

International Journal of Agriculture Extension and Social Development

Volume 8; Issue 10; October 2025; Page No. 75-79

Received: 05-07-2025
Accepted: 08-08-2025

Indexed Journal
Peer Reviewed Journal

Social challenges faced by farm families in Punjab: A comprehensive review

¹Rajinder Kaur and ²Pardeep Kumar

¹Assistant Professor, Punjab Agricultural University Ludhiana, Krishi Vigyan Kendra, Langroya, Nawanshahr (SBS Nagar), Punjab, India

²Deputy Director (Training), Punjab Agricultural University Ludhiana, Krishi Vigyan Kendra, Langroya, Nawanshahr (SBS Nagar), Punjab, India

DOI: <https://www.doi.org/10.33545/26180723.2025.v8.i10b.2505>

Corresponding Author: Rajinder Kaur

Abstract

Farm families in Punjab are confronting numerous social challenges that undermine their economic stability and well-being. Despite being a leading contributor to India's agricultural output, Punjab's rural areas are grappling with persistent issues such as farmer suicides, indebtedness, environmental disasters like floods, inadequate health services, and disrupted education. This review synthesizes secondary data from government reports, published studies, and field observations to explore the socio-economic, psychological, and environmental stressors affecting farm families. The paper identifies key drivers such as crop failure, financial instability, natural disasters, and lack of institutional support, and proposes integrated policy solutions aimed at enhancing resilience, mental health, and livelihood diversification. The findings underscore the need for transparent compensation mechanisms, sustainable agricultural practices, and community-based interventions.

Keywords: Social issues, farmer suicides, indebtedness, environmental disasters, crop failure

Introduction

Agriculture has historically been the backbone of rural economies in India, providing employment and ensuring food security for millions of people. Punjab, often referred to as the "Granary of India," has played a vital role in the country's agricultural output, contributing a significant share to the production of wheat and rice (Agricultural Census, 2015) ^[1]. The state's advanced irrigation systems, mechanization, and adoption of high-yield varieties were instrumental in the Green Revolution of the 1960s, which transformed Indian agriculture and curbed food shortages (Singh & Banga, 2016) ^[13].

However, the agricultural prosperity of Punjab has been accompanied by structural challenges. Increasing reliance on chemical fertilizers, groundwater depletion, and unsustainable cropping patterns have led to declining soil health and environmental degradation (Sharma *et al.*, 2018) ^[12]. These ecological concerns have intensified the vulnerability of farm households, especially among small and marginal farmers who are highly dependent on agricultural income (Gill & Kaur, 2017) ^[6].

In recent years, rural distress in Punjab has been further exacerbated by social factors such as unemployment, indebtedness, and lack of access to healthcare services (Nair *et al.*, 2019) ^[10]. Additionally, climate change-induced events like floods and droughts have increased the frequency of natural disasters, resulting in crop losses and livelihood disruptions (Joshi & Verma, 2020) ^[7]. The burden of these crises is not equally distributed; women and

marginalized communities face greater challenges in accessing resources and securing economic opportunities (Kaur & Sandhu, 2021) ^[8].

Mental health concerns among farmers have also come to the forefront, with rising incidences of anxiety, depression, and suicide reported across rural areas (Patel *et al.*, 2019) ^[11]. Stigma associated with psychological disorders and limited access to counseling services further aggravate the problem, leaving many vulnerable to extreme stress.

Against this backdrop, rural development programs have aimed to address poverty alleviation, employment generation, and livelihood diversification. Yet, challenges related to governance, implementation, and awareness continue to limit the effectiveness of such interventions (Verma *et al.*, 2021) ^[15]. There is a pressing need to understand the multidimensional nature of rural distress in Punjab and to devise holistic strategies that address economic, environmental, and psychosocial factors. This review seeks to explore the broad range of social challenges faced by farm families in Punjab, focusing on their underlying causes and potential pathways for sustainable development.

Review of Literature

Farm suicides and mental health concerns have been widely recognized as critical issues affecting rural communities in Punjab. Singh *et al.* (2021) ^[21] conducted a comprehensive study on farmer suicides in Punjab and identified indebtedness, crop failure, and social stigma as the principal

factors contributing to the rising rates of suicide among farmers. The study emphasized that farmers often resort to borrowing from informal lenders at exorbitant interest rates to cover agricultural costs, which exacerbates their financial vulnerability. The stigma surrounding mental health problems further prevents affected individuals from seeking help, leading to tragic outcomes. Lamont *et al.* (2024) ^[14] supported this finding, noting that rural populations have higher rates of mental health disorders but are among the least likely to access professional care. Structural barriers such as distance from healthcare centers, cultural attitudes, and lack of awareness amplify the mental health crisis among farmers.

Kumar (2024), in a psychological autopsy study, examined the psychosocial and economic stressors leading to suicides in rural Punjab and found that poor coping mechanisms and isolation are as much to blame as financial hardships. Brar (2023) ^[2] added to this discourse by presenting case studies from distressed farming families, where the burden of debt, coupled with repeated crop failures, led to feelings of hopelessness and despair. The National Crime Records Bureau (2022) corroborated these findings by reporting that in 2022, 11,290 farmers committed suicide, accounting for 6.6% of all suicide victims in the country, underscoring the severity of the crisis.

Environmental disasters, particularly floods, have emerged as a significant cause of livelihood disruption in Punjab. The Punjab Flood Report (2025) ^[5] highlighted that over 1,900 villages were submerged during the floods, affecting more than 380,000 people and destroying around 400,000 acres of crops. Mongabay India (2025) ^[17] further detailed how floodwaters not only damaged farmlands but also devastated housing and rural infrastructure, leaving families without shelter and sanitation facilities. Governance lapses have also been identified as contributing factors; Vision IAS (2025) ^[18] argued that poor infrastructure planning and inadequate disaster preparedness intensified the impact of floods on rural communities. Waleed (2025) ^[19] conducted high-resolution flood susceptibility mapping, showing that nearly 29% of Punjab's total area is highly vulnerable to floods due to a combination of poor drainage systems, unregulated land use, and climate variability. Science Direct (2025) ^[20] similarly pointed out that sedimentation, ineffective reservoir management, and erratic monsoon patterns are compounding Punjab's flood risks, thereby threatening food security and rural stability.

In addressing these crises, rural development interventions have sought to alleviate poverty, improve livelihoods, and empower communities, yet challenges remain. Kaur (2020) ^[9] argued that rural development must move beyond the narrow focus of income enhancement and instead address structural factors such as health, education, housing, and nutrition. She emphasized that rural development efforts must be holistic and aimed at sustainable living conditions rather than short-term income support. The Department of Rural Development's annual report (2024–25) ^[3] confirmed that while schemes such as the National Rural Livelihood Mission (NRLM) and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) have shown improvements in groundwater levels and crop yields, implementation inefficiencies persist. Further argued that community participation plays a crucial role in ensuring the

success of rural initiatives. Through case studies of participatory interventions, the study demonstrated that programs involving local stakeholders in planning and execution are more likely to succeed.

Another area of concern is gender inequality in rural development efforts. FAO (2023) ^[4] conducted a nutrition survey among rural households in Punjab and found that women consistently scored lower in Dietary Diversity Scores (DDS) compared to men. This disparity is linked to unequal access to food, limited decision-making power, and excessive time burdens associated with household chores and agricultural labor. Women, therefore, remain one of the most vulnerable groups during natural disasters and health emergencies, with restricted access to healthcare services and disaster relief (Kaur & Sandhu, 2021) ^[8]. A study by Verma *et al.* (2021) ^[15] further confirmed that although women's participation is mandated in government schemes, in reality, patriarchal structures, lack of mobility, and information gaps hinder their access and inclusion.

Mental health issues have gained increasing recognition in recent years. Patel *et al.* (2019) ^[11] examined psychological stress among farmers and identified depression and anxiety as prevalent disorders in rural communities. Limited access to mental health services, coupled with societal stigma, prevents farmers from seeking support and amplifies distress. Similarly, Singh *et al.* (2023) ^[22] explored the effects of agrarian distress on self-esteem and familial relationships, highlighting how prolonged stress erodes social bonds and worsens outcomes for entire households.

Additional studies have also explored the broader economic and social impacts of rural distress. Gill and Kaur (2017) ^[6] observed that small and marginal farmers, who constitute the majority of agricultural households, face disproportionate vulnerabilities due to land fragmentation and lack of insurance coverage. Joshi and Verma (2020) ^[7] pointed out that climate variability has increased the frequency of droughts, further jeopardizing crop yields and income stability. In another study, Nair *et al.* (2019) ^[10] analyzed rural health disparities in Punjab and found that the distance to healthcare centers, high out-of-pocket expenses, and lack of health literacy contribute to poor health outcomes among farming families. These studies collectively emphasize the interconnectedness of economic, environmental, and social factors in shaping rural distress.

Emerging evidence suggests that livelihood diversification and skill-building programs may offer sustainable solutions. Verma *et al.* (2021) ^[15] advocated for integrating vocational training and entrepreneurship development into rural employment schemes. Their findings indicated that farmers trained in alternative income-generating activities were better equipped to withstand environmental and financial shocks. Similarly, research by Kaur and Sandhu (2021) ^[8] recommended gender-sensitive agricultural extension programs that equip women with knowledge and tools to participate in decision-making and access support networks. Taken together, the literature establishes a clear link between economic distress, mental health crises, environmental disasters, and governance gaps in Punjab's rural landscape. The combined effect of these challenges has resulted in deteriorating living conditions, increased vulnerability to extreme events, and reduced access to essential services. The literature further emphasizes the need

for integrated approaches that account for psychosocial factors, ecological risks, and gender disparities while strengthening institutional frameworks. Sustainable solutions must therefore engage communities in participatory development, enhance access to healthcare, diversify income sources, and ensure equitable access to resources for all households.

Materials and Methods

Study Design

This study adopts a comprehensive literature review methodology aimed at synthesizing existing knowledge on the social challenges faced by farm families in Punjab. The review focuses on identifying key socio-economic, psychological, and environmental stressors affecting rural households and exploring the effectiveness of policy interventions and support systems. A qualitative content analysis approach was applied to examine and interpret findings from secondary data sources, enabling a holistic understanding of the multidimensional nature of rural distress in the region.

Data Sources

The review is based on a systematic collection of peer-reviewed research articles, government reports, and credible organizational publications. The inclusion criteria for the selected studies required them to focus on issues related to farmer suicides, indebtedness, floods, mental health, gender disparities, livelihood challenges, and rural development programs in Punjab. The primary sources of data include:

- Research articles from academic journals such as *Journal of Rural Development*, *Public Health Review*, and *Environmental Sustainability Journal*.
- Government reports including the Punjab Flood Report (2025), Annual Suicide Report (NCRB, 2022) ^[16], and the *Department of Rural Development Annual Report (2024–25)* ^[13].
- International organizations' publications, notably from the Food and Agriculture Organization (FAO, 2023) ^[4] and *The Lancet Psychiatry* (Patel *et al.*, 2019) ^[11].
- High-resolution mapping studies such as those by Waleed (2025) ^[19] and environmental assessments on flood susceptibility.
- Field-based case studies and secondary datasets that provide statistical and narrative evidence of socio-economic and mental health challenges in farming communities.

A total of 25 studies were reviewed, with 10 recent studies incorporated in the literature review and 5 key studies integrated into the results and discussion to ensure that the analysis reflects the latest available evidence.

Data Collection Procedure

Relevant studies were identified through academic databases such as Google Scholar, Scopus, Web of Science, and institutional repositories. Keywords used for the search included “farmer suicides Punjab,” “rural health challenges Punjab,” “flood impact agriculture Punjab,” “mental health farming communities,” and “gender disparities rural India.” Studies published between 2015 and 2025 were prioritized to ensure relevance and recency. Documents were screened

based on abstracts and inclusion criteria, ensuring that they directly addressed social issues faced by rural farming families in Punjab. Data from each study were systematically extracted, focusing on study objectives, methodology, sample size, key findings, and conclusions. The information was categorized into themes such as economic stress, mental health, environmental impacts, and institutional support mechanisms. Cross-referencing was performed to ensure consistency in findings and to triangulate evidence from multiple sources. Studies were selected based on their methodological rigor, sample representativeness, and relevance to the research topic.

Results and Discussion

The analysis of available literature and government data reveals that farm families in Punjab are confronting a multidimensional crisis characterized by economic distress, mental health challenges, environmental hazards, and gender inequalities. These challenges are interlinked, reinforcing the vulnerability of rural households and threatening their livelihoods and well-being.

Economic Distress and Debt

A major concern is the financial instability affecting rural households. According to Singh *et al.* (2021) ^[21], approximately 62% of small and marginal farmers in Punjab are trapped in debt, with average loan amounts exceeding Rs 1.5 lakh per household. This indebtedness arises from the rising cost of cultivation, estimated at Rs 45,000 per acre for paddy and Rs 38,000 per acre for wheat, which far exceeds farmers' earnings. Gill and Kaur (2017) ^[6] reported that over 70% of smallholder farmers rely on informal sources of credit, often borrowing from private lenders at interest rates ranging from 24% to 60% annually. The Department of Rural Development's annual report (2024–25) further highlighted that less than 40% of farmers have access to institutional credit schemes, and many are unaware of the government's subsidized loan programs. This financial strain is contributing to declining farm productivity and escalating socio-economic stress.

Farmer Suicides and Mental Health

The link between economic hardship and mental health is underscored by data from the National Crime Records Bureau (NCRB, 2022) ^[16], which reported that 11,290 farmers died by suicide in 2022, accounting for 6.6% of all suicide victims in India. Patel *et al.* (2019) ^[11] noted that one in four farmers surveyed exhibited symptoms of severe depression, with 55% reporting anxiety linked to financial stress. In rural areas, less than 10% of affected individuals have access to professional counseling services, and mental health awareness campaigns remain limited. Lamont *et al.* (2024) ^[14] further observed that stigma, coupled with inadequate infrastructure, prevents many from seeking treatment, thus prolonging psychological distress and isolation.

Environmental Disasters: Floods

Punjab's vulnerability to floods is another significant contributor to rural distress. The Punjab Flood Report (2025) documented that 1,923 villages were severely affected, displacing 387,898 individuals, and destroying

approximately 400,000 acres of crop land. Crop loss was estimated at Rs 1,200 crores, affecting livelihoods across seven districts including Jalandhar, Hoshiarpur, and Shahid Bhagat Singh Nagar. Mongabay India (2025)^[17] highlighted that 51 human lives were lost during the floods, while over 3,000 cattle perished due to inadequate shelter and disease outbreaks. Waleed (2025)^[19] used GIS-based flood susceptibility mapping to show that 29% of Punjab's landmass falls under critical flood-prone areas, largely due to poor drainage, unregulated encroachments, and silting of riverbeds.

Gender Disparities

Gender inequalities are pervasive, with women bearing the brunt of both economic and environmental crises. FAO (2023)^[4] reported that 68% of women in rural households suffer from inadequate nutrition compared to 47% of men, as measured by Dietary Diversity Scores. Limited mobility, excessive household labor, and lack of access to healthcare services are primary barriers to improving health outcomes. Kaur and Sandhu (2021)^[8] found that only 23% of rural women were aware of government welfare schemes, and fewer than 15% were registered beneficiaries, despite quotas mandating equal participation. These inequalities are particularly visible during floods, when women's access to relief camps, medical facilities, and compensation schemes is severely restricted.

Institutional Gaps and Governance Failures

Despite the existence of schemes like NRLM and MGNREGA, awareness and implementation gaps remain significant. The Department of Rural Development (2024–25) reported that over 40% of eligible rural households were unaware of employment guarantee programs. Fund disbursements were delayed by an average of 60 to 90 days, and complaints regarding corruption and irregularities were common across affected regions. Verma *et al.* (2021)^[15] identified bureaucratic inefficiencies and weak coordination between departments as major bottlenecks preventing the effective delivery of services.

Emerging Solutions

Encouragingly, interventions aimed at mental health and livelihood diversification have shown promise. Verma *et al.* (2021)^[15] found that farmers trained in non-farm activities, such as dairy and small-scale entrepreneurship, increased their annual income by 25% to 40%, thus reducing dependency on seasonal crops. Community-based mental health initiatives led by local NGOs have reached approximately 12,000 individuals in pilot districts, providing counseling, helplines, and awareness workshops that have helped destigmatize mental illness (Lamont *et al.*, 2024)^[14]. Sustainable farming practices, such as crop rotation and organic fertilizers, have been adopted by nearly 18% of progressive farmers, improving soil health and reducing costs over time (Sharma *et al.*, 2018)^[12].

Discussion

The findings from this review highlight the multifaceted nature of rural distress in Punjab. Economic instability driven by mounting debts and crop failures is at the core of the crisis, further compounded by psychological stress and a

lack of accessible mental health services. The alarming suicide rates and high incidence of depression reflect the urgent need to prioritize mental health as a component of rural welfare.

Environmental risks, especially floods, have emerged as a critical threat to food security and social cohesion. The massive crop losses and displacement during floods demonstrate how fragile rural livelihoods are in the face of climate change and poor infrastructure. Flood-prone areas must be targeted with disaster preparedness plans, early warning systems, and sustainable land-use policies to mitigate future risks.

Gender disparities remain deeply entrenched, with women disproportionately affected by crises due to unequal access to nutrition, healthcare, and financial resources. Gender-sensitive policies, targeted outreach, and inclusive development programs are imperative to ensure that women's voices are heard and their needs addressed.

The institutional gaps revealed by multiple studies point to governance failures, including inadequate awareness campaigns, delayed compensation, and weak coordination between departments. Addressing these shortcomings requires greater accountability, transparency, and community involvement. Programmatic interventions that engage local stakeholders and leverage participatory models are more likely to succeed, as demonstrated by several pilot projects.

Finally, promising solutions, such as livelihood diversification and mental health initiatives, underscore the importance of holistic development frameworks. Sustainable farming practices, coupled with psychosocial support and skill-building opportunities, have the potential to rebuild resilience and strengthen rural communities.

In conclusion, the results underscore that farm families in Punjab are grappling with an intertwined web of socio-economic, environmental, and psychological challenges. The evidence suggests that addressing these challenges requires integrated, data-driven interventions rooted in community participation, gender equity, and sustainable practices. Coordinated efforts from policymakers, civil society, and local leaders are essential to transforming rural distress into resilience and long-term well-being.

The present review comprehensively highlights the social challenges faced by farm families in Punjab, drawing on recent studies, government reports, and credible organizational data. The findings reveal that economic distress, mental health crises, environmental disasters, gender disparities, and governance gaps are deeply interconnected, collectively contributing to the vulnerability of rural households. With more than 60% of farmers trapped in debt, suicide rates reaching alarming levels, and floods displacing hundreds of thousands annually, the crisis affecting Punjab's agricultural communities cannot be addressed through isolated interventions.

The analysis underscores that economic hardships stemming from crop failures and high input costs are the primary stressors, while mental health concerns are exacerbated by stigma, lack of counseling services, and social isolation. Floods, which have affected over 1,900 villages and destroyed nearly 400,000 acres of farmland, further disrupt livelihoods and deepen food insecurity. These challenges are particularly acute for women, who face limited access to

healthcare, nutrition, and welfare programs despite being integral to rural labor systems.

Furthermore, the review identifies significant gaps in policy implementation, including low awareness of welfare schemes, bureaucratic delays, and inadequate coordination across government agencies. Although initiatives like NRLM and MGNREGA have made some positive contributions, structural barriers continue to limit their reach and impact.

Nevertheless, the review also points to emerging strategies that offer hope. Livelihood diversification, sustainable farming practices, and community-led mental health interventions have been shown to improve resilience, reduce economic dependence, and promote social cohesion. These solutions, when implemented with a focus on inclusivity, gender sensitivity, and local participation, hold great promise for transforming rural distress into sustainable development.

In conclusion, addressing the social challenges faced by farm families in Punjab requires an integrated, evidence-based approach that combines financial support, healthcare access, disaster preparedness, and social inclusion. Policymakers, researchers, and civil society must collaborate to ensure that interventions are context-specific, gender-responsive, and rooted in the lived experiences of farming communities. By strengthening institutional frameworks, promoting mental well-being, and building sustainable livelihoods, Punjab's rural population can be empowered to face current and future challenges with resilience, dignity, and hope.

Ethical Considerations

As this study is a review of publicly available secondary data, no primary data collection involving human participants was undertaken, and ethical approval was not required. Nevertheless, the review adheres to academic integrity by properly citing all sources and ensuring that interpretations are grounded in validated research findings.

Conclusion

This review highlights the complex web of economic, environmental, and social challenges faced by farm families in Punjab. Rising indebtedness, crop failures, and limited access to institutional credit contribute to financial distress, which is closely linked with poor mental health and farmer suicides. Environmental disasters, particularly floods, further destabilize livelihoods, while governance gaps and weak implementation of welfare schemes reduce resilience. Women face added disadvantages due to gender disparities in health, nutrition, and resource access. Addressing these challenges requires integrated, gender-sensitive, and participatory approaches that combine financial security, mental health support, sustainable agriculture, and effective disaster preparedness.

Limitations

While the study incorporates the latest research, it is limited by its reliance on secondary data sources. Variations in study methodologies, sample sizes, and definitions across the literature could impact the generalizability of findings. Moreover, due to data constraints, some regions or marginalized groups may be underrepresented. Future

research incorporating primary field data and longitudinal studies would be beneficial for validating and extending these findings

References

1. Agricultural Census. Agricultural statistics at a glance. New Delhi: Ministry of Agriculture & Farmers' Welfare, Government of India; 2015.
2. Brar C. Uncovering the tragic reality of farmer suicides in Punjab. *Soc Res Rev*. 2023;12(3):45-58.
3. Department of Rural Development. Annual report 2024-25. Chandigarh: Government of Punjab.
4. Food and Agriculture Organization (FAO). Nutrition assessment in rural Punjab. Rome: FAO; 2023.
5. Government of Punjab. Punjab's worst floods since 1988: Social and economic impacts. Chandigarh: Government of Punjab; 2025.
6. Gill SS, Kaur P. Socio-economic condition of small and marginal farmers in Punjab. *J Rural Dev*. 2017;36(4):567-83.
7. Joshi R, Verma K. Climate variability and agricultural distress in Punjab. *Environ Sustain J*. 2020;5(2):112-25.
8. Kaur J, Sandhu HS. Gender disparities in access to agricultural resources in Punjab. *Indian J Agric Econ*. 2021;76(1):134-48.
9. Kaur R. Rural development in Punjab: Issues and policy perspectives. *Int J Law*. 2020.
10. Nair P, Sharma K, Bains JS. Rural health challenges in Punjab: A socio-economic perspective. *Public Health Rev*. 2019;47(3):301-15.
11. Patel V, Chatterji S, Chisholm D, *et al*. The mental health of farmers: Evidence from rural India. *Lancet Psychiatry*. 2019;6(8):669-77. doi:10.1016/S2215-0366(19)30244-4
12. Sharma R, Bansal M, Gill K. Environmental challenges in Punjab agriculture. *J Agric Sci*. 2018;12(3):211-23.
13. Singh K, Banga HS. Agricultural development and food security in Punjab. *Econ Aff*. 2016;62(2):205-13.
14. Lamont K. Improving the mental health of farmers. *Rural Health J*. 2024;8(2):112-25.
15. Verma R, Saini N, Kaur M. Evaluation of rural employment schemes in Punjab. *Indian J Public Adm*. 2021;67(4):547-62. doi:10.1177/00195561211044471
16. National Crime Records Bureau (NCRB). Annual suicide report. New Delhi: Government of India; 2022.
17. Mongabay India. Floods in Punjab: A crisis of infrastructure and governance. 2025. <https://india.mongabay.com>
18. Vision IAS. Punjab floods: Governance failure and climate risks. New Delhi: Vision IAS Publications; 2025.
19. Waleed S. High-resolution flood susceptibility mapping in Punjab. *Sci Clim Risk J*. 2025.
20. Science Direct. Flood susceptibility mapping in Punjab: Environmental risks. 2025.
21. Singh A, Singh J, Kohli S. Farmers' suicides in Punjab and their correlates. 2021. <https://www.researchgate.net/publication/>
22. Singh R, Malhotra V, Gill J. Agrarian distress and mental wellbeing in rural Punjab. *J Community Health*. 2023;15(1):22-37.