Changing Trend of Architecture."-A Study of Changing Face of Housing of Urban Poor and Slum Development with Government Initiatives during 2010-2021

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Article Info	Abstract
Page Number: 09 - 18	Architecture, "the matrix of civilization", has witnessed the chronological
Publication Issue:	development of concepts, strength, diversity and complexity. The great
Vol 70 No. 1 (2021)	ages of world Architecture reveal the changing face of architecture in different regions and periods starting from the prehistoric age to International style of modern architecture. It is evident that Modernism, Post Modernism, Revivalism, avant grade, classicism and expressionism with the changing face of structural design, art and culture are the characteristics of Architecture of the previous century. So Professor E Laube has rightly pointed it out: <u>"Every definition of theory of Architecture represents a certain kind of architecture. Every definition of theory of Architecture gives an answer to what is architecture. Every manifestation of Architecture favours the growth of a new definition or</u>
	theory of architecture."
Article History Article Received: 20 September 2020 Revised: 15 October 2020 Accepted: 02 December 2020 Publication: 31 January 2021	So in the domain of countless spectacular innovations and examples of changing ideas, fashions and tastes the scope of this paper concentrates the social context of Architecture, changing face of Housing of Urban poor and slum development with government initiatives during 2010-2021.
	Keywords : Housing, slum development, urban poor, urbanisation, JNNURM, VAMBAY

1. INTRODUCTION

"28% of Indian people are urban this reveals that out of 1.02 billions population, 285 million persons living in urban areas which comprises of 5161 towns. However it has been observed that the degree of urbanization is not very dramatic in comparison with the global and Asian scenario, which is 47% and 36.7% respectively. (Refer- UN estimates for 2000) But in terms of population size, India's urban population is vast and sluggish. Our urban population is increased by 68 million (increase in urban population) to 285 million during (1991-2001) of which 20 million was

migration from rural areas. Indian urbanization is characterized by growth of urban population in large cities and often referred as pseudo urbanization or over urbanization. So the process has been a large city oriented phenomenon and over the years there has been an increased concentration of population in capital cities, metro cities, class –I cities.

The 35 million plus cities together had a population of about 108 million at 2001 census accounting for about 39% of urban population of the country.

Indian scenario with a moderate growth of urban population is explained by the decline rate of urban growth in the last two decades.

Table-1: Indicates the proportion of urban population to total population between 1961 and 2021.

Year	Percentage of urban to total	Decadal urban population growth
1981	23.34	46.14
1991	25.72	36.46
2001	27.78	31.36

Source: Census of India 2001

One of the goals of planning is the better fulfillment of needs of the common people. (" Roti, Kapwra and Makhan) This is absolutely means eradication or alleviation of poverty. Experience in this regard reveals urban growth including economic growth resulting in agglomeration with large population and high levels of poverty. Refer table-2.2; this depicts Indian urban poverty scenario.

Year	Urban poverty ratio	No. Of Urban poor.	
	(Percentage)	(Million)	
1973-74	49.0	60.0	
1977-78	45.2	64.6	
1983	40.8	70.9	
1987-1988	38.2	75.2	
1993-94	32.4	76.3	
1999-2000	23.6	67.1	
2004-2005	25.7	80.8	
2005-2006	27.7		
2015-2016	16.4		
2019-2021	21.2		

Source: Planning Commission (1997&2007)

Evidently Indian Urban poverty witness a smooth decline of urban poor 49% in 1973-74, 23.6% 1999-2000 and a considerable rise 25.7% in 2004-2005. The absolute number of person has been rising 60.0 million in 1973-74 & 76.3 million in 1993-94, the trend has been reversed and absolute number reduced to 67.1 million in 1999-2000. But of late (2004-05) after that time frame urban population reached a record of 80.8 million. (i.e. Rise of 13.7 million in the absolute numbers of urban poor.)

The above mentioned over all national scenario (macro level decline up to 1999-2000 and considerable rise in 2004-2005) of urban poor is not conformed by all the states. There is a wide regional variation as well as difference among different size class towns with regard to extent and nature of urban poverty. States such as Andhra Pradesh, Goa, Gujrat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharastra, Rajasthan, Tamil Nadu, Delhi and Union territory of Pondicherry have reported a higher level of urban poverty than rural poverty. In the above mentioned states half of the India's urban poor lives in the state of Maharastra, Madhya Pradesh, Uttar Pradesh, and Tamil Nadu. Sluggish urban population size by higher urbanization rate explains the higher concentration of urban poverty of Maharastra, similarly higher urbanization rate explains large share of urban poverty in Tamil Nadu. On the contrary urbanization rate is low for UP and MP but there is a higher incidence of urban poor, this explains the large share of urban poor in UP and MP, in all India states. In this context of urbanization and urban poverty concentration global experiences reveals, rapid urban growth and economic growth consequently giving rise to agglomerations with large population and higher levels of poverty. So the slow and steady growth of India's urbanization will make our cities big and poor. That is the growth of slums and squatter colonies, congestion on the transportation corridors and environmental degradation. To make our cities as "engines of growth" requires a resource intensive urban renewal programme with emphasis on housing of urban poor and slum development thus managing rapid growth and eradicating urban poverty. Thus it is a real challenge to the Architects & planners to cope up with rapid urbanization with limited financial, technical and administrative capacity.

2.THE GOVT. POLICY AND SCHEME FOR HOUSING AND SLUM DEVELOPMENT. (DURING TENTH FIVE YEAR PLAN)

In the light of housing and habitat policy 1998, The Government catalyzes the environment for the growth of housing activity in lieu of taking the housing construction by itself. To meet the housing need of the urban poor Govt. agencies may take up housing construction by itself or to determine by the need of the given situation.

During the tenth five-year plan NSDP (National slum development programme) was initiated in the year 1997, as a scheme of special central assistance to the state Governments for slum improvement till the launch of JnNURM in 2005. The VAMBAY (Valmiki Ambedkar Awas Yojanna) introduced in 2001-2002 continued till JnNURM was launched in 2005. Other schemes are Night shelters for the homeless, the two million housing scheme, accelerated urban water supply programme (AUWSP) and low cost sanitation for the welfare of the urban poor. Here we will concentrate on

the VAMBAY and BSUP project (a component of JnNURM) in order to find out the changing face of Housing of Urban poor and slum development.

a) VAMBAY (Valmiki Ambedkar Awas Yojanna) - It is an innovative scheme for housing & slum up gradation with central assistance. The scheme was launched on 15th August 2001 with a concept to provide ample housing to meet the long-standing housing need of the urban poor.

A proposal of 400,000 dwelling unit for urban poor is made. Evidently VAMBAY can provide immediate benefit to the most vulnerable urban slums. Central assistance is poured in the form of subsidy and loan from HUDCO. So it is an innovative housing programme with credit to the extent that beneficiaries can afford.

Following are the salient features of VAMBAY housing.

The funding pattern of the scheme is 50% GOI subsidy and 50% loan from HUDCO, directly to the state nodal agency. Moreover state Govt. is free to use resources from any other sources. For example, budgetary support, ULB fund, MP-lad, MLA-lad etc.

It is prescribed that the dwelling unit should have built up area not less than 15 sq.m/ 161.4 sq. ft. The upper financial limit for the construction cost of dwelling unit is Rs. 40,000/-, the same is Rs. 50,000/-, and Rs. 45,000/-, for million plus cities and for cities in hilly and difficult areas respectively. The limit of up gradation of an existing dwelling unit shall not be more than 50% of the ceiling

as specified above for different urban areas.

□ 20% of the above mentioned allotted fund for dwelling unit under this scheme would have to be used for infrastructure and common facilities.

□ "Nirmal Bharat Abhijan"(National city sanitation project) is an integral sub component of VAMBAY. It is also important to converge other existing programs such as National slum development programme (NSDP) and Swarna Jayanti Shahari Rozgar Yojana (SJSRY), at the time of implementation of VAMBAY. Such convergence may judiciously used to make the VAMBAY project cost effective.

The GOI nominated state urban development agency (SUDA) in the state as a state level nodal agency to implement the VAMBAY. At the town level, town advisory committee headed by chairperson/ Mayor of ULB shall monitor.

□ State Govt. or its agencies (ULB, District urban development agency, SUDA) has the responsibility of selection of beneficiaries and procure ment of land for the project.

VAMBAY- House along with the land should be in the name of husband and wife jointly or preferably in the name of the wife. Till the re payment of the loan the property shall be mortgaged to the state govt./ ULB.

b) Jawaharlal Nehru Urban Renewal Mission (JnNURM): (2005)

The central govt has launched a robust, massive urban development programme called Jawaharlal Nehru Urban Renewal Mission in 2005. It is a major landmark in the history of urban development

policy in India, which provides massive financial and technical support to 63 cities in India on a sustainable basis. This is one of the largest urban development programmes by means of financial and technical support for the development of city infrastructure and basic services to urban poor.

One of the submission of JNNURM, the Basic Services To Urban Poor (BSUP) under JNNURM has been launched with the thrust on integrated development of slum through projects for providing shelter, basic services and other related civic amenities with a view to provide utilities to urban poor, security of tenure at affordable prices, improved housing, water supply, sanitation and convergence of services in the field of education, health and social security. The funding pattern under BSUP is more liberal because this caters to the needs of the urban poor/slum dwellers where the return on interest is normally very low. The GOI is giving 50% grant for cities with a population of more than 1 million people. (63 mission cities)

3. CHANGING FACE OF HOUSING OF URBAN POOR AND SLUM DEVELOPMENT.

The previous visionary of Housing of Urban poor is as follows.

a) Prescribe minimum housing standard in terms of plinth area and material.

b) Minimize cost of the dwelling units by using indigenous materials and low cost material and adoption of low cost technology.

c) Geometry and form of the housing is predominantly cubistic, rational and functional. Here the concept of the designer is to provide living

spaces with minimum cost. In order to curtail the cost, the best leftout choice is simple geometrical aesthetics with cubic form. This may be called, "the stark utilitarian Architecture".

Here the study will show the changing face of housing due to change in financial assistance (GOI share), socio-economic status of the beneficiaries, and scarcity of land. This constraint compels the Architect over the use of material, technology, style, status and methods. So the ambience of housing varies from project to project with the socio economic status of the region. In the wilderness of concrete and steel today Architects cannot help using them.

In VAMBAY housing the upper financial limit is Rs. 50,000/- with minimum plinth area 15 sq.m/ 161.4 sq. ft. in case of BSUP under JnNURM

The upper financial limit is not specified but the GOI share is 50% of the

cost of the dwelling unit. So the cost of the dwelling unit varies in different parts of India. It nears 1.9 lakh in Durgapur(built up area 28.99 sq.m ,a G +1 Structure), 2.42 lakh in Ahmedabad(built up area27 sq.m ,a G +3 Structure), 1.42 lakh(excluding lift) in Thane Maharastra(built up area25 sq.m ,a G +8 Structure with lift). This depicts a morphological change in different projects. Evidently a VAMBAY house is a block of area 15 sq.m. With changing form and texture, a single block at Durgapur and Multistoried row housing of G+2 structuresat Hyderabad.

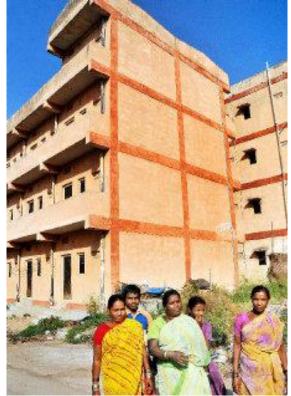


Figure 1:Multistoried row VAMBAY housing at Hyderabad.



Figure 2:A VAMBAY HOUSE AT DURGAPUR.

Similarly the BSUP project has more variations with changing ambience.

Picture depicts a BSUP project of Durgapur municipal corporation from the Architects impression to the implementation at site.

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Figure 3: Plan



Figure 4: An analysis of the projects of Ahmedabad Municipal corporation manifests strong massing of RCC framed structure with bold form.

Vol. 70 No. 1 (2021) http://philstat.org.ph



Figure 5: A tot inside the heart of the housing of Ahmedabad Municipal Corporation.



Figure 6: A spectacular view of the project





Figure 7: Use of texture and finishes in interiors and roof treatment of dwelling unit.

So in all the cases of Ahmedabad, Durgapur, Hyderabad & Thane Kind of Architecture reflects bold structures, wideruse of concrete ,brick, stone and Technology other than using indigenous materials and low cost material and adoption of low cost technology. This exemplifies certainly a change of idea fashion and test. Sometimes referred as the change in Architectural language, this is called changing vocabulary and grammar of Architecture.

4. IS THIS CHANGING FACE LEADS TO A SUSTAINABLE DEVELOPMENT?

Energy conscious Architecture with active energy saving system,

Such as Solar system, Rainwater harvesting, passive energy saving system is desirable for Housing of Urban poor. Reduction in the use of energy is valuable for the society of poor people economically as well as ecologically. So gravity fill house overhead reservoir (possible for G+2 structures as proposed in BSUP Durgapur) is required. Use of lift for vertical movement of people (as proposed in G+8 structure of Thane Municipal Corporation Maharastra) may not be affordable and encouraged. The same question knocks at the door- is the changing idea acceptable? Can the new ingenuity be implemented at ease? The answer is unhesitatingly –"Yes".So it is the responsibility of an Architect to accept the changing face of Architecture in keeping with sustainable development and affordability.

References

- [1] Sharp.D (2002)-"Twentieth Century Architecture: A Visual History" Images Publishing.
- [2] DPR For Rehabilitation Of Slum at The Same Cite Near CMERI Colony At Durgapur (2008): Asansole Durgapur Development Authority, Statutory Authority Of Government Of West Bengal.
- [3] JNNURM Reference Manual (2007): Ministry of Urban Development, Government of India

- [4] Valmiki Ambedkar Awas Yajana (VAMBAY): Ministry of Urban Development, Government of India Guidelines
- [5] Integrated Rehabilitation Project for the urban poor staying in slums on public purpose lands & ecologically dangerous locations of nalla banks of 155.62 kms in Thane, under BSUP.
- [6] Housing Project under JnNURM (BSUP) Presented By, Mr. I.P.Gautam Municipal Commissioner, Ahmedabad
- [7] VAMBAY HyderabadPhoto- The Hindu-On line edition of Indias national news paper.Tuesday, Nov-11, 2008.
- [8] VAMBAY Durgapur. Photo- Courtesy- ADDA.