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# Crop Insurance Awareness And Claim Experience Among Small Farmers: A Conceptual Framework For Participation And Institutional Trust

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## Abstract

Crop farming is subject to a range of risks, including erratic rainfall, drought, flooding, pests, diseases, and other natural occurrences. The purpose of crop insurance is to mitigate the financial consequences of such losses and to afford farmers a degree of protection against production risk. Within India, the Pradhan Mantri Fasal Bima Yojana (PMFBY) constitutes a significant crop insurance scheme. Nevertheless, the mere existence of an insurance scheme does not guarantee that farmers comprehend it, take it up, or enjoy a satisfactory experience at the time of filing a claim. Participation by farmers may be shaped by awareness, accessibility, confidence in institutions, claim processes, communication, and prior experiences.

This paper investigates crop insurance awareness and claim experience among small farmers from a conceptual and literature-based standpoint. The study surveys extant research concerning crop insurance awareness, farmer participation, institutional trust, claim settlement, and satisfaction. The study draws its guidance from Protection Motivation Theory, the Theory of Planned Behaviour, and an institutional trust perspective. A thematic review approach is employed to classify the existing literature into principal themes. The analysis indicates that awareness may shape farmers' comprehension of insurance benefits, risks, eligibility, and procedures, which in turn may influence enrolment. Claim experience is shaped by factors including timeliness, procedural clarity, communication, loss assessment, compensation, and service support. Institutional trust may likewise be pivotal to participation, since farmers must be confident that banks, insurance companies, government departments, and allied institutions will fulfil their anticipated roles. Drawing on the literature, the paper advances a conceptual framework that connects farmer risk perception, insurance awareness, perceived usefulness, institutional trust, and service experience with insurance participation and subsequent engagement. The paper offers managerial implications for enhancing awareness, claim communication, local support, and institutional coordination.

***Keywords: Crop Insurance, Farmer Awareness, PMFBY, Claim Experience, Institutional Trust, Farmer Participation, Small Farmers, Agricultural Risk Management.***

## 1 Introduction

In India, agriculture constitutes a significant livelihood source for a substantial proportion of households. Farm income is influenced by multiple factors over which farmers do not exercise complete control. Variations in rainfall, drought, floods, pest infestations, diseases and other natural occurrences may diminish crop output and generate financial strain for farm households. For smallholder farmers, the consequences of crop loss can be severe, since their capacity to absorb an unexpected loss is typically restricted. Crop insurance represents one financial mechanism through which farmers may manage risks associated with production. In 2016 the Government of India launched the Pradhan Mantri Fasal Bima Yojana (PMFBY) as a flagship crop insurance scheme. The scheme is designed to offer financial assistance to farmers who incur crop losses arising from risks that are covered. The official PMFBY system presently offers operational guidelines and digital services pertaining to applications, crop loss assessment, claim processes and grievance management. The mere existence of a crop insurance scheme, however, constitutes only one element of the problem. Farmers must additionally comprehend the scheme, be aware of the crops and risks covered, understand premium requirements and know the procedure for reporting crop loss or filing a claim. Earlier studies conducted in India have shown that awareness is frequently incomplete. Research on awareness of PMFBY in Southern Tamil Nadu, for instance, revealed that farmers possessed only partial awareness of various aspects of the scheme, and that education, organisational membership, exposure to mass media and extension contacts were correlated with awareness. The same study documented concerns regarding delayed claims, inadequate compensation and perceptions relating to premiums [1]. Awareness thus constitutes a crucial initial step towards participation. A farmer who is unaware that crop insurance exists, does not grasp its benefits, or does not know how to enrol may be less inclined to participate on a voluntary basis. Studies of crop insurance awareness in India have further indicated that technical advice and agricultural training are linked to greater awareness, and that extension services can perform a significant role in enhancing knowledge about crop insurance [2]. Nevertheless, awareness by itself may not account for participation. Farmers reach decisions within a social and institutional context. Banks, insurance companies, government departments, agricultural extension workers, local representatives and other intermediaries are able to shape the information that reaches farmers. Earlier research has recognised lack of trust, complicated claim settlement, insufficient official support and concerns regarding compensation as significant problems from the standpoint of farmers [3]. The post-loss experience following a crop failure assumes particular significance. A farmer might take out crop insurance owing to a perceived requirement for protection; nevertheless, the farmer's perception of the scheme can shift once a claim has been lodged. Where the claim process is transparent, the loss is evaluated appropriately, communication occurs promptly and compensation arrives within a reasonable timeframe, the farmer may come to place greater confidence in the insurance system. Conversely, postponements, ambiguous procedures, disputes regarding loss assessment or difficulties in communicating with service providers may diminish satisfaction and trust. A study of crop insurance conducted in Karnataka revealed that farmers were generally conscious of the existence of crop insurance yet did not consistently comprehend the scheme's various features. The study further recognised delays associated with crop-cutting experiments and the disbursement of claims as significant implementation concerns. It proposed that reduced premiums, broader crop coverage and more rapid claim settlement could enhance the appeal of crop insurance and foster greater trust together with sustained uptake [4].

Government evaluation evidence likewise lends support to the relationship between awareness and participation.

An evaluation of PMFBY reported that, among the farmers selected in its state-level analysis, those enrolled possessed awareness of the scheme. The evaluation additionally recognised practical obstacles, including distance from banking facilities, complications in premium payment procedures, insufficient awareness and prior adverse experiences with the scheme [5]. The question of trust is thus of considerable importance. Insurance entails a promise of future financial protection. Farmers remit a premium, or are covered under an insurance arrangement, in the expectation that eligible losses will be compensated in accordance with the policy conditions. Since the farmer is unable to observe fully the future performance of the insurer or other institutions at the point of enrolment, trust may shape the decision to participate. Institutional trust may be conceptualised as confidence that an institution will carry out its expected functions in an appropriate manner. Scholarship on institutional trust indicates that trust is shaped by individuals' experiences and perceptions of institutional performance [6]. Within the context of crop insurance, farmers may cultivate trust on the basis of their experiences with banks, insurance companies, government officials and claim processes, as well as the experiences of fellow farmers within their local community. This paper consequently concentrates on three interrelated issues: awareness, claim experience and institutional trust. Instead of addressing these issues in isolation, the paper seeks to link them within a unified conceptual framework for comprehending farmer participation in crop insurance. The study holds particular relevance for small farmers. Smallholder farmers are likely to encounter financial limitations, restricted access to formal sources of information, a diminished capacity to absorb crop losses, and a stronger reliance on local networks. Consequently, the insurance choices they make may be shaped both by their own perceptions and by the standard of institutional support at their disposal. The structure of this paper is guided by the following research questions: In what ways does awareness affect enrolment? Which factors influence satisfaction with claims? Can participation be accounted for by institutional trust? In order to answer these questions, the paper undertakes a review of prior literature and draws upon three theoretical lenses: Protection Motivation Theory, the Theory of Planned Behaviour, and an institutional trust perspective. The aim is not to assert statistical relationships in the absence of primary data. Rather, the paper constructs a conceptual account grounded in existing literature and sets out relationships that future empirical research may test.

## 2 Conceptual And Theoretical Background

### 2.1 Protection Motivation Theory

Protection Motivation Theory (PMT) accounts for the ways in which individuals react to threats as they perceive them and determine whether to engage in protective behaviour. This theory assigns central importance to perceptions of threat and to the capacity to cope. Research by Maddux and Rogers on protection motivation and self-efficacy demonstrated that perceived threat, together with the perceived effectiveness of a protective response, may shape the intention to engage in protective behaviour [12]. Crop insurance may be regarded as a form of protective financial behaviour. Farmers confront hazards including crop failure, drought, floods and various other risks. When farmers regard the risk as severe and consider that crop insurance is capable of lessening the financial repercussions, their motivation to contemplate insurance may be strengthened.

On its own, however, PMT does not account for the entire insurance decision. It is possible for farmers to grasp the risk and the potential worth of insurance yet still decline to participate, should they distrust the institution, be unable to afford the premium or regard the procedure as burdensome. Accordingly, PMT proves valuable in accounting for the risk-perception and protection-motivation dimension of crop insurance participation.

### 2.2 Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB) posits that behavioural intention is shaped by attitude, subjective

norms, and perceived behavioural control. Actual behaviour is associated with both intention and perceived behavioural control [13]. This theory is applicable to participation in crop insurance. Attitude may reflect the farmer's conviction that insurance is beneficial. Subjective norms may reflect the influence exerted by fellow farmers, family members, local leaders, banks, or agricultural officers. Perceived behavioural control may reflect the farmer's assessment of whether enrolment and claim procedures are manageable. Awareness may feed into these beliefs, since a farmer requires information before a clear attitude toward insurance can be formed. TPB thus assists in explaining why two farmers confronting comparable agricultural risks may arrive at divergent insurance decisions.

### 2.3 Institutional Trust Perspective

The perspective of institutional trust contributes an additional significant dimension. Farmers need to be confident that the institutions engaged in insurance will fulfil their obligations. Trust may be shaped by prior experience, information, institutional performance, communication, and perceived fairness. Scholarship on institutional trust suggests that individuals assess whether institutions are likely to carry out their expected functions in an appropriate manner [6].

Accordingly, in the context of crop insurance, institutional trust can be associated with:

1. confidence in insurance providers
2. confidence in banks
3. confidence in government agencies
4. confidence in claim assessment
5. confidence in compensation processes
6. confidence in grievance mechanisms.

The integration of these three perspectives offers a more comprehensive explanation. PMT accounts for why farmers may pursue protection against agricultural risk. TPB accounts for how attitudes, social influence, and perceived control may shape participation. Trust in institutions accounts for the way confidence in the organizations that provide insurance may shape both participation and sustained involvement.

## 3 Literature Review

### 3.1 Crop Insurance and Agricultural Risk

Agricultural production entails risks capable of directly influencing farm income. In contrast to numerous business activities, farming is profoundly shaped by weather and biological conditions. A crop can suffer damage even where the farmer has adhered to suitable production practices. This generates a requirement for risk-management mechanisms capable of diminishing the financial impact of crop failure.

Crop insurance constitutes one mechanism of this kind. The fundamental aim of crop insurance is to furnish financial protection against defined agricultural losses. In India, PMFBY was launched to deliver crop insurance coverage, with the objective of safeguarding farmers against crop losses. The official PMFBY platform supplies information concerning scheme guidelines, crop-loss assessment, applications, claims and grievance mechanisms. Research on Indian crop insurance has consistently demonstrated that the effectiveness of insurance rests not solely on scheme design but also on implementation and farmers' understanding. A study of PMFBY in Karnataka revealed that farmers were aware of the existence of crop insurance yet possessed incomplete knowledge of scheme features. It further identified delays in claims as an implementation concern [4]. The literature consequently suggests that crop insurance possesses two interrelated dimensions. The first of these is the financial protection function of insurance. The second is the service and participation function, encompassing awareness, enrolment, claim reporting, loss assessment, settlement and communication. For small farmers, these two dimensions are intimately linked. Insurance is able to deliver financial protection only when farmers are capable of participating in and making effective use of the scheme. This renders farmer awareness and service experience significant domains for research.

### 3.2 Crop Insurance Awareness

Awareness denotes the farmer's knowledge or comprehension of the presence and key characteristics of crop insurance. Awareness may encompass knowledge of the scheme, eligibility criteria, premium, risks covered, crop coverage, the enrolment process, and the reporting and settlement of claims. Earlier research indicates that farmers' awareness tends to be partial rather than entirely lacking. A 2024 investigation of cotton growers in Southern Tamil Nadu revealed partial awareness of PMFBY and reported that education, membership in organisations, exposure to media, and contact with extension services shaped awareness [1]. A further study conducted among farmers in Prayagraj reported that numerous farmers exhibited a moderate level of knowledge about and attitude toward PMFBY. That study proposed that more robust extension services and awareness programmes were needed in order to enhance understanding [7]. Scholarship on crop insurance awareness has likewise recognised agricultural extension as a significant source of information. Farmers who obtain technical guidance or take part in agricultural training are more likely to possess awareness of crop insurance [2]. Awareness is not confined to formal communication from the government. Farmers may additionally acquire information from fellow farmers, banks, agricultural officers, local organisations, the media, and other community networks. A recent investigation of PMFBY awareness in Uttar Pradesh reported that fellow farmers and government officials constituted important sources of information, and it identified insufficient awareness, delayed compensation, and complicated documentation as constraints [8]. This indicates that awareness possesses a social dimension. A farmer's comprehension may hinge on the information accessible within the village and on the capacity of institutions to communicate the scheme in a straightforward manner. Awareness may likewise affect the quality of participation. A farmer may be formally enrolled in an insurance scheme yet fail to understand what is covered or what actions are required following a crop loss. Consequently, enrolment on its own ought not to be regarded as adequate evidence of effective engagement with insurance.

### 3.3 Awareness and Enrolment

The connection between awareness and enrolment constitutes a central concern of the present study. Before arriving at a voluntary decision to participate, a farmer typically requires a degree of understanding regarding the value of insurance. Where a farmer comprehends the financial risk associated with crop loss and holds the belief that insurance offers meaningful protection, the likelihood of contemplating enrolment may rise. In research conducted in Karnataka, insufficient awareness and insufficient trust were identified among the explanations offered by non-insured farmers for abstaining from crop insurance. The same investigation recognised education, income, farm size, prior compensation and credit-related factors as pertinent to differentiating among farmer groups. It further documented that farmers expressed a preference for prompt and transparent settlement of claims [9]. A comparable study in Haryana likewise identified a substantial awareness gap between insured and non-insured farmers, and reported that certain insured farmers took part owing to concerns about financial security or to requirements linked to banks [10]. Such findings suggest that awareness can exert an influence on participation, although the relationship is not inevitably direct in all instances. Farmers may be covered through institutional or credit-linked mechanisms without holding a firm voluntary intention to purchase insurance. Consequently, it is important to distinguish among awareness, voluntary enrolment and participation linked to institutional arrangements. The present paper thus regards awareness as a significant factor capable of influencing enrolment, while acknowledging that institutional arrangements, perceived risk, affordability, social influence and trust may likewise shape the decision.

### 3.4 Claim Experience

Claim experience denotes the experience of the farmer following the reporting of a covered crop loss and the pursuit of compensation. It encompasses multiple service-related dimensions:

- The ease with which the loss is reported;
- The availability of information;
- The clarity of the claim procedure;
- Communication emanating from institutions;
- The assessment of loss;
- The duration required for settlement;
- The amount of compensation provided;
- The handling of grievances; and
- Overall satisfaction.

Claim experience is significant because it constitutes the stage at which the insurance promise becomes visible to the farmer. The government evaluation of PMFBY reported that certain farmers encountered problems relating to enrolment, premium payment and prior claim experiences. It further identified awareness and negative experiences as factors that shaped perceptions of the scheme [5]. Research conducted in Northern Karnataka revealed low satisfaction among insured farmers and recommended more robust awareness programmes, improved information prior to crop-cutting experiments, simplified loss assessment and timely payment of claims [11]. A study examining the challenges of crop insurance among Indian farmers found that cumbersome claim settlement, a lack of trust, inadequate official support and concerns regarding compensation were among the problems reported by farmers [3]. These findings indicate that claim satisfaction is multidimensional. It is not determined solely by whether a claim is ultimately paid. The farmer's experience of the process is also of consequence. For instance, two farmers may receive comparable compensation, yet the farmer who received clear information and timely communication may hold a more positive view of the scheme than a farmer who experienced uncertainty and repeated visits to different offices.

### 3.5 Claim Settlement and Service Quality

Insurance constitutes a service. Consequently, the quality of service may influence how farmers evaluate the insurance programme. Within crop insurance, service quality encompasses accessibility, responsiveness, clarity of information, simplicity of processes and timely communication. At present, the official PMFBY platform offers digital tools and mechanisms related to grievances, which indicates that service delivery and monitoring constitute significant elements of the scheme's implementation. Technology by itself may therefore not resolve every service-related problem. Small farmers may differ in their levels of digital literacy and in their access to smartphones, internet services and digital applications. Local support may thus continue to be of importance. Research conducted in Karnataka revealed that administrative processes, among them crop-cutting experiments and loss assessment, could contribute to delays in the settlement of claims [4]. The literature indicates that enhancing claim satisfaction demands attention to the entire service process, not merely the final payment.

### 3.6 Institutional Trust

Institutional trust constitutes a central concept within this study. Within the crop insurance process, farmers engage with a range of institutions. These may encompass banks, insurance companies, agriculture departments, local government bodies, extension personnel, and other intermediaries. Trust denotes the farmer's expectation that these institutions will duly fulfil their responsibilities. Institutional trust is typically distinguished from personal trust, since the farmer is assessing an institution or an institutional system rather than a single individual alone. Scholarship on institutional trust indicates that such trust may be domain-specific and may hinge on personal experience and perceptions of institutional performance [6]. Within crop insurance, trust may be shaped by prior experiences. A farmer who has obtained a claim without substantial difficulty may exhibit greater confidence regarding future

participation. A farmer who has encountered delayed settlement or unclear communication may develop diminished trust. Studies of Indian crop insurance have pinpointed a lack of trust as a significant problem. Kumar and Sharma documented lack of trust, cumbersome claim settlement, insufficient official support, and compensation-related concerns among the challenges confronting farmers [3]. Institutional trust may consequently exert influence on participation in two respects. First, it may shape the initial decision to enrol. Second, it may determine whether a farmer persists in participating during subsequent seasons.

## 4 Research Gap

Prior scholarship offers valuable empirical insights regarding awareness of crop insurance, participation by farmers, satisfaction with claims, and institutional shortcomings. Nevertheless, these domains tend to be investigated in isolation from one another. Certain investigations concentrate predominantly on awareness and knowledge. For instance, scholars have analysed the determinants of awareness and pinpointed education, extension contact, media exposure, and organisational membership as pertinent determinants [1], [2]. A different set of studies centres on farmer participation and pinpoints determinants including education, income, farm size, credit, and previous compensation [9]. Yet another strand of scholarship centres on claim settlement and the satisfaction of farmers. Scholarship has pinpointed delays, cumbersome procedures, loss assessment, and communication as salient concerns [4], [11]. Evidence also indicates that trust plays a significant role. Investigations of Indian farmers have documented a lack of trust as an impediment to effective participation in crop insurance [3]. Consequently, the deficiency recognised in this paper is not that awareness of crop insurance, participation, claim satisfaction, or trust have never been investigated. Instead, an opportunity exists to integrate these elements within a unified framework directed specifically at small farmers.

More specifically, the extant literature affords an opportunity to investigate how:

Awareness → Enrolment

Service and claim experience → Claim satisfaction

Institutional trust → Participation and continued engagement

The interrelations among these dimensions can be more effectively accounted for by integrating behavioural risk theory, the theory of planned behaviour, and institutional trust. The current paper tackles this deficiency by constructing a conceptual framework that links farmers' risk perception, awareness, perceived usefulness, social influence, perceived control, institutional trust, and service experience to participation in crop insurance and future engagement.

## 5 Research Objectives

This study is guided by four principal objectives:

1. To assess the extent and function of awareness regarding crop insurance among smallholder farmers.
2. To investigate how institutional trust influences participation in crop insurance.
3. To analyse the principal factors that shape farmers' claim experience and their satisfaction with claims.
4. To construct a conceptual framework of insurance engagement that connects awareness, trust, service experience and participation.

## 6 Research Questions

This study is concerned with the following research questions:

RQ1: In what ways does awareness of crop insurance affect the decision of small farmers to enrol?

RQ2: Which factors determine how satisfied farmers are with the experience of filing crop insurance claims?

RQ3: To what extent does institutional trust contribute to explaining farmers' participation in crop insurance?

RQ4: In what manner might awareness, trust and claim experience be combined within a framework of insurance engagement?

## 7 Research Methodology

### 7.1 Research Design

The present study adopts a conceptual research design grounded in the literature. No primary data are gathered in this study by means of questionnaires, interviews, or field surveys. Rather, it undertakes a review of existing academic scholarship together with a selection of official institutional sources. Such an approach aligns with the form of conceptual research paper that serves as the structural reference for this study. Rather than collecting primary data, the reference paper that was uploaded relies on literature-based research and thematic synthesis. A literature-based approach is fitting, given that the aim of the present study is to integrate existing knowledge concerning awareness, participation, claim experience, and institutional trust, and to construct a conceptual framework.

### 7.2 Nature of the Study

This investigation is qualitative and exploratory in character. Its aim is not to establish the proposed relationships statistically. Rather, the study detects recurrent patterns within prior research and formulates theoretical propositions that subsequent primary research may test.

### 7.3 Sources of Data

This study draws upon secondary data obtained from:

articles published in peer-reviewed academic journals;

research papers addressing crop insurance and the participation of farmers;

reports issued by government and institutional bodies;

official documents and guidelines pertaining to PMFBY;

scholarly sources associated with Protection Motivation Theory;

scholarly sources associated with the Theory of Planned Behaviour; and

academic literature concerning institutional trust.

The official PMFBY portal served as a source of information on the scheme as well as of current operational resources.

### 7.4 Literature Search Strategy

Combinations of keywords pertinent to the research problem were employed to examine the literature.

The following search combinations were of particular importance:

crop insurance AND awareness;

crop insurance AND farmer participation;

PMFBY AND awareness;

PMFBY AND enrolment;

The search concentrated on studies directly concerned with farmers, crop insurance, participation, awareness, claim processes and trust.

### 7.5 Method of Analysis

A thematic synthesis approach was employed to analyse the selected literature. The studies were organised into the following principal themes:

1. awareness of crop insurance;
2. awareness and enrolment;
3. institutional trust and participation;
4. claim experience and satisfaction;

Thematic synthesis is appropriate given that the literature spans diverse fields, including agricultural economics, agricultural extension, insurance, behavioural research and institutional studies.

### 7.6 Limitations of the Methodology

Several limitations are inherent in this study. First, the analysis relies on secondary literature and therefore offers no primary survey evidence gathered from small farmers. Second, the studies reviewed differ in their geographical areas, crops, samples and research methods. Consequently, their findings cannot be directly compared as though they had been derived from a single common sample. Third, the relationships proposed within the conceptual framework have not been subjected to statistical testing in this paper. Fourth, experiences with crop insurance may vary across states, crops, insurance providers and administrative systems.

Therefore, the framework should be treated as a conceptual model that requires empirical testing.

## 8 Relationship Between Claim Experience And Future Participation

One of the main arguments of this paper is that the farmer's first insurance experience can affect future engagement.

A positive experience may create: Satisfaction → Trust → Repeat participation

A negative experience may create: Dissatisfaction → Distrust → Reduced future participation

This is a conceptual relationship and has not been statistically tested in the present study. The, existing research provides support for the importance of claim settlement, transparency and trust in farmer participation [3], [4], [9]. Future empirical research can test whether previous claim experience significantly predicts future enrolment intention.

## 9 Proposed Conceptual Framework

Drawing on the literature reviewed, this study puts forward an Insurance Engagement Framework designed for small farmers. This framework comprises five principal stages.

Stage 1: Farm Risk and Farmer Characteristics — perceived risk of crop loss; farm size; prior experience of crop loss; financial status; availability of formal credit; and earlier experience with insurance. Such factors shape the farmer's perceived need for protection against risk.

Stage 2: Awareness and Perceived Usefulness — familiarity with the scheme's availability, eligibility criteria, premium, coverage, enrolment, and the procedures for reporting and settling claims. The level of awareness may shape whether a farmer regards insurance as useful and workable.

Stage 3: Behavioural and Social Factors — disposition towards insurance; perceived benefits; social influence; farmer-to-farmer exchange of information; support from extension services; and perceived capacity to carry out the required procedures. These factors are accounted for principally by means of the Theory of Planned Behaviour.

Stage 4: Institutional Trust and Service Capability — confidence in insurance providers; confidence in banks; confidence in government agencies; transparency of the claims process; responsiveness; accessibility; loss assessment; communication; and handling of grievances. Such factors shape the farmer's degree of confidence in the insurance system.

Stage 5: Insurance Engagement — enrolment; participation in claims; satisfaction with claims; intention to renew; readiness to recommend the scheme; and sustained participation.

The proposed relationship may be expressed as follows:

Farm Risk and Farmer Characteristics → Insurance Awareness → Perceived Usefulness + Attitude + Social Influence + Perceived Control → Institutional Trust → Insurance Enrolment → Claim Experience → Claim Satisfaction → Trust Reinforcement / Trust Reduction → Future Insurance Engagement

The model further acknowledges that local networks and extension services may exert influence on both awareness and institutional trust. A simplified form of the framework is as follows:

Risk Perception + Farm Characteristics → Awareness → Attitude / Perceived Usefulness → Participation Intention → Enrolment → Service and Claim Experience → Claim Satisfaction → Institutional Trust → Future Participation in which Local Networks + Extension Support + Institutional Accessibility function as supporting factors throughout the process.

### 9.1 Theoretical Propositions

P1: Awareness of crop insurance exerts a positive influence on farmers' intention to enrol. It is anticipated that farmers who possess a more thorough grasp of insurance benefits, coverage and procedures will be more inclined to contemplate enrolment.

P2: The perceived usefulness of crop insurance exerts a positive influence on the intention to participate. Where farmers hold the belief that crop insurance is capable of mitigating the financial repercussions of crop loss, their intention to participate is anticipated to rise.

P3: Institutional trust exerts a positive influence on participation in crop insurance. It is anticipated that

farmers who place greater confidence in government agencies, banks, insurance providers and claim processes will demonstrate a stronger readiness to participate.

P4: The quality of the claim process exerts a positive influence on claim satisfaction. It is anticipated that clear communication, accessible procedures, fair loss assessment, responsiveness and prompt settlement will enhance farmers' satisfaction with their claims.

P5: A favourable claim experience reinforces institutional trust and subsequent engagement with insurance. It is anticipated that farmers who undergo a satisfactory claim process will develop greater trust and a stronger readiness to maintain their participation in crop insurance.

P6: Local information networks reinforce the association between awareness and participation. Information acquired via fellow farmers, farmer groups, extension personnel and local institutions may reinforce the influence of awareness upon participation.

P7: Perceived behavioural control reinforces the association between awareness and enrolment intention. It is anticipated that farmers who both comprehend the insurance scheme and believe themselves capable of completing the enrolment and claim procedures will exhibit a stronger intention to participate.

### 9.2 Indian Context

The Indian agricultural insurance setting constitutes an appropriate framework within which awareness, trust and claim experience can be examined.

Introduced in 2016, PMFBY continues to occupy a significant position within India's crop insurance architecture. Operational guidelines, application instruments, systems for assessing crop loss and services addressing grievances are all made available through the official PMFBY platform. The Indian setting is characterised by complexity, given that farmers vary markedly with respect to regions, crops, farm sizes, irrigation conditions, financial access, education and digital literacy. Evidence drawn from various states indicates that awareness and experience are not distributed uniformly. The study conducted in Southern Tamil Nadu established that awareness was associated with education, organisational membership, media exposure and extension contact [1]. The Haryana study documented disparities in awareness and perceptions between farmers who were insured and those who were not [10]. Delays in claim settlement and administrative problems were identified in the Karnataka literature as matters of considerable concern [4]. The Uttar Pradesh study documented moderate levels of knowledge among numerous farmers and identified fellow farmers and government officials as significant sources of information [8]. Such findings suggest that a single, universally applicable approach to crop insurance awareness may not exist. Communication methods may need to be tailored to different regions.

### 9.3 Local-language awareness + extension support + farmer groups + bank-level assistance

It may prove more effective than depending solely on general advertising.

In a comparable manner, claim services ought to take into account the local circumstances of farmers. The Indian setting likewise calls for coordination across multiple institutions. Crop insurance encompasses farmers, banks, insurers, government departments, agricultural officials, and technology systems. Consequently, the farmer's experience may hinge on the degree to which these institutions cooperate effectively. This renders institutional trust particularly significant.

## 10 Managerial And Policy Implications

### 10.1 Improve Awareness Before Enrolment

Insurance providers and government agencies ought to prioritise comprehension over a sole emphasis on enrolment figures. Awareness initiatives should present the scheme in language that is easy to understand. Farmers ought to possess a clear grasp of what the scheme covers and what it does not, the manner in which premiums operate, the enrolment procedure, the steps for reporting crop loss, the way claims are evaluated, and the process for lodging a grievance. Evidence drawn from

Indian studies lends support to the case for more robust awareness and extension efforts [1], [2].

### 10.2 Strengthen Local Support

Information asymmetries can be diminished through the efforts of local institutions. Practical support may be delivered by agricultural extension agents, farmer organizations, cooperatives, banks, and local agricultural agencies. Rather than fostering farmers' reliance on intermediaries, the aim ought to be enabling them to comprehend and utilize the insurance system on their own.

### 10.3 Simplify Claim Procedures

Claim procedures ought to be kept as straightforward as feasible. Farmers should be aware of the following: where a report must be filed → how it should be filed → the deadline for filing → the information that is needed → the manner in which the claim will be evaluated → how its status may be verified. Scholarly literature highlights burdensome claim procedures as a significant issue [3].

### 10.4 Improve Claim Communication

A significant enhancement of service delivery may be achieved through improved communication. Agricultural producers ought to be provided with information regarding claim status that is readily comprehensible. Although digital instruments can facilitate this procedure, assistance at the local level should continue to be offered to farmers who encounter challenges in using digital systems. The formal PMFBY framework already furnishes digital instruments pertaining to farmer applications, the assessment of crop losses, and the handling of grievances.

### 10.5 Build Institutional Trust

Advertising by itself is incapable of generating trust. Rather, it emerges from performance that remains consistent over time. Consequently, institutions ought to concentrate on prompt service delivery, intelligible information, transparent procedures, adequate loss assessment, equitable treatment, efficient grievance redressal and unambiguous communication. Institutional trust is likely to strengthen when farmers perceive the system as dependable.

### 10.6 Measure Claim Satisfaction

It is inadvisable for insurance organisations to assess performance solely by means of policy counts, premium income and the number of farmers enrolled. In addition, they ought to track claim settlement time, farmer satisfaction, complaint frequency, communication quality, grievance resolution, repeat participation and farmer trust. Such an approach would yield a more comprehensive account of how the scheme is performing.

### 10.7 Use Local Networks

Networks of local farmers may serve as a means of enhancing awareness. To illustrate, institutions may hold meetings at the village level in which farmers who have already made successful use of insurance are able to describe the process to fellow farmers. Communication of this kind ought to remain factual and should avoid generating unrealistic expectations regarding claim amounts.

## 11 Conclusion

Crop insurance is designed to offer financial protection against risks associated with agricultural production; however, the effectiveness of insurance is contingent upon factors beyond the mere existence of a scheme. Farmers must comprehend the insurance product, regard it as offering meaningful protection, and possess confidence that the institutions concerned will fulfil their obligations. The body of literature examined in this paper indicates that awareness constitutes a significant determinant of participation in crop insurance. Nevertheless, awareness by itself may prove inadequate. Farmers may be cognisant of crop insurance yet still opt not to participate owing to concerns about cost, cumbersome procedures, restricted accessibility, prior adverse experiences, or an absence of trust. Studies conducted in diverse Indian settings corroborate the significance of awareness, extension support, claim settlement, and trust [1][5]. The experience of claims constitutes a further crucial dimension of the insurance

relationship. The farmer's experience is shaped by reporting procedures, communication, loss assessment, settlement duration, compensation, and the handling of grievances. A satisfactory claim experience can enhance confidence, whereas an unsatisfactory one may erode trust and diminish future participation. Institutional trust furnishes a valuable connection between awareness and sustained participation. Farmers require confidence in the organisations charged with delivering the insurance service. Trust may be reinforced through transparent communication, dependable service, straightforward procedures, equitable assessment, and prompt settlement. Protection Motivation Theory contributes to explaining the function of perceived agricultural risk and the necessity for protection. The Theory of Planned Behaviour contributes to explaining attitudes, social influence, and perceived behavioural control. The institutional trust perspective contributes the dimension of confidence in organisations and service systems. Collectively, these perspectives afford a more comprehensive explanation of engagement with crop insurance. The conceptual framework advanced in this paper links risk perception and farmer characteristics with awareness, perceived usefulness, behavioural factors, institutional trust, enrolment, claim experience, claim satisfaction, and future participation. The central contention is that engagement with crop insurance ought not to be gauged solely by the number of farmers enrolled. A more instructive approach is to consider the entire farmer journey: Awareness → Understanding → Enrolment → Claim Experience → Satisfaction → Trust → Continued Participation.

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