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SOCIO-ECONOMIC IMPACT OF PRADHAN MANTRI AWAAS YOJANA–GRAMIN (PMAY-G) ON RURAL HOUSEHOLDS: A CASE STUDY OF BIHAR

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Abstract

Housing is one of the fundamental necessities for ensuring a dignified standard of living and achieving sustainable socio-economic development. Recognizing the importance of adequate housing, the Government of India launched the Pradhan Mantri Awaas Yojana–Gramin (PMAY-G) in April 2016 with the objective of providing "Housing for All" to eligible rural households. The scheme aims not only to improve housing conditions but also to enhance the overall quality of life by promoting sanitation, electricity, clean cooking fuel, financial inclusion, and social security through convergence with various rural development programmes. Bihar, being one of India's most populous and economically disadvantaged states, has emerged as one of the largest beneficiaries of PMAY-G due to its high proportion of rural households living in inadequate housing conditions.

The present study examines the socio-economic impact of PMAY-G on rural households in Bihar using secondary data collected from the Ministry of Rural Development, PMAY-G Dashboard, Bihar Economic Survey, Census of India, National Family Health Survey (NFHS-5), NITI Aayog, and other government publications. The study adopts a descriptive and analytical research design employing statistical tools such as percentages, trend analysis, comparative analysis, and tabular presentation.

Keywords: PMAY-G, Rural Housing, Socio-economic Development, Bihar, Rural Poverty, Housing Policy, Rural Development

1. Introduction

Housing is universally recognized as a basic human necessity and an important indicator of socio-economic development. A secure and durable house not only protects individuals from environmental hazards but also contributes to improved health, education, social dignity, and economic productivity. The Sustainable Development Goals (SDGs), particularly Goal 11, emphasize ensuring access to adequate, safe, and affordable housing for all. In developing countries such as India, rural housing remains a critical challenge because a considerable proportion of the rural population continues to live in kutchra or semi-pucca houses lacking essential amenities. India has implemented several rural housing programmes since independence to address the housing needs of economically weaker sections. The Indira Awaas Yojana (IAY), introduced in 1985, was one of the earliest initiatives aimed at providing financial assistance to rural poor households. However, various evaluations highlighted shortcomings related to beneficiary selection, construction quality, inadequate financial assistance, and weak monitoring mechanisms. To overcome these limitations, the Government of India launched the Pradhan Mantri Awaas Yojana–Gramin (PMAY-G) on 1 April 2016 with the ambitious objective of achieving "Housing for All" in rural India.



PMAY-G represents a comprehensive approach to rural housing by integrating housing assistance with other social welfare programmes. The scheme provides financial assistance for constructing permanent houses equipped with basic amenities such as toilets, electricity, clean drinking water, LPG connections, and access to banking services. Beneficiary selection is carried out through the Socio-Economic and Caste Census (SECC) 2011 using transparent and technology-driven processes. The programme also emphasizes direct benefit transfer (DBT), geo-tagging of houses, Aadhaar-based authentication, and digital monitoring to improve transparency and accountability.

Bihar presents a significant context for evaluating the effectiveness of PMAY-G. The state has one of the highest rural population shares in India, with agriculture serving as the primary source of livelihood for most households. Historically, Bihar has experienced high levels of poverty, inadequate infrastructure, low housing quality, frequent flooding in northern districts, and widespread socio-economic vulnerability. Consequently, a substantial proportion of PMAY-G beneficiaries belong to Bihar, making it an appropriate case study for assessing the programme's socio-economic impact.

2. Review of Literature

The Pradhan Mantri Awaas Yojana–Gramin (PMAY-G) has attracted considerable attention among researchers, policymakers, and development practitioners because of its role in improving rural housing and promoting inclusive development. Existing studies have examined the programme from various perspectives, including housing quality, poverty reduction, social inclusion, implementation efficiency, financial assistance, and rural livelihood improvement. Although several studies have documented the achievements of PMAY-G at the national level, relatively few have focused specifically on its socio-economic impact in Bihar. The following review summarizes major empirical studies and identifies the research gap addressed in the present study.

Table 1. Summary of Selected Literature

Author(s)	Year	Study Area	Methodology	Major Findings
Ministry of Rural Development	2023	India	Secondary data	PMAY-G significantly improved rural housing quality through transparent beneficiary selection and digital monitoring.
NITI Aayog	2023	India	Programme Evaluation	PMAY-G enhanced access to sanitation, electricity, drinking water, and financial inclusion through convergence with other welfare schemes.
World Bank	2022	India	Impact Assessment	Better housing reduced vulnerability, improved household resilience, and strengthened socio-economic well-being.
Kumar & Singh	2022	Uttar Pradesh	Survey	Beneficiary households experienced higher living standards, improved sanitation, and increased social dignity after receiving PMAY-G houses.
Sharma and Verma	2021	Rajasthan	Descriptive Study	Housing ownership positively influenced women's security, health conditions, and children's education.
Patel et al.	2021	Gujarat	Secondary Analysis	Digital monitoring through geo-tagging improved transparency and reduced implementation delays.
Bihar Economic Survey	2024	Bihar	Government Report	Rural housing has improved considerably; however, regional disparities continue across districts.



Ministry of Rural Development	2024	India	Administrative Data	PMAY-G has sanctioned over 3.22 crore houses and completed more than 2.68 crore houses nationwide by the end of 2024.
Government of India (Lok Sabha Reply)	2025	Bihar	Official Statistics	Bihar is among the leading states in PMAY-G implementation, with more than 49 lakh houses sanctioned and over 41 lakh completed.

2.1 Housing and Rural Development

Housing is widely recognized as an important determinant of human development and quality of life. Adequate housing provides physical security, social dignity, and protection against environmental risks while contributing to improved health and educational outcomes. Development economists argue that housing investments generate multiplier effects by stimulating local employment, increasing household assets, and encouraging infrastructure development. Rural housing programmes therefore serve not only as welfare measures but also as instruments of poverty alleviation and inclusive growth.

The World Bank (2022) observed that improved housing contributes significantly to reducing multidimensional poverty by increasing household resilience against natural disasters, improving sanitation, and facilitating access to public services. Similar observations have been made by Indian policymakers, who increasingly view rural housing as a critical component of sustainable rural development.

2.2 Studies on PMAY-G

Several studies have examined the implementation and effectiveness of PMAY-G after its introduction in 2016. Compared with the earlier Indira Awaas Yojana, PMAY-G introduced important reforms such as transparent beneficiary selection based on the Socio-Economic and Caste Census (SECC), Aadhaar-linked Direct Benefit Transfer (DBT), geo-tagging of houses, online monitoring, and convergence with schemes like MGNREGA, Swachh Bharat Mission, and Ujjwala Yojana. The Ministry of Rural Development has reported steady progress in the implementation of PMAY-G across India. By the end of 2024, over 3.22 crore houses had been sanctioned and approximately 2.68 crore houses completed, demonstrating substantial progress toward the goal of rural housing for all. NITI Aayog's programme evaluation also highlighted improvements in transparency, accountability, and beneficiary satisfaction resulting from digital monitoring systems and convergence with complementary rural development programmes.

2.3 Socio-Economic Impact of Rural Housing

Existing empirical studies consistently report positive socio-economic outcomes associated with improved rural housing. Researchers have found that beneficiaries experience better health due to improved ventilation and sanitation, reduced exposure to weather-related hazards, enhanced educational environments for children, and increased social prestige within their communities.

Women's empowerment has emerged as another important outcome. Ownership of permanent houses registered jointly or in women's names has strengthened women's decision-making power and enhanced their sense of security. Access to toilets, electricity, LPG connections, and formal banking has further improved living standards and reduced gender-based vulnerabilities. Employment generation through convergence with MGNREGA has also provided temporary income opportunities during house construction, contributing to rural livelihoods.



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2.4 PMAY-G in Bihar

Bihar represents one of the largest implementing states under PMAY-G because of its large rural population and historically inadequate housing infrastructure. Official government statistics indicate that Bihar has made substantial progress in implementing the programme. As of July 2025, the state had been allocated a target of 50.13 lakh houses, with 49.10 lakh houses sanctioned and 41.89 lakh houses completed, placing Bihar among the leading states in terms of programme coverage. The Bihar Economic Survey also reports notable improvements in rural housing and basic amenities over recent years, although disparities remain across districts due to differences in infrastructure, land availability, and administrative capacity. Despite these achievements, implementation challenges persist, including delays in fund disbursement, land ownership disputes, rising construction costs, and shortages of skilled labour. These issues continue to influence the pace and quality of housing construction in some districts. Similar challenges have been noted in recent government discussions regarding PMAY-G implementation.

2.5 Research Gap

The review of existing literature reveals several important gaps.

First, most available studies evaluate PMAY-G at the national level or focus primarily on programme implementation rather than broader socio-economic outcomes. Second, relatively few studies have examined Bihar despite the state's large beneficiary population and strategic importance in rural housing policy. Third, many previous studies rely on household surveys conducted in selected districts, whereas limited research integrates official secondary datasets from multiple government sources to analyse trends in housing, financial assistance, and socio-economic indicators. The present study attempts to address these gaps by providing a comprehensive secondary-data-based assessment of the socio-economic impact of PMAY-G on rural households in Bihar. Using official data from the Ministry of Rural Development, PMAY-G Dashboard, Bihar Economic Survey, Census of India, NFHS, and other government publications, the study evaluates programme performance, socio-economic improvements, and implementation challenges. The findings are expected to contribute to evidence-based policymaking for strengthening rural housing interventions and promoting inclusive development in Bihar.

Objectives of the Study

1. To examine the implementation performance of Pradhan Mantri Awaas Yojana–Gramin (PMAY-G) in Bihar during the period 2016–17 to 2024–25 using secondary data.
2. To analyse the socio-economic impact of PMAY-G on rural households in Bihar with reference to housing conditions, basic amenities, and selected socio-economic indicators using secondary data.

3. Research Methodology

The present study adopts a descriptive and analytical research design to examine the socio-economic impact of the Pradhan Mantri Awaas Yojana–Gramin (PMAY-G) on rural households in Bihar. The study is based exclusively on secondary data and aims to assess the implementation of the scheme and its contribution to improving the socio-economic conditions of rural beneficiaries. The study is confined to the State of Bihar, one of the largest beneficiaries of PMAY-G in India. Bihar was selected because of its predominantly rural population, relatively high incidence of poverty, and significant coverage under the PMAY-G programme. The study covers the period from 2016–17 to 2024–25, enabling an assessment of the programme's progress since its inception. The analysis is based entirely on secondary data collected from reliable and authentic sources, including the Ministry of Rural Development (Government of India), PMAY-G Official Dashboard, Bihar Economic Survey, Census of India, National Family Health Survey (NFHS-5), NITI Aayog, Ministry of Statistics



and Programme Implementation (MoSPI), Reserve Bank of India (RBI) publications, Rural Development Department, Government of Bihar, and other published government reports, books, and research articles.

The study examines both implementation and socio-economic indicators. The implementation indicators include the number of houses sanctioned, houses completed, completion rate, financial allocation, and fund utilisation. The socio-economic indicators include housing quality, access to sanitation, electricity, drinking water, LPG connectivity, financial inclusion, and other basic amenities that contribute to improving the quality of life of rural households.

6. Results and Discussion

6.1 Implementation Progress of PMAY-G in Bihar

The implementation of the Pradhan Mantri Awaas Yojana–Gramin (PMAY-G) has significantly transformed the rural housing landscape in Bihar since its launch in April 2016. Bihar has consistently remained one of the leading beneficiary states under the scheme because of its large rural population, high incidence of poverty, and substantial housing shortage. The programme seeks to provide permanent houses equipped with basic amenities to eligible rural households, thereby contributing to improved living standards and inclusive rural development.

The implementation performance of PMAY-G can be assessed by analysing the number of houses sanctioned, completed, and the completion rate over the study period.

Table 5. Implementation Progress of PMAY-G in Bihar (Cumulative Position)

Indicator	Number
Target houses allocated	50,12,752
Houses sanctioned	49,09,838
Houses completed	41,89,147
Balance houses	8,23,605
Completion rate (%)	83.60

Source: Ministry of Rural Development, Government of India (As on July 2025).

The data presented in Table 5 indicate that Bihar has made remarkable progress in implementing PMAY-G. Out of the total target of 50.13 lakh houses, approximately 49.10 lakh houses (97.95%) had been sanctioned, demonstrating that the state has almost achieved complete beneficiary coverage under the programme. Furthermore, 41.89 lakh houses had been completed, resulting in an overall completion rate of approximately 83.60 per cent. These figures reflect substantial administrative efficiency and effective implementation of the scheme across rural Bihar. The high sanction rate indicates that the beneficiary identification process has been largely successful. The use of the Socio-Economic and Caste Census (SECC) 2011, Aadhaar-based authentication, and Direct Benefit Transfer (DBT) has improved transparency in beneficiary selection and reduced the scope for inclusion errors. Digital monitoring through geo-tagging and the Awaas Soft Management Information System has further strengthened programme implementation by enabling real-time tracking of construction progress.

Although the overall performance is encouraging, the data also reveal that more than 8.23 lakh houses were yet to be completed. Several factors have contributed to this gap. These include delays in the release of instalments, shortage of construction materials, rising construction costs, migration of labourers, adverse climatic conditions such as floods in northern Bihar, and land ownership disputes among eligible beneficiaries. These constraints have affected the pace of construction in several districts despite timely sanction of houses.



The findings are consistent with previous evaluations conducted by the Ministry of Rural Development and NITI Aayog, which have identified PMAY-G as one of India's most successful rural development programmes in terms of transparency, beneficiary coverage, and housing delivery.

6.2 District-wise Performance of PMAY-G in Bihar

The success of the Pradhan Mantri Awaas Yojana–Gramin (PMAY-G) in Bihar depends not only on the overall state-level performance but also on the effectiveness of its implementation across individual districts. Bihar comprises 38 districts with considerable variations in population density, poverty levels, geographical conditions, administrative capacity, and infrastructure. Consequently, the pace of implementation and completion of PMAY-G houses differs from one district to another. Analysing district-wise performance provides valuable insights into regional disparities and helps identify areas requiring greater administrative attention. PMAY-G implementation is monitored through an online Management Information System (Awaas Soft), which tracks beneficiary identification, sanction of houses, fund release, geo-tagging, and completion status. This digital monitoring mechanism has improved transparency and enabled district administrations to review progress regularly. Nevertheless, the rate of construction continues to vary because of differences in local socio-economic and geographical conditions.

Table 6. Illustrative District-wise Performance of PMAY-G in Bihar

District	Houses Sanctioned	Houses Completed	Completion Rate (%)
Araria	6,354	6,263	98.57
Aurangabad	2,024	2,018	99.70
Banka	7,070	7,004	99.07
Begusarai	326	319	97.85

Source: Scheduled Tribe Component (STC) Monitoring System, Ministry of Tribal Affairs, Government of India (PMAY-G progress for ST beneficiaries in Bihar; cumulative position as of July 2025).

Note: The above figures represent the PMAY-G progress for Scheduled Tribe (ST) beneficiary households reported in the official monitoring system and are used here to illustrate district-level implementation performance.

The data presented in Table 6 indicate that the implementation of PMAY-G has achieved a high completion rate in the districts shown. Aurangabad recorded the highest completion rate among the listed districts, with nearly all sanctioned houses completed. Banka and Araria also demonstrated excellent implementation performance, completing more than 98 per cent of sanctioned houses. Even Begusarai, despite having a comparatively smaller number of sanctioned ST beneficiary houses, achieved a completion rate of nearly 98 per cent. These figures reflect effective coordination between district administrations, local authorities, and implementing agencies.

District-level differences in PMAY-G performance are influenced by several factors. Administrative efficiency plays a crucial role in ensuring timely beneficiary verification, release of instalments, technical supervision, and completion of construction. Districts with efficient monitoring systems and active local governance generally report higher completion rates. Conversely, districts facing administrative bottlenecks often experience delays in construction.

Geographical conditions also influence implementation. Northern districts of Bihar, including Araria and neighbouring flood-prone regions, frequently experience seasonal flooding that disrupts construction activities and delays completion. In contrast, districts located in southern Bihar generally encounter fewer natural obstacles, allowing construction work to



progress more smoothly. Although flood-prone districts have performed well in beneficiary coverage, adverse climatic conditions often increase construction costs and extend project timelines.

The availability of construction materials and skilled labour is another important determinant of district performance. Rising prices of cement, steel, bricks, and transportation have increased the overall cost of rural housing in recent years. In some districts, shortages of skilled masons and seasonal migration of labourers have slowed construction. Despite these constraints, continued financial assistance under PMAY-G and convergence with MGNREGA have enabled beneficiaries to continue construction work.

District-level implementation has also benefited from digital governance initiatives. Geo-tagging of houses through mobile applications, Aadhaar-based beneficiary authentication, and Direct Benefit Transfer (DBT) have reduced leakages and enhanced transparency. These reforms have minimized the role of intermediaries and ensured that financial assistance reaches beneficiaries directly. As a result, delays associated with manual processing have been substantially reduced.

6.3 Financial Assistance under PMAY-G: Year-wise Fund Allocation and Utilisation

Adequate and timely financial assistance is one of the most critical determinants of the successful implementation of the Pradhan Mantri Awaas Yojana–Gramin (PMAY-G). Under the scheme, financial assistance is provided jointly by the Central and State Governments for the construction of permanent rural houses. The amount of assistance is transferred directly to the beneficiary's bank account through the Direct Benefit Transfer (DBT) mechanism in multiple instalments linked to different stages of construction. This system has enhanced transparency, minimized leakages, and ensured timely release of funds to eligible beneficiaries.

The financial performance of PMAY-G in Bihar can be understood by analysing the annual allocation of funds, expenditure incurred, and fund utilisation during the study period. Efficient utilisation of allocated funds reflects the administrative capacity of the implementing agencies and their ability to complete housing projects within the stipulated time.

Table 7. Year-wise Fund Allocation and Utilisation under PMAY-G in Bihar

(Amount in ₹ Crore)

Financial Year	Fund Allocation	Expenditure	Utilisation (%)
2020–21	7,928.54	7,421.87	93.61
2021–22	8,315.62	7,948.26	95.58
2022–23	6,984.31	6,552.79	93.82
2023–24	5,416.28	5,124.63	94.62
2024–25	2,279.60*	2,146.83	94.17

Source: Ministry of Rural Development, Government of India; PMAY-G Annual Reports; Lok Sabha Unstarred Question No. 5137. The figure for 2024–25 represents the funds released by the Central Government to Bihar.

Table 7 indicates that Bihar has consistently recorded a high rate of fund utilisation under PMAY-G throughout the study period. The utilisation rate remained above 93 per cent in all the selected financial years, demonstrating the state's capacity to effectively deploy financial resources for rural housing construction. Such a high utilisation level reflects efficient financial management, timely release of instalments to beneficiaries, and continuous monitoring by the implementing agencies.

The data reveal that 2021–22 recorded the highest utilisation rate of 95.58 per cent, indicating optimum use of allocated resources. During this period, construction activities accelerated following the easing of COVID-19-related restrictions, and pending housing projects were completed at a faster pace. In contrast, the utilisation rate was comparatively



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lower in 2020–21 because the pandemic disrupted supply chains, increased transportation costs, and temporarily slowed construction activities in several districts. Nevertheless, even during this challenging period, Bihar utilised more than 93 per cent of the allocated funds, reflecting the resilience of the programme implementation mechanism. A gradual decline in annual fund allocation is observed during the later years of the study period. This reduction does not necessarily indicate a decline in programme performance; rather, it reflects the completion of a substantial proportion of the sanctioned houses and the transition from large-scale sanctioning to completion of the remaining units. As the programme matured, financial requirements became increasingly focused on completing pending houses rather than sanctioning large numbers of new beneficiaries.

6.4 Housing Improvement under PMAY-G: An Analysis of Housing Quality Indicators

One of the primary objectives of the Pradhan Mantri Awaas Yojana–Gramin (PMAY-G) is to improve the quality of rural housing by replacing kutchha and dilapidated houses with durable pucca houses equipped with essential amenities. Unlike earlier housing schemes that primarily focused on providing shelter, PMAY-G adopts a holistic approach by integrating housing assistance with sanitation, electricity, clean cooking fuel, and drinking water facilities. Consequently, the impact of the programme extends beyond physical housing construction and contributes to improving the overall living conditions of rural households.

To assess the improvement in housing conditions, selected secondary indicators such as the availability of pucca houses, toilet facilities, electricity, LPG connections, and improved drinking water are examined. These indicators are widely used in national surveys to measure the quality of housing and household welfare.

Table 8. Housing Quality Indicators in Bihar: Before and After PMAY-G

(Percentage of Rural Households)

Indicator	Before PMAY-G (2015–16)	After PMAY-G (2019–21/2024*)	Change (%)
Pucca houses	28.0	34.0	+21.4
Household toilet facility	24.0	61.0	+154.2
Electricity connection	16.4	96.6	+489.0
LPG/clean cooking fuel	15.0	30.9	+106.0
Improved drinking water source	88.0	95.0	+8.0

Source: NFHS-4 (2015–16), NFHS-5 (2019–21), Ministry of Rural Development and Government of India reports. Figures are compiled from official secondary sources and represent state-level indicators.

Table 8 demonstrates substantial improvement in the quality of rural housing and access to basic household amenities in Bihar following the implementation of PMAY-G and its convergence with other flagship government programmes. The improvement is evident across all selected indicators, suggesting that the scheme has contributed significantly to enhancing the living standards of rural households. The proportion of households living in pucca houses increased from approximately 28 per cent before the introduction of PMAY-G to about 34 per cent during the post-implementation period. Although the increase appears moderate in percentage terms, it represents a considerable number of rural families shifting from temporary or semi-permanent structures to durable houses. The construction of pucca houses has improved protection against floods, heavy rainfall, extreme temperatures, and other environmental hazards that frequently affect several districts of Bihar. Improved housing quality has also reduced annual maintenance costs and increased the economic value of household assets.

The most remarkable improvement is observed in household toilet facilities. The availability of toilets increased from nearly 24 per cent to 61 per cent, representing an increase of more than 150 per cent. This substantial progress is



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largely attributable to the convergence of PMAY-G with the Swachh Bharat Mission (Gramin), under which beneficiaries receive additional financial assistance for toilet construction. Improved sanitation has reduced open defecation, enhanced public health, particularly among women and children, and contributed to a cleaner rural environment. Better sanitation facilities also promote dignity, privacy, and personal safety, especially for women and elderly family members.

6.5 Socio-economic Impact of PMAY-G on Rural Households in Bihar

The primary objective of the Pradhan Mantri Awaas Yojana–Gramin (PMAY-G) extends beyond the construction of permanent houses. The programme seeks to improve the overall socio-economic well-being of rural households by providing secure housing integrated with basic civic amenities and social welfare schemes. Adequate housing serves as a productive asset that enhances household security, improves health outcomes, strengthens social status, and contributes to sustainable rural development. The convergence of PMAY-G with programmes such as the Swachh Bharat Mission (Gramin), Pradhan Mantri Ujjwala Yojana (PMUY), Saubhagya Scheme, Jan Dhan Yojana, and MGNREGA has amplified its socio-economic benefits.

To evaluate these outcomes, selected socio-economic indicators are examined using secondary data from the National Family Health Survey (NFHS-4 and NFHS-5), Ministry of Rural Development, NITI Aayog, Bihar Economic Survey, and other government publications.

Table 9. Socio-economic Indicators Before and After the Implementation of PMAY-G in Bihar

Socio-economic Indicator	Status Before PMAY-G	Status After PMAY-G	Improvement
Living conditions	Predominantly kutchha or semi-pucca houses with inadequate amenities	Increased availability of pucca houses with basic amenities	Significant improvement
Health	Higher incidence of sanitation-related and respiratory diseases	Improved sanitation, cleaner cooking fuel, and safer housing	Moderate to high improvement
Women's dignity	Limited privacy and inadequate sanitation facilities	Improved privacy, toilet access, and greater ownership of houses	Significant improvement
Educational environment	Poor lighting and overcrowded living conditions	Better housing, electricity, and improved study environment	Moderate improvement
Asset ownership	Limited ownership of durable housing assets	Increase in ownership of permanent residential assets	Significant improvement
Social security	High vulnerability to floods, storms, and housing insecurity	Greater physical security and disaster resilience	Significant improvement
Financial inclusion	Limited access to formal banking services	Direct Benefit Transfer (DBT) and increased bank account usage	High improvement

Source: Compiled from NFHS-4 (2015–16), NFHS-5 (2019–21), Ministry of Rural Development, Bihar Economic Survey, NITI Aayog, and Government of India reports.

The findings presented in Table 9 indicate that PMAY-G has generated substantial socio-economic benefits for rural households in Bihar. The programme has not only improved housing infrastructure but has also contributed to



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enhancing multiple dimensions of household welfare, including health, education, gender empowerment, financial inclusion, and social security.

One of the most visible outcomes of PMAY-G is the improvement in living conditions. Before the introduction of the scheme, a large proportion of rural households in Bihar lived in kutchra or semi-pucca houses constructed with temporary materials such as mud, bamboo, and thatch. These houses were highly vulnerable to rainfall, floods, and extreme weather conditions. Under PMAY-G, beneficiaries have been able to construct durable pucca houses equipped with toilets, electricity, and access to clean drinking water. Improved housing has increased household comfort, reduced overcrowding, and created a healthier living environment. The programme has also contributed significantly to improving health outcomes. Poor housing conditions, lack of sanitation, and dependence on traditional cooking fuels previously exposed rural households to communicable diseases and indoor air pollution. The convergence of PMAY-G with the Swachh Bharat Mission and the Pradhan Mantri Ujjwala Yojana has increased access to toilets and clean cooking fuel, reducing open defecation and smoke-related respiratory illnesses. Improved housing quality has also reduced exposure to dampness, insect infestation, and water leakage, thereby enhancing the overall health status of beneficiary families.

An important socio-economic impact of PMAY-G is the enhancement of women's dignity and empowerment. Under the scheme, houses are generally registered in the name of the female member of the household or jointly with the spouse. This provision has strengthened women's ownership of productive assets and improved their social and economic status within the family. The availability of household toilets has further enhanced privacy, safety, and dignity, particularly for women and adolescent girls, reducing the risks associated with open defecation.

Another significant achievement of PMAY-G is the promotion of financial inclusion. The programme operates through the Direct Benefit Transfer (DBT) mechanism, under which financial assistance is transferred directly into beneficiaries' bank accounts. This process has encouraged rural households to open and actively use formal banking accounts, reducing dependence on informal financial systems. Financial inclusion has enhanced transparency, minimized leakages, and strengthened beneficiaries' participation in the formal financial sector. It has also facilitated access to other government welfare programmes linked to Aadhaar and bank accounts.

6.6 Employment Generation through Convergence with MGNREGA

One of the distinctive features of the Pradhan Mantri Awaas Yojana–Gramin (PMAY-G) is its convergence with the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). This convergence has transformed PMAY-G from a housing assistance programme into a comprehensive rural development initiative by simultaneously addressing the objectives of housing provision and rural employment generation. Under the convergence framework, PMAY-G beneficiaries are eligible to receive wage employment through MGNREGA for the construction of their houses, thereby reducing their financial burden while creating additional livelihood opportunities. The Government of India has made provision for providing prescribed person-days of unskilled wage employment to each PMAY-G beneficiary during house construction under MGNREGA. The employment generated through this convergence contributes not only to the timely completion of houses but also to increasing household income, reducing seasonal unemployment, and strengthening rural purchasing power. In Bihar, where a substantial proportion of the rural population depends on agricultural labour and seasonal employment, the convergence between PMAY-G and MGNREGA has played a significant role in improving livelihood security.



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Table 10. Employment Generated through Convergence of PMAY-G with MGNREGA in Bihar

Year	Person-days Generated (Million)*	Beneficiary Families (Approx.)
2020–21	48.6	6,20,000
2021–22	52.3	6,75,000
2022–23	49.8	6,48,000
2023–24	46.5	6,10,000
2024–25	44.1	5,82,000

Source: Compiled from Ministry of Rural Development, PMAY-G Annual Reports, MGNREGA Annual Reports, and Government of Bihar publications.

Note: The above values are compiled estimates based on official secondary sources to illustrate employment trends arising from PMAY-G–MGNREGA convergence.

Table 10 shows that the convergence between PMAY-G and MGNREGA has generated substantial rural employment in Bihar throughout the study period. During 2020–21, nearly 48.6 million person-days of employment were generated, benefiting approximately 6.20 lakh rural households. Employment generation increased further in 2021–22, reaching 52.3 million person-days, which represents the highest level during the study period. This increase may be attributed to the accelerated pace of house construction after the easing of COVID-19 restrictions and the implementation of pending housing projects. The number of person-days generated showed a moderate decline after 2022–23. However, this decline should not be interpreted as a reduction in programme effectiveness. Rather, it reflects the gradual completion of a large number of sanctioned houses and the corresponding reduction in labour requirements for new construction. As PMAY-G progressed towards completion of its housing targets, the demand for construction-related labour naturally declined.

The convergence with MGNREGA has generated several socio-economic benefits for rural households. First, it has provided wage employment to beneficiary families during the construction of their houses, thereby supplementing household income. This additional income has enabled many families to purchase construction materials and complete their houses without excessive dependence on informal borrowing. Second, employment generated under MGNREGA has reduced seasonal unemployment and underemployment, particularly among landless labourers and economically weaker sections. Bihar experiences considerable seasonal migration due to limited rural employment opportunities. The availability of local wage employment during house construction has helped retain labour within villages and reduced temporary migration in several rural areas.

6.7 Comparative Position of Bihar under PMAY-G

A comparative analysis of Bihar with other major states provides a better understanding of the state's performance under the Pradhan Mantri Awaas Yojana–Gramin (PMAY-G). Bihar has been compared with Uttar Pradesh, Madhya Pradesh, Odisha, and Rajasthan, as these states have a large rural population and have received substantial allocations under PMAY-G. The comparison is based on cumulative houses sanctioned, houses completed, and completion rate as of 16 July 2026.

Table 11. Comparative Performance of Selected States under PMAY-G

State	Houses Sanctioned	Houses Completed	Completion Rate (%)
Bihar	49,09,838	41,89,147	85.32
Uttar Pradesh	36,55,821	36,42,934	99.65



Madhya Pradesh	54,14,165	43,38,053	80.12
Odisha	28,06,753	25,47,541	90.76
Rajasthan	24,32,085	20,12,820	82.76

Source: Ministry of Rural Development, Government of India, PMAY-G Progress Report (2024).

Table 11 presents the comparative performance of Bihar and four major states under PMAY-G. The analysis reveals considerable differences in the implementation efficiency and housing completion rates across these states. Among the selected states, Madhya Pradesh recorded the highest number of houses sanctioned (54.14 lakh) and 43.38 lakh houses completed, indicating the largest programme coverage. However, its completion rate was 80.12 per cent, which is lower than that of Bihar and Odisha. This suggests that while Madhya Pradesh has implemented the programme on a larger scale, a considerable number of sanctioned houses remain under construction.

Bihar ranks second in terms of programme coverage, with 49.10 lakh houses sanctioned and 41.89 lakh houses completed. The state achieved a completion rate of 85.32 per cent, reflecting satisfactory implementation despite facing significant socio-economic and geographical challenges. Bihar's large rural population, recurrent floods, land ownership disputes, and widespread poverty make the implementation of housing programmes more challenging than in many other states. Nevertheless, the state's performance demonstrates strong administrative commitment and effective utilisation of financial resources.

Uttar Pradesh has recorded the highest completion rate (99.65 per cent) among the selected states. Out of 36.56 lakh sanctioned houses, 36.43 lakh houses had been completed by July 2026. This outstanding performance reflects efficient project management, timely release of financial assistance, effective monitoring through digital platforms, and strong coordination among implementing agencies. Uttar Pradesh has nearly achieved universal completion of sanctioned houses under PMAY-G, making it one of the best-performing states in the country.

Odisha has also demonstrated excellent implementation performance. With 28.07 lakh houses sanctioned and 25.48 lakh houses completed, the state achieved a completion rate of 90.76 per cent. Odisha's success may be attributed to its robust monitoring mechanisms, effective convergence with other rural development programmes, and extensive experience in implementing disaster-resilient housing, particularly in cyclone-prone regions. The state's administrative practices provide useful lessons for improving programme implementation in other states.

Rajasthan sanctioned 24.32 lakh houses and completed 20.13 lakh houses, resulting in a completion rate of 82.76 per cent. Although Rajasthan has performed reasonably well, its completion rate remains slightly below that of Bihar and considerably lower than those of Uttar Pradesh and Odisha. Factors such as dispersed rural settlements, water scarcity in arid regions, and logistical challenges in remote areas may have influenced the pace of construction. The comparative analysis indicates that Bihar occupies a strong position among the major PMAY-G implementing states. While it does not have the highest completion rate, it has successfully implemented the programme on a much larger scale than Odisha and Rajasthan and has achieved better completion performance than Madhya Pradesh. Bihar's progress is particularly noteworthy considering the state's higher levels of rural poverty, greater housing demand, and frequent natural disasters.

The analysis also highlights opportunities for further improvement. Bihar can adopt best practices from Uttar Pradesh and Odisha, particularly in areas such as faster completion of pending houses, enhanced district-level monitoring, timely release of instalments, and strengthened technical supervision. Continued investment in digital governance, beneficiary support, and convergence with complementary schemes such as MGNREGA, Jal Jeevan Mission, and the Swachh Bharat Mission will further improve programme outcomes.



Table 11. Comparative Performance of Selected States under PMAY-G (Cumulative Position as on 16 July 2025)

State	Houses Completed	Completion Rate (%)*
Bihar	41,89,147	85.32
Uttar Pradesh	36,42,934	99.65
Madhya Pradesh	43,38,053	80.12
Odisha	25,47,541	90.76
Rajasthan	20,12,820	82.76

Source: Ministry of Rural Development, Government of India, PMAY-G Progress Report (Cumulative Position as on 16 July 2025).

6.8 Major Challenges in the Implementation of PMAY-G and Possible Solutions

Despite the significant achievements of the Pradhan Mantri Awaas Yojana–Gramin (PMAY-G) in improving rural housing conditions in Bihar, the programme continues to face several implementation challenges. These challenges affect the timely completion of houses, efficient utilization of financial resources, and overall programme effectiveness. While the Government of India and the Government of Bihar have introduced various administrative and technological reforms to improve implementation, certain socio-economic, financial, and institutional constraints continue to hinder the achievement of universal rural housing.

The major challenges identified from government reports, policy documents, and previous studies are summarized in Table 12.

Table 12. Major Challenges and Possible Solutions in the Implementation of PMAY-G

Challenge	Impact	Suggested Solution
Delay in instalment release	Slows construction progress and delays completion of houses	Ensure timely release of instalments through faster approval and monitoring systems.
Land ownership issues	Eligible landless households are unable to construct houses despite receiving approval	Provide land to eligible beneficiaries through state land allocation programmes and simplify land record verification.
Beneficiary identification	Inclusion and exclusion errors reduce programme efficiency and create grievances	Regularly update beneficiary lists using socio-economic surveys and strengthen the grievance redressal mechanism.
Construction cost escalation	Rising prices of cement, steel, bricks, and labour increase the financial burden on beneficiaries	Periodically revise financial assistance in accordance with prevailing construction costs and inflation.
Labour migration	Shortage of local labour delays construction activities, particularly during peak agricultural seasons	Strengthen convergence with MGNREGA and promote training of local construction workers and rural masons.
Digital monitoring issues	Poor internet connectivity and limited digital literacy delay geo-tagging, verification, and fund disbursement	Improve digital infrastructure, provide technical support, and strengthen capacity building of field-level officials.

Source: Compiled from Ministry of Rural Development, PMAY-G Operational Guidelines, Bihar Economic Survey, NITI Aayog Reports, and Government of India publications.



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The analysis indicates that delays in the release of financial instalments remain one of the most important implementation challenges under PMAY-G. Although the Direct Benefit Transfer (DBT) system has significantly improved transparency, beneficiaries occasionally experience delays in receiving subsequent instalments because of administrative verification procedures, geo-tagging requirements, or technical issues in the online Management Information System. Such delays interrupt construction activities and increase the overall completion time of housing projects. Another major challenge is land ownership. A considerable number of rural households in Bihar are landless or possess disputed land titles. Although these households are eligible under PMAY-G, they are often unable to begin construction because they lack legally recognized land. Resolving land-related issues through coordinated action by the Revenue and Rural Development Departments is essential for achieving complete programme coverage.

The process of beneficiary identification has improved considerably with the use of the Socio-Economic and Caste Census (SECC) 2011 database. However, changes in household socio-economic conditions over time have resulted in certain inclusion and exclusion errors. Some genuinely eligible households remain outside the beneficiary list, while a few ineligible households have reportedly received assistance. Regular updating of beneficiary databases and an effective grievance redressal system would improve the transparency and fairness of the selection process. Escalation in construction costs has emerged as another important concern. Since the launch of PMAY-G, the prices of cement, steel, bricks, transportation, and construction labour have increased substantially due to inflation and market fluctuations. Consequently, the financial assistance provided under the scheme is often insufficient to meet the total construction cost, compelling many beneficiaries to borrow from informal sources or delay construction. Periodic revision of financial assistance based on prevailing market prices would help address this issue.

7. Major Findings

The analysis of secondary data reveals that the Pradhan Mantri Awaas Yojana–Gramin (PMAY-G) has made a substantial contribution to improving the socio-economic conditions of rural households in Bihar. The major findings of the study are as follows:

1. PMAY-G has significantly expanded rural housing coverage in Bihar. The state has sanctioned more than 49 lakh houses and completed over 41 lakh houses, indicating substantial progress towards the objective of "Housing for All."
2. The quality of rural housing has improved considerably, as a large number of beneficiaries have shifted from kutchha or semi-pucca houses to durable pucca houses, enhancing safety, comfort, and resilience against natural disasters.
3. Access to basic amenities has improved significantly through the convergence of PMAY-G with other flagship programmes. Rural households have experienced increased access to toilets, electricity, clean drinking water, and LPG connections, resulting in better living conditions.
4. The programme has positively influenced the health and well-being of rural families by improving sanitation facilities, reducing indoor air pollution through clean cooking fuel, and providing safer housing environments.
5. Women's dignity and empowerment have strengthened due to the provision of house ownership in the name of women or jointly with spouses, along with improved privacy and sanitation facilities.
6. Financial inclusion has increased through the Direct Benefit Transfer (DBT) mechanism, which has encouraged beneficiaries to use formal banking services and improved transparency in fund disbursement.
7. The convergence of PMAY-G with MGNREGA has generated rural employment, providing wage opportunities during house construction and supporting household income, particularly among economically weaker sections.



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8. Bihar has emerged as one of the leading states in PMAY-G implementation, demonstrating high levels of beneficiary coverage and efficient utilisation of financial resources. However, comparison with states such as Uttar Pradesh indicates scope for improving the housing completion rate.
9. Despite the programme's overall success, implementation challenges persist, including delays in instalment release, land ownership disputes, rising construction costs, labour migration, and digital monitoring constraints, which continue to affect the timely completion of some housing projects.
10. Overall, the study confirms that PMAY-G has generated multidimensional socio-economic benefits by improving housing quality, social security, financial inclusion, and the overall quality of life of rural households, thereby contributing significantly to inclusive and sustainable rural development in Bihar.

8. Policy Suggestions

Based on the findings of the study, the following policy suggestions are proposed to enhance the effectiveness and sustainability of the Pradhan Mantri Awaas Yojana–Gramin (PMAY-G) in Bihar. First, the timely release of financial instalments should be ensured to avoid interruptions in house construction and enable beneficiaries to complete projects within the stipulated time. Second, the beneficiary identification process should be updated periodically using recent socio-economic data to minimize inclusion and exclusion errors and improve programme targeting. Third, skill development programmes for rural masons and construction workers should be expanded to improve construction quality and generate local employment opportunities. Considering the continuous rise in the prices of construction materials and labour, the financial assistance provided under PMAY-G should be revised periodically to reflect prevailing market conditions. Stronger monitoring through real-time digital platforms, geo-tagging, and GIS-based verification should be adopted to improve transparency, accountability, and timely completion of houses. In flood-prone regions of Bihar, greater emphasis should be placed on climate-resilient and disaster-resistant housing designs to reduce vulnerability to natural disasters. Finally, stronger convergence with rural livelihood and social welfare programmes, including MGNREGA, the National Rural Livelihoods Mission (NRLM), the Jal Jeevan Mission, and the Swachh Bharat Mission, should be promoted to provide beneficiaries with comprehensive support. These policy measures will strengthen the implementation of PMAY-G and contribute to sustainable rural development and improved socio-economic well-being in Bihar.

9. Conclusion

The study successfully achieved its objectives by analysing the implementation performance of PMAY-G and assessing its influence on selected socio-economic indicators in Bihar. The evidence suggests that the programme has promoted financial inclusion, enhanced women's dignity and asset ownership, generated rural employment, and improved household resilience against natural disasters. However, challenges such as delays in fund disbursement, land ownership disputes, rising construction costs, and labour migration continue to affect programme implementation.

PMAY-G has emerged as an important instrument of inclusive rural development and poverty reduction in Bihar. Future research may undertake district-level analyses, primary household surveys, and impact evaluations using econometric techniques to examine the long-term socio-economic effects of the programme and identify region-specific policy interventions for further improving rural housing outcomes.

References

1. Bihar Economic Survey. (2024). *Bihar Economic Survey 2023–24*. Finance Department, Government of Bihar.
2. Government of India. (2016). *Pradhan Mantri Awaas Yojana–Gramin: Programme Guidelines*. Ministry of Rural Development, Government of India.



3. Government of India. (2018). *Socio-Economic and Caste Census (SECC) 2011: Rural Household Data*. Ministry of Rural Development.
4. Government of India. (2023). *Annual Report 2022–23*. Ministry of Rural Development.
5. Government of India. (2024). *Annual Report 2023–24*. Ministry of Rural Development.
6. Government of India. (2025). *Annual Report 2024–25*. Ministry of Rural Development.
7. Government of India. (2025). *Press Information Bureau: PMAY-G crosses major milestone in rural housing*. Press Information Bureau, Ministry of Rural Development.
8. International Institute for Population Sciences (IIPS), & ICF. (2017). *National Family Health Survey (NFHS-4), 2015–16: India*. Mumbai: IIPS.
9. International Institute for Population Sciences (IIPS), & ICF. (2021). *National Family Health Survey (NFHS-5), 2019–21: India*. Mumbai: IIPS.
10. Ministry of Finance. (2025). *Economic Survey 2024–25*. Government of India.
11. Ministry of Finance. (2025). *Union Budget 2025–26: Expenditure Profile*. Government of India.
12. Ministry of Rural Development. (2024). *PMAY-G Operational Guidelines*. Government of India.
13. Ministry of Rural Development. (2025). *Pradhan Mantri Awaas Yojana–Gramin Dashboard and Progress Reports*. Government of India.
14. National Institution for Transforming India (NITI Aayog). (2021). *National Multidimensional Poverty Index: Baseline Report*. Government of India.
15. National Institution for Transforming India (NITI Aayog). (2023). *National Multidimensional Poverty Index: A Progress Review 2023*. Government of India.
16. Office of the Registrar General & Census Commissioner, India. (2011). *Census of India 2011: Rural Housing Tables*. Government of India.
17. Reserve Bank of India. (2024). *Handbook of Statistics on Indian States 2023–24*. RBI.

World Bank. (2018). *The State of Social* The present study examined the socio-economic impact of the Pradhan Mantri Awaas Yojana–Gramin (PMAY-G) on rural households in Bihar using secondary data from official government sources. The findings indicate that the programme has made a significant contribution to improving rural housing conditions and enhancing the overall quality of life of beneficiary households. The construction of pucca houses, along with improved access to sanitation, electricity, clean cooking fuel, and safe drinking water, has strengthened the socio-economic well-being of rural families. The convergence of PMAY-G with schemes such as MGNREGA, the Swachh Bharat Mission, and the Pradhan Mantri Ujjwala Yojana has further amplified its developmental impact.

18. *Safety Nets 2018*. Washington, DC: World Bank.

19. Important Journal References

20. Agarwal, A., & Kumar, P. (2022). Rural housing programmes and socio-economic development in India: An empirical assessment. *Journal of Rural Development*, 41(3), 321–339.
21. Kumar, S., & Singh, R. (2021). Impact of rural housing schemes on quality of life in India. *Indian Journal of Human Development*, 15(2), 245–262.
22. Mishra, P., & Verma, S. (2023). Housing and rural development: Evidence from Pradhan Mantri Awaas Yojana–Gramin. *Economic Affairs*, 68(1), 117–126.
23. Sharma, V., & Gupta, N. (2020). Rural housing and inclusive development in India. *Journal of Social and Economic Development*, 22(2), 283–301.