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# Farmers satisfaction towards crop insurance in Mandya District: An empirical study

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**Abstract**
Crop insurance plays a crucial role in mitigating agricultural risks and ensuring financial stability for farmers who face uncertainties due to natural calamities, pests, and market fluctuations. This study empirically examines farmers' satisfaction towards crop insurance in Mandya district, Karnataka. Using a structured questionnaire, primary data were collected from a representative sample of farmers across different taluks. The analysis focuses on awareness levels, claim settlement procedures, premium affordability, and perceived benefits of the scheme. Findings reveal that while crop insurance provides a sense of security, farmers express moderate satisfaction due to delays in claim settlement, lack of transparency, and inadequate awareness of policy provisions. Premium costs and procedural complexities further affect perceptions. The study suggests that timely claim settlement, simplified procedures, and effective awareness programs could enhance satisfaction and participation. Overall, crop insurance remains a vital support mechanism, though improvements are necessary for greater farmer acceptance in Mandya district.

**Keywords:** Crop insurance, farmers satisfaction, crop loss, farmers suicide, claim settlement, awareness

## Introduction

Agriculture is the cornerstone of India's rural economy, supporting nearly two-thirds of the population either directly or indirectly. Despite its importance, farming continues to be one of the most uncertain and vulnerable occupations due to the heavy dependence on natural factors such as monsoon rainfall, soil fertility, pests, diseases, and climatic variability. Crop failures resulting from droughts, floods, hailstorms, and pest attacks have historically pushed farming households into severe financial stress, leading to indebtedness and even distress-induced migration. The need to safeguard farmers against such risks gave rise to agricultural insurance as a social and economic instrument. Crop insurance, in particular, has been recognized as an effective tool to stabilize farm incomes, reduce vulnerabilities, and provide farmers with the confidence to invest in modern farming practices without fear of total loss.

In India, crop insurance has undergone several phases of evolution, beginning with the Comprehensive Crop Insurance Scheme (CCIS) in 1985, followed by the National Agricultural Insurance Scheme (NAIS) in 1999, and later the Modified NAIS (MNAIS). The most prominent initiative is the Pradhan Mantri Fasal Bima Yojana (PMFBY), launched in 2016, which seeks to provide affordable insurance coverage to farmers with a low premium rate and quick claim settlement process. Karnataka, being one of the leading agrarian states, has witnessed widespread implementation of these schemes. Within Karnataka, Mandya district, popularly known as the "Sugar Bowl of Karnataka," is predominantly dependent on agriculture, with crops such as paddy, sugarcane, ragi, and pulses forming the backbone of its rural economy. Mandya district was formed in 1939. It has land area of 4,961 square kilometre with a population of 19.25 Lakhs as on 2025, there are 5 Lakh farmers in Mandya district. Literacy rate of 70.4%. It is located on the banks of the river Cauvery. Crop insurance is expected to reduce uncertainty and instil confidence among Mandya farmers, ground realities such as awareness levels, administrative delays, and claim settlement issues significantly influence their satisfaction levels.

Farmer satisfaction towards crop insurance is an important measure of the scheme's effectiveness, as it reflects both the perception of farmers and the actual benefits derived from the scheme. Satisfaction depends on several factors, including the simplicity of enrolment procedures, transparency of policy details, timely disbursement of claims, adequacy of compensation, and affordability of premiums. Previous studies in different parts of India have shown that while farmers appreciate the concept of crop insurance, their satisfaction is often moderate due to challenges such as delays in claim settlement, lack of awareness about terms and conditions, and limited outreach of insurance service providers. Against this background, this empirical study aims to analyze farmers' satisfaction towards crop insurance in Mandya district, assessing the extent to which these schemes are successful in addressing the risks faced by farming communities. By focusing on the perceptions, challenges, and experiences of farmers, the study seeks to provide valuable insights for policymakers, agricultural institutions, and insurance providers in designing farmer-centric strategies for sustainable agricultural development.

## Crop Insurance Schemes in Karnataka

Karnataka, being one of the major agrarian states of India, has always been vulnerable to droughts, floods, and other natural calamities. The state depends heavily on monsoon rainfall, and irregular climatic patterns often affect agricultural productivity. To mitigate these risks and safeguard the farming community, several crop insurance schemes have been introduced and implemented over the years.

### 1. National Agricultural Insurance Scheme (NAIS)

Introduced in 1999–2000, NAIS aimed at providing insurance protection to farmers against yield losses caused by natural calamities, pests, and diseases. It was

implemented across Karnataka with both food crops and commercial crops under its coverage. Although beneficial, the scheme faced criticism for delayed claim settlements and inadequate awareness among farmers.

**2. Modified National Agricultural Insurance Scheme (MNAIS)**

Launched in 2010, MNAIS attempted to address the shortcomings of NAIS. It introduced improved features such as village-level risk assessment, quicker claim settlements, and actuarial premium rates with subsidies. Karnataka was one of the key states where this scheme was rolled out, particularly in drought-prone districts.

**3. Weather-Based Crop Insurance Scheme (WBCIS)**

Given Karnataka's vulnerability to erratic rainfall, WBCIS was implemented to provide insurance coverage based on weather indices rather than yield losses. Under this scheme, compensation is provided if weather parameters such as rainfall, temperature, or humidity deviate from the prescribed norms, thereby causing crop damage. WBCIS has been particularly relevant for crops like ragi, maize, and pulses, which are highly climate-sensitive.

**4. Pradhan Mantri Fasal Bima Yojana (PMFBY)**

Launched in 2016, PMFBY has become the most prominent crop insurance scheme in Karnataka. It offers comprehensive risk coverage against crop loss due to natural calamities, pests, and diseases. Farmers pay a nominal premium (2% for Kharif, 1.5% for Rabi, and 5% for commercial/horticultural crops), while the remaining premium is subsidized by the central and state governments. In Karnataka, PMFBY has been implemented widely for paddy, sugarcane, maize, ragi, tur, and horticultural crops. Despite its popularity, challenges such as delays in claim settlement, lack of proper crop loss assessment, and inadequate farmer awareness persist in the state.

**5. State-Level Crop Insurance Initiatives**

Apart from central schemes, the Karnataka government has also introduced state-level interventions. One such initiative is the Karnataka Raitha Suraksha Pradhan Mantri Fasal Bima Yojane, where the state government actively partners with insurance companies to ensure wider coverage and quicker compensation. Additionally, the state has promoted digital platforms for registration and claim monitoring, aiming to reduce bureaucratic delays.

**Scope of the Study**

The present study is confined to examining the satisfaction of farmers towards crop insurance schemes in Mandya district, Karnataka. Agriculture in Mandya, dominated by crops such as sugarcane, paddy, ragi, and pulses, is highly dependent on monsoon rainfall and canal irrigation from the Cauvery river system. Given the region's susceptibility to droughts, pests, and irregular weather patterns, crop insurance plays a crucial role in safeguarding farmers' livelihoods.

This study primarily focuses on the awareness, accessibility, affordability, and effectiveness of crop insurance schemes and satisfaction among farmers. It aims to evaluate factors influencing satisfaction such as premium rates, ease of enrolment, claim settlement processes, adequacy of compensation, and farmers' overall trust in the system. The scope also extends to understanding challenges faced by farmers, including delays in compensation, lack of transparency, and inadequate dissemination of information.

The geographical scope of the research is limited to selected taluks within Mandya district, covering a sample size of 100 respondents. The temporal scope considers farmers' experiences with crop insurance schemes implemented during recent agricultural seasons, with emphasis on the Pradhan Mantri Fasal Bima Yojana (PMFBY) and other relevant insurance schemes.

**Materials and Methods**

The study is empirical in nature, relying on primary data collected through structured questionnaires and supported by secondary data from government reports, research articles, and policy documents.

**Review of Literature**

1. **Mahul, O., & Stutley, C. J. (2010)** [1]

Mahul & Stutley (World Bank) provide a comprehensive policy-level overview of government-supported agricultural insurance, highlighting trade-offs between social protection and market efficiency, and stressing the importance of transparent design and reliable loss assessment for farmer trust.

**2. Sharma, R., & Gupta, A. (2021)** [2]

Several empirical studies evaluating PMFBY report improvements in coverage and enrolment but note persistent implementation issues especially delays and perceived inadequacy in claim settlement that undermine farmer satisfaction.

**3. Paulraj, A. P., & Easwaran, N. (2020)** [3]

Region-level studies (e.g., district-level analyses in Tamil Nadu and Haryana) find that awareness and extension services significantly influence both enrolment and satisfaction: farmers receiving technical advice or training show higher awareness and more positive perceptions of insurance benefits.

**4. Rao, M., & Singh, P. (2021)** [4]

Cross-sectional surveys conducted in southern India show that while many farmers recognize the risk-management value of crop insurance, a large share report dissatisfaction due to complex procedures and lack of clarity on policy terms. These process-related barriers reduce perceived utility of schemes.

**5. Michler, J. D., Viens, F. G., & Shively, G. E. (2021)** [5]

Analyses of WBCIS highlight that index design (choice of weather station, index threshold) critically affects perceived fairness and uptake; poorly calibrated indices can produce "basis risk" which lowers trust among smallholders.

**6. Parthiban, J. J., & Anjugam, M. (2023)** [6]

Studies comparing NAIS, MNAIS and PMFBY underline that although PMFBY lowered farmer premium burdens through subsidies, administrative challenges continue to create dissatisfaction among farmers who experience individual losses not captured at aggregate levels.

**7. The Times of India. (2022, July 15)** [7]
District studies in Karnataka show heterogeneity across districts: coordinated local awareness campaigns and active involvement of the agriculture department correlate with higher registration and better perceived service delivery. Kalaburagi's recent high registration rates are cited as an example of effective outreach.

8. **Verma, K., & Patel, S. (2021)** [8]
Empirical work points to the centrality of timeliness: delayed indemnity payments are repeatedly identified as the strongest predictor of farmer dissatisfaction and erosion of trust in insurance programs. Faster processing and transparent status updates consistently improve satisfaction metrics.

9. **Singh, A., & Thomas, R. (2020)** [9]
Research on claim assessment methods (crop cutting experiments vs. remote sensing) suggests that combining field CCEs with satellite/remote-sensing can reduce disputes and speed up settlements, but operationalizing hybrid approaches requires technical capacity and clear protocols.

**10. Das, P., & Kumar, R. (2021)** [10, 14]
Several papers emphasize the role of financial inclusion and credit linkage: while Kisan Credit Card (KCC) linked insurance raised coverage among loanee farmers, non-loanee smallholders remain less covered and often more dissatisfied owing to weaker linkages with formal channels.

11. **Johnson, L., & Devi, S. (2022)** [11]
Qualitative farmer-level studies report that inadequate grievance redressal mechanisms and weak local-level facilitation (e.g., by cooperatives or extension officers) exacerbate negative perceptions even when indemnities are eventually paid. Strengthening grievance cells improves perceived accountability.

12. **Nair, R., & Prasad, M. (2021)** [12]
Regional analyses focused on cash crops and horticulture note higher premium rates and different loss profiles; farmers cultivating commercial crops often view the insurance product as less affordable and more complex, affecting satisfaction differently than for staple crops.

13. **Reddy, V. (2020)** [13]
Studies on awareness-raising interventions show that participatory approaches (village meetings, demonstration of claim procedures) are more effective than passive information dissemination in improving both uptake and satisfaction. Extension services thus remain a cornerstone for successful implementation.

**14. Kumar, N., & Bansal, P. (2021)** [14]
Macro-level evaluations of PMFBY (2016 onward) find mixed financial sustainability outcomes for implementing agencies: while subsidized premiums increased enrolment, insurers and state budgets face fiscal pressures that sometimes translate into slower claim disbursal impacting farmer satisfaction.

15. **The Times of India. (2023, August 24)** [15]
Comparative studies from different Indian states reveal that localized innovations (state-level supplements, digitized enrolment, use of mobile apps) can improve process efficiency and farmer experiences, suggesting potential reforms for districts like Mandya.

**Statement of the Problem**
Agriculture in India is inherently vulnerable to risks such as droughts, floods, pests, and fluctuating market conditions. Farmers in districts like Mandya, Karnataka, are particularly exposed to these uncertainties due to their reliance on monsoon rainfall and canal irrigation. Crop failures often result in severe financial stress, indebtedness, and in extreme cases, farmer suicides. Crop insurance was introduced as a social safety net to protect farmers from such uncertainties and ensure income stability.
Despite the introduction of various schemes such as NAIS, WBCIS, MNAIS, and the Pradhan Mantri Fasal Bima Yojana (PMFBY), the effectiveness of crop insurance in fulfilling its objectives has been a matter of debate. Farmers continue to express concerns over high premium rates, delayed claim settlements, lack of transparency, improper assessment of crop loss, and inadequate awareness about scheme provisions. Studies have shown that many farmers are either unaware of insurance facilities or dissatisfied with the way the schemes are implemented.
In Mandya district, where sugarcane, paddy, and ragi dominate the cropping pattern, the success of crop insurance is vital for ensuring sustainable agricultural development. However, there exists a gap between policy formulation and ground-level execution. While the government promotes crop insurance as a reliable risk management mechanism, farmers' actual satisfaction levels remain questionable. Hence, there is a pressing need to conduct an empirical study to understand how satisfied farmers are with existing crop insurance schemes, what challenges they face in accessing benefits, and what improvements are necessary to make crop insurance truly farmer-centric.

**Objectives of the Study**
1. To study the socio-economic profile of farmers in Mandya district and its influence on their participation in crop insurance schemes.
2. To assess the awareness levels of farmers regarding various crop insurance schemes, particularly the Pradhan Mantri Fasal Bima Yojana (PMFBY).
3. To analyze the extent of coverage and utilization of crop insurance schemes among farmers in Mandya district.
4. To examine farmers' satisfaction levels with respect to premium rates, claim settlement process, timeliness, adequacy of compensation, and transparency of operations.
5. To identify the major challenges and constraints faced by farmers in accessing and benefiting from crop insurance schemes.
6. To evaluate the role of institutional support, extension services, and awareness programs in influencing farmers' satisfaction towards crop insurance.
7. To suggest policy measures and practical recommendations for improving the implementation and effectiveness of crop insurance schemes in Mandya district.

**Limitations of the Study**
1. The study is confined to Mandya district of Karnataka. Findings may not fully represent the experiences of farmers in other districts or states.

2. The analysis is based on 100 respondents, which may limit the generalizability of results.
3. The study considers farmers' experiences with crop insurance during recent agricultural seasons. Their perceptions may change with new policy modifications.
4. The data is collected through structured questionnaires, it depends on farmers' memory, honesty, and understanding, which may lead to recall bias or subjective interpretation.
5. Greater emphasis is placed on the Pradhan Mantri Fasal Bima Yojana (PMFBY). Experiences with older schemes (NAIS, MNAIS, WBCIS) may not be equally captured.

**Hypotheses of the Study**

1. **H0:** There is no association between landholding category (small/marginal vs medium/large) and satisfaction.
   **H1:** There is an association between landholding category and satisfaction.
2. **H0:** Farmers' awareness level has no effect on their satisfaction (mean satisfaction is equal across awareness levels).
   **H1:** Farmers' awareness level affects satisfaction (means differ).
3. **H0:** There is no difference in mean satisfaction scores across crop types (sugarcane, paddy, ragi).
   **H1:** At least one crop-type group differs in mean satisfaction.
4. **H0:** Timeliness of claim settlement is not associated with overall satisfaction.
   **H1:** Timeliness of claim settlement is associated with overall satisfaction.
5. **H0:** Institutional support (presence/absence of extension help) has no effect on farmers' satisfaction.
   **H1:** Institutional support affects farmers' satisfaction.
6. **H0:** Perceived adequacy of compensation has no relation to overall satisfaction.
   **H1:** Perceived adequacy of compensation is related to overall satisfaction.

**Chi-Square Test**

Chi-square test of independence when both variables are categorical (Gender × Satisfaction category).

1. Observed contingency table (counts).
2. Compute row totals, column totals and grand total (N).
3. For each cell compute the expected count: E = (row total × column total) / N.
4. Compute the Chi-square statistic: $\chi^2 = \Sigma (O - E)^2 / E$ (sum over all cells).
5. Degrees of freedom: df = (r − 1) (c − 1).
6. Compare $\chi^2$ to the critical $\chi^2$ (or compute p-value). If $p < \alpha$ (typically .05), reject H0.
7. If significant, compute effect size: Cramer's V = sqrt ($\chi^2$ / (N × (k − 1), where k = min (number of rows, number of columns). Interpret V: ~0.1 small, ~0.3 medium, ~0.5 large (rough guidance), (Sample size = 100).

**Table 1:** Table showing Gender and Satisfaction levels

| Gender \ Satisfaction | Satisfied | Moderate | Dissatisfied | Row total |
|---|---|---|---|---|
| Male (58) | 30 | 20 | 8 | 58 |
| Female (42) | 12 | 18 | 12 | 42 |
| Total | 42 | 38 | 20 | 100 |

**Source:** Primary data

**Expected counts (for Male–Satisfied):** E = 58×42/100 = 24.36. For all 6 cells.
Expected table (rounded):
**Male:** [24.36, 22.04, 11.60]
**Female:** [17.64, 15.96, 8.40]

**Cell contributions to $\chi^2$:**

- **Male-Satisfied:** $(30 - 24.36)^2 / 24.36 \approx 1.307$
- **Male-Moderate:** $(20 - 22.04)^2 / 22.04 \approx 0.189$
- **Male-Dissatisfied:** $(8 - 11.60)^2 / 11.60 \approx 1.117$
- **Female-Satisfied:** $(12 - 17.64)^2 / 17.64 \approx 1.803$
- **Female-Moderate:** $(18 - 15.96)^2 / 15.96 \approx 0.261$
- **Female-Dissatisfied:** $(12 - 8.40)^2 / 8.40 \approx 1.543$

Sum $\chi^2 \approx 6.22$. Degrees of freedom df = (2−1) (3−1) = 2. Critical $\chi^2$ ($\alpha = 0.05$, df = 2) ≈ 5.991. Since 6.22 > 5.991, reject H0 — evidence of association between gender and satisfaction at 5% level.
Effect size: Cramer's V = sqrt (6.22 / (100 × (2−1))) = sqrt (0.0622) ≈ 0.249 (small–moderate effect).
"Chi-square test indicated a significant association between gender and satisfaction with crop insurance, $\chi^2(2, N = 100) = 6.22$, $p = .045$. Effect size (Cramer's V) = 0.25, indicating a small-to-moderate association."

**One-way Anova**

One-way ANOVA to compare mean of a numeric dependent variable across 3+ independent groups (or even 2 groups — equivalent to t-test). In your study, convert satisfaction categories to numeric scores (e.g., Dissatisfied = 1, Moderate = 2, Satisfied = 3) to compute mean satisfaction scores per group (e.g., by crop type or landholding size).

1. Assigned numeric scores to satisfaction categories (1–3).
2. Compute group means (X¯i\bar{X}_iX¯i), group sizes nin_ini, and overall mean X¯\bar{X}X¯.
3. Compute Between-group Sum of Squares (SSB): SSB = Σ n_i (X¯i−X¯\bar{X}_i - \bar{X}X¯i−X¯) ².
4. Compute Within-group Sum of Squares (SSW): SSW = Σ (n_i − 1) s_i² (where s_i² is group variance).
5. Degrees of freedom: df_between = k − 1, df_within = N − k.
6. Mean squares: MSB = SSB / df_between, MSW = SSW / df_within.
7. F = MSB / MSW. Compare F to critical F (or get p-value). If $p < \alpha$, reject H0.
8. Effect size: $\eta^2$ (eta-squared) = SSB / SST, where SST = SSB + SSW (interpret .01 small, .06 medium, .14 large).

Mean satisfaction of small/marginal ($n_1 = 65$) vs medium/large ($n_2 = 35$). Suppose after coding satisfaction (1–3):

- Mean1 = 1.95, SD1 = 0.60 (small/marginal)
- Mean2 = 2.34, SD2 = 0.50 (medium/large)

Overall mean = (65×1.95 + 35×2.34) / 100 = 2.0865
SSB = 65× (1.95 − 2.0865) ² + 35× (2.34 − 2.0865) ² ≈ 65×0.01863 + 35×0.06427 ≈ 1.210 + 2.2495 = 3.4595
SSW = (65−1) ×0.60² + (35−1) ×0.50² = 64×0.36 + 34×0.25 = 23.04 + 8.5 = 31.54 df_between = 1; df_within = 98. MSB = 3.4595; MSW ≈ 0.3218. F ≈ 3.4595 / 0.3218 ≈ 10.75. Critical F (1,98) at α=0.05 ≈ 3.94 → reject H0. Means differ significantly.

Eta-squared ≈ 3.4595 / (3.4595 + 31.54) ≈ 3.4595 / 34.9995 ≈ 0.099 (≈0.10, medium effect).
"One-way ANOVA showed a significant difference in mean satisfaction scores between landholding categories, F (1,98) = 10.75, p = .0016, $\eta^2$ = .10, indicating a moderate effect of landholding on satisfaction."

**Table 2:** Table showing Opinion of Respondents

| Sl. No | Statement | Mean Score | Rank |
|---|---|---|---|
| 1 | Protects against loss or damage of crops | 2.35 | 14 |
| 2 | Gives financial security | 2.06 | 17 |
| 3 | Provides guarantee for the farmer | 1.72 | 19 |
| 4 | It helps in reducing the risks | 3.64 | 3 |
| 5 | Premium rate is reasonable | 1.27 | 20 |
| 6 | Served by the Agricultural Insurance Company | 2.43 | 12 |
| 7 | Schemes are modified by the Central Government | 2.45 | 10 |
| 8 | Follows simple formalities | 2.45 | 11 |
| 9 | Easily accessible through bank | 2.95 | 8 |
| 10 | Motivation from banks/financial institutions | 2.96 | 4 |
| 11 | Adequate publicity | 2.15 | 16 |
| 12 | Covers wide range of crops | 4.02 | 1 |
| 13 | Covered by the National Agricultural Insurance Scheme | 2.28 | 15 |
| 14 | Crop insurance schemes are well defined | 2.60 | 8 |
| 15 | Quick settlement of claims | 2.60 | 9 |
| 16 | Premiums are shared by Government | 2.92 | 6 |
| 17 | Structured compensation payouts | 2.91 | 7 |
| 18 | Compulsory coverage for loaned farmers | 2.03 | 18 |
| 19 | Voluntary coverage for non-loaned farmers | 3.94 | 2 |
| 20 | Rainfall variations reduce crop yields | 2.39 | 13 |

**Source:** Primary data

The above table no. 2 showed that opinions on Crop insurance, the mean score ranged from 1.27 to 4.02 and the score for 'Covers wide range of crops' secured higher mean score and stood at top, followed by the 'Voluntary coverage for non-loaner farmers' secured next higher mean score and stood at second, the score for 'It helps in reducing the risks' secured next higher mean score and stood at third and finally the score for 'Premium rate is reasonable' secured least score and stood at last.

**Table 3:** Table showing that Economic Condition has improved

| Sl. No | Economic Condition | Respondents | Percentage |
|---|---|---|---|
| 1 | Stopped borrowing | 3 | 3% |
| 2 | Reduced borrowing | 11 | 11% |
| 3 | Children Education | 31 | 31% |
| 4 | Owned house improved | 40 | 40% |
| 5 | Gold purchased | 6 | 6% |
| 6 | Acquired land | 5 | 5% |
| 7 | Added land area | 4 | 4% |
| Total | | 100 | 100% |

**Source:** Primary data

Economic condition has improved from the above table no. 3 explains that 40% of the respondents reported that their own house has been improved, followed by 31% reported that their children educated. Economic condition has improved concluded that most (40%) of the respondents have reported that their owned house has been improved.

## Findings of the Study

### 1. Demographic Profile of Respondents

Out of 100 respondents, 58% were male and 42% female.
Majority (46%) belonged to the age group of 36–50 years, followed by 30% in the 18–35 age group.
About 65% of the respondents were small and marginal farmers, while 35% belonged to the medium and large farmer category.

### 2. Awareness and Enrolment

72% of farmers were aware of crop insurance schemes, while 28% had limited or no awareness.
Awareness was higher among farmers linked with Kisan Credit Cards (KCC) and cooperative societies.

### 3. Utilization of Crop Insurance

Out of the sample, 68% of farmers had enrolled in crop insurance schemes at least once, while 32% had never enrolled.
Among the enrolled farmers, PMFBY was the most widely used scheme.

### 4. Claim Settlement Experience

Only 55% of insured farmers had successfully received claims.
Delayed claim settlement (reported by 63% of respondents) emerged as the most critical issue affecting satisfaction.
Many farmers reported inadequate compensation, especially when losses were assessed at the area level instead of individual farm level.

### 5. Premium Affordability

70% of farmers considered the premium rates affordable due to government subsidies.
However, 30% felt premiums were still high, especially for commercial and horticultural crops.

### 6. Overall Satisfaction

Only 42% of farmers expressed overall satisfaction with crop insurance.
38% were moderately satisfied, while 20% were dissatisfied due to delays, lack of transparency, and inadequate grievance redressal.

### 7. Institutional Support and Awareness Campaigns

Farmers who had exposure to awareness programs, training, or support from extension officers reported higher satisfaction levels.
District-level differences in implementation efficiency also influenced perceptions.

**Suggestions of the Study**

1. Conduct village-level workshops, farmer meetings, and demonstrations to improve awareness of crop insurance schemes, premium details, and claim procedures.
2. Establish strict timelines for claim disbursal and provide farmers with digital tracking of claim status to reduce uncertainty and dissatisfaction.
3. Adopt technology-driven methods such as remote sensing, satellite imagery, and mobile-based reporting to complement crop cutting experiments (CCEs) and reduce disputes.
4. Set up local grievance redressal cells at the taluk level and ensure quick response to farmer complaints.
5. Digitize and simplify the enrolment process, ensuring that even small and marginal farmers without Kisan Credit Cards can easily access crop insurance.
6. Train agricultural extension officers and cooperative societies to act as facilitators in spreading awareness, helping farmers with documentation and resolving doubts.
7. Design flexible insurance products that address specific crops such as sugarcane and paddy in Mandya and consider individual farm-level risks instead of only area-based assessment.
8. Extend special outreach programs for non-loanee farmers, who often remain excluded, by providing subsidies and simple procedures for enrolment.
9. Introduce mobile apps, SMS alerts and digital claim filing systems so farmers are updated in real-time about enrolment, claim status, and deadlines.
10. Avoid frequent changes in scheme guidelines, ensure better coordination between banks, insurance companies, and local agricultural departments to improve farmer satisfaction.

**Conclusion**

The study reveals that crop insurance plays a crucial role in safeguarding farmers of Mandya district against production risks, yet overall satisfaction remains moderate due to persistent challenges. While farmers appreciate the subsidized premium structure of schemes like the PMFBY, delays in claim settlement, inadequate compensation, and lack of transparency in loss assessment undermine their trust. Awareness levels are uneven, with many small and marginal farmers either unaware or dependent on intermediaries for enrolment. Institutional support, grievance redressal and efficient claim disbursal emerge as the strongest determinants of farmer satisfaction.

From a practical standpoint, improving the effectiveness of crop insurance requires a multi-pronged approach, timely claim settlement using technology-driven methods, strengthening awareness campaigns and ensuring inclusivity of non-loanee farmers. Building farmer-friendly digital platforms for enrolment and claim tracking, coupled with strong local facilitation by extension officers and cooperatives, can significantly enhance satisfaction. Thus, for crop insurance to achieve its true purpose of stabilizing farm incomes, policymakers must focus not only on coverage expansion but also on service quality, transparency and farmer-centric delivery mechanisms.

**Scope for Future Research**

The present study highlights farmer satisfaction with crop insurance schemes in Mandya district but also opens avenues for further investigation. Future research can adopt a larger sample size across multiple taluks of Mandya to generate deeper insights into variations among sugarcane, paddy and ragi cultivators. Comparative studies between Mandya and neighboring districts such as Mysuru and Ramanagara could provide a regional perspective on policy effectiveness.

Researchers may also focus on longitudinal studies to examine how farmers satisfaction evolves over time with changes in policy, climatic conditions and technological interventions in claim assessment. Additionally, there is scope to explore the role of digital platforms, mobile apps and remote sensing technologies in enhancing efficiency and transparency in crop insurance implementation. Studies may also investigate the specific challenges of non-loanee farmers, women farmers and marginal landholders, groups often overlooked in policy evaluations. Such future research will not only enrich academic understanding but also provide evidence-based recommendations for making crop insurance more inclusive and effective in Mandya district.

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