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Affordable Housing: The Growing Demand for Indian Sector

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Abstract: Within the attractive real Estate sector of India, affordable housing seems to be a bright opportunity for private players. The potential of affordable housing is very high, by the very nature of its business model, which is connected with India's largest part of population, which is low income population or in other words middle class people. But at the same time, there are certain challenges encountered by private players in affordable housing business like taxation, land, approvals, finance issues etc. This study examines the major hurdles or challenges encountered by private players and also tries to evaluate the challenges encountered by the customers of low income population. Challenges encountered by developer and customers were found by Pie Chart, Mean and Median analysis method. So ultimately we will be able to find out the issues of affordable housing and its implementation issues in Indian sector.

Keywords: Affordable Housing, Low-Income Population, Middle-Income Population, funding issues, Non-profitability.

I. INTRODUCTION

The Indian real estate sector has rebounded strongly in the post crisis environment, supported by an innate, robust appetite for housing, and other favourable economic and sector drivers. The main economic drivers are sustained high levels of output growth and rising disposable incomes, which are fuelling an era of consumerism. Within the real estate sector, an expanding middle-class population and rapid urbanization rates, coupled with supportive policy measures, are the key factors driving growth.

'Affordability'^[1], is a nonspecific term, the meaning of which changes with the context being considered. As a result, there is no fixed definition of affordable housing that can be applied uniformly across the world. The definition and scope of affordable housing is greatly contingent on a country/region's level of economic development and income levels.

A. Need for Study

- 1) The affordable housing sector is clearly in need of supply amplification.
- 2) Also many of the locations for affordable housing projects are deficient in support infrastructure; The absence of sufficient tax incentives for developers of affordable housing; And the unfriendly state of FDI processes in India etc. can be considered as challenges.
- 3) Considering that the profit margins in this segment are inherently thin and become attractive only when a sizeable number of units in such projects are developed and sold, the cumulative challenges are not insignificant. Investing in affordable housing is a play on volumes, which means that it calls for large supply.

B. Scope of Study

Scope of this study is majorly restricted to examine and evaluate the challenges faced by developers working in SURAT and low & middle income customers of SURAT city areas which are major hubs of affordable housing such as Nilgiri Road, Godadra, Amroli And Bamroli area. Etc.

This research work is limited for SURAT city only, Questionnaires based investigation is carried out and Analysis of questionnaires will be done by mean and ranking method.

C. Problem Statement

As middle income people having the highest population in developing country so problem related to shelter is increasing day by day and issues like Lack of Availability of Land, Excessive Control on Development of Land Creates Artificial Shortage, Lack of Marketable Land Parcels, Titling Issues and Lack of Information.

D. Objective

To fulfill the aim of the research the following research objectives are imperative:

- 1) To identify the challenges related to affordable housing for Low and Middle income population.
- 2) To Evaluate the Identify Challenges with Perspective to Users and Developers.

II. LITERATURE REVIEW

- 1) *Jyoti Trivedi And Ajit Lalaji 14th November 2013*: This paper was focused on potentialities of PPP model for affordable housing to urban poor to achieve a balance between market forces and the needs of the low-income people. This paper was to investigate and analyze enabling forces for paving the way of developers, government, non-government organizations (NGO's) and financial institutions to improve service delivery and risks associated towards development in the adoption of PPP model for affordable housing. This paper also discussed about challenges of affordable housing in India such as land & infrastructure, financing, taxation, approvals, marketing, etc.
- 2) *A.R. Musa, N. M. Tawil*, S. M. Sood, A. I. Che-Ani, N. Hamzah, H. Basri:-* This paper was focused on affordability of young generation people to have their own house in early age of working. This research then appraises the costing of materials for commercial housing development as possible avenue for cost reduction in the house price. In addition with the nation's need to fulfill the people housing needs, green sustainable living is also of importance to the government so they concern in this research is to design towards the development of critical construction processes in housing project management for developing affordable and sustainable housing scheme. This Research also help in housing construction in determining which element that can help in reducing the price of new houses.
- 3) *Enas Ahmed Abdulla Shaqra'a, Nurwati Badarulzaman, Ruhizal Roosli :-* In this paper they put out a questionnaire survey was conducted. The sample of the study was 369 of resident's respondents. The results of the study the results of the study showed that the housing cost in aden. The chief among them is that the government should Pursue a housing delivery strategy that is 'End-users Driven', This study is focused on the affordable of housing provided in the private housing schemes. Push and Pull factors for Entry of private players in the affordable housing segment.
- 4) *Aditya Agarwal, Vikram Jain & Ashish Karamchandani (Monitor Deloitte Survey – July 2013*: In this paper they have discuss about the Demand and supply side challenges for affordable housing they have also converse about the role of private developers and HFSC in progress of LIH segment increase of LIH segment in Ahmadabad by 2013, mover over they have deliberate about Progress of the Low-Income Housing Market – Potential Housing Demand in different segment (Several supply and demand side challenges were responsible for under-development of affordable housing sector in the past).they also extravagant the Government policies and regulations for both demand and supply side along with other players enabling robust functioning of the ecosystem. They have detailed on Demand and supply side drivers multiple favorable factors are breaking the barriers and paving the way for explosive growth Apart from new housing finance companies, a large number of established financial services/banks have also entered into affordable housing finance market. Increase in LIH segment in Ahmadabad by 2013.
- 5) *Kalpna Gopalan, Madalasa Venkataraman 19th may 2015*: This paper reviles that out of 18 million house 99% of the house comes in EWS. They have also talked about the Challenges In India like – Road ahead; challenges and potential – Reasons For Low Affordability Improving affordability, transparency, sustainability and growth. They also flesh out on Issues in the Development of Affordable Housing like scarcity of land, scarcity of marketable land parcels, titling issues, rising cost and regulatory constraints. They also enhance about the international experience in this sector

III. RESEARCH METHODOLOGY^[22]

A. Surat Scenario

SURAT: Despite the slowdown in realty market, affordable housing remains a distant dream for the common man. With a 20% rise in the cost of building material in a year, an affordable house appears to be slipping further away from his reach.

"The prices of cement and steel have not gone down and neither have they remained stable," said Sagar Dandwate, a contractor so looking towards the need of development of affordable housing Surat having many opportunities for development of this type of Projects.

B. Methodology Adopted

The research methodology includes following essential steps:

- 1) Identifying the various challenges encountered by private developers in affordable housing segment and challenges encountered by low income population in accessing housing through literature review
- 2) Studying the significance of the factors through questionnaire survey and getting the perspective of developers and customers
- 3) Analyzing the data through:
 - a) Pie Chart Analysis
 - b) Mean, Median & Mode Analysis
- 4) Validation of results of data analysis through case study
- 5) Deriving suitable conclusions & propose suggestions

C. Pilot Study

Pilot study was conducted to shortlist the challenges faced by Private Developers which were identified from the literature review. As there were around 40 challenges were found from literature review, so there arise a need to do pilot study to shortlist them to smaller numbers.

Pilot study was conducted based on a questionnaire formed for the challenges faced by developers identified from literature review. Those 40 challenges were categorized into 7 heads namely government incentives, taxation, land, approvals, policy, affordability, miscellaneous etc.

D. Detailed Questionnaire based on Pilot Study Findings^[22]

A detailed questionnaire survey was used as the primary means of data collection from various private developers involved in affordable housing projects in Surat City. The sample size of the questionnaire for developers was 24 in numbers.

Another detailed questionnaire survey was used for data collection from low-income people and middle-income people who are major customers of affordable houses in Surat City. The sample size of the questionnaire for customers was 100 in numbers.

IV. DATA ANALYSIS AND DISCUSSION

The data analysis was carried out qualitatively by interviewing the respondents and asking them to identify the factors and ranking them for pie chart and mean analysis method. The respondents of the questionnaire were asked to rate on the scale of 1 to 5 based on the agreement or disagreement on the measures to find out critical challenges as shown below:

Ratings: (SD or -2) Strongly Disagree, (D or -1) Disagree, (N or 0) Neutral, (A or 1) Agree, (SA or 2) Strongly Agree

[Reference: The Effect of Typeface on the Perception of Email by A. Dawn Shaikh, Doug Fox & Barbara S. Chaparro]

A. Analysis for challenges faced by Developers

For analysis of data collected through developer segment questionnaire 2 different data analysis methods were adopted. Those 2 analysis methods were Pie Chart Analysis and Mean Analysis.

Total number of respondents = 12

1) Pie Chart Analysis for Developer's Profile

- a) The respondents were asked to identified the type of structure of their company. The results are presented in Fig. 4

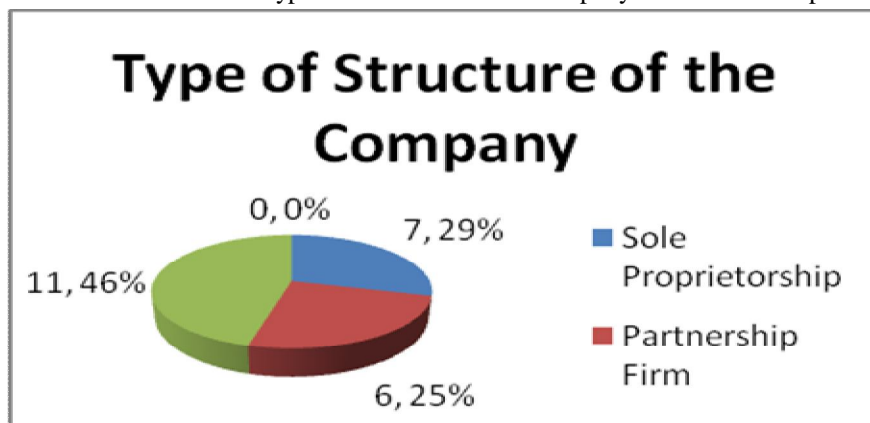


Fig. 1 Type of Structure of the Company

- b) The respondents were asked to indicate their years of operations in construction business. The results are presented in Fig. 5

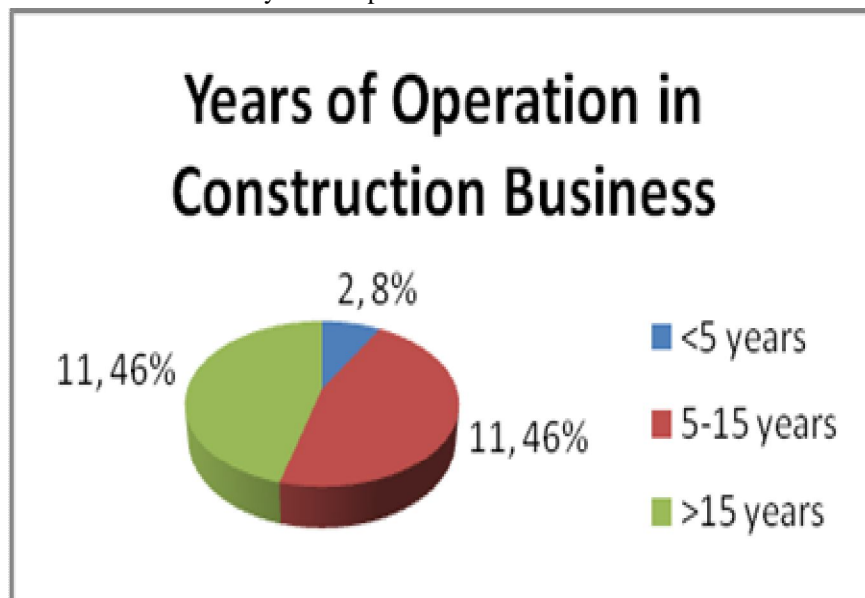


Fig. 2 Years of Operation in Construction Business

- c) The respondents were asked to indicate the number of housing units constructed by their company. The results are presented in Fig. 6

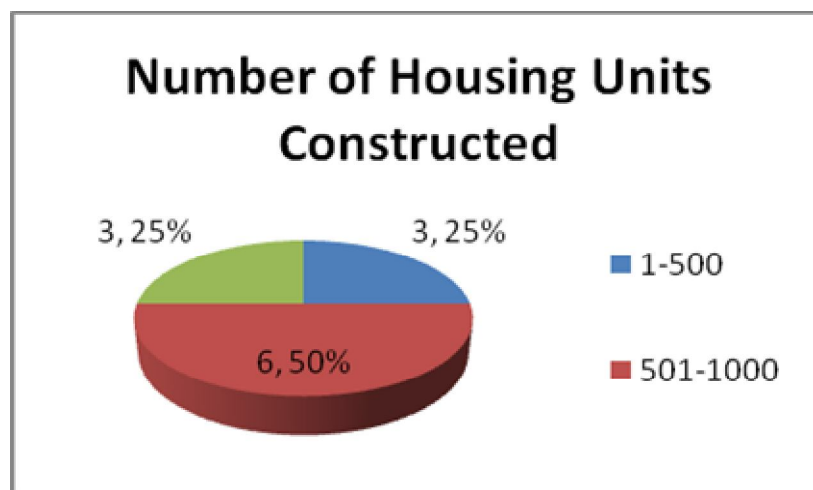


Fig. 3 Number of Housing Units Constructed

2) Motivations behind players in housing industry (Mean Analysis)

Table I shows mean analysis for motivations behind players in housing industry.

TABLE I
Motivation Behind Players In Housing Industry

Statement	Mean
Maximum Profit Motive	0.75
Social Need Motive	0.70833
Government Incentives	-0.20833

3) Analysis for challenges encountered by housing developers for affordable housing development (Mean Analysis)

Table II shows the mean analysis of challenges encountered by developers.

TABLE II

Mean Analysis Of Challenges Encountered By Developers

Challenges	Mean
Government Incentives	
FSI	0
TDR (Transfer of Development Rights)	0
Free land	0.08333333
Subsidies	0.25
Stamp Duty	0.41666667
License Fee	0.66666667
Scrutiny Fee	-0.16666667
Development Charges	0.25
Stamp Duty	0.125
Taxation	
CGST & SGST	0.625
Income Tax	0.91666667
Land	
Procurement	-0.25
Utilities	0.16666667
Topography	1
Soil Condition	-0.25
Land Cost (Market Value)	1
Approvals	
Transparency	0.875
Land Acquisition	-0.33333333
Single Window Clearance	0.83333333
Design Engineering	0.66666667
NA Clearance	0.66666667
Policy	
Lack of Vision	-1.08333333
Transparency in existing policy	0
Cross subsidization	-0.83333333
No Incentives to Private Players	0.08333333
Non profitable schemes	0.29166667
Mix housing schemes	0.04166667
Reservation of EWS in master plan	1.08333333
Affordability	
Delay in Project Delivery	-0.83333333
Land availability	0.08333333
Higher Land Price	0.16666667
High material cost	1
Miscellaneous	
Low Return on Investment	0.08333333
High Interest on Capital Finance	0.16666667
Excessive Control on Development creates Artificial Shortage	
Titling Issues & Lack of Information	
Lack of Access to home finance for low-income population	0.91666667
Lack of Clarity in building bylaws and guidelines	

After this mean analysis of challenges, mean taken out for all 7 categories by taken out avarage of mean of challenges comes under particular category as shown in Table III.

TABLE III
Mean Of Challenge Categories

Categories	Mean
Government Incentives	0.771
Taxation	0.542
Land	0.333
Approvals	0.333
Policy	0.203
Affordability	0.104
Miscellaneous	0.048

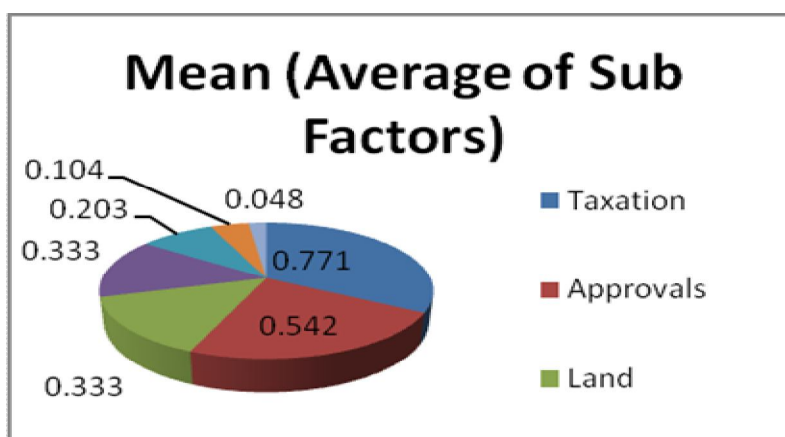


Fig. 4 Mean of Challenge Categories

B. Analysis for challenges of Low-Income Population in accessing housing

For analysis of data collected through customer segment questionnaire 3 different data analysis methods were adopted. Those 3 analysis methods were Pie Chart Analysis, Median Analysis and Mean Analysis.

Total Number of Resondents = 100

1) Pie Chart Analysis for Customer's Profile:

a) The respondents were asked to indicate age group. Results are presented in Fig. 7.

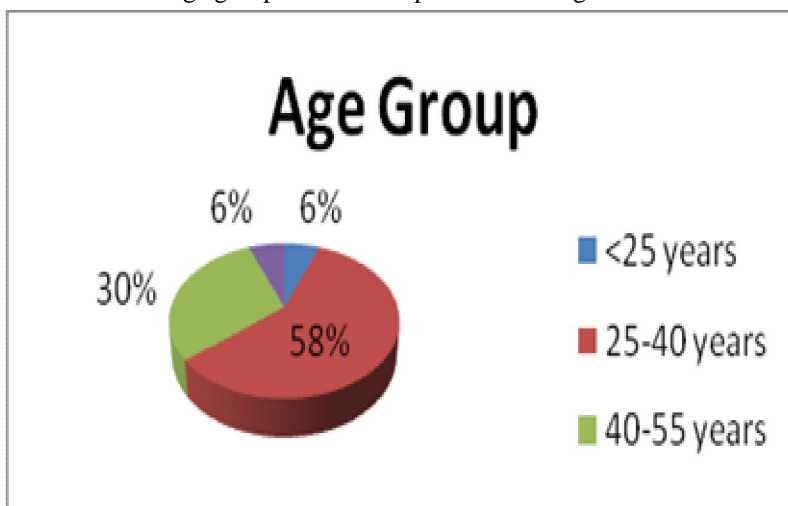


Fig. 5 Age Group of Customers

b) Respondents were asked to indicate income range. Results are presented in Fig. 8.

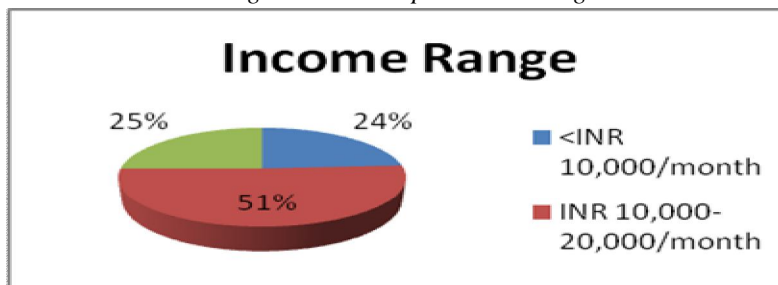


Fig. 6 Income Ranges of Customers

c) Respondents were asked to indicate their type of employment. Results are presented in Fig. 9.

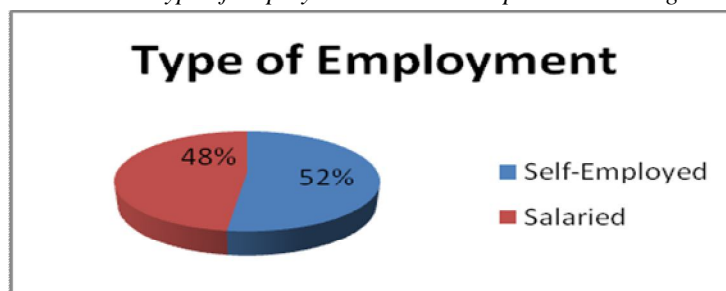


Fig. 7 Type of Employment of Customers

d) Respondents were asked to indicate the type of housing requirement they are currently facing. Results are presented in Fig. 10.

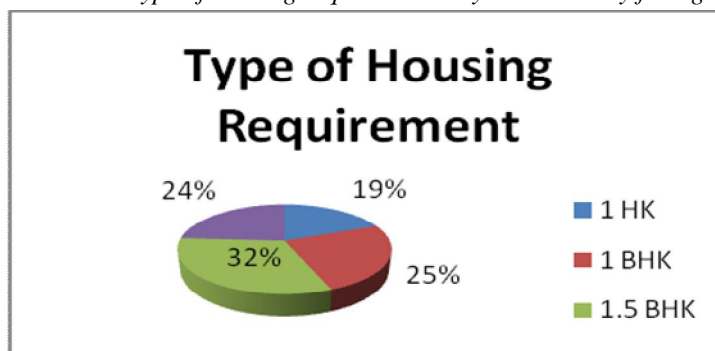


Fig. 8 Type of Housing Requirement of Customers

e) Respondents were asked to indicate the type of housing provision they will prefer to buy. Results are presented in Fig. 11.

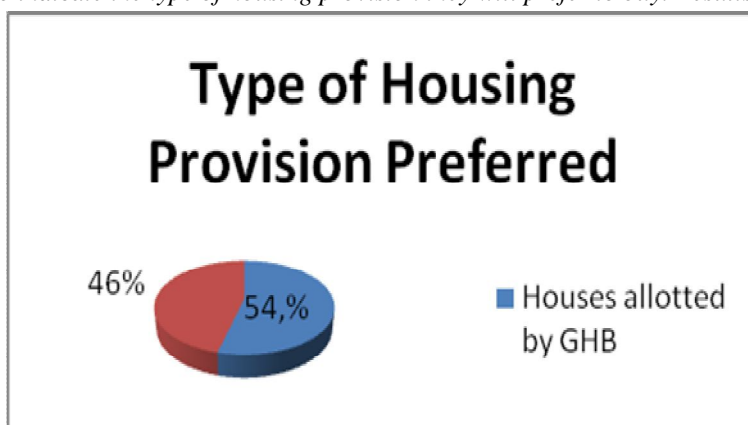


Fig. 9 Type of Housing Provision Preferred by Customers

2) Factors taken into consideration while purchasing affordable house (Median Analysis)

Respondents were asked to give rank order to certain parameters which they take into consideration while they go for purchase of affordable house. After data collection median was taken out for all parameters. Table 7 shows the results:

TABLE IV
Mean of parameters taken into consideration for purchase of house

Parameters	Mean
Price	1.99
Interest Rate	2.96
Location	3.68
Repayment Tenure	4.09
Developer Reputation	4.88
Documents Required	4.93
Collateral Requirements	5.41

3) Challenges faced by customers in accessing housing (Mean Analysis)

Table 5 shows mean analysis of challenges faced by customers.

TABLE V
MEAN ANALYSIS OF CHALLENGES FACED BY CUSTOMERS IN ACCESSING HOUSING

Challenges	Mean
Public authorities such as National Housing Bank	0.4
Lack of Marketable Land Parcels	0.32
Rising Threshold Costs of Construction	0.32
Low income resulting from unemployment/underemployment	0.31
Willingness of lenders to make mortgage finance	0.31
Gap between aspirations and actual affordability	0.29
Formally documented income proofs	0.23
Unable to distinguish between different developers	0.23
Lack of Information, Awareness & Confidence	0.21
Lack of Money	0.21
Lack of Access to Home – Finance for Low – Income Groups	0.2
Lack of Clarity in Building Bylaws and Guidelines	0.2
Excessive Control on Development of Land creates artificial shortage	0.19
Extremely stringent credit verification of customers	0.05
Margin Money Hurdle	0.04
Tedious procedures to legalize housing units	0.02
International developmental organizations such as World Bank, International Finance Corporation and Asian Development Bank	0.02
Poor Management of financial assets	0
Absence of ease in loan availability	-0.06
High Borrowing Cost	-0.2
High Collateral Requirements	-0.22
Long Process towards Ownership	-0.49
Rising cost of land	-0.55
Banks focuses on corporate services rather than individual banking due to high transaction cost	-0.55
Increased Rent	-0.56
Lack of availability of land	-0.58

V. CONCLUSIONS

During this study the most serious or major challenges encountered by the developers which were found during this study are in taxation, land, approvals and finance areas. To help them to overcome these challenges government needs to give some sort of relaxation or reduce percentage of taxation like income tax, sales tax, service tax, etc. Major challenges encountered by the customers found during study are gap between aspirations and actual affordability, lack of formally documented income proofs, margin money issues, lack of willingness of lenders to provide home finance to low income population. These issues are major hurdle in increment of housing provision.

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REFERENCES

- [1] Adel El Menshawt^a, Sherine Shafik^b, Fab\dwakhedr^{ab} "Affordable Housing as a Method for Informal Settlements Sustainable Upgrading" Published by Social and Behavioral Sciences 223 (2016) 126 – 133, 18th may 2016 [1]
- [2] Austin, J., & McCaffrey, A. "Business leadership coalitions and public-private partnerships in American cities" Journal of Urban Affairs , (2002), 24, 35-54. [2]
- [3] Agarwal, Aditya, Vikram Jain and Ashish Karamchandani, "State of the Low-Income Housing Market: Encouraging Progress & Opportunity to Realize Dreams of Millions." Deloitte Touche Tohmatsu India Private Limited, July 2013. [3]
- [4] Agarwal, Sachin. "Affordable Housing in India - Future Prospects & Challenges." 11 September 2014. [4]
- [5] A.R.Musa, N. M. Tawil*, S. M. Sood, A. I. Che-Ani, N. Hamzah, H. Basri "Constructing Formulation of Affordable Green Home for Middle Income Group" Published by Elsevier Ltd 2011. 20 (2011) 466 – 473 [5]
- [6] Azhan Abdul Aziz and Abdullah Sani Ahmad* Home Making in Low-Cost Housing Area, Faculty of Built Environment, Universiti Teknologi Malaysia, 81310, Skudai, Johor, Malaysia, 14-15 November 2009, 49 (2012) 268 – 281 [6]
- [7] Davidson, Nestor M. and Robin Paul Malloy. "Affordable Housing and Public-Private Partnerships." Ashgate New York (n.d.): 302. [7]
- [8] Enas Ahmed Abdulla Shaqra'a*, Nurwati Badarulzaman, Ruhizal Roosli" Residents' Perception of the Affordability of Private Housing Schemes: Lessons from Aden, Yemen" ASEAN-Turkey ASLI (Annual Serial Landmark International) Conference on Quality of Life 2014, 202 (2015) 389 – 399 [8]
- [9] Gopalan Enterprises. "Affordable Housing in India: A Challenge." n.d. Gopalan Enterprises. July 2012 [9]
- [10] Gregory. B, Keith. I, "The Effects Of Impact Fees On Multifamily Housing Construction", Journal of Regional Science 10 January 2006 [10]
- [11] H R Khan: "Enabling affordable housing for all – issues and challenges" International Conference on "Growth with stability in affordable housing markets, new Delhi, 30 January 2012 [11]
- [12] India Brand Equity Foundation. "Affordable Housing in India: Budding, Expanding, Compelling." IBEF. 30 February 2006 [12]
- [13] Indian Express Report. "National Council Of Applied Economics Research". 2010 [13]
- [14] Johnson, R. W. "The Economic Benefits of Open Space" Recreation Facilities and Walkable Community Design. pp. 28. (2010) [14]
- [15] Kalpana Gopalan*, Madalasa Venkataraman "Affordable housing: Policy and practice in India" IIMB-Century Real Estate Research Initiative, Indian Institute of Management Bangalore, Bangalore, Karnataka, India. 19 May 2015 [15]
- [16] Katz, Bruce, et al. "Rethinking Local Affordable Housing Strategies: Lessons from 70 Years of Policy and Practice." The Urban Institute (2003): pp.138. [17]
- [17] Krishnan, Rajesh. "Addressing Affordable Housing Challenges." Buildotech (Technology - Design - Sustainability). 25 August 2014. [18]
- [18] Malimakatso Louisa Thellane" Making Land Available For Affordable Housing: Challenges For Local Government" University of the Witwatersrand, Johannesburg. 19 December 2008 [19]
- [19] Michael J. Seiler, M. T. Lake View on real estate. (2008) 11. [20]
- [20] Niu, Y. "The performance and problems of affordable housing policy in China :The estimations of benefits, costs and affordability" International Journal of Housing Markets and Analysis, 2008. 1(2), Pp. 125-146. [21]



- [21] Salama, A.M. "A life style theories approach for affordable housing Research in Saudi Arabia. Emirates" Journal for Engineering Research, 2006 11 (1), 67-76 [22]
- [22] Shah, Sanjay. "Challenges in Development of Affordable Housing." National Symposium on Affordable Housing. Ahmedabad: DBS Affordable Home Strategy Limited, 22 July 2013. [23]
- [23] Trivedi, Jyoti and Ajit Lalaji. "A Public Private Partnership Model for Provision of Housing To Urban Poor." NICMAR - Journal of Construction Management March 2014: pp.18. [24]
- [24] V, Abhijit and Akhil Shanbhag. "Low Cost Urban Housing in India and Habitat for Humanity. IIMB-Century Real Estate Research Initiative, Indian Institute of Management Bangalore, Bangalore, Karnataka, India 2013. [25]
- [25] Woetzel, Jonathan, et al. "A Blueprint for addressing the global affordable housing challenge." 2014. [26]
- [26] Yirenkyi, Joshua Nana. "Urban Housing Supply Challenges and Implications for Affordable Housing in Accra" M.A. Thesis. Ghana: University of Ghana, 2014. [27]
- [27] Zhang, Xing Quan. "Housing for All: The Challenges of Affordability, Accessibility and Sustainability" Synthesis Report. Nairobi: United Nations Human Settlements Programme, 2008. [28]



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