationship of dependent variable, i.e. attitude on 12 antecedent variables pertaining to the respondents. In case of beneficiary respondents, the value of coefficient of determination (R^2) was found as 0.78 that shows 78% variations in the dependent variable mainly due to 12 antecedent variables taken for the present investigation. The remaining 22% variation in the attitude was due to other factors outside the purview of this investigation. The data further revealed that in case of beneficiary respondents, age (2.42*), education (3.34**), occupation (2.71**), mass media exposure (2.46*) and extension agency contact (2.01*) were significantly associated with the attitude of the respondents, whereas rest of the factors have not shown any significant contribution to the multiple regression analysis. Further, in case of non-beneficiary respondents, the value of coefficient of determination (R^2) was 0.73 and similar trend of association among variables was observed (Table 2).

In case of pooled data, overall respondents showed 72% variations in the dependent variable with (R^2) value of 0.72. Similar trend of association was also observed in the pooled data (Table 2). Considering the relationship regarding attitude of the farmers towards PMFBY, it was observed that age and education had positive and significant association with the attitude of the wheat growers indicating that with increase in education and age, there is formation of more favourable attitude towards PMFBY. Singh *et al.* (2014) also concluded that age is significantly associated with the attitude of farmers. Similarly, Deshmukh *et al.* (2020) too discovered that education and attitude of farmers have a positive and highly significant relationship and concluded that it is education which directly affects one's understanding of any idea, object or thing. Education leads to increase in literacy level and possibly has influence on the attitude of farmers. Increased level of education also aids an individual to imbibe the required skills for adopting modern technologies and new schemes. This justifies the positive and significant relationship between education and attitude towards PMFBY. Results are similar to the findings of Singh and Sinha (2017) who also found that education had a positive and significant relationship with attitude of an individual. The study reveals that occupation of an individual too has bearing on attitude.

Table 2 Relationship between Selected Variables and Attitude of Respondents towards PMFBY

Variable	Beneficiary respondents (n=90)			Non-beneficiary respondents (n =90)			Pooled (N=180)		
	b value	Standard error	t value	b value	Standard error	t value	b value	Standard error	t value
Socio-personal characteristics									
Age	0.17	0.07	2.42*	0.08	0.04	1.99*	0.13	0.06	2.20*
Caste	2.26	1.22	1.84^{NS}	0.44	0.75	0.59^{NS}	1.35	0.98	1.37^{NS}
Education	0.97	0.29	3.34**	1.32	0.44	3.01**	1.14	0.37	3.08**
Social participation	1.82	7.69	0.23^{NS}	0.72	2.28	0.31^{NS}	2.29	2.77	0.82^{NS}
Socio-economic characteristics									
Occupation	2.52	0.93	2.71**	3.37	1.69	1.99*	2.94	1.25	2.35*
Annual income	0.88	1.12	0.79^{NS}	6.91	11.17	0.61^{NS}	3.90	1.98	0.70^{NS}
Land holding	0.27	1.01	0.26^{NS}	0.33	0.79	0.42^{NS}	0.99	0.69	1.44^{NS}
Source of irrigation	2.27	3.30	0.68^{NS}	0.35	2.20	0.16^{NS}	2.50	2.12	1.17^{NS}
Communication pattern									
Mass media exposure	0.86	0.35	2.46*	0.42	0.21	2.03*	0.18	0.08	2.24*
Information seeking behaviour	0.34	0.28	1.21^{NS}	0.07	0.17	0.40^{NS}	0.37	0.16	0.80^{NS}
Information sharing behaviour	0.50	0.62	0.80^{NS}	0.44	0.51	0.85^{NS}	0.35	0.43	0.81^{NS}
Extension agency contact	1.18	0.59	2.01*	0.83	0.42	1.98*	0.76	0.38	2.00*
		$R^2 = 0.78$			$R^2 = 0.73$			$R^2 = 0.72$	

R^2=Coefficient of multiple determinations; NS=Non significant; **=Significant at 0.01 level of probability; * =Significant at 0.05 level of probability.

It is quite natural that people with farming as main source of livelihood would have more positive attitude towards government schemes as they are totally dependent on agriculture having no alternate source of income. They gain more insight about the various schemes and programmes thus developing a favourable attitude. Mass media exposure and extension agency contact too had positive association with attitude. The possible justification could be farmers who are more exposed to extension agencies are generally at an advantage to gain information, knowledge and skills and therefore tend to have a more favourable attitude towards the same. Therefore, we can infer that there exists a positive and significant association between contact with extension agency and attitude. If an individual gets exposed to good number of extension agencies, he/she has an opportunity to gain knowledge thus enriching his/her attitude. Exposure to extension agencies could thus contribute to formation of a positive attitude and highly significant relationship found in the study is thus justified.

Majority of the respondents had neutral attitude towards Pradhan Mantri Fasal Bima Yojana. Age, education, occupation, mass media exposure and extension agency contact had projected a positive and significant relation with the attitude of wheat growers. The study further leads us to the conclusion that crop insurance schemes should be more concentrated towards those farmers whose main occupation is agriculture, at the same time more and more information regarding PMFBY should be broadcasted through television, radio, farmers' magazines and newspapers to develop favourable attitude among the farmers about this scheme and also other government programmes. Even the extension agencies such as Krishi Vigyan Kendras and State Department of Agriculture should conduct awareness and knowledge based programmes for the farmers on PMFBY and other insurance schemes so as to develop favourable attitude among the farmers because it is attitude only which leads to action. More efforts are needed on the part of concerned persons implementing PMFBY to provide better services, awareness, simplify procedures along with timely claim of PMFBY if any, to farmers so that they may have trust in the programme and come forward to get their crops insured.

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