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"Awareness Levels and Perceived Benefits of Pradhan Mantri Fasal Bima Yojana: A Comparative Study of Insured and Non-Insured Farmers in Haryana."

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Abstract
The Pradhan Mantri Fasal Bima Yojana (PMFBY) has emerged as a vital policy initiative aimed at providing financial protection to farmers against agricultural risks arising from natural calamities, pests, and diseases. In Haryana, the scheme has played a significant role in extending insurance coverage to farmers and facilitating claim settlements. For the present study, a sample of 600 farming households was selected from the state, comprising an equal number of insured and non-insured farmers. To ensure adequate representation of diverse socio-economic groups within the farming community, a stratified random sampling technique was employed. Primary data were collected through a semi-structured questionnaire administered to 300 insured and 300 non-insured farmers. This section examines the socio-economic characteristics of the respondents along with their level of awareness regarding PMFBY. The analysis focuses on farmers' understanding of the scheme, procedures for availing crop insurance, and awareness of the risks and crops covered under PMFBY. The study undertakes a comparative assessment of awareness levels and perceived benefits of PMFBY among insured and non-insured farmers in selected districts of Haryana, namely Kaithal, Hisar, and Jhajjar. The findings reveal marked disparities in awareness between the two groups, with insured farmers consistently demonstrating higher levels of knowledge across various risk categories and crop types. These results underscore the need for targeted awareness and capacity-building programmes, particularly for non-insured farmers, to bridge existing knowledge gaps and promote informed participation. Strengthening information dissemination through extension services, financial institutions, and digital platforms could further enhance the effectiveness and inclusiveness of PMFBY in the state.

Keywords: capacity-building, financial, significance, perceptions, simultaneously, dissemination

Introduction

The agricultural sector in India constitutes the backbone of the national economy, sustaining the livelihoods of nearly two-thirds of the population. Crop insurance plays a vital role in restoring farmers' confidence and enabling them to resume agricultural production following adverse farming years (Kait & Sheoran, 2020). A key emphasis of crop insurance programmes is the retention of farmers through timely settlement of claims, which has emerged as a critical factor in

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sustaining participation in such schemes (Sheoran & Kait, 2021). Empirical evidence suggests that crop insurance has been effective in supporting farmers during periods of crop loss or damage, thereby enhancing their economic stability and safeguarding rural livelihoods (Sheoran et al., 2021). By mitigating risks and uncertainties inherent in agriculture, crop insurance significantly contributes to farmers' financial security and overall socio-economic well-being (Sheoran & Kait, 2021). In response to persistent agricultural risks, the Government of India has introduced several crop insurance initiatives aimed at providing financial support and minimizing losses arising from crop failure. Among these, the Pradhan Mantri Fasal Bima Yojana (PMFBY), launched in 2016, represents a flagship intervention designed to offer comprehensive financial protection to farmers against crop losses. The scheme emphasizes the integration of technology, transparency, and timely implementation to strengthen farmers' resilience in the face of agricultural uncertainties. PMFBY provides coverage across various stages of crop production and incorporates modern agricultural and technological practices to reinforce the sustainability of the farming sector.

In Haryana, PMFBY has assumed particular significance by extending financial protection to farmers and facilitating timely settlement of crop insurance claims. The scheme encompasses a broad range of crops cultivated during both Kharif and Rabi seasons and adopts a cluster-based approach to enhance operational efficiency. Through coordinated efforts of implementing agencies and the use of digital platforms such as the National Crop Insurance Portal, PMFBY in Haryana seeks to reduce the premium burden on farmers while ensuring transparency and efficiency in scheme administration.

In accordance with the stated research objectives, an extensive review of existing literature on agricultural insurance schemes has been undertaken. A fundamental prerequisite for the effective implementation and functioning of crop insurance programmes is a high level of awareness among farmers. The review of literature not only provides insights into existing knowledge gaps but also helps in generating innovative ideas and perspectives for strengthening crop insurance schemes, while simultaneously safeguarding the interests of both insurers and the farming community.

Kumar et al. (2011) examined farmers' perceptions and awareness of crop insurance in Tamil Nadu using primary data collected from 600 farmers. The study employed Probit and Tobit models to identify factors influencing awareness and adoption of crop insurance. The findings revealed that while approximately 65 percent of farmers were aware of government risk mitigation measures, only about 50 percent were aware of crop insurance schemes. The study highlighted the need for improved dissemination of insurance-related information. Factors such as cropped area, non-agricultural income, exposure to farming risks, availability of family labour, satisfaction with premium levels, and affordability were found to significantly influence insurance adoption. The authors emphasized the importance of developing innovative and farmer-friendly insurance products, strengthening dissemination strategies, and enhancing access to institutional credit. The

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study concluded that capacity building and active stakeholder engagement are essential for improving the adoption and outreach of crop insurance schemes.

Goudappa et al. (2012) analyzed farmers' perceptions and awareness of crop insurance in the northeastern regions of Karnataka, India, with particular emphasis on socio-economic characteristics. The study reported no significant inter-district variation in education levels, family size, or farming experience among respondents. However, farm size and crop income were relatively higher in Gulbarga district compared to Koppal and Raichur districts. The findings revealed that farmers were primarily motivated to opt for crop insurance due to bank compulsion, the need for financial security, and favorable experiences shared by fellow farmers. A major concern expressed by beneficiaries was the prolonged delay in claim settlement, which in many cases extended beyond one year, indicating the need for more efficient claim processing mechanisms.

Soni and Trivedi (2013) investigated the level of awareness and adoption of crop insurance among farmers in Anand district of Gujarat. The study surveyed 55 farmers, of whom only two had availed crop insurance. The respondents were predominantly male, with an average age of approximately 49 years, low literacy levels, and engagement in multiple livelihood activities. Crop failures were reported to occur one to two times annually due to climatic, economic, and input-related factors. Most farmers relied on personal savings rather than insurance as a coping mechanism. The study identified key reasons for low insurance uptake, including perceptions of crop insurance as a non-institutional loan, lack of cooperation from banks, and apprehension regarding complex procedural requirements. With only about 4 percent of farmers insured, the study highlighted significant potential for expanding crop insurance coverage by building trust and improving claim settlement processes.

Uvaneswaran and Mohanapriya (2014) assessed farmers' awareness and perceptions of crop insurance in Erode district of Tamil Nadu. The study was based on interviews conducted with 150 farmers and employed statistical tools such as simple percentage analysis, chi-square tests, and the Henry Garrett Ranking technique. The findings underscored the necessity of enhancing awareness and positively shaping farmers' perceptions regarding the benefits of crop insurance. The authors emphasized that targeted awareness initiatives are essential to encourage participation among farmers of all categories, particularly small and medium-scale cultivators.

Iqbal et al. (2016) examined cotton farmers' risk perceptions and attitudes towards various production-related risks associated with cotton cultivation. The study was based on a survey of 480 farmers drawn from six major cotton-growing districts of the province. To assess farmers' risk attitudes and perceptions, the study employed the Equally Likely Certainty Equivalent (ELCE) approach and a risk matrix method, respectively, while a Probit regression model was used to identify factors influencing farmers' attitudes toward risk. The findings revealed that a majority of

cotton farmers were risk-averse, with floods, excessive rainfall, increased incidence of crop diseases, and rising input prices identified as the most significant risks affecting cotton production.
Nain et al. (2017) conducted a study in Southern Haryana to assess farmers' awareness of agricultural insurance schemes, with a specific focus on the Mewat region. Data were collected through focused group discussions and personal interviews conducted in two selected villages. The study reported a generally low level of awareness among farmers regarding key features and operational aspects of agricultural insurance schemes. Major constraints identified included lack of clarity about premium rates and loss assessment procedures, indicating the need for greater involvement of service providers and extension agencies to enhance awareness and understanding among farmers.

Kandel (2019) investigated farmers' awareness and perceptions of livestock insurance in Nawalparasi District of Nepal, where livestock plays a crucial role in agricultural GDP and rural livelihoods. Using cluster and simple random sampling techniques, data were collected from 80 households through semi-structured interviews. The study found widespread dissatisfaction among farmers regarding claim procedures, documentation requirements, and delays in claim settlement by insurance companies. The findings emphasized the need to improve farmers' knowledge and perceptions of livestock insurance in order to strengthen adoption and effectiveness of insurance schemes in Nepal.

Devi and Gupta (2020) assessed farmers' awareness of the Pradhan Mantri Fasal Bima Yojana (PMFBY) in Fatehpur district. Primary data were collected from 150 respondents and analyzed using statistical tools such as percentages, averages, weighted mean scores, ranking techniques, standard deviation, and correlation analysis. The study revealed that a large proportion of farmers possessed education up to the high school level and had annual incomes ranging between ₹1,00,000 and ₹1,50,000. The majority of respondents were found to be aware of PMFBY and its coverage against various agricultural risks, indicating a relatively positive level of scheme awareness in the study area.

Darshan et al. (2021), in their study titled *"A Study on Farmers' Knowledge on Pradhan Mantri Fasal Bima Yojana in Tumkur District of Karnataka,"* examined the level of awareness and understanding of PMFBY among farmer beneficiaries in Tumkur district, Karnataka. The study was based on a sample of 120 farmers selected through random sampling techniques, and primary data were collected using structured interview schedules. The findings revealed that comprehensive knowledge of the scheme and its coverage against losses caused by natural calamities can significantly benefit farmers. The study further emphasized the critical role of extension personnel at the grassroots level in disseminating timely and accurate information regarding PMFBY to enhance farmers' understanding and effective participation in the scheme.

Methodology: A total of 600 farming households from Haryana were selected for the present study, comprising equal numbers of insured and non-insured farmers. To ensure adequate representation of the diverse segments within the farming community, a stratified random sampling technique was employed. Primary data were collected through a semi-structured questionnaire administered to 300 insured and 300 non-insured respondents. The sampled farmers represented a wide range of farm sizes, from marginal to large holdings, and were engaged in the cultivation of various major crops during one or more agricultural seasons. Following data collection, the information obtained was systematically analyzed using tabular analysis and basic statistical tools, including measures of central tendency and percentage analysis.

Results and Discussion

Section 1: Farmers Awareness about Risk Covered under PMFBY

The table presents a comparative analysis of farmers' awareness regarding the risks covered under the Pradhan Mantri Fasal Bima Yojana (PMFBY) across three districts of Haryana, namely Kaithal, Hisar, and Jhajjar. The analysis distinguishes between insured farmers (IF) and non-insured farmers (NIF) and examines awareness levels across different categories of risks, including localized calamities, risks during the standing crop period (from sowing to harvesting), and post-harvest losses. With respect to localized calamities—such as hailstorms, inundation, cloudbursts, and lightning—the findings reveal noticeable variations in awareness among insured and non-insured farmers across the three districts. In Kaithal, awareness among insured farmers ranges between 41 percent and 58 percent, whereas among non-insured farmers it varies from 20 percent to 28 percent. A similar pattern is observed in Hisar, where insured farmers report awareness levels ranging from 40 percent to 57 percent, compared to 22 percent to 28 percent among non-insured farmers. In Jhajjar, awareness among insured farmers ranges from 39 percent to 55 percent, while non-insured farmers exhibit comparatively lower awareness levels, ranging from 20 percent to 25 percent. Overall, the results consistently indicate higher awareness levels among insured farmers across all three districts and risk categories. This disparity highlights the positive role of scheme participation in enhancing farmers' understanding of insured risks under PMFBY. At the same time, the relatively lower awareness among non-insured farmers underscores the need for targeted awareness and capacity-building programmes to improve their understanding of risk coverage and promote informed participation in the crop insurance scheme.

Table 1: Farmers Awareness about Risk covered under PMFBY

Particulars		**Kaithal**		**Hisar**		**Jhajjar**	
Localised calamities		**IF**	**NIF**	**IF**	**NIF**	**IF**	**NIF**
1.	Hailstorm	43	27	45	28	41	25
2.	Inundation	58	22	57	22	55	20
3.	Cloud burst	41	23	40	24	39	21

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4.	Lightening	45	25	45	26	41	21
Standing crop (Sowing to Harvesting)		**IF**	**NIF**	**IF**	**NIF**	**IF**	**NIF**
1.	Drought	**77**	**49**	**84**	**53**	**75**	**45**
2.	Dry spell	48	23	53	24	47	22
3.	Flood	**76**	**46**	**85**	**53**	**71**	**48**
4.	Inundation	58	22	57	22	55	20
5.	Widespread pests and Disease attack	**79**	**48**	**85**	**53**	**71**	**48**
6.	Lightening	45	25	45	26	41	21
7.	Storm/ Hailstorm	43	27	45	28	41	25
Post-Harvest Losses		**IF**	**NIF**	**IF**	**NIF**	**IF**	**NIF**
1.	Hailstorm	43	27	45	28	41	25
2.	Cyclonic rains	48	22	51	22	46	20
3.	Unseasonal rain	43	23	45	24	39	21

Source: Field Survey

During the standing crop phase, the Pradhan Mantri Fasal Bima Yojana (PMFBY) provides coverage against a range of risks, including drought, dry spells, floods, inundation, widespread pest and disease attacks, lightning, storms, and hailstorms. The analysis indicates substantial variation in awareness levels between insured and non-insured farmers across the three study districts. In Kaithal, awareness among insured farmers ranges from 43 percent to 79 percent, whereas among non-insured farmers it varies from 22 percent to 53 percent. In Hisar, insured farmers exhibit awareness levels ranging from 45 percent to 85 percent, compared to 24 percent to 53 percent among non-insured farmers. Similarly, in Jhajjar, awareness among insured farmers ranges from 41 percent to 75 percent, while non-insured farmers report comparatively lower awareness levels between 22 percent and 48 percent. These findings consistently demonstrate higher awareness among insured farmers, highlighting the need for targeted awareness initiatives to bridge the knowledge gap among non-insured farmers.

With regard to post-harvest losses caused by hailstorms, cyclonic rains, and unseasonal rainfall, awareness levels remain relatively modest but continue to show a clear disparity between the two groups. In Kaithal, awareness among insured farmers ranges from 43 percent to 48 percent, compared to 22 percent to 28 percent among non-insured farmers. In Hisar, insured farmers report awareness levels between 45 percent and 51 percent, while non-insured farmers range from 22 percent to 24 percent. In Jhajjar, awareness among insured farmers varies from 41 percent to 46 percent, whereas among non-insured farmers it remains between 20 percent and 25 percent. Once

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again, insured farmers consistently demonstrate higher awareness, underscoring the need for focused efforts to enhance understanding of post-harvest risk coverage among non-insured farmers.

Overall, the findings reveal a persistent and systematic pattern of higher awareness levels among insured farmers compared to their non-insured counterparts across all categories of risks in Kaithal, Hisar, and Jhajjar districts. This suggests that farmers' knowledge and understanding of risk coverage improve significantly after enrolling in and benefiting from PMFBY. Insured farmers, having direct exposure to the scheme and its operational mechanisms, display a more comprehensive awareness of insured risks. To ensure inclusivity and enhance the overall effectiveness of PMFBY, it is imperative to address existing awareness gaps through targeted educational interventions, extension activities, and structured orientation programmes. Such measures would enable all farmers, irrespective of their insurance status, to develop a clear understanding of the risks covered under PMFBY, thereby fostering a more informed, equitable, and resilient agricultural community.

Section 2: Farmers Awareness about Crops Covered under PMFBY

The table presents a detailed overview of farmers' awareness regarding the crops covered under the Pradhan Mantri Fasal Bima Yojana (PMFBY) across the districts of Kaithal, Hisar, and Jhajjar. The analysis differentiates between insured farmers (IF) and non-insured farmers (NIF) and examines awareness levels separately for Kharif and Rabi crops, thereby providing a comprehensive understanding of crop-wise awareness under the scheme.

Table 2: Farmers Awareness about Crops Covered under PMFBY

Particulars	**Kaithal**		**Hisar**		**Jhajjar**	
Kharif Crop	**IF**	**NIF**	**IF**	**NIF**	**IF**	**NIF**
Paddy	100	47	100	56	100	47
Bajra	86	42	100	52	100	42
Maize	47	21	51	29	67	33
Cotton	89	45	100	66	100	35
Rabi Crop	**IF**	**NIF**	**IF**	**NIF**	**IF**	**NIF**
Wheat	100	64	100	72	100	42
Gram	53	27	74	36	53	40
Barley	58	20	72	22	48	22
Mustard	67	15	41	19	47	23
Sunflower	65	13	34	16	45	15

Source: Field Survey

With respect to Kharif crops, the data reveals a clear and consistent pattern of awareness among farmers across the study districts. In Kaithal, all insured farmers (100 percent) were fully aware that paddy is covered under the Pradhan Mantri Fasal Bima Yojana (PMFBY), whereas awareness among non-insured farmers was limited to 47 percent. Similar trends are observed for other Kharif crops such as bajra, maize, and cotton, where insured farmers consistently demonstrate significantly higher levels of awareness than their non-insured counterparts across Kaithal, Hisar, and Jhajjar districts.

A comparable disparity is evident in the case of Rabi crops. For wheat, the principal Rabi crop, 100 percent of insured farmers in Kaithal reported awareness of its coverage under PMFBY, compared to only 64 percent of non-insured farmers. This pattern extends to other Rabi crops, including gram, barley, mustard, and sunflower, where insured farmers across all three districts exhibit markedly higher awareness levels than non-insured farmers.

Overall, the findings clearly indicate persistently higher awareness among insured farmers for both Kharif and Rabi crops in Kaithal, Hisar, and Jhajjar. This suggests that farmers' knowledge and understanding of crop coverage under PMFBY improve substantially after enrollment and receipt of scheme benefits. The observed disparity highlights the urgent need for targeted awareness and capacity-building initiatives specifically designed for non-insured farmers. Bridging this awareness gap is essential for fostering a more inclusive and informed farming community. Ensuring that all farmers, irrespective of insurance status, possess adequate knowledge of the crops covered under PMFBY can significantly enhance the effectiveness, inclusiveness, and resilience of the crop insurance programme, ultimately contributing to more sustainable and secure agricultural practices in the region.

Section 3: Source of Information about PMFBY

The data presents a comprehensive overview of the sources through which insured and non-insured farmers in the study area obtain information about the Pradhan Mantri Fasal Bima Yojana (PMFBY). The information is reported in terms of frequency, with corresponding percentages provided in parentheses. The analysis covers a range of information sources, including banks and financial institutions, Krishi melas and the Agriculture Department, social participation platforms such as farmers' associations, self-help groups, and watershed associations, as well as newspapers, friends and relatives, fellow farmers, television and social media, and other channels such as road shows, loudspeakers, and posters.

Table 3: Source of information about PMFBY

Sr. No.	Sources of information	Insured farmers	Non-insured farmers
1	Banks/financial institution	101 (33.67)	23 (10.95)
2	Krishi mela and agricultural dept.	60 (20.00)	43 (20.48)

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3	Social participation*	36 (12.16)	13 (06.19)
4	Newspaper	25 (08.17)	10 (04.76)
5	Friends and relatives	20 (06.83)	14 (06.67)
6	Fellow farmers	27 (09.00)	79 (37.62)
7	TV/ social media	07 (02.34)	11 (5.24)
8	Others (road show. Loudspeakers, posters etc.)	24 (07.84)	17 (8.10)
	Total	300 (100.00)	184 (100.00)

Source: Field Survey

Note: Figures in parenthesis show the percentage to the total
Social participation (Farmers association and self-help groups)
The data presented in the table provides a detailed assessment of the various sources through which farmers obtain information about the Pradhan Mantri Fasal Bima Yojana (PMFBY), with a comparative distinction between insured and non-insured farmers. Among insured farmers, banks and financial institutions emerge as the most prominent source of information, accounting for 33.67 percent of responses. In contrast, only 10.95 percent of non-insured farmers reported banks as their primary information source, indicating a substantial disparity in access to formal financial communication channels. Both insured and non-insured farmers demonstrate a similar level of reliance on Krishi Melas and the Agriculture Department as information sources, with 20.00 percent of insured farmers and 20.48 percent of non-insured farmers reporting these platforms. This reflects a shared preference for agriculture-specific events and institutional outreach programmes as reliable means of acquiring scheme-related information. Social participation through farmers' associations, self-help groups, and similar organizations also plays a notable role, particularly among insured farmers. Approximately 12.16 percent of insured farmers cited social participation as a source of information, compared to only 6.19 percent of non-insured farmers. This suggests that insured farmers are relatively more engaged in organized community networks that facilitate information exchange and collective learning.
Print media, such as newspapers, contribute modestly to awareness, with 8.17 percent of insured farmers relying on this source, compared to 4.76 percent of non-insured farmers. This indicates a higher tendency among insured farmers to access formal print-based information. Informal

interpersonal channels, including friends and relatives, serve as a consistent yet limited source for both groups, accounting for 6.83 percent of insured farmers and 6.67 percent of non-insured farmers.

A marked contrast is observed in the dependence on fellow farmers as a source of information. While only 9.00 percent of insured farmers reported fellow farmers as their primary source, a significantly higher proportion of non-insured farmers (37.62 percent) relied on peer farmers for information about PMFBY. This highlights the strong role of informal, community-based communication networks among non-insured farmers.

Electronic media, including television and social media, were utilized by 2.34 percent of insured farmers and 5.24 percent of non-insured farmers, suggesting comparatively greater reliance on digital and broadcast media among non-insured farmers. Additionally, alternative communication channels such as road shows, loudspeakers, and posters accounted for 7.84 percent of insured farmers and 8.10 percent of non-insured farmers, indicating that both groups are exposed to non-traditional modes of information dissemination.

In conclusion, the findings reveal distinct differences in the information-seeking behaviour of insured and non-insured farmers. While banks and financial institutions play a dominant role in informing insured farmers, non-insured farmers rely more heavily on informal networks, particularly fellow farmers. Social participation appears to significantly enhance awareness among insured farmers, suggesting that engagement in collective and community-based activities positively influences knowledge acquisition. These results underscore the need for a diversified and integrated communication strategy to improve awareness of PMFBY. Strengthening the role of financial institutions, promoting farmer-to-farmer communication, leveraging mass media, and expanding government-led outreach initiatives such as agricultural fairs and awareness campaigns are essential for bridging information gaps and ensuring comprehensive awareness across the farming community.

Section 4: Benefits of PMFBY for Insured Farmers

The table provides a detailed distribution of the benefits perceived by insured farmers in Haryana under the Pradhan Mantri Fasal Bima Yojana (PMFBY). These benefits are classified into five distinct dimensions, with corresponding frequencies and percentages, offering a comprehensive assessment of the scheme’s impact on farmers’ experiences and livelihoods.

Table 4: Benefits of PMFBY for Insured Farmers

Sr. No.	Benefits	Respondent	Percentage
1	Felt more confident in farming decision	79	26.33
2	Took risks in farming and adopted new farming methods	97	32.33
3	Earned higher incomes	24	08.00

4	Able to continue farming	50	16.67
5	No benefit	160	53.33

Source: Field Survey

The data indicate that 26.33 percent of insured farmers reported an increased level of confidence in their farming decisions as a result of their participation in the Pradhan Mantri Fasal Bima Yojana (PMFBY). This finding suggests that beyond providing financial protection, the scheme has also contributed to psychological reassurance and greater decision-making confidence among farmers. A larger proportion of respondents (32.33 percent) reported that PMFBY encouraged them to take calculated risks in farming and adopt new agricultural practices, highlighting the scheme's potential role in promoting innovation, resilience, and improved productivity.

Although a comparatively smaller share of insured farmers (8.00 percent) reported an increase in income attributable to PMFBY, this nonetheless reflects a positive economic impact for a segment of beneficiaries. Additionally, 16.67 percent of insured farmers indicated that the scheme enabled them to continue farming activities during adverse conditions, underscoring its role in ensuring financial continuity and reducing the likelihood of farmers withdrawing from agricultural operations.

However, a significant concern emerges from the finding that 53.33 percent of insured farmers reported not experiencing any tangible benefits from PMFBY. This observation raises critical questions regarding the scheme's effectiveness, outreach, and communication strategies, as a substantial proportion of beneficiaries appear dissatisfied with the outcomes. These results highlight the need for a more nuanced examination of the factors influencing farmers' perceptions of PMFBY, including issues related to claim settlement, benefit realization, and expectation management. Addressing the concerns of farmers who did not perceive the anticipated benefits is essential to enhance the scheme's effectiveness and to ensure improved welfare and satisfaction among insured farmers in Haryana.

Conclusion

The analysis of farmers' awareness regarding risks covered under the Pradhan Mantri Fasal Bima Yojana (PMFBY) in the districts of Kaithal, Hisar, and Jhajjar provides several important insights. Across all categories of risk, insured farmers consistently exhibited higher levels of awareness than non-insured farmers, underscoring the role of scheme participation in enhancing knowledge and understanding. In the case of localized calamities, awareness among insured farmers ranged between 39 percent and 58 percent, whereas non-insured farmers reported considerably lower awareness levels, varying from 20 percent to 28 percent. A similar pattern was observed during the standing crop phase, where insured farmers demonstrated awareness levels ranging from 41 percent to 85 percent, compared to 22 percent to 53 percent among non-insured farmers. For post-harvest losses, insured farmers reported awareness levels between 41 percent and 51 percent, while awareness among non-insured farmers remained relatively low, ranging from 20 percent to 28 percent.

The study further revealed that insured farmers possessed greater awareness of crops covered under PMFBY during both Kharif and Rabi seasons across all three districts. This consistent disparity highlights the need for targeted awareness and capacity-building initiatives aimed specifically at non-insured farmers to bridge existing knowledge gaps. In addition, the findings highlight notable differences in information sources, with insured farmers relying predominantly on formal channels such as banks and financial institutions, whereas non-insured farmers depended more heavily on informal networks, particularly fellow farmers.

An assessment of the benefits perceived by insured farmers under PMFBY revealed mixed responses. While a segment of farmers reported increased confidence, greater willingness to adopt improved farming practices, and enhanced resilience, a substantial proportion expressed dissatisfaction due to a perceived lack of tangible benefits. These mixed perceptions point to the need for improved implementation, effective communication, and timely claim settlement to enhance farmers' trust and satisfaction with the scheme.

Overall, the study emphasizes the importance of continuous evaluation and refinement of PMFBY to ensure broader awareness, equitable participation, and improved effectiveness. Strengthening outreach mechanisms, enhancing transparency, and addressing farmers' concerns can significantly improve the scheme's utility, thereby contributing to sustainable agricultural practices and greater resilience against diverse agricultural risks.

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