

## Precast Construction as a Sustainable Alternative for Affordable Housing Under PMAY-G

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### **Abstract**

Housing schemes are plentiful in India, and their demand is very high, especially in rural areas where the housing need is greatest. That's why Pradhan Mantri Awas Yojana Gramin (PMAY-G), under the Housing for All (HFA) initiative, is implemented in rural areas of India. In rural regions, classification of beneficiaries is based on Social Economic Criteria (SEC) data, which targeting the homeless, destitute, manual scavengers, and auto-excluded groups. The SEC group depend on financial support provided through government housing schemes. Most beneficiaries face this problem during the initial stages of the PMAY-G application. The estimate is analysed before sanction, and the installment amount is released in this scheme in steps. It is observed that the previous construction amount sanctioned under PMAY-G is insufficient due to increased material, transportation costs, etc., in the post-Corona period. Therefore, reducing these conflicts in the application process, sanctioned amount and installments under the PMAY-G scheme is required an alternative. In this study, the complete precast house unit installation is proposed as an alternative solution for rural areas. A material and cost comparison is also conducted between precast and traditional construction methods. A viable solution is suggested for beneficiaries to construct a housing project with proper planning under the scheme. It may improve the users from the SEC group, which is also highly beneficial for running the housing schemes.

