

## Impact Assessment of PM-Kisan Samman Nidhi Yojana in Karamadai Block of Coimbatore District

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### Abstract

*The Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) scheme provides direct income support to landholding small and marginal farmers across India. This study assesses the awareness, enrolment, benefit receipt and perceived impact of the scheme among 60 farmers in Karamadai block of Coimbatore district. Awareness of PM-KISAN was relatively high; however, enrolment did not proportionately match awareness, mainly due to documentation and land-title constraints. All registered beneficiaries reported timely receipt of instalments, indicating strong operational efficiency. The financial assistance helped reduce short-term financial stress for a majority of beneficiaries, although improvements in agricultural productivity, capacity building and living standards were modest. Gender disparities were notable, as women farmers faced limited access owing to the absence of land ownership in their names. A majority of the respondents perceived the transfer amount as insufficient to substantially influence farm investment or reduce dependence on informal credit. The findings indicate that while PM-KISAN effectively ensures the timely delivery of benefits, its broader developmental impact remains limited without enhanced inclusion measures, increased financial support and integration with complementary extension and financial services.*

**Keywords:** Small and marginal farmers, Gender inclusion, Impact assessment, Agricultural extension, Rural livelihoods

**JEL Classification:** G21, Q12, Q18, Q21

### Introduction

Small and marginal farmers in India continue to experience chronic income instability, limited access to institutional support, rising cultivation costs and multiple livelihood vulnerabilities. These structural constraints have persisted despite decades of policy reforms aimed at stabilising rural incomes and reducing production risks (Chand and Singh, 2021). To address such challenges, the Government of India introduced the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) scheme as a nationwide direct benefit transfer (DBT) programme providing annual income support of Rs. 6,000 to landholding farmers in three equal instalments. The primary objective is to ease short-term liquidity constraints, support agricultural operations during critical crop stages and strengthen household welfare. National reports indicate that more than eleven crore farmers have benefited from PM-KISAN since its inception, making it one of the largest income-support programmes in the world (Government of India, 2023).

The various studies conducted across India show considerable regional variation in awareness, enrolment and utilisation of PM-KISAN benefits. Durgadevi and Sumathi (2024) reported that awareness levels in Coimbatore district were influenced by age, education and exposure to extension services, factors that significantly determined registration and benefit realisation. Research in Uttar Pradesh highlighted that convergence with institutional advisory bodies such as Krishi Vigyan Kendras (KVKs) improved the productive use of PM-KISAN instalments and supported better farm management decisions (Varshney et al., 2019). In Tamil Nadu, Bala Singh (2023) found high levels of registration yet noted that utilisation of funds remained confined largely to short-term consumption needs and input purchases. Similar observations were made by Naik et al. (2023), who reported that instalments were frequently used for seeds, fertilisers and pesticides, with limited evidence of long-term investment or technology adoption. Broader policy analyses further emphasise that income-support schemes can enhance farmer resilience only when linked with complementary institutional mechanisms such as credit, extension and insurance services (Kalia and Singh, 2020; Meenakshi et al., 2021).

A recurring theme in the literature is the persistence of gender-based exclusion within PM-KISAN. Women farmers often face structural barriers, including the absence of independent land ownership, documentation constraints, limited digital literacy and restricted mobility. Anjula and Nair (2024) documented that these challenges significantly reduce women's enrolment and benefit access despite their substantial contribution to agricultural labour. Studies from Tiruppur district (Sivasthi and Kavya, 2025) further highlight that tenant farmers and sharecroppers- many of whom are women- remain excluded due to the scheme's stringent land-title eligibility norms. These results mirror national observations that landownership-linked DBT policies systematically disadvantage women, widows and tenant cultivators who rarely possess formal land records in their names (Gulati et al., 2019).

Earlier assessments in Andhra Pradesh (Kumar, 2018) and other regions of India showed that the initial roll-out phases of PM-KISAN were marked by uneven outreach, low coverage and documentation inconsistencies, reinforcing the need for micro-level validation of scheme performance. Broader evaluations of income-support programmes also note that unconditional transfers tend to stabilise consumption but do not automatically translate into sustained income growth unless integrated with advisory services, labour-market support or complementary productivity-enhancing interventions (Banerjee et al., 2020; Ramaswami and Khanna, 2022). International evidence presents similar insights. Conditional and unconditional cash-transfer programmes such as Bolsa Família in Brazil, Mexico's Procampo and targeted transfers in Sub-Saharan Africa demonstrate that income support improves short-term household resilience but generates stronger long-term outcomes when combined with institutional support structures, human-capital investments and risk-mitigation mechanisms (de Janvry and Sadoulet, 2020; Fisher and Sriram, 2021; Taylor and Taylor, 2018). This global experience underscores that DBT mechanisms alone are often insufficient to produce sustained productivity gains in agriculture without institutional convergence.

A comparison of PM-KISAN with other major public transfer programmes such as the fertiliser subsidy system and the MGNREGA wage programme reveals important differences in objectives, eligibility structures and developmental pathways. PM-KISAN provides unconditional income support to landholding farmers, whereas fertiliser subsidies operate indirectly through price support and often benefit larger or more resource-rich cultivators. MGNREGA, by contrast, functions as a demand-driven employment guarantee programme where payments are conditional on labour performed. These differences extend to targeting mechanisms: PM-KISAN requires verifiable land titles thereby excluding tenants and many women farmers while fertiliser subsidies are prone to leakage and

MGNREGA excludes the non-working poor. The nature of transfers also varies, with PM-KISAN offering a fixed, unconditional amount, fertiliser subsidies lowering cultivation costs implicitly and MGNREGA providing conditional wage payments. Utilisation behaviour reflects these structural differences: PM-KISAN is often used for consumption or basic inputs; fertiliser subsidies primarily reduce input costs and MGNREGA wages contribute to consumption smoothing and limited asset creation. Evidence on productivity impacts also diverges; PM-KISAN offers short-term liquidity support but limited long-term gains without complementary services, fertiliser subsidies show mixed effects and MGNREGA's impact on productivity is indirect through community assets. This comparative positioning highlights the need for micro-level assessment to understand PM-KISAN's unique strengths and limitations within India's broader social-protection landscape.

Although regional and national assessments of PM-KISAN and other DBT programmes provide valuable insights, several gaps persist. First, much of the existing analysis operates at state or national scales; fewer studies offer micro-level, block-specific assessments that capture administrative realities, social norms and gendered barriers shaping enrolment and utilisation. Second, while many studies describe PM-KISAN outcomes, fewer explicitly situate PM-KISAN within a comparative DBT framework to explain how design differences influence farmers' behaviour and welfare. Third, although gender exclusion and tenancy constraints are acknowledged, empirical evidence detailing how land-title norms, documentation requirements and tenancy arrangements translate into practical exclusion remains limited in local contexts.

This study addresses these gaps by providing a block-level assessment in Karamadai (Coimbatore district) that examines awareness, registration, benefit receipt and perceived impact at the household level; situates PM-KISAN outcomes within a comparative DBT framework; and applies a gender-and-tenure lens to document how land-title norms influence inclusion. The present study also differs from past research in several ways. Unlike broader district- or state-level studies, it uses household interviews to capture micro-administrative dynamics and village-level constraints affecting enrolment and benefit realisation. It explicitly contrasts PM-KISAN's design with subsidy-based and employment-linked transfer models to understand differential pathways of behavioural response. Beyond reporting gender-disaggregated patterns, it analyses how joint ownership norms, documentation requirements and socio-cultural barriers restrict women's and tenants' access to benefits. By combining quantitative indicators with qualitative narratives, the study offers operational insights into implementation challenges that often remain invisible in large-scale evaluations.

Accordingly, the present study investigates awareness, enrolment status, instalment receipt and perceived impact of PM-KISAN among small and marginal farmers in Karamadai block of Coimbatore district; it further examines gender- and tenure-related constraints to inclusion and situates PM-KISAN's outcomes within a broader set of DBT mechanisms to identify policy measures that could enhance the scheme's developmental effectiveness.

### Data Sources and Methodology

A descriptive research design was adopted to assess the awareness, enrolment, instalment receipt and perceived impact of the PM-KISAN Samman Nidhi Yojana among small and marginal farmers in the Karamadai block of Coimbatore district. Owing to the absence of a complete sampling frame and the dispersed nature of the farming population, a snowball sampling technique was used to identify and select 60 respondents. This approach enabled the inclusion of both male and female farmers and facilitated the documentation of gender- and tenure-related constraints affecting access to the scheme.

Data were collected through personal interviews using a structured and pre-tested questionnaire administered between April and June 2025. The tool comprised items on socio-demographic characteristics, awareness of PM-KISAN, registration status, instalment receipt, utilisation of funds, perceived changes in financial stress, agricultural productivity, standard of living, and challenges encountered during enrolment or benefit receipt. Additional questions were included to capture gender-specific barriers, such as documentation requirements and land-ownership patterns.

To ensure content validity and clarity, the questionnaire was reviewed by subject-matter experts and pilot-tested with a small group of farmers outside the study area, with necessary revisions made before full deployment. Descriptive statistics such as frequencies and percentages were used for quantitative analysis. Qualitative insights obtained during interviews were used to contextualise numerical findings and highlight operational nuances. Although snowball sampling aided in identifying respondents who might otherwise be difficult to reach, its inherent limitations- such as referral bias and reduced representativeness- were addressed by initiating multiple referral chains across different villages to diversify the sample.

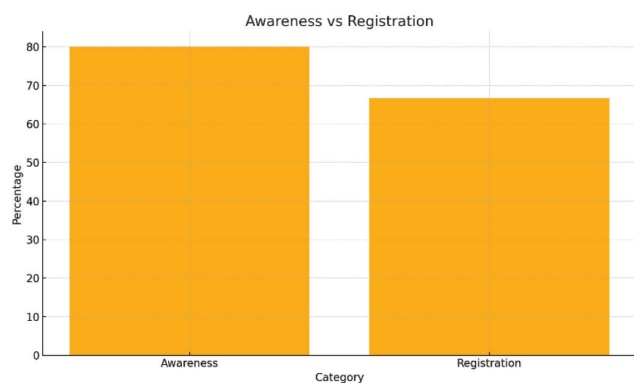
### Results and Discussion

The results of the study provide an in-depth understanding of farmers' socio-demographic characteristics, their levels of awareness and enrolment in the PM-KISAN scheme, the extent of benefit receipt, and their perceptions of the scheme's influence on agricultural and household outcomes. The discussion integrates these findings with established literature to contextualise PM-KISAN's performance at the micro level within the broader landscape of income-support

programmes in India.

The socio-demographic profile of respondents, presented in Table 1, reveals that farming in the Karamadai block continues to be predominantly male-led, with 70 per cent of respondents being men and only 30 per cent women. The age distribution shows that a majority fall within the economically active age groups of 31–45 years (33.3 per cent) and 46–60 years (30 per cent), indicating a strong presence of middle-aged farmers who are traditionally more engaged in agricultural operations. Educational attainment remains modest, with nearly half of the respondents having only primary schooling and 20 per cent being illiterate. These attributes are relevant for understanding programme access, as education and familiarity with administrative procedures strongly influence enrolment and documentation accuracy. Landownership patterns further shape eligibility, with 58.3 per cent owning land individually, while 25 per cent cultivate leased land. Given PM-KISAN's land-title requirement, this tenant segment remains excluded by design, a concern consistently raised in earlier evaluations of the scheme and other DBT interventions.

Awareness of PM-KISAN was relatively high in the study area, with 80 per cent of farmers reporting familiarity with the scheme. However, enrolment lagged behind awareness, as only 66.7 per cent were registered beneficiaries. Figure 1 illustrates this divergence between awareness and actual registration. The gap highlights that knowledge alone does not guarantee participation; instead, documentation issues, mismatched land records and administrative hurdles continue to impede enrolment. Table 2 summarises the proportion of farmers who were aware, registered, and successfully receiving instalments. Remarkably, all registered farmers reported receiving every instalment on time, indicating strong operational efficiency and the reliability of the digital transfer mechanism. This finding aligns with observations from other regions of Tamil Nadu and states such as Uttar Pradesh, where studies have emphasised that PM-KISAN's instalment delivery is among the most efficient of



**Figure 1: Awareness and registration levels among farmers**

**Table 1: Socio-demographic profile of respondents**

Variable	Category / Range	Frequency	Percentage (%age)
Age (years)	18–30	10	16.7
	31–45	20	33.3
	46–60	18	30.0
	>60	12	20.0
Gender	Male	42	70.0
	Female	18	30.0
Education Level	Illiterate	12	20.0
	Primary School	28	46.7
	Secondary	14	23.3
	Higher Secondary and Above	6	10.0
Family Size	1–3 members	14	23.3
	4–6 members	32	53.3
	>6 members	14	23.3
Land Ownership	Own Land	35	58.3
	Joint Ownership	10	16.7
	Tenant/Leased	15	25.0

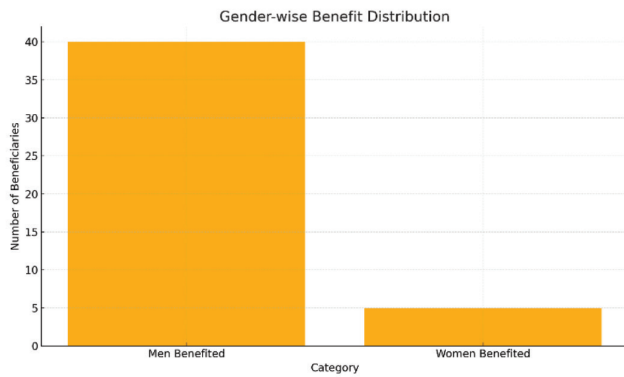
India's agricultural DBT programmes. The consistency of disbursement underscores the strength of Aadhaar-enabled payment systems, even though enrolment challenges persist.

Gender disparities were particularly visible in the study area. Although women constituted a substantial share of the agricultural workforce, only one-fourth of the women respondents were beneficiaries of the scheme. Figure 2 shows the gender-wise distribution of PM-KISAN beneficiaries. The primary reasons for this exclusion were the absence of land titles in women's names, joint ownership patterns favouring male members and limited access to documentation and digital procedures. These findings echo the conclusions of national gender audits, which observe that PM-KISAN's design inadvertently restricts women's access due to structural inequities in land ownership. Earlier research has highlighted that women farmers, despite being integral to cultivation, often lack legal recognition in land records, resulting in their exclusion from several agriculture-related entitlements. The present study reinforces these concerns at the micro level, showing that awareness among women does not necessarily translate into eligibility or benefit receipt.

Perceptions regarding the impact of PM-KISAN reveal a nuanced picture. A vast majority of beneficiaries (85 per cent) acknowledged that the financial assistance helped reduce short-term financial stress, especially during periods requiring immediate expenditure on inputs such as seeds and fertilisers. However, only 40 per cent perceived any improvement in agricultural productivity or capacity, and merely 26.7 per cent felt that their standard of living had improved. Table 3 presents the ranking of perceived impact indicators. These responses suggest that while the scheme provides liquidity at crucial times, the annual amount of ₹6,000 is insufficient to drive substantial farm-level investment or broader livelihood transformation. The finding that none of the respondents reported reduced dependence on informal credit further reinforces the limited developmental impact of the scheme. This is consistent with national evaluations indicating that unconditional cash transfers, although valuable for immediate relief, seldom influence long-term financial behaviour or asset creation without complementary support systems such as credit linkage, extension services and risk mitigation mechanisms. Studies from international programmes such

**Table 2: Awareness, registration and instalment receipt among respondents**

Indicator	Yes (n)	Yes (%age)	No (n)	No (%age)
Awareness of PM-KISAN	48	80.0	12	20.0
Registered for PM-KISAN	40	66.7	8	13.3
Received all instalments	40	100.0	0	0.0
Women beneficiaries (of 18)	5	25.0	13	75.0

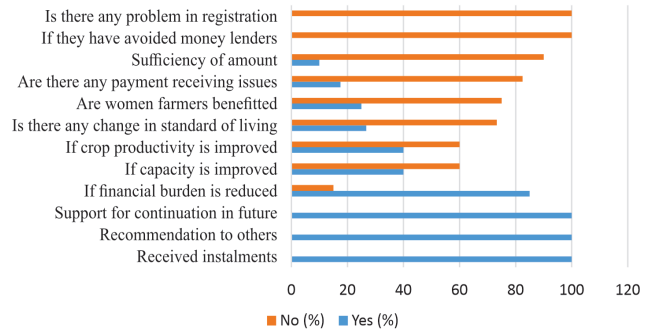


**Figure 2: Gender-wise distribution of PM-KISAN beneficiaries**

as Brazil’s Bolsa Familia and Mexico’s Procampo similarly emphasise that the transformative potential of cash transfers emerges only when they are integrated with developmental services.

Operational aspects of PM-KISAN appeared largely satisfactory, with only 17.5 per cent of respondents reporting any form of difficulty in receiving instalments. Most issues were minor, such as delays arising from Aadhaar-bank linkage inconsistencies or temporary server problems at the bank level. Importantly, none of the respondents reported significant challenges during registration, indicating that administrative processes have improved over time. The declining trend in registration-related grievances reflects stronger village-level facilitation and efforts by extension officials to update land records and facilitate e-KYC. However, interview narratives revealed that structural constraints continued to affect certain categories of farmers- especially tenants, widows, elderly farmers and women lacking independent documentation. These groups frequently depended on intermediaries,

**RESPONSE RECORDED**



**Figure 3: Diagrammatic representation of farmers’ responses**

which not only complicated the process but, in some cases, discouraged them from pursuing registration at all.

Figure 3 presents a diagrammatic summary of beneficiary responses, illustrating the prominence of short-term relief and the relative absence of long-term developmental outcomes. Beneficiary suggestions gathered during the survey emphasised the need to increase the financial support to match inflation and rising cultivation costs, expand eligibility to include tenant and women farmers without independent land titles and link PM-KISAN with agricultural extension services to encourage productive utilisation. These suggestions resonate with policy recommendations from several evaluations calling for convergence between income support schemes and institutional mechanisms that promote sustainable agricultural development.

In summary, the findings from Karamadai block indicate that PM-KISAN succeeds in providing timely and reliable financial assistance, thereby reducing immediate financial stress for small and marginal farmers. However,

**Table 3: Perceived impact indicators and their ranking**

Indicator	Yes (%)	No (%age)	Rank
Received instalments	100.0	0.0	1
Recommend continuation	100.0	0.0	1
Support continuation in future	100.0	0.0	1
Financial burden reduced	85.0	15.0	4
Capacity improved	40.0	60.0	5
Crop productivity improved	40.0	60.0	5
Standard of living improved	26.7	73.3	7
Women farmers benefitted	25.0	75.0	8
Payment receiving issues	17.5	82.5	9
Sufficiency of amount	10.0	90.0	10
Avoided moneylenders	0.0	100.0	11
Registration problems	0.0	100.0	11

its broader developmental influence remains limited due to structural inclusion barriers, inadequate transfer amounts and the absence of complementary institutional linkages. The study's results reaffirm observations from both national and international literature: direct income support offers essential consumption smoothing but does not sufficiently address long-term vulnerabilities unless supported by extension, credit, insurance and gender-responsive reforms.

### Conclusions and Policy Implications

The study assessed the awareness, enrolment patterns, benefit receipt and perceived impact of the PM-KISAN scheme among small and marginal farmers in the Karamadai block of Coimbatore district. The findings show that the scheme performs strongly in terms of operational efficiency, with all registered beneficiaries receiving instalments on time and reporting a reduction in short-term financial stress. The high reliability of instalment delivery reflects the robustness of Aadhaar-enabled digital payment systems and the improved administrative facilitation at the local level. However, the broader developmental impact of the scheme remains modest, as the financial assistance is primarily used for immediate consumption or input purchase rather than long-term productivity enhancement.

The study also highlights persistent inclusion barriers linked to land-title norms, which disproportionately affect women farmers, widows and tenant cultivators. Despite adequate awareness of the scheme, these groups remain excluded due to structural constraints in landownership documentation. The PM-KISAN transfer amount, though appreciated, was widely regarded as insufficient to address rising cultivation costs or reduce reliance on informal credit sources. As a result, the scheme functions largely as a short-term consumption-smoothing mechanism rather than a transformative agricultural support intervention. These observations are consistent with national evaluations of PM-KISAN and international evidence on cash-transfer programmes, which demonstrate that income support alone does not significantly alter long-term livelihood outcomes without complementary institutional linkages.

The policy implications emerging from this study underscore the need to broaden the inclusiveness of PM-KISAN by revisiting the strict land-title-based eligibility criteria. Enabling access for women cultivators, tenant farmers and sharecroppers through simplified documentation procedures or alternative verification mechanisms would significantly enhance the scheme's equity outcomes. Increasing the transfer amount to reflect inflation and rising input costs may strengthen the scheme's capacity to contribute to meaningful farm-level investments. Integrating PM-KISAN with agricultural extension services, credit facilitation and crop-insurance linkages can further ensure that beneficiaries utilise the support more productively. Strengthening village-

level facilitation desks, regularly updating revenue records and conducting awareness campaigns focused on women and vulnerable groups can improve enrolment and ensure that the scheme reaches those most in need. Overall, the study affirms the significance of PM-KISAN as a timely and reliable income-support mechanism while emphasising the importance of complementary structural reforms and institutional convergence to enhance its long-term developmental effectiveness.

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