Research Journal of Engineering Technology and Medical Sciences (ISSN: 2582-6212), Volume 06, Issue 02, June-2023 Available at www.rjetm.in/

# Transforming Urban Housing in India: A Comprehensive Review of the Pradhan Mantri Awas Yojana in Bhopal

<sup>1</sup>Jyoti Singh, <sup>2</sup>Afzal Khan

<sup>1</sup>Mtech scholar. Department of Civil Engineering, Millennium Institute of Technology, Bhopal, MP, India <sup>2</sup>Assistant Prof., Department of Civil Engineering, Millennium Institute of Technology, Bhopal, MP, India

Email singhbetu383@gmail.com

\* Corresponding Author: Jyoti Singh

Abstract: This review paper explores the transformative effects of the Pradhan Mantri Awas Yojana (PMAY) in addressing India's urgent need for affordable urban housing, focusing on the case study of Bhopal, Madhya Pradesh. Launched to combat the housing deficit amid rapid urbanization, PMAY represents a significant government initiative towards 'Housing for All by 2022'. Our study delves into the program's strategic objectives, implementation methods, and outcomes in Bhopal, offering a critical assessment of its impact on urban development. We analyze the program's effectiveness in fostering sustainable growth, inclusivity, and improved living conditions for the urban poor. By examining the challenges and successes in Bhopal, this paper seeks to contribute to the broader discourse on viable urban housing policies in India, highlighting lessons learned and policy implications for future endeavors in sustainable and equitable urban housing development.

**Keywords:** Pradhan Mantri Awas Yojana, Affordable Urban Housing, Sustainable Development, Bhopal Case Study, Indian Urbanization, Housing Policy Analysis, Urban Poor, Urban Development Strategies.

# I. INTRODUCTION

The urbanization wave sweeping across India has brought with it a multitude of challenges, none more pressing than the need for adequate and affordable housing for the burgeoning urban population. Recognizing this imperative, the Government of India launched the Pradhan Mantri Awas Yojana (PMAY), a visionary initiative aimed at addressing the housing deficit and improving the living conditions of the urban poor. In this context, our review paper delves into the specific case study of Bhopal, the capital city of Madhya Pradesh, to scrutinize the impact and efficacy of the Pradhan Mantri Awas Yojana in reshaping the urban housing landscape.

Pradhan Mantri Awas Yojana, conceived with the ambitious vision of 'Housing for All by 2022,' unfolds as a multifaceted program designed to cater to the diverse housing needs of the urban populace. Our review seeks to unravel the layers of this transformative initiative in the unique context of Bhopal, a city emblematic of the urbanization challenges faced by many rapidly growing metropolitan areas in India.

The introduction of PMAY in Bhopal marks a pivotal juncture in the city's urban development trajectory. With a focus on inclusivity, affordability, and community participation, PMAY envisions not only providing shelter but also fostering sustainable and holistic urban growth. As we embark on this review, we aim to shed light on the strategic objectives that underpin PMAY, the methodologies employed for implementation, and the outcomes realized in Bhopal. Through a meticulous examination of achievements, challenges, case studies, and policy implications, our review aspires to contribute to the broader understanding of effective urban housing policies in the Indian context.

Bhopal, a city steeped in history and culture, presents a dynamic backdrop for this study. The review will navigate through the labyrinth of urban challenges, assessing how PMAY has shaped the city's skyline and, more importantly, the lives of its residents. By scrutinizing the achievements and setbacks, we aim to distill valuable lessons that can inform future urban housing policies and contribute to the ongoing discourse on sustainable and equitable urban development. House is one of the three basic human requirements besides food and cloth. Even after 70 years of independence, India is still grappling with the growing housing problem, especially of the urban poor. The rapid population growth in urban areas has led to acute housing shortages and poor urban living conditions. Continuous influx of rural population to cities in search of jobs is causing problems on urban housing. The 20th century witnessed a rapid growth in urban areas. Rapid growth of the urban poor. Housing affordability is currently a prominent concern in India, specially in urban areas. Globally, there have been several interventions which have aimed to provide affordable housing solutions for all [1]. India is known as an agrarian economy although share of agriculture and its allied services is as low as 19.9% whereas population dependent on agriculture for livelihood is as high as approx. 58% of total population. Agriculture sector of India is facing various problems such as excess employment burden, crop failure,

and non- remunerative prices for quite long so much so that most surveys conducted by government and non-government agencies point out that nearly 60% of total farmers want to quit agriculture [2].

## **II. LITERATURE REVIEW**

Anurag Mahure and Amit Kumar Ranit (2018)[3] the primary objective of the examination was to plan, timetable, and track a private venture with assistance of primavera programming, study the outcomes created, it was conceivable to recommend which strategy is appropriate for the chosen private task. Venture Monitoring goes about as a notice system; it is the way toward recording, gathering and revealing data concerning extending execution that the undertaking supervisor and others wish to know. Observing incorporates watching the advancement of the undertaking against time, execution timetable and assets during a real execution of the venture and it distinguished the slacking regions which require opportune consideration and activities. It is extremely normal to see venture neglecting to accomplish their missions inside determined time and financial plan, the components causing invade as expressed above insufficient undertaking definition, lack of foresight and absence of task the board during execution, however, the fundamental driver of disappointment can be ascribed to cost assessment disappointment and the executives disappointment.

Ajesh Pilaniya and Ashwin A. Mahajan (2018)[4] The aim of this research was to highlight the significance of using Primavera P6 Web in intricate construction endeavors such as metro rail projects. This goal was accomplished by identifying and examining the benefits of the P6 Web version compared to the client-based variant. The study found that this software enhances efficiency and contributes positively to project outcomes. It is tried and tested software and certainly it improves the efficiency of overall project. It acts as excellent communication bridge between upper management and all other teams who physically check on the progress of project. The research paper dealt with advantage and added benefits of Web based primavera P6 for planning and scheduling of Pune Metro Rail Project.

Mohammad Afzal S. Siddiqui and Abhijit N. Bhirud (2018)[5] the research paper listed the activities of Pune metro rail bridge work for a 10km stretch of bridge work and highlights the enterprise project structure, organizational breakdown structure, the work breakdown structure and its activities and thus highlight the impact of Primavera P6 in the planning of projects of greater magnitude. The results stated that the route from the Pimprichinchwad to the Range hill section was planned in Primavera in the research paper which was based on tentative times of activities depending upon their working times required for each activity to finish. This is an estimated time required to complete the project not considering the other major causes of delay which can include political obstacles, non-cooperation of other departments on site utility obstacles etc.

Akshay R. Kohli (2017)[6] the primary objective behind the research wasto identify construction sequence for building construction and even identify technique used in developing planning and scheduling. The scheduled model was prepared using Primavera Software so as to identify proper execution of the planning and scheduling. This approach is employed to examine shortcomings in an organization's planning and scheduling strategies, proposing appropriate enhancements to their methodologies. The findings conclude that the study offered a thorough examination of project management using Primavera P6 EPPM software, covering all related facets. The process for managing the construction of the building is detailed, focusing on aspects of planning, scheduling, and the allocation and balancing of resources. The concepts of budget optimization and updating have been understood and the project has been completed in an efficient manner.

Alberto Cerezo-Narváez et al. (2020) [7] the research paper dissected whether the coordination of a cost breakdown structure (CBS) can prompt the age of more vigorous WBSs in development ventures. Throughout the most recent years, some global associations have normalized and fit diverse cost arrangement frameworks (e.g., ISO 12006-2, ISO 81346-12, OmniClass, CoClass, UniClass). These cost data sets have likewise been brought into building data displaying (BIM) structures. We estimate that in BIM conditions if these CBSs are utilized to produce the venture WBS, a few preferences are increased, for example, more keen task definition. This upgraded venture definition decreases venture logical inconsistencies at both arranging and execution stages, foresees likely timetable and spending deviations, improves asset designation, and by and large it permits a superior reaction to potential task chances. The speculation that the utilization of CBS's can produce more vigorous WBSs is tried by the reaction investigation of a poll overview disseminated among development professionals and venture administrators. Utilizing auxiliary condition demonstrating (SEM), the connection (understanding) and recognition contrasts between two 250-respondent subsamples (specialized venture staff versus venture the executive's staff).

**Abdul Aziz and Sanjeet Kumar (2019)[8]** the research aimed to know difference between the manmade and primavera software, in estimation of scheduling of financial and work management of a project with the aid e.g. literature references and the unique methodology in monitoring and control with the help of primavera software. The The projected timeline for completing the G+4 building at Osmania University in Hyderabad, as estimated by the contractor, spanned 560 days, roughly equivalent to 18 months. However, with meticulous planning, effective control, and continuous monitoring of each activity, the same project could potentially be executed within a more optimized timeframe primavera tool the expected time of the project completion is estimated to be 486 days only. The planning of various activities throughout the project run would be optimum, then financial and work management can be done

properly. The primavera software P6 is a perfect and efficient tool for the project management and for the purpose of monitoring and controlling of the various construction projects.

#### **III. PROJECT CASE STUDY**

Pradhan Mantri Awas Yojana (Urban) Mission dispatched on 25th June 2015 which expects to give lodging to all in metropolitan territories continuously 2022. The Mission gives Central Assistance to the executing offices through States/Union Territories (UTs) and Central Nodal Agencies (CNAs) for giving houses to every qualified family/recipients against the approved interest for houses for about 1.12 cr. According to PMAY(U) rules, the size of a house for Economically Weaker Section (EWS) could be up to 30 sq. mt. cover zone, notwithstanding, States/UTs have the adaptability to improve the size of houses in interview and endorsement of the Ministry.

The following sub work breakdown Structure (W.B.S) are:

WBS is a grouping of different elements of the project with concerned to specific project and it organizes or impinges to determine the overall intent of the project.

- Survey and Site Investigation.
- Substructure.
- Super Structure.
- Finishing Work

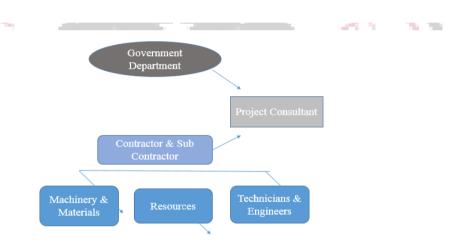


Figure 1 Hierarchal Structure of Construction Project India's rise as a significant international player hinges on its ability to effectively address rural poverty and development. Recognizing this, the Government prioritizes rural transformation through enhanced livelihoods. Providing adequate housing has been a key policy goal for successive Indian governments, both at the central and state levels. The Pradhan Mantri Awas Yojana, an initiative by the Government of India, aims to achieve 'Housing for All' by 2022. This program is designed to meet the housing needs of the urban poor, including those living in slums, through a series of strategic procedures.

#### **Project Details**



### V. CONCLUSION

The Pradhan Mantri Awas Yojana in Bhopal serves as a pivotal example of India's efforts to address the urban housing crisis. Our comprehensive review reveals that while PMAY has made significant strides in providing affordable housing and enhancing the quality of life for many urban dwellers, it also faces notable challenges. These include issues related to implementation, resource allocation, and meeting the diverse needs of the rapidly growing urban population. The experience of Bhopal underlines the importance of community participation, effective policy design, and flexible approaches to accommodate varying urban dynamics. The insights gained from this case study are invaluable for shaping future housing policies and urban development strategies, not only within India but also in other rapidly urbanizing regions globally. There is a pressing need for continuous evaluation and adaptation of such programs to ensure they meet their intended goals and truly benefit those in need.

#### REFERENCES

- [1] Gohil, J., & Gandhi, Z. H. (2019). Pradhan Mantri Awas Yojana (PMAY) Scheme—an emerging prospect of affordable housing in India. *Int Res J Eng Technol*, 6(12), 2546-2550.
- [2] Sharma, S. (2021). A Critical Appraisal of Pradhan Mantri Fasal Bima Yojana. International Journal of Social Sciences Arts & Humanities [IJSSAH]. Internet Sources.
- [3] Abdul Aziz and Sanjeet Kumar, [Financial and Work Management Analysis for Residential Construction: a Case Study], International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-7, Issue-6C2, April 2019.
- [4] Kottamasu L. N. Panakala Rao and K. Shyam Chamberlin, [Resources Optimization in Construction of a Residential Apartment by using Primavera: a Case Study], International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-7, Issue-6C2, April 2019.
- [5] AnuragMahure and AmitkumarRanit, [Project Management using Primavera P6], International Journal of Engineering Research & Technology (IJERT), ISSN: 2278-0181, Vol. 7 Issue 04, April-2018.
- [6] AjeshPilaniya and Ashwin A. Mahajan, [A Review of Planning & Scheduling of a Pune Metro Rail Project using Primavera P6 Web], IJSRD - International Journal for Scientific Research & Development Vol. 6, Issue 09, 2018 | ISSN: 2321-0613.
- [7] Mohammad Afzal S. Siddiqui and Abhijit N. Bhirud, [EPS, OBS, Project Activities for Pune Metro Phase-1 in Primavera P6], Journal of Advances and Scholarly Researches in Allied Education, Vol. XV, Issue No. 2, (Special Issue) April-2018, ISSN 2230-7540.
- [8] Akshay R. Kohli, [Enterprise Project Management using Primavera P6 EPPM], International Research Journal of Engineering and Technology (IRJET), Volume: 04 Issue: 12 | Dec-2017, Impact Factor value: 6.171.