

# A Review on Affordable Housing By Rasing Finance Using Loan And PMAY Subsidy

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**Abstract-** *Housing is one of the basic requirements after food and clothing. Each one dream for owning a suitable house in our life span. In today's context when India is heading towards an era of overall development, it is more than essential that we create an environment to anable affordable housing for all.*

*Paper reviews affordable housing many previous works and key findings and further it also includes various materials as per fabricated doors and windows and techniques studied to understand their role in low cost housing in rural areas. Finally Financial banking model is described by which low cost housing can be possible.*

*(affordable housing, low cost materials and PMAY)*

## I. INTRODUCTION

The 2011 Consensus of India reveals that the urban population of the country stood at 377 million or 31.2 percent of the total population. It is projected that the urban population will grow about 470 million in 2021 and 700 million in 2041. Housing has been one of the priorities of the Government of India right from the first Five year plan. Government has provided fiscal incentives to promote housing from both the demand and supply sides. Since independence, a large number of schemes were launched under different names, though the focus remaining on the housing of the poor; especially the urban poor. Low cost housing can be achieved by use of efficient planning and project management, low cost materials, economical construction technologies and use of alternate construction methods available, in addition to all affording home with least finance in hand availability is focused in this paper.

## II. LITERATURE REVIEW

S Husain, et., al., 2018; "Pradhan Mantri Awas Yojana", a noble mission to construct 20 million affordable housing units by the government is an ambitious scheme with challenges. The government is all set to spend a minimum of one lakh rupees on each housing unit. This fund will be used to rehabilitate and thereby improve living conditions of Indian

slums by providing affordable housing. The various challenges faced include replacing slums with low-cost sustainable construction with structural integrity that can withstand Indian sub-tropical conditions. The main objective is to provide the information to the industry with an option of using low-cost housing that can effectively provide an alternative to conventional housing construction and help into improve the living condition of people in Indian slums [1].

Manjesh Srivastava, et., al., 2018; Low cost housing refers to those housing units which are affordable by that section of society whose income is below than median household income. This depends on three key parameters—income level, size of dwelling unit and affordability. The various aspects of predestined building methodologies by highlighting the different available techniques, and the economical advantages achieved by its adoption. In a building the walls, floors and roofs are the most important sections, which can be analyzed distinctively based on the needs, thus, improving the speed of construction and reducing the construction cost. The use of local materials in the different components of building to make them as low cost available solutions for low income groups. To own a house by middle and lower income groups in today's economic trends is very difficult. Therefore, it has now become a necessity to adopt cost effective, innovative and environment-friendly housing technologies for the construction of houses and buildings and availing them at low cost comparatively. In order to come up with viable solutions this paper compares the construction cost for the traditional and low cost housing technologies and it was observed that with the use of technology and reuse of waste material as building material the cost of construction can be minimized to an extent. It was observed that with if the filler slab can be used as an alternative to conventional slab the cost of construction can reduce upto 25%. With the time more studies are going to identify the reuse of waste material like flyash, rice husk, etc as building material. After realizing the true potential of these waste materials as building material in construction industry the cost can be minimized to a greater extent. In addition the building up of cooperative to supply those alternative raw materials rather than importing from

somewhere else would help in reducing the cost by 20–30% [2].

**Ramakrishnan N, et. al.** 2018, Author Focuses on focuses on four broad models of affordable housing development in India – (i) area-based models (ii) agency models (iii) partnership models (iv) enterprise models. The salient features of these models are explained through specific case projects under each category. Finally, these models are compared on a matrix so as to help the various players of housing development in the adoption of such/ similar models in other areas. The replication potential of these models in other settings/contexts is also discussed through feature mapping done in the matrix. [3]

**Deepti Pande Rana, et. al., 2016;** Urbanization is generating a massive housing shortage and the growth of slum conditions in India. This growing concentration of people in urban areas has led to problems of land shortage, housing shortfall and congested transit and has also severely stressed the existing basic amenities such as water, power and open spaces of the towns and cities. This is primarily due to the skyrocketing prices of land and real estate in urban areas. Development of large-scale affordable housing is the greatest necessity of urban India today. The objective of creating affordable housing is to provide adequate Affordable Housing shelter to all. Creation of affordable housing should encompass both – enabling people to buy and to rent, for which there is a need to put an institutional structure in place. While the concept of affordable housing seems to be a simple solution to current housing woes, its execution remains complicated due to the unclear policy framework. To make affordable housing work in India, it would require “will” from all the stakeholders by slightly adjusting their interests towards a wider social cause [4].

**S. Baqutaya, et. al., 2016;** Shelter is a fundamental human need. Housing plays a vital role in people’s wellbeing while equally contributing to the physical and mental health, education, employment and security outcomes for individuals. Still, so far the major challenge is housing issue particularly on the establishment of adequate affordable livable home standards for the nation; and failure to achieve that will lead to a housing stress. For that reason, this study presents a research on issues related to affordable housing among middle-income groups. It examines on how certain issues of housing affordability affect societal well being. The purpose is to present an overview of affordable housing problem and to set out a series of options that should be considered as part of a comprehensive “way in managing these issues”. Data was gathered from fifty respondents, using “housing issues questionnaires”. The accumulated data were then analyzed;

descriptive statistics were used to interpret these issues. The key findings indicated that three main housing issues faced by middle-income groups are housing price, housing loan and housing schemes’ policy. Hence, it is highly advisable to address these issues to ensure the vast majority of the population are affordable to own livable property and directly may enhance the quality of life [5].

**Anindo Sarkar, et. al., 2016;** In this paper, the Government of India's programmes for affordable housing in India, is criticized, viz. the Rajiv Awas Yojana and Housing for All 2022. The efficacy of these policies is analysed in being able to provide the sections of the population who are unable to avail housing from the formal market, both through direct support and most importantly in addressing the many distortions that have made the housing unnecessarily expensive, while taking away much of the value to consumers. It is argued that while these programmes and policies are a major advancement over the previous approaches, they do not fully exploit the potential that is there in increased FSI, sensitivity of low cost housing development to exploiting locational value appropriately, to use of government land judiciously, to the reform of titles and squatter rights, and to more efficient land use changes. They are also constrained by an inability to distinguish between what the markets can be coaxed to deliver and where state intervention becomes necessary [6].

**M. Ravi Kanth, 2016;** Affordability is measured in terms of disposable income and affordable housing is categorized in terms of cost of a house, as a proportion to the total income of a household. For the urban poor, the cost of affordable house should not exceed five times the household gross annual income and the EMI/rent should not exceed 30 per cent of the household’s gross monthly income. As a result, providing affordable housing is a daunting task, particularly when the cost of building material and land prices are on the rise. The gap between supply and demand of low cost housing for this income category is increasing, since it is impossible to construct a house within affordable limits for this group. If left to the market forces, builders will target the groups with a predictable and regular disposal income. Thus, middle income and high income groups become an obvious choice, since they are considered bankable. Lack of market support in favour of poor households, limits the supply of housing for them and blocks the opportunity of aspiring households, resulting in increasing financial stress, personal underachievement and societal costs [7].

**Abhijith V , et. al., 2013;** The primary objective of this paper is to study the urban housing problem in India and provide a viable solution to overcome this. It tries to identify

the main reasons for the inadequacy of low-cost housing units and why the government and private sector have failed to address this issue. The article analyses the business model of an NGO, “Habitat for Humanity India” to identify the different stakeholders and their roles and responsibilities. Based on the learning gained, the article tries to propose a scalable and sustainable model to alleviate this growing problem [8].

**Jingchun Lin, 2011;** The development of ‘Affordable housing’ has become an urgent and important topic of discussion in China. Unlike in western countries where the social welfare system has been set up for many years and the public housing system also is mature, in most of Asian countries, the social welfare systems are still weak in relation to their large amount of low-income populations. The gap between rich and poor is considerable large, and is still increasing; many people with low-income could not afford their own houses since the minimum down-payment and the entry-requirement of real estate market are both increasingly high; the ‘Affordable housing’ is therefore very difficult to be developed appropriately under this circumstances [9].

**Salem Y. Al Qudwa, 2013;** The term minimalism is used to describe a trend in design and architecture where the subject is reduced to its necessary elements. In terms of architecture and for the purposes of this thesis, the concept of minimalist architecture is described in the following way: To strip everything down to its essential quality and achieve simplicity, by sorting out highest priority architectural requirements are, and then to do the possibly least to achieve them. Other aspects of this trend are using basic and elemental geometric forms, raw materials, and the repetitions of structures which represent a sense of order and essential quality [10].

### III. AFFORDABLE HOME BY BANK LOAN AND PMAY SUBSIDY

Definition of Affordable Housing [Indian Financial and population Census 2011], Economic weaker section family income Rs 150000/- while low income group of family income Rs 150000/- -300000/- . Herby suggesting the affordability to purchase home is as below.

**Table 1.** Eligibility by Bank Finance under PMAY Scheme

Yearly Family Income (INR)	1,50,000
Required Home Loan Amount (INR)-1800*350	6,30,000
Interest Rate (Per Annum)	8.5%
Loan Tenure	30 Years

Here 8.5% is assumed on long term basis as it is now currently as low as 6.75%. Assumptions of loan amount of Rs 630000/-

**Table 2.** Loan Amount Comparative: PMAY Vs. Prevailing Home Loan Rates

Calculations per PMAY Subsidy Scheme as per ROI 8.35%	Calculations per Current Home Loan Rates as per ROI 8.5%
Loan Amount	Loan Amount
Rs. 6,30,000	Rs. 6,30,000
Monthly Instalment (EMI)	Monthly Instalment (EMI)
Rs. 4,560	Rs. 4,844
Total Interest Amount	Total Interest Amount
Rs. 10,11,660	Rs. 11,13,896
Total Amount (Principal + Interest)	Total Amount (Principal + Interest)
Rs. 16,41,660	Rs. 17,43,896

In view of above table it is evident that if loan amount is Rs. 6,30,000/- (1800 Sq. Ft. x Rs. 350 per Sq. Ft.), then monthly installment payable as per PMAY subsidy scheme at 8.35% rate of interest shall be Rs. 4,560/- while monthly installment calculated is Rs. 4,844/- as per prevailing home loan rates i.e. 8.5%.

Having a house is a very basic need of every human being. With the vision of providing urban and rural poor a home of their dreams, Our Prime Minister Mr. Narendra Modi launched two housing schemes under Pradhan Mantri Awas Yojna. He announced the same on December 31, 2016 when he addressed the entire nation. People who take loans of Rs. 9 Lakhs and 12 Lakhs in 2017 will now get a subsidy in their interest rates. The scheme designed for the people belonging to LIG and EWS category will allow them to get a home loan up to Rs. 9 Lakhs at an interest subsidy rate of 4%.

### IV. CONCLUSION

Previous Studies have suggested various schemes and techniques of affordable housing in nation. In this paper a generalized view giving a financial model by loan and materials as in reviews for low cost of construction. This paper concludes briefly that basic criteria to avail home is finance which is generally not available with economic weaker section. If each family in economically weaker section using subsidies’ and ease of loans by banking can manage finance and repay with very low interest and monthly installments although in long term.

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