

A STUDY ON HOUSING PROBLEMS OF URBAN POOR IN AIZAWL CITY, MIZORAM

A Dissertation submitted in partial fulfillment for the award of the degree of Master of
Philosophy in Economics

By

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CERTIFICATE

This is to certify that Tuanmuansanga has worked under my supervision and guidance on a research topic entitled “**A Study on Housing Problems of Urban Poor in Aizawl City, Mizoram**” for the degree of Master of Philosophy in Economics, Mizoram University, Aizawl. The work embodies a record of original investigations and no part of it has been submitted for any other degree in other universities.

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DECLARATION

I, Tuanmuansanga, hereby declare that the subject matter of this dissertation is the record of work done by me, that the content of this dissertation did not form basis of the award of any previous degree to me or to do the best of my knowledge to anybody else, and the dissertation has not been submitted by me for any research degree in any other university/institute.

This is being submitted to the Mizoram University for the degree of Master of Philosophy in Economics.

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LIST OF ABBREVIATIONS

AHP	Affordable Housing in Partnership
BPL	Below Poverty Line
BSUP	Basic Service to Urban Poor
CAGR	Compound Annual Growth Rate
CSP	Centre for Social Policy
ECHP	European Community Household Panel
EWS	Economically Weaker Sections
FAR	Floor Area Ratio
FHA	Federal Housing Administration
GIS	Geographic Information System
GSDP	Gross State Domestic Product
HIFE	Household Income Facilities and Equipment
IAY	Indira Awas Yojana
IHP	Immigrant Housing Project
IHSDP	Integrated Housing & Slum Development Programme
ISHUP	Interest Subsidy Scheme for Housing the Urban Poor
JNNURM	Jawaharlal Nehru National Urban Renewal Mission
LIG	Low Income Group

LPG	Liquefied Petroleum Gas
MIG	Middle Income Group
MoHUPA	Ministry of Urban Housing and Poverty Alleviation
MPCE	Monthly Per Capita Consumption Expenditure
MRP	Mixed Recall Period
NHUP	National Urban Housing & Habitat Policy
NLUP	New Land Use Policy
NSDP	National Slum Development Programme
NSS	National Sample Survey
NSSO	National Sample Survey Organisation
PHE	Public Health Engineering
PMAY	Pradhan Mantri Awas Yojana
PPP	Public-Private Partnership
RAY	Rajiv Awas Yojana
SIRC	Selangor Islamic Religious Council
SJSRY	Swarna Jayanti Shahari Rozgar Yojana
SZB	Selangor Zakat Board
UD&PA	Urban Development and Poverty Alleviation

UIDSSMT	Urban Infrastructure Development Scheme for Small and Medium Towns
UIG	Urban Infrastructure and Governance
UN	United Nations
URP	Uniform Recall Period
USA	United States of America
UTs	Union Territories
VAMBEY	Valmiki Ambedkar Awas Yojana

INTRODUCTION

1.1. Introduction

Housing is one of the basic human needs along with food and clothing. The need for housing increases with the development of knowledge, changes in civilization, increase awareness about privacy, sanitation, consciousness about health, environment, infrastructural facilities, etc. Housing provides security, raises the standard of living and even empowers the weaker sections of the society. Adequate housing or shelter means “adequate privacy; adequate space; physical accessibility; adequate security; security of tenure; structural stability and durability; adequate lighting, heating and ventilation; adequate basic infrastructure such as water supply, sanitation and waste management facilities; suitable environmental quality and health-related factors; and adequate and accessible location with regard to work and basic facilities: all of which should be available at an affordable cost. . . .” (UN Habitat, 1996). The importance of housing has been determined by the services and amenities it provide which includes security, health, education, employment opportunities, rather than a mere shelter.

“The human right to housing is the right to live in adequate shelter in security, peace, and dignity. The right to housing is not merely having a roof over one’s head; rather, it requires an accessible habitable space that fulfils the basic needs of humans to personal space, security, adequate lighting and ventilation, safe infrastructure, protection from weather, and adequate location with regard to work and basic facilities– all at a reasonable cost.” (National Human Right Commission, 2011).

In any society, the housing sector is an integral part of the economic and social system. The availability and quality of housing are major indicators of a society's standard of living and level of economic and social development (Chen and Gao,1993). The type of housing and average space available for each person in the house, the basic civic amenities available to the household, etc depict the overall socio-economic progress of the society. Access to housing for the poor not only improves social standing and provides a sense of dignity, but also helps the owner incrementally build an appreciating asset, a potential place for work and for generating livelihoods. Further housing ensures safety and positive health implications through reduction of incidences in diseases via access to clean water and sanitation (Arya, 2013)

Pal et.al (2015) finds that economic and social backgrounds of the households are the major determinant of housing condition in both rural and urban India. They find that there exists unequal distribution of housing with the rich having higher access to better housing, and also suggest that the access to basic amenities such as drinking water and sanitation is highly correlated with the economic status of the households that the poor and socially deprived classes have less access to these amenities.

The requirements of housing are growing with the rapid pace of urbanization due to the increasing rural-urban migration. This trend of migration has been resulted by poverty, unemployment, etc leading to large concentration of population in urban areas. These urban poor households were deprived of basic amenities such as water, electricity, gas, toilet facilities, etc. This means that these households were chronically housing poor and were most vulnerable and insecure. It shows that the incidence of

poverty based on housing inadequacy is much greater than that indicated by income/consumption measures (Nazli et.al, 2003).

The increasing urban population leads to higher demand for housing and other basic amenities causing mismatch between demand and supply of housing and other amenities. The increasing population, faster urbanization and the increasing demand for housing and amenities causes land prices escalation thereby reducing affordability of land for the poorer section of society. Thus, the poor and economically weaker sections were the victim of problems of housing shortage and deprivation of basic amenities. “The deprivation has obviously increased in terms of absolute numbers due to increase urbanization and migration” (Kumar, 2015).

The increasing housing problems and increasing deprivation in urban areas has been resulted by a number of reasons and causes and needs effective measures to curb it. The most prominent reason has been increasing urban poverty. It is therefore necessary to curb increasing poverty to reduce housing problems. Edgley, et.al (1968) argued that in order to improve the lives of low income groups, rental subsidies (or mere housing assistance) is not enough, instead, more efforts should be given to relieved them from major causes of economic deprivation such as ignorance, inordinate numbers of children, discrimination, etc.

1.2. Concepts and Definitions

In this paper, terms like households, urban, poverty/BPL has been frequently use. The terms most frequently used in this study are define as under

Household- Cambridge School Dictionary defines ‘household’ as ‘a family or group of people who live together in a house’ Household in our analysis means a family or

group of people who share meal or other living accommodation or perhaps share their economic interest. A single dwelling unit may contain one or more households if meal, living space or other accommodation is not shared.

Poverty/BPL: Poverty in India has been usually determined in terms of per capita consumption per day or per month. According to the latest poverty line definition (Rangarajan methodology), a person or families whose per capita monthly consumption lower than Rs 972 and Rs 1407 (Rs 32 and Rs 47 per day) in rural areas and urban areas respectively are considered as living Below Poverty Line. According to Rangarajan Methodology, in Mizoram the poverty line has been set at Rs 1231.03 in rural areas and Rs 1703.93 in urban areas.

Under the initiatives of Economics and Statistics Department, Government of Mizoram, a new BPL survey is being held in Mizoram. Some important criteria for identification or selection of BPL in urban areas includes: a family with per capita income lower than Rs 2100 per month; a BPL should not rent a house of above Rs 2500 rent payment; a BPL family should not possess luxurious goods like car, two wheeler, computer or laptop; etc. However the final selection and verification lies with Local Council or locality level administration.

Urban: For the Census of India 2011, the definition of urban area is as follows;

1. All places with a municipality, corporation, cantonment board or notified town area committee, etc.
2. All other places which satisfied the following criteria:
 - i) A minimum population of 5,000;

ii) At least 75 per cent of the male main working population engaged in non-agricultural pursuits; and

iii) A density of population of at least 400 persons per sq. km.

The first category of urban units is known as Statutory Towns. These towns are notified under law by the concerned State/UT Government and have local bodies like municipal corporations, municipalities, municipal committees, etc., irrespective of their demographic characteristics as reckoned on 31st December 2009. The second category of Towns (as in item 2 above) is known as Census Town. These were identified on the basis of Census 2001 data.

In Mizoram there is only one Census Town i.e., Aizawl (as given in second category) and 22 Statutory/notified towns across the state. In this study, we consider these 23 Census Town and Statutory Towns as urban.

1.3. Urban Poverty and magnitude of Housing Shortage in India

In recent years, there has been a marked shift in India's economic structure from a predominantly agrarian economy into a manufacturing and services sector oriented economy. As a result of this change, the rate of urbanization in India has been accelerated. India's urban population has grown at a Compound Annual Growth Rate (CAGR) of 2.8 per cent over 2001-2011, resulting an increase in urbanization rate from 27.8 per cent in 2001 to 31.2 per cent in 2011. Out of India's 1.21 billion population, 377 millions are urban dwellers (Census 2011).

Along with the increase in urban population, poverty in urban areas has also increase. In 2004-05, 80.8 million people out of an estimated urban population of 309.5 million persons were below the poverty line in that their per capita monthly

consumption was less than Rs. 538.6. During the period of 1973-2004, the numbers of the urban poor has risen by 34.4 per cent and the shares of the urban poor in the total from 18.7 per cent in 1973 to 26.8 per cent in 2004-05. In comparison the numbers of the rural poor have registered a 15.5 per cent decline over this period. In addition, about 40 to 45 million persons are on the border line of poverty (Planning Commission, 2011). The trend and share of urban poverty to the total poverty during 1973 to 2011-12 is given in Table-1.1

Table-1.1: Trend and share of urban poverty to the total poverty during 1973-2004

Year	No. of urban poor(in millions)	Share (%)
1973-74	60.5	18.7
1983	70.9	21.97
1993	76.3	23.83
2004-05	80.7	26.78
2009-10	76.5	21.61
2011-12	53.1*	19.68

Source: Planning Commission, 2014

*Lakdawala methodology

According to expert committee set up by the Planning Commission under C Rangarajan (also known as Rangarajan Committee), the poverty ratio at all India level for 2011-12 comes 29.5 per cent with an absolute number of 363 million people (260.5 millions i.e., 30.9% in rural and 102.5 millions i.e., 26.4% in urban areas).

Growing concentration of people in urban areas has resulted in an increase in the number of people living in slums and squatter settlements. The 2011 Census enumerated that 13.9 million households with a total population of nearly 65.5 million people reside in slums (Census 2011). Skyrocketing prices of land and real estate in urban areas have induced the poor and the economically weaker sections of the society to occupy the marginal lands typified by poor housing stock, congestion and

obsolescence. It is apparent that substantial housing shortage looms in Urban India and a wide gap exists between the demand and supply of housing, both in terms of quantity and quality. Table-1.2 shows that there were 18.78 million units housing units short in urban India; nearly 95% of this shortfall was in the Economically Weaker Sections (EWS) and Low Income Group (LIG) housing. It is also interesting to be noted that more than 30 per cent (31.6%) of urban households lived in hired dwelling (NSS 69th round 2012).

Table-1.2: Estimated Urban Housing Shortage in India – 2012

Categories	As on 2012 (in Millions)
Households living in Non-Serviceable Katcha	0.99
Households living in Obsolescent Houses	2.27
Households living in Congested Houses requiring new houses	14.99
Households in Homeless condition	0.53
Total Urban Housing Shortage	18.78

Source: Ministry of Housing and Urban Poverty Alleviation, Govt. of India, 2013

According to Cushman & Wakefield Research, presented in Table-1.3, demand for urban housing will scale up by nearly 12 million units by 2017 based on just the current growth of population. By 2021, the urban population is expected to increase to nearly 500 million, totaling to about 35 per cent of the total population of India. Hence, the total housing demand in the country by 2017 could be as high as 88.78 million units (Cushman & Wakefield Research, 2012).

Table-1.3: Total Housing Shortage Projection

<i>Housing Shortage</i>	<i>Units in Millions</i>
Urban shortage in 2012	18.78
Rural shortage in 2012	43.67
Additional demand due to population growth in 2012-17	26.33
Total Demand	88.78

Source: Cushman & Wakefield Research, 2012.

In case of basic amenities, there has been remarkable development in urban India as compared to rural areas. According to National Sample Survey (NSS) 69th Round, 2012, 89.6 per cent of urban households get sufficient drinking water supply as against 85.8 per cent for rural households. Thus, the insufficiency of drinking water was 10.4 per cent and 14.2 per cent for urban and rural households respectively. Bathroom facility was not available for nearly 16.7 per cent of urban households while for rural households, it was 62.3 per cent.

According to NSS 69th Round, 2012, about 59.4 per cent of rural households in India had no latrine facility whereas 8.8 per cent of urban households did not have any latrine. In case of electricity, 80 per cent of rural households and 97.9 per cent of urban households had electricity for domestic use. Among households having electricity for domestic use, 33.2 percent in rural India and 63.5 percent in urban India were using electric wiring of the conduit type.

1.4. Profile of Urban Poverty in Mizoram

Mizoram is one of the most backward states in India inhabited by a population of 1091014 (as on 2011). It is one of the urbanized state in India where there are 23 census towns and more than 52 per cent of the population are living in urban areas. However, the increasing poverty both in rural and urban becomes a major hindrance on the way of the development of the state. In 2004-05, number of persons Below

Poverty Line (BPL) in Mizoram, based on Tendulkar Methodology, stood at 15.3 per cent i.e more than 1.4 lakh persons (23% for rural and 7.9% for urban), which increased to 20.4 per cent i.e more than 2.3 lakh (35.4 % for rural and 6.4% for urban) in 2011-12. But the Rangarajan Committee estimated that in 2011-12, 27.4 per cent or more than 3.1 lakh persons (33.7% in rural and 21.5%) are BPL in Mizoram (Planning Commission, 2014).

According to BPL Census 2010 conducted by SJSRY Cell, Urban Development & Poverty Alleviation Department (UD&PA), Government of Mizoram, in the district capital of the 8 district of Mizoram, there are 27225 families living below poverty line. Table-1.4 presents district wise number of BPL as per the record of UD&PA

Table-1.4: Number of BPL families in urban areas of Mizoram

Sl.no	District	No. of Families	No. of Persons
1	Champhai	2233	9735
2	Lunglei	3143	13412
3	Kolosib	1983	8524
4	Saiha	1627	7275
5	Lawngtlai	903	4154
6	Serchhip	1017	1017
7	Mamit	583	2688
8	Aizawl	15736	69375
	Total	27225	116180

Source: SJSRY Cell, UD&PA, Govt. of Mizoram, 2010

1.5. Significance and Scope of Study

It is a fact that housing inequality exist in both developed and developing countries. The growing urbanization and rise in population has created a substantial demand for housing and amenities. With the increasing land price, the affordability and accessibility of housing by the poor has decline resulting residential deprivation, growing slums and squatter settlement. Similar to other developing countries, India

also experience serious shortage and inequality in access to housing and basic amenities such as housing structure, electricity, toilet facility, drinking water, etc. Although there are significant improvement, as a result of various efforts by states and central government, the level of housing deprivation is still high and slum population is on the rise.

Mizoram, however, has a different experience. There is no report of homelessness and congestion and slum practically does not exist. However, the level of accessibility and affordability of housing and other amenities by the poor is not much better than other states .Most of the poor(BPL) families in Aizawl are lives in rented house, facing problems of insecurity due to non existence of regulation for rental housing. The problem is still more severe in terms of access to basic amenities such as electricity, drinking water, sanitation, etc. In the light of these problems, an in-depth analysis is required in order to ascertain the scale and status of problems, determinant of satisfaction, security of tenure, etc related to housing and basic amenities, which may, in future, serve as a source of information for the general public and public policies related to low-income housing.

1.6. Study Area: Aizawl

Of all the 23 census towns in Mizoram, Aizawl is clearly the biggest urban centre in Mizoram. Since more than 30 per cent of the state population are living in the city and is enough to represent the scenario of housing and amenities problems in urban areas, it is select to be the case of the study. The study focused on the problems of housing

and basic amenities which is being faced by more than fifteen thousand poor families living in Aizawl city.

Aizawl is the capital city of the state of Mizoram. Geographically the city is located 23° 43'38"N, 92° 43'04"E, north of Tropic of Cancer in the northern part of Mizoram. The hilly and mountainous nature of the city has brought natural disasters/problems like landslide quite often especially in rainy seasons. It is connected by road all over from Mizoram, district capitals and others city and towns within or outside the state and is also connected by air through Lengpui.

It is the centre of administration right from British settlement in Mizoram, and State's Legislative Assembly House, State's Secretariat and all other administrative institutions were placed in Aizawl. Also it is the State's centre of business and trade that major banks other financial institutions, big business or trading firms are doing business in the city.

Demographically, Aizawl is the most populated city in the state with 2,93,822 population (Village and Town Wise Primary Census Abstract, District Census Handbook, Aizawl). Almost all of the inhabitant were Scheduled Tribe and speak Mizo and majority of them were Christians.

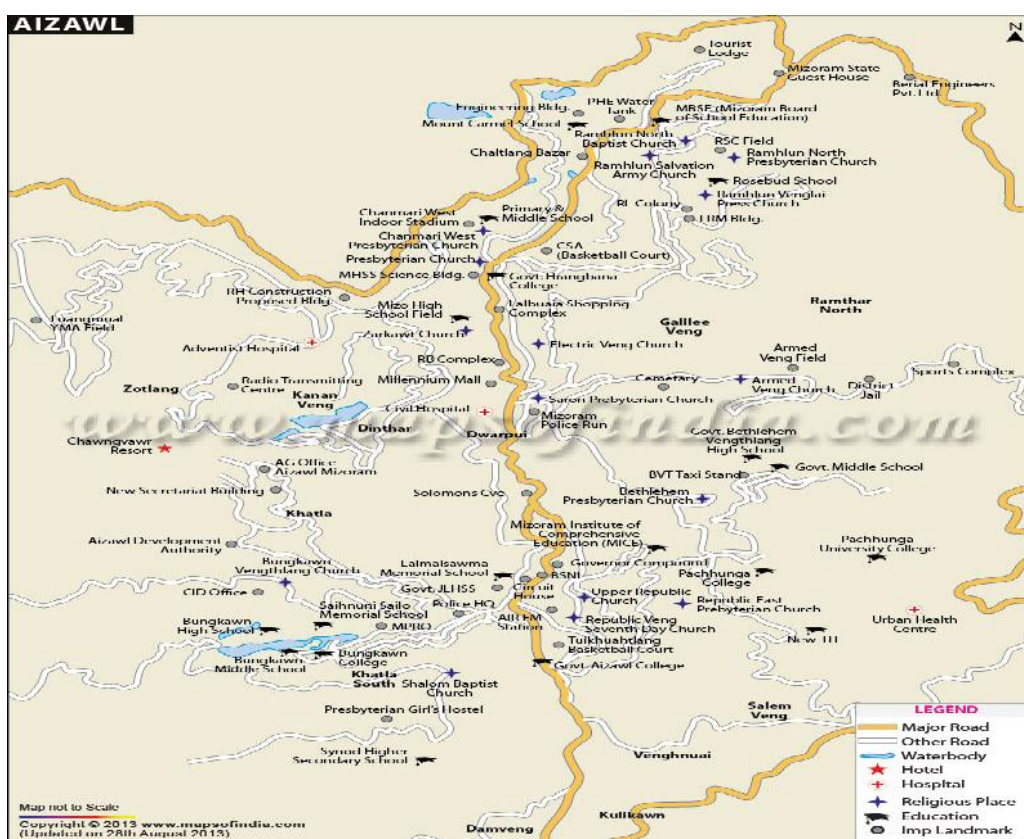
Aizawl is also home of more than sixty nine thousands population living below poverty line which is more than combine of number of people living below poverty line in other seven district capital of the state. The number of families and number of persons living below poverty line, according to BPL Census 2010 conducted by SJSRY Cell, UD&PA Department are presented in Table-1.5.

Table-1.5: Number of families and number of persons living below poverty line in Aizawl, 2010

Name of Zone	Male	Female	Total	Families
Zone 1	3760	3879	7639	1853
Zone 2	5199	5727	10926	2424
Zone 3	4292	4532	8824	2040
Zone 4	5772	6095	11867	2623
Zone 5	3680	4038	7718	1736
Zone 6	6932	7351	14283	3238
Zone 7	3914	4204	8118	1822
Total	33549	35826	69375	15736

Source: SJSRY Cell, UD&PA Department, Govt. of Mizoram, BPL Census 2010

Figure-1.1: Map of Aizawl City



1.7. Objectives of the Study

The study tries to examine the problem of housing and basic amenities in Aizawl city with the following objectives in mind:

1. To examine the existing housing status and scale of housing problems for the urban poor.
2. To analyze the structure of rents and tenure system determining security of the poor renting house.
3. To study the pattern of income and expenditure of the urban poor in Aizawl city.
4. To examine the level of households' access to basic facilities in the city.
5. To analyze the relationship between the income level of the poor and their access to basic living facilities.
6. To examine the level of satisfaction of the poor with the level of housing and basic amenities available to them.

1.8. Hypotheses

The following hypotheses are tested in the study:

1. Access to basic housing amenities is directly related to income level of the urban poor households.
2. Majority of urban poor live in rented house and face difficulty in payment of monthly rent.

1.9. Methodology

Data source: The study relies on two data sources - primary data and secondary data. Primary data are collected by sample survey in the study area (Aizawl), broadly by stratified random sampling with Zone (as classified by UD&PA, Govt. of Mizoram) as strata. Seven Local Council Areas viz; Thakthing Damveng, College Veng, Khatla East, Kanan, Chhinga Veng, Chaltlang North and Ramhlun South are selected from each zone. From the selected seven Local Council Areas, 15 sample households each were selected by adopting the BPL List of the concerned Local Council as sampling frame. The total sample size optimally determined after conducting pilot study turned out to be 105. At the same time, secondary data are collected from published sources like reports of departments and ministries of central government and state government, issues of Economic Survey, Statistical Survey, Census data, National Sample Survey (66th and 69th Rounds); and published or unpublished records, books, journals, magazine and research papers.

Analytical Tools: The data collected from various sources are analyzed using various statistical measures like mean, median, average, percentage and graphical presentation wherever suitable. The study hypotheses are tested using test statistics like Chi-square, whichever is appropriate to the empirical data.

1.10. Scheme of Chapterisation

The study is organized in five chapters as follows:

Chapter-1 : Introduction-This chapter gives a brief introduction to the needs and importance of housing, brief overview of housing shortage and urban poverty in India as a whole and Mizoram. It also contains the objectives, hypotheses, methodology, significance of the study, etc.

Chapter-2 : Review of Literature- The second chapter presents review of literature related to housing and its related problems. The chapter is organized into eight different sections containing review of literature related to housing from sixes different angles or themes.

Chapter-3 : Scenario of urban poverty and housing problems- Chapter three present overview of (using available secondary data mainly Census and NSS data) level of urbanization, urban poverty and availability of housing and its related facilities in India and Mizoram.

Chapter-4 : Housing and Basic Amenities of Poor in Aizawl City- This chapter present analysis of primary data collected and illustrated it using tables and figures.

Chapter-5 : Summary of findings and conclusions- Chapter five summarized the main findings of the study and concludes with recommendations to reduce or solve the housing and its related problems being prevalent in Aizawl city.

Bibliography

Chapter-2 REVIEW OF LITERATURE

2.1. Introduction

Review of literatures is an important part of empirical research involving thorough examination of published or unpublished works related to the present study. This chapter examines previous studies related to urban housing and its attributes such as residential satisfaction and housing, housing affordability problems, issues related to public provision of housing, etc. Accordingly, this chapter has been divided into sixes (6) section base on these different themes related to urban housing. It is expected that the chapter provides a deep insight into the issues and problems of housing viewed from different angles.

2.2. Residential Satisfaction and housing

Edgley, et.al (1968) present data relative to dissatisfaction of tenants in rent-subsidized programme in Lubbock, Texas, USA with a purpose to discover social correlates of dissatisfaction in an urban renewal relocation housing project in Lubbock. Data analysis showed that the families who were self-sufficient before relocation were force into welfare situation because of rent subsidy programme, however, dissatisfied with relocation facilities. The data also indicate that “dissatisfaction is correlated positively with the number of persons in the household, the age of residents, and socioeconomic status”. The study also led into conclusion that in order to improves the lives of low income groups, rental subsidies is not enough, instead, more efforts should be given to relieved them from major causes of economic deprivation such as ignorance, inordinate numbers of children,

discrimination. They are major factors of dissatisfaction which cannot be removed merely by the presence of subsidy programme.

Lane, et.al (1980), examined dwelling characteristics, housing tenure status, and household demographic characteristics to analyse the probability of satisfaction with housing for those who lives in single-family homes, duplexes apartment and mobile homes and for renters and owners. Using a data collected and compiled by Survey Research Center of University of Michigan, this study used a more robust of statistical analysis of the determinant of satisfaction derive from housing. The findings of the study concludes- housing characteristics were more important determinant of housing satisfaction than the demographic characteristics of housing occupants; mobile-home dwellers were the least likely to be satisfied with their homes; and, apartment and duplexes dwellers had similar preference for housing characteristics. For home owners, rising housing price and increased in property taxes means higher satisfaction with their housing as its value for both the investment and consumption value of their homes increased.

Using data collected from households living in Brisbane-South East Queensland Region, *McCrea, et.al* (2005) test, using path analysis the level of satisfaction of the urban resident in three urban domains- regional satisfaction, housing satisfaction and neighbourhood satisfaction. The analysis showed that the contribution of these three domains to the overall life satisfaction. While regional satisfaction is a measure in terms of cost of living, government service provision, pollution, transports system, etc; neighbourhood satisfaction is best predicted by neighbourhood interaction and perceive crime. Satisfaction with housing is shown to be best predicted by housing age, temperature and home ownership. The analysis

show that neighbourhood satisfaction is much less important in predicting overall life satisfaction than satisfaction with housing and the region.

Elsinga, et.al (2005) test whether homeowners are more satisfied with their housing situation than tenants, in order to explain the beneficial effect of homeownership and its relationship with satisfaction using European Community Household Panel (ECHP) database mainly in English speaking countries. The result of the test indicate that homeowners in seven out of eight countries (two English speaking countries Ireland and United Kingdom; three countries with well developed rental sector- Austria, Netherland, Denmark; and southern European countries- Spain, Italy, Greece) are satisfied with their housing situation than tenants. Only in Austria homeowners and tenants show same level of satisfaction.

Salleh, et.al (2006) investigates the various factors which determine individual housing satisfaction such as dwelling units, housing services and neighbourhood facilities and environment in private low-cost housing in fast growing state of Penang and slow growing state of Terengganu in Malaysia. Analysis of samples randomly selected shows that “the level of satisfaction are generally higher with dwelling units and services provided by developers rather than neighbourhood facilities and environment”. Poor public transports, lacks of children playground, car parks, security and disability facilities are the major factor contributing to low level of satisfaction.

Mohit , et.al (2011) evaluates the social housing programme adopted by Selangor Zakat Board (Selangor Zakat Board (SZB) is a wholly owned subsidiary of Selangor Islamic Religious Council (SIRC)) in the state of Selangor, Malaysia. In order to identify the types of housing programme adopted by Selangor Zakat Board and examine the beneficiaries housing satisfaction, they adopted the housing

satisfaction model. In order to examine housing satisfaction, five objective components- housing unit features, housing unit support services, the social environment, public facilities and neighbourhood facilities- were analysed. The study finds that the Board has been successful in providing a moderate level of satisfaction with the housing units. However, the satisfaction level in other components like social environment, public facilities, etc shows that there is still scope to enhance residents' satisfaction level.

Mohit, et.al (2012) examined the residential satisfaction with public housing in Hulhumale (an artificial island developed to provide housing facilities in order to solve the growing problem of congestion and housing shortage within the capital region of Male), Maldives based on assessment of satisfaction with physical features of housing unit, services provided within housing unit, public facilities provided within and close to the housing area, and social environment within the housing area and their contribution to the overall satisfaction with the public housing. With an objective of determining the level of satisfaction, to identify the key factors that determine satisfaction, primary data were collected using questionnaire and analyse using cross tabulation, correlation and regression analysis. The study found that majority of the residents are slightly satisfied, though satisfactions levels varied with the provision of services and public facilities, compared to satisfaction with physical features of the housing unit and the social environment within the housing area. Low level of residential satisfaction was recorded for number of toilets, size and condition of washing and drying area, number of electrical sockets, cleaning services for corridors and staircases, street lighting, garbage collection, ferry services and security level within the housing area. The study also found that satisfactions levels were lower among housing units occupied by owners than those occupied by the tenants.

The study then concluded that “merely providing housing does not indicate success of housing development and policies, but meeting the actual housing needs and preferences of the residents will determine whether the government can achieve the goal of providing adequate and affordable housing for all citizens”.

Using data from American Housing Survey 2009, *Ross, et.al* (2012) examines, in their research, neighbourhood and housing satisfaction among assisted and unassisted renters. The main objective of this study is to assess the effectiveness of a pre-dominant form of US Government sponsored housing assistance at providing expanded housing choices for low income families. The study allows for an assessment of the role of housing vouchers (a rental certificate that covers a certain percentage of their rent payment for private-market housing) in promoting household mobility to higher quality of housing and neighbourhoods compared with public housing developments or unsubsidized housing units. The findings of the research show that holders of housing voucher and public housing residents achieve higher level of housing satisfaction and choose more desirable dwelling than unassisted low-income renters. Housing assistance, however, fails to locate its recipients to better neighbourhoods

Aibavboa, et.al (2013) considered housing satisfaction in subsidized housing in South Africa using Johannesburg Subsidized Housing Schemes in Gauteng Province as a case study. The objective of the study is to established predictors, of both physical and social factor which influence satisfaction of residents. The study adopted objective and subjective measures of housing attributes through evaluation of the physical and social factors which determine residential satisfaction and also reports on factors which influence satisfaction or dissatisfaction among the beneficiaries of housing subsidy scheme in the Gauteng Province of South Africa.

The findings of the study found that residents are more satisfied with social attributes in their housing units and the neighbourhood, but not satisfied with physical attributes except in the case of security in and around the unit. Also beneficiaries were satisfied with privacy and improved living conditions in housing unit compared to where they previously lived, despite failing to meet majority's expectation. And overall assessment indicates that the quality of life of the beneficiaries increase because of improved living conditions and a cleaner environment.

2.3. Housing and Problems of Affordability

Arnold, et.al (1989) assessed the general housing situation by developing estimates of prevalence of affordability problems in urban Ontario, Canada and also examined conditions of renters living in Ontario cities using the Canadian Household Income Facilities and Equipment (HIFE) surveys for 1972, 1976 and 1983. The study used three different methods- Rent to Income Ratio, the Core Need Method and, the Affordability - to measure affordability. The three methods consistently show that affordability problems have increased for the lowest income Canadian. This study concludes that large number of government programmes implemented and withdrawn during the 1970s failed to reduce the prevalence and severity of the affordability problem and the incidence of the problems is increasing.

Pillay, et.al (2006) studied the role of savings and affordability in the low-income housing crisis in South Africa. A study was conducted during 1999 and 2000 across five provinces of South Africa and collecting information/data by means of structured questionnaire and interview of 653 sample households (within different income groups who are actively trying to buy a formal house). The study confirmed

that low-income households face difficulties in obtaining housing as well as mortgage finance. For instance among the households with monthly income category of R1000 to R2600, it was found that 90% of households took more than 19 months to acquire a home, compared to only 23% in the income category above R4000. It also found that housing affordability is significantly affected by other debt obligation of households.

Yang, et.al (2008) discuss in their paper the affordability level of housing by medium – low income families in Beijing, China with an aim to measure the magnitude of housing affordability. By applying residual income approach and defining minimal socially acceptable standard housing unit, and also by taking into account the minimum non-housing consumption required and the household's ability to cover mortgage cost, the researchers assessed affordability in the city of Beijing. The study concluded that income of low and medium-income families fall far short of the level required to provide access to standard housing. The gap between the family income and minimum required income to access standard housing is huge that, based on their calculation, to make standard housing available to these medium and low-income families, their income would have to increase by 50% or housing price would have to come down by 33%.

Mikeszova, et.al (2009) analyse regional differences in rental housing affordability following rent deregulation in Czech Republic with an objective to identify the type of households potentially at risk of being unable to afford housing, mapping the development of potential housing unaffordability since 2000 and to trace development of regional differences in the percentage of at-risk households in Czech Republic. Using the available regional wage statistics and data on market rents, the researchers measured housing affordability. The result indicated that both regional differences in housing and the risk of being unable to afford rental housing decline,

however, pointed that there is still a relatively large group of households that under current wages condition for paying social benefits would be unable to afford to pay market

Aziz, et.al (2010) evaluates the accessibility of affordable housing among middle income earners and investigate the affordability profiles of middle-income earners (to derive the levels of house prices they can afford) in ten (10) major cities of Malaysia. The study finds that there is a mismatch between affordability and housing price for the middle-income group and concluded that “affordability is an expression of the social and material experiences of middle-income households in relation to their individual housing situations. Affordability expresses the challenge each household faces in balancing the cost of its actual or potential housing, on the one hand, and its non-housing expenditures, on the other, within the constraints of its income”.

Using Kumasi and Tamale as study area, *Boamah* (2010) explores the affordable housing situation in Ghana. The researcher tried to determine whether housing credit, rental and owner occupied are affordable; whether the Ghanaian government have been successful in providing affordable housing to its citizens or not. Also, he examined the contribution of formal financial institutions and evaluates the affordable housing delivery system in Ghana. The study found that many households in the study area are unable to afford housing units even with basic acceptable standards. According to the study the major factor responsible for poor state of and inadequacy of housing in Kumasi and Tamale includes- failure of government policy intervention in housing sector due to political instability, lack of coordination, poor management and corruption; high unemployment rate, low income levels, high housing prices and rental levels. One of the disappointing facts suggested

by income and housing price data is that in Kumasi and Tamale, a household would have to save its entire annual income for at least 39 years and 31 years respectively to be able to acquire its own housing units

Joshua, et.al (2014) evaluates housing affordability in Idah, Nigeria with an aim to determine the quality of housing and percentage of income spent on housing in urban Nigeria. By utilizing structured questionnaire as means of collecting information, the result of the analysis shown that a greater percentage of people in the study area spend more than 30 per cent of their monthly income on housing. More disappointing finding is that even some other households spends more than 50 per cent of their monthly income on housing, but still cannot afford adequate housing. The study argued that this heavy spending on housing has adverse effect on their standard of living that, not much is left to cater other needs such as foods, clothing, medical bills, etc.

2.4. Poverty and its Impact on Housing

Edwards (1982), in his paper discussed the political economy of low income rental housing in urban Colombia, mostly using data from Bucaramanga in north-east Colombia and analyzed the relationship between housing tenure and social structure. He stated that the local state in Bucaramanga has rarely intervened in the low-income housing market due to three main factors- first, there is conflict of interest within state to take steps in order to make home ownership accessible to low income households; second, there has never been sufficient pressure from the public; and third and the most important of all, housing conditions among the Colombian urban poor do not pose a significant threat to the legitimacy of the state. Due to these factors, the study

found that renting, as an important housing alternative increased in Bucaramanga and in all Colombian cities. Over half of the low-income households are now lived in a rental accommodation in Bucaramanga. The evidence from Bucaramanga also suggested that although tenure plays a significant role in dividing the poor both materially and ideologically, it is household income and housing preference, which determine the type of accommodation which is owned or rented.

With an aim to trace changes in poverty between early 1970s and early 1980s in Australia, *Bradbury, et.al* (1986) studies the impact housing costs on poverty levels. This study argues that measuring “after housing poverty” enables some account to be taken of differential outlays on accommodation. All people require shelter, but some have to pay considerably more for it than others. Such payment critically affect resources availability to pay for all other household items and home ownership saved many from slipping into poverty. The study found that, a decade after 1970, housing was less likely to cushion the impact of poverty due to development in the housing market over that time and also due to changing nature of poverty in Australia. The study concluded that by 1981-82 access to affordable housing no longer protected many people from falling into poverty.

Van Dam, et.al (2003) studies the relation between housing and poverty in Flanders (Belgium) and describe how home tenure and housing costs developed differently for different income groups and further assess the impact of this evolution on poverty and income distribution. The analysis based on the data from the socio-economic surveys of the Centre for Social Policy (CSP) of the Antwerp University showed that in the observed period (1976-1997) home ownership increased strongly among higher income categories and remained stable or even decreased among low-income households. Average housing costs increased more for low-income

households than for high-income households, leading to a sharp increase in problematic rent-to-income ratios for the former. It appears that especially the private rented sector is problematic. The social rented sector is evaluated rather positively. Measuring poverty level in terms of housing costs leads to higher poverty levels and higher welfare inequality compared to the situation where only current income is used to calculate poverty and welfare distribution.

Aluko (2012) examined the impact of poverty on housing condition in Mushin Local Government of Lagos State, Nigeria. The objective of the study includes to examine the socio-economic characteristic of the resident in the study area, the existing housing condition, types and qualities of facilities available to these houses, the environmental quality surrounding these houses and to examine the relationship between poverty and housing in the study area. The study used both primary and secondary data as its data sources. Samples are collected through questionnaire by means of stratified random sampling and covered ten (10) wards within the Local Government with a total of 400 respondents. The finding of the research revealed that poverty result in poor health of the residents, and has a severe adverse impact on the lives of the people and housing conditions.

Against the background of increasing poverty and housing inadequacies in Nigeria, *Omolola, et.al* (2015) examined the housing situation in the core areas of cities in Nigeria with a view to upgrading the standard of living in the area in order to meet the present day requirements and future needs of the residents. By using Ibadan City of the southwestern part of the country as a case study and using simple random technique to select 252 houses in the area and questionnaire and direct field observation as instruments of data collection, the study found out that there existed high congestion in the area that accommodation density in the area was as high as 31-

40 person per house while above 20 person per house was considered a good indicators of poverty. Also, 11.79 of the buildings in the area were in good condition, 27.64 buildings were fair and poor, while fallen buildings constituted 36.56 and 23.98 respectively. The study concluded that the majority of the residents of the areas are old people and are in the low income group and the unemployed young residents cannot afford decent living and suggest that in order to upgrade their status, they should be provided with basic facilities which requires government assistance in the form of housing finance, financial assistance through loans from financial institutions.

2.5. Issues in Public Provision of Low income Housing

Morrall III, et.al (1980) examined the cost effectiveness of various methods of providing leased public housing service to low income families in United States. The cost effectiveness ratio adopted in this study is the ratio of the total cost of providing a leased public housing unit to its market rent. The result of the study shown that- first, using the financial programme of Federal Housing Administration (FHA), increased the cost of leased housing programme by at least 18 per cent; second, leasing single-family homes is less cost-effective than leasing apartments; and third, it is probably good public policy to allow families to find their own housing rather than assigning them units, given that there is apparently no difference in the cost-effectiveness of the two approaches.

Shlomo (1986) described the social differentiation among Immigrant Housing Project (IHP) in old Israeli towns and attempted to discover the mechanism through which social differentiation is generated based on based on case of immigrant housing project in Israel. The study examined 23 IHP established in 1950 in 14 old towns. The

findings of the research suggest that the mechanism generated in such social differentiation is triggered by the initial difference among IHP in terms of social status and spatial location. It argued that “once social differentiation among IHP is produced, it sets in motion similarly differentiated process of migration, which, in turn, reinforces the initial differentiation over time”. Spatial location augmented the influence on initial location, public agencies are not in a position to modify the inter-relationship between initial social condition and migration.

Sheng (2002) discussed the role and contribution of various public and private sector in the provision of low-income housing in Bangkok Metropolitan areas of Thailand. It states that the government has never played an active role in housing development in Thailand by citing that in 1980 public contribution to housing was only 7 per cent of housing development, which further reduced to only 3 per cent in 2000. When it (the government) played an active role, it facilitated private housing development and kept interest rate low to support home buyers. The researcher argued that such government policy was not successful and benefited only private developers more than it benefit low-income homebuyers, resulting no significant reduction of slum dwellers in Bangkok.

DeMoss (2012) explores whether participation involvement in housing development projects lead to better quality of life for the poor and help them with greater access to jobs, quality housing, services and community using Sakhasonke housing subsidy project in Port Elizabeth’s Walmer Township and the township of Wells Estate, a resettlement community as study area. The study also addressed the level of participation of the beneficiaries in the housing development projects and also analyse the benefits and drawbacks of housing development projects in meeting the needs of the poor. The findings of the research shows- that receiving quality housing

has significant impact on the quality of life of the residents and they are more satisfied with the type of housing they received than their previous home, however their access to job and income not much improve; communication between beneficiaries and developers was better in Sakhasonke than in Wells Estate; and, community and social trust decreased for the people of Wells Estate after they moved to their new homes compared to what they experienced in the their former residences which signifies how new housing can have a significant impact on beneficiaries' ability to develop a sense of community and a greater quality of life.

Yau (2012) studied the social impact of marking system on public housing tenants in public housing estates in Hongkong through structured questionnaire survey. The Marking system introduced by Hongkong Housing Department operates as a penalty-point system where sitting tenants will be expelled from their public housing units if they receive penalty points up to a certain level for committed misdeeds and is measure to tackle neighbourhood problems or so-called antisocial behaviour (ASB) or to improve environmental hygiene in public housing. The survey finding confirmed that marking system has positive effect on the environmental hygiene of public housing estates. However, there was no strong evidence that the respondents' perceived marking system was effective in tackling neighbourhood nuisance and anti-social behavior problems in their estates in the long run. The survey finding also show that marking system undermined harmony among family and neighbourhoods and weakened tenure security.

Otieno (2014), in his quantitative survey research tried to examine the Kenyan Government housing policies and strategies for housing the urban poor in Kenya and how the citizens benefitted from these schemes and policies. The main objective of this research was to find out the constraints in the housing policy towards the

provisions of low cost housing to the urban poor in Kisumu City. Along with the secondary data available such as official Kenyan Government data on housing policies and plans, research publications, etc, the researcher collects data through structured interviews, questionnaires, observations, etc. Simple random technique was used to select a sample size of 384 from 218766 population. The findings of the research revealed that the investment in housing sector since 1966-67 have been minimal and irregular that the demand for housing still exceeds its supply. With high rate of urbanization and increasing poverty and escalation of housing cost made the provision of housing more and more challenging.

2.6. Determinants of Rental housing and Problems related to Tenure Security

Ho, et.al (2002), attempts to identify all the determinants of the rent-to-income ratio (which is one of the most commonly used affordability indicator which measure expenditure on rental housing as a proportion of income), and residual income approach as alternative measurement and examine the impact of accessibility on affordability in the private rental sector. They also examine how rent-to-income ratios vary in locations with different accessibility, household characteristics, household preferences, housing market conditions, and housing stock characteristics. The results indicate that households in locations with different accessibility determine their rent-to-income ratios differently. Empirical results indicate not only determinants of the rent-to-income ratio would vary, but even the same variable would have different impacts on the rent-to-income ratio and hence on affordability for locations with different accessibilities. Although the rent-to-income ratio in Hong Kong is considerably higher than in most other cities, results from the residual income

approach indicate that the affordability problem is not significant, and that it has a strong link with accessibility.

Wood, et.al (2006) analyse the relationship between Vacancy rates and rent value segments in the private rental markets in Australia using unique panel database for two different cities (Sydney and Adelaide). Panel database (rental bond data – records with regards to rent, dates at which bonds are lodged and returned and a limited range of property and location characteristics) permits measurement of various dimensions of housing supply across value segments in a metropolitan private rental housing market. The research findings suggest that there is contraction in the supply of low rent housing, despite shortages in this segment of the market. It also pointed to evidence that “low-rent vacancy rates are typically higher than high rent vacancy rates”, and there is negative relationship between rents and property vacancy rates in two Australian cities - Adelaide and Sydney.

Iwata, et.al (2007), in their paper, test empirically the effect of land tenure security system on maintenance expenditure decision in Japan by comparing two land tenure systems practice in Japan-leasehold and freehold. Under freehold, the freeholder owned a piece of land for a period of time, that is not limited and no restrictions or limitation are place on the right of a freeholder to enjoy the property, lease it to others or sell it. Under leasehold option, on the other hand, the tenant has to return the land and lose the premises at the expiry of term's lease and tenants are not residual claimants on housing. The study concluded that leaseholders and freeholders are equally likely to remain in the same premises. However leaseholders spend less on home maintenance because they are not full residual claimants even under land security. Using data of Japanese Housing Demand Survey (1998), the empirical analysis also show that leaseholders expenditure on maintenance was 30 per cent

lower than those of freeholders and their premises are less likely to be in a sound condition than freehold premises, suggest leaseholders are not full residual claimants although land tenure security laws existed in Japan.

Lux, et.al (2010) described the development of private rental housing after 1990 in Czech Republic to show the significance of government on people's expectations and social norms and thus the form of housing system. The researchers argued that the "state intervention affecting property restitution, the protection of tenants, rent regulations, and relative subsidisation of individual housing tenures are crucial factors influencing the perception and significance of private renting in Czech Republic". The research finds that the significance of rental housing quickly changed to become temporary and residual form of housing caused by the "specific state interventions in the area of property restitution, rent regulation, and the protection of tenant rights; especially owing to the lack of protection attached to lease durations and the uncertainty attached to rent reviews in the 'non-privileged' segment of the private rental sector".

Gandhi, et.al (2014) examined situation of rental housing in India particularly in relation to the growth in urban workforce participation, urbanization, population and per capita incomes; and investigated why rental housing has been on the decline, by focusing on the case of Mumbai. The study argued that rigid rent controls have a devastating impact on cities housing market while rental laws that allow for sufficient return to landlords, in tune with market returns, as well as provide adequate protection to tenants will boost the rental housing. It found that "for cities in developing countries, stringent rent control laws coincide with greater proportion of population living in slums". The study found that rental housing in Mumbai witnessed a significant decline while home ownership flourished. It also argued that the

Maharashtra Rent Control Act 1999, which governed Mumbai's rental housing market failed to revive rental housing in the city, rather, it contributed to the deterioration of the existing rental housing stocks and decline in creation of new rental housing units. This, ultimately work against the poor whom the laws seek to protect, while tenants from higher income continue to enjoy a protection they do not deserve. It then propose a reform in rental laws with an objective of upgrading existing stocks and incentivize new investment in new rental housing units.

Sani, et.al (2015), examined the nature of private rental housing market and its influencing factors in Kaduna metropolis from the view point of both tenants and property managers. In the light of failing in aspect of rent, quality and quantity of private rental housing in Nigeria, this study examines the pace and issues in rental housing in Kaduna, Nigeria. Findings of the research shows there are different forms of rental payment patterns and tenant selection criteria adopted. The study revealed that advanced payment has been the most common form of rental payment and more than 68 per cent of tenants preferred to pay rent in advance and for more than 47 per cent payment of rent in full does not affect their other housing needs. In the aspect of tenant selection, the study confirmed that an inquiry into tenants occupation (92.3 percent) and into tenants income (76.9 percent) are the basic methods of determining rent affordability of prospective tenant in the study area. Tenants behavior, breach of tenancy agreement, harsh landlord's policy are the main causes of rental defaults.

2.7. Housing Quality and Quality of Life

Ahmat, et.al (2002) analyse the demand for housing in the Province of Sind, Pakistan. Using data from the survey of households in the Province of Sind, the study compares rent to income ratios across various sub-groups, stratified by income and urban size, and also calculate demand elasticities. The sample for the survey was stratified by urban size (large, medium and small centres) and the size of the of the plot. The analysis shows that a majority of the households (60-70 percent) spend around 10-20 per cent of their income on housing. Less than 10 per cent spend more than 40 per cent of their income on housing across all urban sizes. Renter households spend relatively less of their income on housing than owners. Estimates of income elasticities are low. The permanent income elasticity is lowest for the largest urban areas. There is much variation found in the household size elasticity across different urban size areas. A comparison of elasticities across renters and owners shows that investment motives on part of owners are not strong and that financial constraints in Sindh are more operative than in other developing countries.

To examine the quality of residential neighbourhood in Jos, Nigeria, *Mallo, et.al* (2009) stratified residents of Jos into three zones- low, medium and high density dwellers. Survey of 400 households across 15 location give the result that “residents of low density zone are predominantly people of high status, those in the high density zone are mostly peasants while the medium density zone has a blend of people of high status and peasants”. The study concluded that only residents of low density location and some parts of medium density zone have access to adequate housing; and residents of high density locations and some part of medium density zone live in inadequate housing, lacks basic physical infrastructure and social amenities. Most of

the high density neighbourhoods where people of low socio-economic status reside are unplanned, indecent, and unsafe with poor sanitary conditions.

Filali, (2012) using data from Tunisia's national survey on family health and social transformation for two periods- 1994 and 2006, analyse the housing conditions of households in Tunisia by developing indicator of housing adequacy based on dwelling attributes and household size. The analysis has revealed a deep gap in housing condition between coastal and inland regions and between urban and rural areas. It also shows that housing structure is the main factor that explains housing condition disparities. Overcrowding is a serious problem which harms both the households' housing condition and public health. Rural households are found to be seriously deprived, mainly in terms of housing space.

Zainal, et.al (2012) examines the relationship between housing quality and quality of life of the urban poor in Malaysia using participatory approach, with Klang Valley as its study area. Housing conditions includes conditions of dwellings, types of dwellings, housing tenure, surrounding environment and availabilities of amenities. Quality of life is measured on 50 items of self reported health, safety and social support. Analysis of primary data collected through interview and structured questionnaire from selected 400 samples from the study area gives the result that there is small, but significant positive relationship between housing conditions, health, safety and social support which provide empirical evidence of relationship between housing conditions and quality of life. The study argued that "housing is not only a physical shelter but also plays a significant role in a person's physical, mental, and emotional health conditions with regards to the qualitative dimensions provided by the housing condition and the surrounding environment of the housing area. Unfortunately, the housing conditions of the urban poor in Malaysia are lacking all

these aspects and failed to provide these important dimensions”. It suggested that housing condition should be considered as socio-economic indicator in the assessment of urban poverty due to its significant relationship with quality of life. It then warned that failure to address to housing issue of the urban poor might cause the group to be continuously marginalized in the society and deprive of quality of life.

Gambo, et.al (2012) examined the housing quality of slum residents of Makoko, Nigeria and its influence on the economy of the poor. Structured questionnaire and interviews were employed as instrument for data collection. The study found that there exist a complex relationship between housing condition with quality of education, health care affordability and level of income, that, those living in slum neighbourhood are paying variety of hidden costs on health, poor quality of education, water, employment opportunity, etc which in turn adversely affect their economic productivity. The study found that effect can be very negative when people reside in unsafe neighbourhood characterized by crime, violence, and lack of opportunity.

Amao (2014) examines the causes and characteristics of poor residential neighbourhood in Oshogbo, Nigeria. With primary data collected through structured questionnaire from 500 sample households, the researcher analyse various factors that could result poor residential neighbourhood. The study argued that as housing prices increases, the growing population are forced to live in substandard housing and unhealthy condition giving rise to poor residential neighbourhood and also asserts that poor residential neighbourhood has adverse effects on people. The study found that the problems that caused poor residential neighbourhood are poverty, growth of informal sector and housing shortage. It revealed that it is the income of the household that determine the quality of house; most of house with poor conditions are

belonging of low income category. The correlation analysis also revealed that there is positive relationship between quality of life and some housing variables like ventilation, spaces, lighting, security, drainage, sanitation, external environment, etc. The study then suggested that urban renewal and slum upgradation programmes are the most suitable methods to deal with the situation and to improve the socio-economic condition of the poor residents.

Adeleye, et.al (2014) examined the perception of housing quality by residents and non-residents of Ibara Housing Estate, Abeokuta, Ogun State, Nigeria. Applying descriptive and inferential technique of analysis, the study established that the condition of the building elements was perceived by the residents to be of good condition, while non-residents perceived to be fair in condition. The residents and non-residents of the estate were fairly satisfied with the facilities and services in the estate. The study, however, suggest that public should be more involved with the decision of housing provision right from the stage of design to implementation that all the stakeholders comprising residents and other target groups should adequately be consulted to prevent the occurrence of failure.

2.8. Conclusion

Reviewing research papers and articles, from various sources, of varieties of housing related topics, with different objectives, methodology, etc gives different pictures of housing and related problems faced by different countries- developed to underdeveloped. It is a fact that the problems and issues related to housing being faced by developing or underdeveloped countries is different from that of developed countries. While in developing countries, problems like homelessness, squatter

settlement, congestion, affordability are the main issues related to housing, whereas in developed country, most issues comes from residential satisfaction, quality of housing and rental market and its related problems like tenure security. It is clear that these problems, as their cause and nature differs, needs different approach or strategies. All of these papers prove to be relevant and useful source of information to the present study.

SCENARIO OF URBAN POVERTY AND HOUSING PROBLEMS

3.1. Introduction

In almost all underdeveloped countries where per capita income is very low, income inequality has resulted in a number of evils, of which poverty is certainly the most serious one (Misra & Puri, 2010). Poverty is characterized by deprivation of basic human needs- the needs of decent clothing, reasonable shelter, adequate foods and other social needs such as education, proper sanitation, protection from diseases, etc. Access to these basic needs to ensure a decent quality of life has been internationally and nationally recognized. In the absence of reliable statistics on poverty based on people's incomes and assets, one possible way of estimating the scale of poverty is to base it on how many people live in poor-quality homes or neighbourhood that lack the basic infrastructure and services that are essential for good health (Global Report on Human Settlement, 1996, page 114). Thus, the availability and condition of adequate housing, provision of safe and sufficient water supplies, provision of sanitation, drainage and healthcare effectively reflects the quality of human life. In this chapter, the trends of urbanization, magnitude of urban poverty and housing problems in India and Mizoram were discuss broadly.

Amidst rapid economic, social, political and demographic change, urban centres become driver of country's economic development that "major cities generally have a significantly higher concentration of the nation's economic output than of its population" (Global Report on Human Settlement, 1996). Although urbanization is expected to provide reasonably better quality of life with quality home, social

interaction, better healthcare, sanitation, most of Indian cities face severe shortage of these living facilities as most of them suffers due to unplanned expansion, growing slums, congestion and squatter settlement. Increasing cost of living, increasing land price reduced the level of affordability by the urban poor to decent living standards. This chapter analyze available secondary data (such as Census 2011, NSS Report) on poverty, housing and basic amenities in India as a whole and Mizoram in detail.

3.2 Trends in India's urban growth

Urbanization is a part of development process. With most of economic activities concentrated in urban centres and the more promising urban facilities, India's urban witnessed a growing population even before Independence. The underdeveloped Indian agriculture which limit its capacity to absorb the increasing working population and post-liberalized manufacturing and service sector boom contribute significantly to the increasing rural-urban migration. As in the case of other developing countries, lack of employment opportunities, poverty, poor health and medical facilities, sanitation and lack of other basic facilities forced millions and millions of rural youth to migrate to the urban centres. Our present condition indicated that this trend of rural to urban migration is likely to continue and another millions from rural India are expected to move to cities. Along with increasing rural-urban migration, natural growth (i.e., high birth rate 18.3 per thousand in 2009) and inclusion of new areas under 'urban' are another factor that contributes to growth of urban population.

India's urban population has increase at the Compound Annual Growth Rate (CAGR) of 2.8 per cent (Cushman & Wakefield, 2012) during 2001- 2011 resulting in

increase in urbanization rate of 27.8 per cent to 31.2 per cent. Out of India's total population of 1210 millions, 377 millions are urban dwellers (Census 2011). According to the Planning Commission, urban India is going to be the home of 600 million people in 2031; an increase of 59 per cent from 2011. Table 3.1 shows the percentage of urban population to the total population in India since Independence.

Table-3.1: Trends in Percentage Growth of Urban Population in India

Year	Population (in Millions)	Urban Population	Urban Population percentage	Annual Population Growth Rate		
				Total	Urban	Rural
1951	361.1	62.4	17.3	-	-	-
1961	439.2	78.9	18	1.96	2.34	1.88
1971	548.2	109.1	19.9	2.22	3.24	1.98
1981	683.3	159.5	23.3	2.7	3.79	1.77
1991	846.3	217.6	25.7	2.14	3.11	1.83
2001	1028.7	285.3	27.8	1.94	2.71	1.65
2011	1210	377.1	31.2	1.76	2.8	1.22

Source: Selected Socio-Economic Statistics India 2011;and, Misra & Puri, "Indian Economy" (28th Edition),2010, Himalayan Publishing House, page 129 table 9.7

As indicated in Table 3.1, urbanization in India is on the rise but with a slower rate in compare to other developing countries like Brazil (87 percent), Mexico (78 percent), Indonesia (54 percent) and China (45 percent) (Cushman & Wakefield, 2012). And, in comparison with the urbanization level of developed countries like 73 per cent in Russia, 77 per cent in USA, 91 per cent in Australia in 2001, the Indian percentage of 27.8 (2001) was too low. From 1961 onwards, the number of towns has steadily increased from 2700 in 1961 to 3768 in 1991 and to 5545 in 2001 and further to 7935 in 2011. Also clear from the table is the annual growth rate of urban decelerated from 3.11 in 1991 to 2.71 in 2001 and 2.8 in 2011.

While urbanization is expected to improve the quality of life and living standard of the people, correlation analysis shows that urbanization is not much

helpful to reduce unemployment in India. Correlation analysis also indicates the existence of mild correlation between proportion of urban population and percentage of population below poverty line. Obviously, the pattern of urbanization that has developed in India did not make much impact on reduction of poverty (Dutt & Sundaram, 2010). The growing concentration of peoples in cities and urban areas result in increasing slum population and squatter settlement and deteriorated the housing condition of economically weaker section of society. The increasing urban population led to rising land prices, land shortage, shortfall in housing and shortfall in other basic amenities like water, power, open spaces and thus denied such basic services which should be available to the urban dwellers by being lived in city. The worst effects of such problems arising out of urbanization thus have to be bear by low income families and economically weaker sections.

3.3. Magnitude of Urban Poverty in India

India, a home of more than one billion people has been on its way to development at snail's pace right from its Independence in 1947. However, the country inherited millions of its population trapped under acute poverty with high rate of illiteracy, unemployment, low income, undeveloped agriculture and industry, low labour productivity, poor health and medical facilities, etc which have worsened its economic development prospects and puts a brakes on its growth. Despite various strategic and policies measures adopted by the Government of India to tackle and reduce poverty, the progress has been disappointing that large percentage of Indians remains below poverty line.

Several economists and organizations have conducted studies to measure the extent of poverty in India. According to P.D. Ojha estimates (with a base of monthly per capita expenditure of Rs 15-18 per person for urban areas (1960-61 prices) and Rs 8-11 for rural areas), 184 million persons in rural areas (ie 51.8 per cent of rural population) and 6 million persons in urban areas (ie 7.6 per cent of urban population), and for the country as a whole, 190 million persons i.e., 44 per cent are classified as poor in 1960-61. And, for 1967-68, more than 70 per cent of rural populations are found to be below poverty line (Dutt & Sundaram, 2010). Montek Ahluwalia studied the trends in incidence of poverty for rural India for the period of 1956-57 to 1973-74. In order to define the concept of poverty line, he used an expenditure level of Rs 15 in 1960-61 prices for rural areas and Rs 20 per person for urban areas. According to this study, the proportion of rural poverty declined initially from over 50 per cent in the mid-fifties to around 40 per cent in 1960-61, rose sharply through the mid sixties, reaching a peak in 1967-68 (56.5 percent), and then declined again. He, then, concludes that fluctuations in incidence of poverty inversely related to performance of agriculture that it falls in periods of good agricultural performance and rises in periods of poor performance.

The Planning Commission, which was the nodal agency for estimating level of poverty in India has appointed a number of committees and adopted different methodologies which are changes from time to time. It estimates level of poverty at the national and state level and separately for rural and urban. The incidence of poverty is measured by the poverty ratio which is the number of poor to the total population expressed in percentage. It is also known as head-count ratio and is measured from an exogenously determined poverty quantified in terms of per capita consumption expenditure over a month and the class distribution of persons obtained

from large sample survey of consumer expenditure data of National Sample Survey Office (NSSO). The Working Group constituted in 1962, Task Force under the chairmanship of Dr Y.K Alagh in 1977, the Expert Group under the chairmanship of Prof. D.T Lakdawala in 1989, and Prof. S.D. Tendulkar in 2005 were the different groups appointed by the Planning Commission to estimate poverty level in India. Within one and a half years of the acceptance of the recommendations of Tendulkar Committee, Planning Commission constituted an Expert Group under the chairmanship of Dr. C Rangarajan.

According to official Planning Commission estimate of poverty using Lakdawala method during 1973-74 to 2004-05 (Using expenditure data available from 28th, 32nd, 43rd and 50th Rounds of NSS), poverty in India has been declined slowly in percentage terms both in rural and urban areas. In comparison to rural poverty ratio which declined from 54.4 in 1973-74 to 39.1 in 1977-78 and further to 28.3 in 2004-05, urban poverty ratio shows relatively smaller decline which come down from 49 in 1973-74 to 38.2 in 1977-78 and to 25.7 in 2004-05. However, the absolute number of poverty in urban increased from 60 million in 1973-74 to 80.8 million in 2004-05 while in rural areas it declined from 261.3 million in 1973-74 to 220.9 in 2004-05. This is shown in Table 3.2

Table- 3.2: Poverty Ratio and Number of Poor by Expert Group (1979) Method

Year	Poverty Ratio			No. of Poor (in million)		
	Rural	Urban	Total	Rural	Urban	Total
1973-74	56.4	49	54.9	261.3	60	321.3
1977-78	53.1	45.2	51.3	364.3	64.6	328.9
1983	45.7	40.8	44.5	252	70.9	322.9
1987-88	39.1	38.2	38.9	231.9	75.2	307.1
1993-94	37.3	32.4	36	244	76.3	320.3
2004-05 (URP)	28.3	25.7	27.5	220.9	80.8	301.7

Note: URP = URP consumption = Uniform Recall Period consumption in which the consumer expenditure data for all the items are collected from 30-day recall period.

Source: *Planning Commission, (2014), "Report of the Expert Group to Review the Methodology for Measurement of Poverty" page 14 table 2.1*

Tendulkar Committee which submitted its report in 2009, adopted the officially measured urban poverty line of 2004-05 based on Expert Group (Lakdawala) methodology and converted this poverty line (which is URP consumption based) into Mixed Recall Period (MRP) consumption (MRP- consumer expenditure data is collected using 365 day recall period for five non-food items like clothing, footwear, durable goods, education and institutional expenses; and 30 days recall periods for the remaining items). It has made a re-estimation of poverty ratio for 1993-94 and 2004-05 which is shown in Table 3.3.

Table-3.3: Percentage and Number of Poor Estimated from Expert Group (Tendulkar) Methodology

Year	Poverty Ratio (percent)			Number of Poor (million)		
	Rural	Urban	Total	Rural	Urban	Total
1993-94	50.1	31.8	45.3	328.6	74.5	403.7
2004-05	41.8	25.7	37.2	326.3	80.8	407.1
2009-10	33.8	20.9	29.8	278.2	76.5	354.7
2011-12	25.7	13.7	21.9	216.7	53.1	269.8

Source: *Planning Commission, (2014), "Report of the Expert Group to Review the Methodology for Measurement of Poverty" page 18 table 2.*

The analysis of the tables-Table 3.2, 3.3, 3.4, 3.5, shows that poverty is widespread in India both in urban and rural. While data shows decrease in the incidence of poverty in percentage terms, the absolute number of people living below poverty line has increased. In 2004-05, 80.8 million out of estimated urban population of 309.5 million persons were living below poverty line. These numbers constitute a significant proportion of the world's total urban poor estimated at 291.4 million (Steering Committee on Urbanization Planning Commission, 2011). During 1973 to 2004-05, the rate of decline in rural poverty was much more impressive (54.6 in 1973-74 to 28.3 in 2004-05) than rate of decline in urban poverty (49 per cent in 1973-74 to 25.7 per cent in 2004-05). However, data shows that there was an impressive decline in urban poverty during 2004-05 (25.7 percent) to 13.7 in 2011-12. Another fact that attract attention is the slowing down of rate of decline in the 1990s as compared to the period 1983-1993 (Steering Committee on Urbanization Planning Commission, 2011)

According to the Rangarajan methodology, which set national poverty line for rural at Rs 972 and Rs 1407 (per capita monthly consumption) for urban, the poverty ratio at all India level for 2011-12 comes 29.5 per cent with an absolute number of 363 million people (260.5 millions i.e., 30.9 percent in rural and 102.5 millions i.e., 26.4 percent in urban areas). The estimate of poverty ratio for the years 2009-10 and 2011-12 derived from the Expert Group (Rangarajan) methodology and Tendulkar methodology are summarised in Table 3.4

Table-3.4: Poverty Estimates in 2009-10 and 2011-12

Year	Poverty Ratio			Number of Poor (million)		
	Rural	Urban	Total	Rural	Urban	Total
Expert Group (Rangarajan)						
2009-10	39.6	35.1	38.2	325.9	128.7	454.6
2011-12	30.9	26.4	29.5	260.5	102.5	363
Reduction (percent points)	8.7	8.7	8.7	65.4	26.2	91.6
Expert Group (Tendulkar)						
2009-10	33.8	20.9	29.8	278.2	76.5	354.7
2011-12	25.7	13.7	21.9	216.7	53.1	269.8
Reduction (percent points)	8.1	7.2	7.2	61.5	23.4	84.9

Source: *Planning Commission, (2014), "Report of the Expert Group to Review the Methodology for Measurement of Poverty" page 69, table 4.7*

Poverty has been a national issue and part of policy debate right from the first plan period with primary focus on rural sector since large proportion of people living in rural areas. However, in recent years, India witnessed a marked shift in its economic structure, from an agrarian economy to manufacturing and services sector oriented economy; and the growth of urban centre and urban population (see table 3.1). It is therefore necessary for the policy makers to deal with the problems and demands accompanying the urban growth including poverty. So far, it may not be right to claim that the efforts of the Government to reduce the incidence poverty both in urban and rural areas has been successful and the progress has been disappointing as indicated in the tables.

State-wise estimates of percentage and numbers of poverty for the year 2011-12 is also given in Table-3.5

**Table-3.5: Number and Percentage of Population Below Poverty Line By States – 2011-12
(Tendulkar Methodology)**

Sl.no	States	Rural		Urban		Total	
		Percentage of Persons	No. of Persons (lakhs)	Percentage of Persons	No. of Persons (lakhs)	Percentage of Persons	No. of Persons (lakhs)
1	Andhra Pradesh	11	61.8	5.8	17	9.2	78.8
2	Arunachal Pradesh	38.9	4.2	20.3	0.7	34.7	4.9
3	Assam	33.9	92.1	20.5	9.2	32	101.3
4	Bihar	34.1	320.4	31.2	37.8	33.7	358.2
5	Chhattisgarh	44.6	88.9	24.8	15.2	39.9	104.1
6	Delhi	12.9	0.5	9.8	16.5	9.9	17
7	Goa	6.8	0.4	4.1	0.4	5.1	0.8
8	Gujarat	21.5	75.4	10.1	26.9	16.6	102.2
9	Haryana	11.6	19.4	10.3	9.4	11.2	28.8
10	Himachal Pradesh	8.5	5.3	4.3	0.3	8.1	5.6
11	Jammu & Kashmir	11.5	10.7	7.2	2.5	10.3	13.3
12	Jharkhand	40.8	104.1	24.8	20.2	37	124.3
13	Karnataka	24.5	92.8	15.3	37	20.9	129.8
14	Kerala	9.1	15.5	5	8.5	7.1	23.9
15	Madhya Pradesh	35.7	191	21	43.1	31.6	234.1
16	Maharashtra	24.2	150.6	9.1	47.4	17.4	197.9
17	Manipur	38.8	7.4	32.6	2.8	36.9	10.2
18	Meghalaya	12.5	3	9.3	0.6	11.9	3.6
19	Mizoram	35.5	1.9	6.4	0.4	20.4	2.3
20	Nagaland	19.9	2.8	16.5	1	18.9	3.8
21	Orissa	35.7	126.1	17.3	12.4	32.6	138.5
22	Punjab	7.7	13.4	9.2	9.8	8.3	23.2
23	Rajasthan	16.1	84.2	10.7	18.7	14.7	102.9
24	Sikkim	9.9	0.4	3.7	0.1	8.2	0.5
25	Tamil Nadu	15.8	59.2	6.5	23.4	11.3	82.6
26	Tripura	16.5	4.5	7.4	0.8	14	5.2
27	Uttar Pradesh	30.4	479.4	26.1	118.8	29.4	598.2
28	Uttarakhand	11.6	8.2	10.5	3.4	11.3	11.6
29	West Bengal	22.5	141.1	14.7	43.8	20	185
30	Puducherry	17.1	0.7	6.3	0.6	9.7	1.2
31	Andaman & Nicobar Island	1.6	0.04	0	0	1	0.04
32	Chandigarh	1.6	0.004	22.3	2.3	21.8	2.3
33	Dadra & Nagar Haveli	62.6	1.2	15.4	0.3	39.3	1.4
34	Daman & Diu	0	0	12.6	0.3	9.9	0.3
35	Lakshadweep	0	0	3.4	0.02	2.8	0.02
	All India	25.7	2166.6	13.7	531.2	21.9	2697.8

Source: Planning Commission, (2014), "Report of the Expert Group to Review the Methodology for Measurement of Poverty" page 31, table B4

3.4. Housing shortage and problems in urban India

As India moves towards the path of development and has experienced movement of millions its population to the cities and urban centres, a serious question arises as to whether the Indian cities are prepared to accommodate this large influx of people to the city. Maintaining the same level of living standard of the urban dwellers while accommodating an additional population by providing basic and quality amenities become a serious challenge. One important challenge being the provision of quality and affordable housing to the people whether they are poor or rich. It is, indeed, a fact that India failed to provide the urban dwellers their basic needs such as housing (Cushman & Wakefield, 2012). Ministry of Housing and Urban Poverty Alleviation (MoHUPA), in 2012, states that there is deficit in the supply, to the extent of 18.78 million, of housing unit in urban India, of which nearly 95 per cent are of the Economically Weaker Section (EWS) and Low Income Group (LIG) of urban population.

The major problem with India's urban growth is that urban centres and cities have grown unplanned and haphazard manner due to rapid urbanization and lack of planning. Cities are overcrowded because of natural growth plus migration from rural to industrialized cities in search of employment. This has put pressure on the natural resources of the cities, basic services like water, sanitation, electricity and other services, which bring down the living standard of the city. The increasing needs of shelter put pressure on land and housing price pushing a number of poor to live in footpath/streets or cause growth of slums.

The pressure of increasing population has led to construction of sky-scrapers to accommodate maximum number of people within minimum space. But this has

created other issue such as fire hazard, lack of civic amenities such as parks, open spaces and playgrounds (Cushman & Wakefield, 2012). So these are the challenges that needs to be respond with right strategy and careful planning if India ever wanted to fulfill its dream of having smart cities.

3.4.1 Estimation of housing shortage.

Apparently there is substantial housing shortage in India and there exist a wide gap between the supply and demand of housing both in terms of quality and quantity. As shown in Table-3.6, Ministry of Housing and Urban Poverty Alleviation estimated that there were 18.78 million housing deficit in urban India, out of which obsolescence and congestion problems were the highest factor. It also pointed out that nearly 95 per cent of this shortfall was in EWS and LIG housing.

Table-3.6: Estimated Urban Housing Shortage in India – 2012

Categories	As on 2012 (in Millions)
Households living in Non-Serviceable Katcha	0.99
Households living in Obsolescent Houses	2.27
Households living in Congested Houses requiring new houses	14.99
Households in Homeless condition	0.53
Total Urban Housing Shortage	18.78

Source: Ministry of Housing and Urban Poverty Alleviation, Govt. of India, "Report of the Technical Group on Urban Housing Shortage"(2013), page 4

According to Cushman & Wakefield Research, as presented in Table 3.7, demand for urban housing will scale up by nearly 12 million units by 2017 based on just the current growth of population. By 2021, the urban population is expected to increase to nearly 500 million, to about 35 percent of the total population of India.

Hence, the total housing demand in the country by 2017 could be as high as 88.78 million units (Cushman & Wakefield Research, 2012).

Table-3.7: Total Housing Shortage Projection

Housing Shortage	Units in Millions
Urban shortage in 2012	18.78
Rural shortage in 2012	43.67
Additional demand due to population growth in 2012-2017	26.33
Total Demand	88.78

Source: *Cushman & Wakefield Research, (2012), "Challenge and Opportunities for the Housing Sector in India" page 5*

3.4.2. Housing and housing condition in India-Census 2011

Census of India in its decadal operations collects valuable information on housing such as number of houses and households, quality of houses in terms of good, livable and dilapidated in the country along with some important information on availability of basic amenities. The information given by Census 2011 data relating housing and housing conditions are presented in detail, as under:

(a) Number of Houses and number of Households: As shown in Table-3.8a(i) total number of houses as per 2011 Census was 330.84 million, out of which 110.14 million were in urban. While 99.04 million urban houses were occupied, 11.09 million houses were recorded vacant. As per 2011 Census, total number of household was 246.69 million in India and all India average household size was 4.9 persons (4.8 for urban and 4.9 for rural). The number of rural households was 167.83 million (68 per cent), while the urban households were 78.86 million (32 per cent) as presented in Table-3.8a(ii).

Table- 3.8a(i) Total Number of Census Houses: Rural & Urban-2011 (million)

Area	Total Number of Census Houses	Distribution of Census Houses	
		Occupied Houses	Vacant Census House
Rural	220.7	207.12	13.58
Urban	110.14	99.04	11.09
India	330.84	306.16	24.67

Source: Ministry of Housing and Urban Poverty Alleviation (2013), "State of Housing in India : A Statistical Compendium 2013" Government of India page 5 table-1

Table-3.8a(ii) Total Number of Households: Rural & Urban -2011 (million)

Characteristics	Total	Rural	Urban
Total Population	1210.19	833.09 (69%)	377.10 (31%)
Total Households	246.69	167.83	78.86
Average Household size	4.9	4.9	4.8

Source: Ministry of Housing and Urban Poverty Alleviation (2013), "State of Housing in India : A Statistical Compendium 2013" Government of India page 6, table-2

b) Total Occupied Houses by Type of Use: Out of the 306.16 million occupied houses in India, houses use for both residence and residence-cum-other purpose were 244.64 million. While houses uses for non-residential uses like shops, schools, college, hospitals, place of worship, factories, etc were numbered at 61.52 million, as presented in Table-3.8b

Table no-3.8b: Distribution of Occupied Census Houses -2011 (million)

Area	Total Occupied	Distribution of Occupied Census Houses			
	Census Houses	Residence	Residence-cum-other use	Total of Residence & Residence-cum-other use	All other Non-residential Uses
Rural	207.12	159.93	6.23	166.16	40.96
Urban	99.04	76.13	2.35	78.48	20.56
India	306.16	236.06	8.58	244.64	61.52

Source: Ministry of Housing and Urban Poverty Alleviation (2013), "State of Housing in India : A Statistical Compendium 2013" Government of India page-7 table-3

(c) Habitable condition of houses: Concern with the quality of housing, Census 2011 distributed households in terms of habitable conditions of houses into ‘good condition’, ‘livable condition’ and ‘dilapidated condition’ (shown in table-3.8c). Among the 246.69 million total households living in residential and residence-cum-other use occupied census houses, 131.02 (53 percent) million households were living in ‘good condition’ houses, 102.47 million (42 percent) were living in ‘livable condition’ houses while households living in ‘dilapidated’ houses were 13.20 million (5 percent). Among 78.86 million urban households in residential and residence-cum-other use census houses, households living in ‘good condition’ houses were 53.98 million (68 percent); households living in houses of ‘livable conditions’ were 22.61 million (29 percent), while households in ‘dilapidated’ houses were 2.27 million (3 percent).

Table- 3.8c: Distribution of Households by Their Habitable Condition of Census Houses Occupied – 2011(million)

Area	Total Number of Households	Distribution of households by their Habitable Condition of Houses		
		Good	Livable	Dilapidated
Rural	167.83	77.04 (46%)	79.85 (48%)	10.93 (6%)
Urban	78.86	53.98 (68%)	22.61 (29%)	2.27 (3%)
India	246.69	131.02 (53%)	102.47 (42%)	13.20 (5%)

Source: Ministry of Housing and Urban Poverty Alleviation (2013), “State of Housing in India : A Statistical Compendium 2013” Government of India page 51, table-11

(d) Households and their tenure status: Relating to tenure status of households, Census 2011 data shows that a large percentage of Indian households live in their own house or dwelling units, i.e.,, 213.53 million households have owned house. While 23.37 million households (11 percent) are living in a rented accommodation, the remaining 5.80 million (2 percent) settle in other accommodation. Among the Urban

households, households living in own dwelling units were 54.54 million (69 percent), households in rented dwellings were 21.72 million (28 percent) and households in any other accommodation numbered 2.60 million (3 percent). The distribution of ownership status of households is shown in Table-3.8d.

Table-3.8d: Distribution of Households by Ownership Status of the Census Houses Occupied by Them – 2011 (million)

Area	Total Number of Households	Distribution of Households by Ownership Status		
		Owned	Rented	Any Other
Rural	167.83	158.98 (95%)	5.64 (3%)	3.20 (2%)
Urban	78.86	54.54 (69%)	21.72 (28%)	3.20 (2%)
India	246.69	213.53 (87%)	27.37 (11%)	5.80 (2%)

Source: Ministry of Housing and Urban Poverty Alleviation (2013), "State of Housing in India : A Statistical Compendium 2013" Government of India page 17, table-13

3.4.3. Housing and Housing Condition in India- NSS 69th Round 2012

The National Sample Survey Organisation (NSSO) collects information on structural aspects of dwelling units and basic housing amenities such as drinking water, sanitation, electricity, etc in various rounds of National Sample Surveys such as 7th Round (1953-54), 28th Round (1973-74), 44th Round (1988-89), 49th Round (1993), 58th Round (2002), 65th Round and the latest 69th Round (2012). Then the latest data available on housing condition is the data corresponding to NSS 69th Round called "Drinking Water, Sanitation, Hygiene and Housing Condition in India". Some important findings of this report regarding housing conditions are present below.

(a) Distribution of Households by Types of Structure: The type of structure of building is an important indicator of housing condition. The physical condition of the structure of buildings have been classified into pucca, semi-pucca and kutcha based on materials used in the construction of roof and wall of the dwelling unit. Table-

3.9a shows the distribution of rural and urban households by type of structure of the dwelling unit reported during 69th Round NSS survey.

Table-3.9a: Distribution (per cent) of Households by Type of Structure of House as per 69th NSSO Rounds

Sector	Type of Structure		
	Pucca	Semi-pucca	Katcha
Rural	65.8	24.6	9.6
Urban	93.6	5	1.4
All India (Rural+Urban)	94.6	18.4	7

Source: NSSO 69th Rounds (2012), page 50, table 4.1

In rural India, 53.9 percent households of lowest quintile class of MPCE stayed in pucca structure whereas the proportion was 77.8 percent for households belonging to top quintile class. In the urban India, 82.9 percent households belonging to lowest quintile class of MPCE stayed in pucca structure as compared to 99.4 percent households in top quintile class

(b) Distribution of Households by Condition of Structures: Table-3.9b shows that in urban areas, a higher percentage of households lived in structures, which were in good condition when compared to rural areas. Around 60 per cent of urban households lived in structures that were in good condition, as against 38.3 percent of rural households. While the percentage of households living in satisfactory condition is higher in rural areas (48.6 per cent against 32.8 per cent in urban), 13 percent of rural households lived in houses with bad structural condition compared to 7 percent of urban households.

Table-3.9b: Distribution (percentage) of households by condition of structure for different structure types in India during 2012

Structure type	Condition of Structure		
	Good	Satisfactory	Bad
Rural			
Pucca	53.7	41.8	4.5
Semi-pucca	10.3	68.8	20.9
Katcha	5	43.6	51.3
Urban			
Pucca	63.5	31.7	4.7
Semi-pucca	14.4	51.3	34.2
Katcha	3.1	36	60.9

Note: If the structure did not require any immediate repairs, major or minor, it was considered as in 'good' condition whereas if the structure required immediate minor repairs but not major repairs, it was considered as in 'satisfactory' condition. If the structure of the building required immediate major repairs without which it might be unsafe for habitation or required to be demolished and rebuilt, it was considered as in 'bad' condition.

Source: NSSO 69th Rounds (2012), page 55, table 4.6

(c) Households with Different Types of Tenure Status: According to NSS 69th Round report, as presented in Table-3.9c, in 2012, the majority of the households, in both rural and urban areas were residing in owned dwellings - 93.3 percent in rural areas and 61.1 percent in urban areas. Households living in hired dwellings or rented house (with or without written contract) constitute 4.5 per cent in rural and 31.6 percent in urban areas. One important point to be noted here is that of such households living in hired dwelling units or rented houses, only a few percentages are with written contract, which may affect tenure security. Residing in employer's quarter was more of an urban phenomenon, with nearly 3.8 percent of the urban households residing in employer's quarters as against less than 1 (0.3) per cent of rural households.

Table-3.9c: Distribution of Households (percentage) with Different Types of Tenure Status

Sl.no	Dwelling Units by Tenure Status	Rural	Urban
1	No dwelling	0	0
2	Owned dwelling-freehold	92.7	59.6
3	Owned dwelling-leasehold	0.6	1.5
4	All Owned dwelling (freehold+leasehold)	93.3	61.1
5	Employer's quarters	0.6	3.8
6	Hired dwelling with written contract	0.3	6.4
7	Hired dwelling without written contract	4.2	25.2
8	All hired accommodation	4.5	31.6
9	Others	1.6	3.4

Source: NSS 69th Round (2012) page 46 table-3.29

Another interesting information regarding households' tenure status is that 94.2 percent and 71.3 percent households in rural India and urban India respectively had 'secured tenure' which includes the tenurial statuses: 'owned-freehold/leasehold', 'hired: employer's quarters' and 'hired dwelling units with written contract'. Also, in rural areas, "94-95 percent of households owned their dwelling unit in all except the top quintile class of MPCE", and in urban areas, "the proportion of households living in hired dwelling units increased steadily from 24 percent in the lowest quintile class of MPCE to 44 percent in the highest".

(d) Distribution of basic amenities

In order to assess the availability of living facilities to households, both urban and rural, in India, we may take the case of three items- the availability of drinking water, latrine facilities and electricity. According to 69th NSS Report 2012, 85.8 percent households in rural India and 89.6 percent households in urban India had sufficient drinking water, while 86.0 percent and 89.5 percent of households in rural India and urban India respectively got sufficient water throughout the year for performing all household activities. And, 88.5 percent households in rural India, and 95.3 percent

households in urban India had improved source of drinking water during 2012 where, the ‘improved source’ of drinking water includes: ‘bottled water’, ‘piped water into dwelling’, ‘piped water to yard/plot’, ‘public tap/standpipe’, ‘tube well/borehole’, ‘protected well’, ‘protected spring’, and ‘rainwater collection’. The major sources of drinking water in India during 2012 is presented in Table-3.9d(i).

Table-3.9d(i): Percentage distribution of households by principal source of drinking water in India during 2012

Principal sources of drinking water	Rural	Urban
Bottled water	1.6	5.2
Piped water into dwelling	6.5	35.1
Piped water into yard/plot	10.4	21.2
Public taps/standpipe	14.3	12.8
Tubewell/borehole	52.4	19.9
Protected well	2.7	1.1
Unprotected well	9	2.2
Protected spring	0.4	0
Unprotected spring	0.3	0
Rain water collection	0.2	0
Surface water tank/pond	0.5	0.1
Surface water-other surface water	0.6	0
Others	1.1	2.4

Sources: NSS 69th Round (2012) page 17, table-3.1

There was slight difference in access to improve drinking water among different quintile classes ranging from 88 per cent to 90 per cent in rural India and from 93 per cent to 97 per cent in urban areas. The number (percentage) of households having improved source of drinking water for each quintile classes of MPCE is presented in Table-3.9d(ii).

Table-3.9d(ii): Percentage of Households having improved source of drinking water for each quintile class of MPCE in India during 2012

Quintile Class of MPCE	Rural	Urban
0-20	88	93.4
20-40	87.8	93.6
40-60	87.5	95.2
60-80	88.4	95.3
80-100	90	97.3

Sources: NSS 69th Round (2012) page 19, table-3.3

Regarding bathroom and sanitation facilities, 62.3 percent of households in rural India and 16.7 percent of households in urban India did not have any bathroom facility while 15.5 percent rural households and 55.4 percent urban households in India had attached bathroom. Another shocking and disappointing fact related to sanitation facilities is that more than half (59.4 percent) of rural households had no latrine facilities while in urban areas, 8.8 per cent households had no latrine facilities. 31.9 percent households in rural India and 63.9 percent households in urban India had exclusive use of latrine facilities. While the households belonging to lowest quintile class of MPCE (0-20), 20 per cent in rural areas and 40.4 per cent in urban areas had exclusive access to latrine facilities, 28.7 per cent and 62.3 per cent (rural and urban respectively) households of middle quintile class (40-60), 46.4 per cent and 79.1 per cent of rural and urban households respectively of top quintile class had exclusive access to latrine facilities.

And, in case of electricity, 80 per cent of rural households and 97.9 per cent of urban households had electricity for domestic use. Among households having electricity for domestic use, 33.2 percent in rural India and 63.5 percent in urban India were using electric wiring of the conduit type.

3.5. Government Policies on Urban Housing for the Poor

The Government of India and state governments have taken a number of initiatives to promote housing and housing finance in India. Some of the key schemes being implemented by Government of India can be summarized as follows:

1) **Indira Awas Yojana (IAY):** This scheme is targeted at BPL families by providing them cash subsidy to build low-cost houses. Funding is jointly provided by the central and state governments in the ratio of 75:25. Launched in 1998-99, the scheme intends to build 2 million additional houses subdivided into 1.3 million in rural areas and 0.7 million in urban areas.

2) **Bharat Nirman:** This program was launched in 2005 with the vision of accelerating infrastructure development (including housing) in rural areas. The scheme has been a success so far with 7.2 million houses constructed in the first phase (2005-09) against a target of 6 million units. The scheme has been extended till 2014 with 12 million additional houses targeted to be built during 2009-14. The second phase is also progressing well with 9.5 million houses already built till October, 2012.

3) **Jawaharlal Nehru National Urban Renewal Mission (JNNURM):** The most effective and prominent initiatives of the central government concerning the development of urban infrastructure and urban housing is that of the Jawaharlal Nehru National Urban Renewal Mission (JNNURM), launched in December, 2005. This mission has been broadly classified into four components viz., Urban Infrastructure & Governance (UIG), Basic Services to the Poor (BSUP), applicable to 65 cities of national importance and Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) and Integrated Housing & Slum Development Programme (IHSDP) applicable to other cities and towns.

UIG and UIDSSMT focus on the development of city-wide infrastructure, whereas BSUP and IHSDP focus on housing and basic amenities of urban poor, especially slum-dwellers. The earlier schemes known as National Slum Development Programme (NSDP) and Valmiki Ambedkar Awas Yojana (VAMBEY) has been subsumed under IHSDP.

The broad objectives of Jawaharlal Nehru National Urban Renewal Mission (JNNURM) are:

- 1) Planned urban development;
- 2) Integrated development of urban infrastructural services;
- 3) Effective linkages between asset creation and asset management;
- 4) Ensuring adequate investment of funds in cities;
- 5) Scaling up delivery of civic amenities and provision of utilities with emphasis on universal access to the urban poor;
- 6) Taking up urban renewal programme, i.e.,, redevelopment of inner (old) cities area to reduce congestion; and
- 7) Provision of basic services to the urban poor including security of tenure at affordable prices, where possible in situ , improved housing, water supply, sanitation, education, health and social security.

There are certain significant components under the JNNURM, Basic Services to the Urban Poor (BSUP) and Integrated Housing and Slum development Programme (IHSDP) and, Affordable Housing in Partnership (AHP). The main features of these programmes are explained in detail as under:

a) The Basic Services to the Urban Poor (BSUP) and Integrated Housing and Slum Development (IHSDP): The schemes mainly focus on integrated provision of affordable housing and basic amenities to the urban poor, with focus on slums. Their main focus is thus, concerning for the poorest of the urban dwellers. These schemes claimed for the reformation of pro-poor governance based on the following measures:

1) Earmarking at least 20-25 percent of developed land in all housing projects (both public and private agencies) for EWS/LIG category with a system of cross-subsidization;

2) Internal earmarking within local body budgets for basic services to the urban poor; and

3) Implementation of 7-Point Charter, i.e., provision of basic services to the urban poor, including security of tenure at affordable prices, improved housing, water supply, sanitation and ensuring delivery of already existing universal services of the Government for education, health and social security within the Mission period (2005-12) as per agreed timelines.

The main purpose of suggesting such reformations with the objectives of : enabling the urban poor to have access to urban land and not squeezing them out of the urban; facilitating a dedicated budget or fund to be created at the city or state level to ensure a steady flow of resources for urban poverty alleviation and slum upgradations; providing basic entitlements and services to be provided to the urban poor based on agreed milestones and deliberately planned efforts to develop “inclusive” cities. Hence, an enabling framework of urban good governance for planned and

development of cities and towns could be attained, provided these schemes should be in conjunction with other reforms.

b) Affordable Housing in Partnership (AHP): The scheme for Affordable Housing in Partnership (AHP) has been launched in 2009 as a part of the then existing Basic Services to Urban Poor (BSUP). The main aim is incentivizing land assembly for affordable housing among Economically Weaker Section (EWS), Low Income Group (LIG) and Middle Income Group (MIG) with at least 25 percent for EWS, and as such the scheme has an outlay of Rs. 5,000 crores for the 11th plan and a target of construction of one million houses for the above mentioned economical categories. The partnership is aimed between the various agencies: Government/ Parastatals/ Urban Local Bodies/ Developers for realizing the goal of affordable housing for all facilitating the creation of inclusive habitats.

4) National Urban Housing & Habitat Policy 2007 (NUHP): The Ministry of Housing and Urban Poverty Alleviation has formulated the National Urban Housing & Habitat Policy, 2007 (NUHP-2007) which basically aims at providing a framework for provision housing and basic amenities in urban areas.

The prominent features of the policy are: Target at Affordable Urban Housing for All with special emphasis on urban poor; Lay emphasis on inclusive urban planning; Encouraging Integrated Townships and Special Economic Zones that are inclusive; Reserving 10-15 percent of land in every new public/private housing projects or 20-25 percent Floor Area Ratio (FAR); Public-Private-Partnerships (PPP): The private sector to undertake land assembly within the purview of Master Plans with focus on inclusion. Action Plans for urban Slum-dwellers and special package for Cooperative Housing, Labour Housing and Employees Housing to be prepared; Accord primacy to

the provision of shelter to urban poor at their present location or near their work place; Focus on detailed city maps to be prepared based on GIS, aerial survey and ground verification. Efforts should be on encouraging the use of proven cost-effective technology and building materials. NHHUP-2007 envisages that the state/UTs would develop a “Habitat Infrastructure Plan” for all cities with a population of over one lakh.

5) Interest Subsidy Scheme for Housing the Urban Poor (ISHUP) : The Interest Subsidy Scheme for Housing the Urban Poor (ISHUP) was launched in 2008-09, seeks to provide a subsidy of 5 per cent on interest loans up to Rs 1 lakh taken for housing purposes by the urban poor, admissible over the full period of the loan.

The scheme aims at leveraging the flow of institutional finance for the EWS (with monthly income of up to Rs. 5,000) and LIG (with monthly income between Rs. 5,001 and Rs. Rs. 10,000). The beneficiaries may choose fixed or floating rates.

The interest subsidy directly accrues to the benefit of the borrower upfront reducing his principal outstanding amount. The beneficial impact of the upfront subsidy on the acceptability of borrowers should be higher than in the case of periodical subsidy payment. Under the ISHUP the NPV subsidy is given to the lenders on an up-front and quarterly basis.

6) Rajiv Awas Yojana (RAY): Rajiv Awas Yojana (RAY) is a scheme for “Slum-free India” announced by the President of India on June 4, 2009. The scheme is meant for the beneficiaries of slum-dwellers and urban poor by encouraging States/ Union Territories to tackle the problems of slums in a definitive manner.

The strategy of RAY is on focusing: Bringing existing slums within the formal system and enabling them to avail of the same level of basic amenities as the rest of the town; Redressing the failure of the formal system that lie behind the creation of slums and squatter settlements; and Tackling the shortages of urban land and houses that keep shelter out of reach of the urban poor and force them to resort to extra-legal solutions in a bid to retain their sources of livelihood and employment. It is worth noting that Ray will be driven faster if it is incorporated with the JNNURM. Besides the Rajiv Awas Yojana, the Government of India has launched a scheme called Slum-free City Planning Scheme with a view to supporting States and Urban Local Bodies in activities like slum survey, Slum MIS, GIS mapping of slums, GIS-MIS integration and preparation of slum-free City and State Plans.

7) Pradhan Mantri Awas Yojana (Housing for All): Housing for All is the latest housing scheme announced by the President of India on 9th June 2014 with an objective to provide every family a pucca house with water connection, toilet facilities, 24x7 electricity supply and access by the time India completes its 75th years of Independence. The scheme seeks to address the housing requirement of the urban poor of the country by including slum dwellers through programmes such as: slum rehabilitation of slum dwellers with participation of private developers using land as resources; promotion of affordable housing for weaker section through credit linked subsidy; affordable housing in partnership with public and private sector; and subsidy for beneficiary-led individual construction. The scheme will be implemented during 2015-2022 and will provide central assistance to implementing agencies through States and UTs.

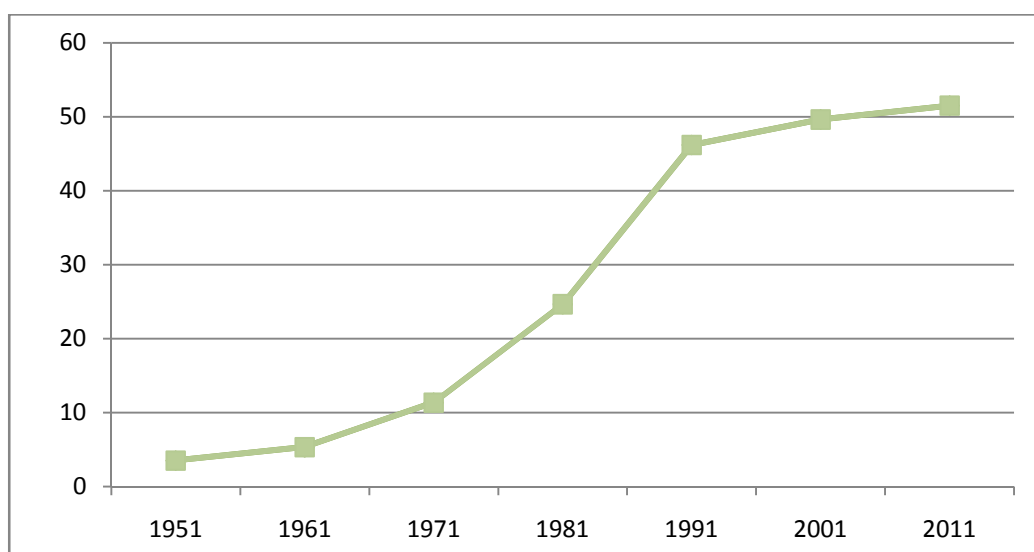
3.6. Urbanisation, Urban Poverty and Housing Problems in Mizoram

Mizoram, one of the seven sister states of North-East India, is not an exception to the problems arising out of increasing urbanization, raising number of people under poverty line and their subsequent effect of housing shortage. The state is one of the most backward states in India wherein nearly two-third of its population depends on agriculture and allied activities with low level of productivity. The agriculture and allied sector which employed around 60 per cent of its workforce contributed to a mere 16.26 per cent (Mizoram Economic Survey, 2014-15) to its Gross State Domestic Product (GSDP) showcasing its under-developed rural sector. In contrast, the service sector has been the driver of the state economy contributing 57.68 per cent of GSDP in 2013-14 (Mizoram Economic Survey, 2014-15). This relative difference between productivity of the agricultural sector and the services sector reflects the urban-rural divide, and probably one of the important pull factor that attract rural households to migrate to urban areas especially to Aizawl city leading to increasing urban population. However, the cities were not planned or prepared to handle such huge influx from rural areas, the resources available with the cities get exhausted and serious problems arise. Increasing land prices, shortages in basic amenities like water, cooking fuel (LPG), electricity, sanitation and wastes disposal, etc become eminent problems of the city. However, as compared to other the problems faces by big metropolitan centres in India, the problems being face by the city and towns of Mizoram seems lesser and solvable.

3.6.1 Urbanization trend in Mizoram

Mizoram is one of the most urbanized state in India, ranked second excluding Union Territories (UTs) after Goa, and 7th among states and UTs, comprising 23 towns with a total population of 561977 which is 51.51 per cent of the total population of the state. Out of the 561977 urban dwellers, as much as 291822 i.e., 51.93 per cent are live in Aizawl city alone. In 1951, the level of urbanization in Mizoram was only 3.54 per cent which steadily rose to 46.20 in 1991, to 49.63 in 2001 and to 51.51 in 2011. The trend of urbanization in Mizoram from 1951 to 2011 is presented in figure 3.1

Figure3.1: Trend of urbanization in Mizoram from 1951 to 2011 (% of urban population in Mizoram)



An observation to the above figure tell us that there was a slower rate of urbanization in Mizoram during the first two decades following Independence. The growth of urbanization picked up its momentum during 1971 to 1991, experienced growth from 11.36 per cent to 46.2 per cent during these periods. While the state recorded a decadal growth of 22.78 during 2001 to 2011 the rate of urbanization tends to slow down from 46.2 per cent to 51.51 per cent during the same period.

District wise analysis of urbanization tell us that Aizawl District is the most urbanized district in Mizoram with 77.42 per cent of its population living in urban areas, while Mamit is the least urbanized district with only 17.27 per cent of its population lived in urban. It is interesting to be noted that, according to Census 2011, all districts except Lunglei District recorded increase in the level of urbanization from 2001. Table-3.10a and Table-3.10b presents District-wise percentage of population and number of population and households.

Table-3.10a: Ranking of districts by percentage of urban population - 2001 & 2011

District	Percentage of Urban Population			
	2001	Ranking	2011	Ranking
Aizawl	76.19	1	77.42	1
Champhai	39.01	6	38.46	6
Kolosib	55.34	2	56.22	2
Lawngtlai	16.67	8	17.79	7
Lunglei	42.23	4	39.3	5
Mamit	16.97	7	17.27	8
Saiha	42.11	5	44.47	4
Serchhip	47.52	3	49.3	3

Source: Directorate of Census Operation (2011), Primary Abstract of Population Census, 2001, 2011

Table-3.10b: District-wise number of Towns, Population and households

District	Number of Towns	Population			Number of Households			
		Rural	Urban	Total (3+4)	Normal	Institutional	Houseless	Total (6+7+8)
1	2	3	4	5	6	7	8	9
Aizawl	4	85555	314754	400309	82298	219	7	82524
Champhai	4	73588	45965	119553	24842			24842
Kolosib	4	37077	46878	83955	17199	71	0	17270
Lawngtlai	1	97064	20830	117894	22899	80	5	22984
Lunglei	3	92676	68752	161428	32853	203	2	33058
Mamit	3	71465	14899	86364	17664	62	5	17734
Saiha	1	31464	25110	56574	11125	17	2	11144
Serchhip	3	32918	32019	64937	12590	26	6	12622
Mizoram	23	521807	569207	1091014	221470	678	27	222178

Source: Directorate of Census Operation (2011), Primary Abstract of Population Census, 2011

3.6.2 Urban Poverty and its related problems in Mizoram:

Urban poverty has been part and parcel of urbanization that cannot be avoided or surpassed. Same is the case with Mizoram, that right from the initial stage of urbanization, the problem of urban poverty come into limelight. Cities are important drivers of development and poverty reduction in both urban and rural areas, as they concentrate much of the national economic activity, government, commerce and transportation, and provide crucial links with rural areas, between cities,.. (United Nations, World Urbanization Prospects, 2014). However, absence of proper planning and failure to implement policies to ensure equitable sharing of city's resources compromise our growth prospect and now urban poverty seems more extreme than rural poverty and thousands of urban poor live in sub-standard conditions in Mizoram. The trend of growth of poverty estimated based on Lakdawala Methodology is presented in Table-3.11.

Table-3.11: Number and Percentage of Population Below Poverty Line, Mizoram (Lakdawala Methodology)

Year	Number and percentage of Poverty					
	Rural		Urban		Mizoram (Total)	
	% of Persons	No of Persons (in Lakhs)	% of Persons	No of Persons (in Lakhs)	% of Persons	No of Persons (in Lakhs)
1973-74	52.67	1.62	36.92	0.2	50.32	1.82
1977-78	59.82	2.03	32.71	0.28	54.38	2.31
1983-84	42.6	1.58	21.73	0.37	36	1.96
1987-88	39.35	1.46	9.94	0.25	27.52	1.7
1993-94	45.01	1.64	7.73	0.3	25.66	1.94
1999-00	40.04	1.4	7.47	0.45	19.47	1.85
2004-05	22.3	1.02	3.3	0.16	12.6	1.18

Note: Poverty Ratio of Assam is used for Sikkim, Arunachal Pradesh, Meghalaya, Mizoram, Manipur, Nagaland and Tripura.

Source: Planning Commission, (2014), "Report of the Expert Group to Review the Methodology for Measurement of Poverty"

According to Lakdawala estimates, poverty ratio in Mizoram declined impressively. From 50.32 per cent in 1973-74 it rose to 54.38 per cent in 1977-78, but recorded a massive decline in 1983-84 to 36 per cent. From 1983-84 onwards, poverty ratio declined steadily to 12.6 per cent in 2004-05. In case of urban, around 20000 persons i.e., 36.92 per cent are considered as poor in 1973-74 which declined to 21.73 per cent in 1983-84 and fell significantly to 7.73 per cent in 1993-94 and 3.3 per cent in 2004-05. As compared to the ratio of poverty in rural Mizoram which was estimated at 52.67 per cent in 1973-74 and 22.3 per cent in 2004-05, the rate of decline for urban was much more impressive.

Another or updated estimated by Tendulkar methodology shows different picture of poverty estimation for 2004-05 as presented in Table-3.12. According to Tendulkar methodology, there were more than 1.4 lakh (i.e., 15.3 per cent, 12.6 per cent for Lakdawala) persons living below poverty line which increased to around 2.3 lakhs persons in 2011-12. It is interesting to note here that the incidence of poverty in Mizoram as a whole was on the rise during 2004-05 to 2011-12. The ratio of poverty for urban increased from 15.3 per cent in 2004-05 to 21.1 per cent in 2009-10 and slightly declined to 20.4 in 2011-12. So the increase in poverty ratio for Mizoram has been caused by increased in rural poverty which recorded a massive increase of 23 per cent in 2004-05 to 35.4 per cent in 2011-12.

A new Expert Group (Rangarajan Committee) which submitted its report to the Planning Commission on June, 2014 introduced a new poverty line for India as a whole and specific state-wise poverty line. According to this newly introduced poverty line, monthly per capita consumption of Rs 972 in rural areas and 1407 in

urban areas is treated as poverty line for the country as a whole, while for Mizoram, monthly per capita consumption of Rs 1231.03 in rural areas and Rs 1703.93 in urban areas is treated as poverty line. As presented in Table-3.13, as compared to national level, Mizoram has a slightly better record of 27.4 per cent poverty ratio in 2011-12, for all India as whole, it is 29.5 per cent. In case of urban poverty also, percentage of Mizoram is a little better as compared to the national level and rural Mizoram has higher percentage of poverty than India as a whole. It is also noteworthy that the poverty line for Mizoram is set at a much higher than national level and is one of the highest (second, only after Andaman & Nicobar Island) which, probably, indicate higher cost of living in Mizoram.

Table-3.12: Number and Percentage of Population Below Poverty Line, Mizoram (Tendulkar Methodology)

Year	Poverty line (Rs per capita per month)		Number of Poverty					
	Rural	Urban	Rural		Urban		Mizoram (Total)	
			% of Persons	No of Persons (in Lakhs)	% of Persons	No of Persons (in Lakhs)	% of Persons	No of Persons (in Lakhs)
2004-05	639	700	23	1.1	7.9	0.4	15.3	1.4
2009-10	850	939	31.1	1.6	11.5	0.6	21.1	2.3
2011-12	1066	1155	35.4	1.9	6.4	0.4	20.4	2.3

Source: Planning Commission, (2014), "Report of the Expert Group to Review the Methodology for Measurement of Poverty"

Table 3.13: Number and Percentage of Population Below Poverty Line, Mizoram, 2011-12 (Rangarajan Methodology)

Year	Poverty line (Rs per capita per month)		Number of Poverty					
	Rural	Urban	Rural		Urban		Total	
			% of persons	No of Persons (in Lakhs)	% of persons	No of Persons (in Lakhs)	% of persons	No of Persons (in Lakhs)
2011-12	1231.03	1703.93	33.7	1.8	21.5	1.2	27.4	3.1
2011-12 (All India)	972	1407	30.9	26052	26.4	1024.7	29.5	3629.9

Source: *Planning Commission, (2014), "Report of the Expert Group to Review the Methodology for Measurement of Poverty"*

A careful observation to the tables-Table 3.11-3.13 indicated that poverty incidence in Mizoram slowly decreased from 50.32 per cent in 1973-74 till 2004-05 (12.6 percent as per Lakdawala methodology and 15.3 percent as per Tendulkar methodology). From 2004-05, it took a reverse trend and increased again from 15.3 per cent in 2004-05 to reached up to 27.4 per cent in 2011-12. In case of urban, Mizoram witnessed a significant reduction in urban poverty, from 36.92 per cent in 1973-74 to as low as 3.3 per cent in 2004-05 (7.9 percent as per Tendulkar methodology), with the change of methodology, the number rose again to 11.5 per cent in 2009-10 and decreased again to 6.4 per cent. The Rangarajan methodology, however, estimated that the urban poverty as high as 21.5 per cent a little per cent lower than the national level (26.4).

Alleviation of poverty or reduction of poverty is not a simple task and is a complex process involving a number of policies, strategies and financial measures wherein the society, the institutions and mostly the state/government plays an active role. As the cause of poverty are numerous, it needs multi-strategies to tackle or to bring down that no single intervention can alleviate poverty. Mizoram, since it got statehood in 1986 formulated and implemented a numbers of its state- owned policies

and measures and also implemented central sponsored schemes to alleviate poverty out of rural and urban Mizoram. So far, as the above analysis indicated, the measures taken by the government to bring down poverty, to some extent, has delivered, however, the efforts has not been enough that almost 30 per cent of the population remains under acute poverty.

3.6.3. Housing problems in Mizoram:

Provision of affordable housing has been one of the challenge faced by every society or every government of every modern welfare state. In a backward state like Mizoram, the problem has been more severe that a number of households suffers from problems like congestion mostly in urban areas, and a large number of households live in temporary and dilapidated houses which needs to be immediately repaired. The geographical landscape and hilly nature of Mizoram doubled the cost of construction and make housing more costly. Also natural calamities like landslide often caused disaster resulting loss of shelter by a numbers of households.

As already mentioned, Mizoram is one of the most urbanized state in India with more than 50 per cent of its population living in urban areas. City and towns of Mizoram has also suffers from problems like poverty, unemployment, housing shortage, lack of basic living facilities, etc. According to Report of Technical Group on Urban Housing Shortage (TG-12), housing shortage in Mizoram was estimated at 0.02 million (i.e., 20000). These shortages are mainly of BPL or other low income categories. The condition of housing and basic amenities in Mizoram are analyze in the next sub-sections (3.6.3 and 3.6.4) using Census 2011 and NSS 69th Round report.

3.6.4. Housing and Household Amenities, Census 2011

Census of India, 2011 collected information on houses and households amenities for India as a whole as well as Mizoram which gave us a clearer picture of housing condition in Mizoram. Census 2011 gave the following information regarding housing and basic amenities in Mizoram.

(a) Number of houses and their uses and number of households: According to Census 2011, there are 269431 census houses in Mizoram (123347 in rural and 148084 in urban). Of which 4.4 per cent were vacant (3.4 percent in rural and 5.3 percent in urban). Of all the occupied houses, 84.3 per cent is use for residential purpose (85.7 per cent with residence-cum-other uses), and another 14.3 per cent is use for non-residential purposes such as shops and offices, schools and colleges, hospitals, factory, places of worships, etc. The number of houses, their uses and number of households is presented in Table-3.14a(i) and 3.14a(ii)

Table-3.14a(i): Number of Census Houses and Number of Households

Sector	Number of Census Houses			Number of Households
	Total	Vacant	Occupied	
Rural	123347	4162 (3.4 percent)	119185	104874
Urban	148084	7688 (5.3 percent)	138396	116203
Mizoram (Total)	269431	11850 (4.4 percent)	257581	221077

Source: *H HH Series Tables, Census of India 2011*

Table- 3.14a(ii): Number of Occupied Houses and their uses

Area	Total Occupied Census House	Distribution of Occupied Census Houses			
		Residence	Residence-cum-other uses	Total of Residence & Residence-cum-other uses	All other non residential uses
Rural	119185	86.5	1.4	87.9	12.1
Urban	138396	82.5	1.5	84	16
Mizoram	257581	84.3	1.4	85.7	14.3

Source: H HH Series Tables, Census of India 2011

(b) Households by condition of Census Houses: Table-3.14b presents the condition of houses by classifying census houses into ‘good’, ‘livable’ and ‘dilapidated’. It shows that while 62.3 per cent houses were in a good condition, 34.9 per cent were classified as livable and 2.8 per cent as dilapidated. In urban areas as high as 73.6 per cent of residential houses were in good habitable condition, 1.5 per cent were classified as old and bad condition.

Table- 3.14b: Percentage of Households by condition of Census Houses

Area	Total	Good	Livable	Dilapidated
Rural	104683	49.8	45.9	4.3
Urban	116222	73.6	24.9	1.5
Mizoram	220909	62.3	34.9	2.8

Source: H HH Series Tables, Census of India 2011

Note: ‘Total’ in the above table is the total of number of occupied census houses uses for residence and residence-cum-other uses.

(c) Households by Ownerships status: As presented in Table-3.14c, 65.8 per cent of households in Mizoram owned a house/home while 31.8 per cent of households lived in rented houses. It is interesting to note that in urban Mizoram the percentage of

households living in a rented house is higher than those of living in their owned house. While only 12.6 per cent of rural households lived in a rented house, almost half (49.1 percent) of urban dwellers lived in a rented house, probably, indicating the shortage of land for housing or high cost of construction.

Table-3.14c: Household by Ownership Status

Area	Number of Households	Owned	Rented	Others
Rural	104874	85.7	12.6	1.7
Urban	116203	47.9	49.1	3
Mizoram	221077	65.8	31.8	2.4

Source: *H HH Series Tables, Census of India 2011*

As per Census, 2011, among all 221077 households, percentage of households having one dwelling room and two dwelling rooms were 18.8 per cent and 42.6 per cent respectively. Households having three dwelling rooms and four rooms were 22.2 and 8.3 respectively. In case of urban also, majority of households have two and three dwelling rooms (41.1 and 24.8) while 1.7 per cent households have no exclusive room.

(d) Availability of living facilities: In order to assess the state of basic amenities in Mizoram let us take three cases- drinking water facilities, latrine facilities and source of lighting. As per Census 2011, tap water has been main source of water for majority of urban households (74.4 percent), and 41.4 per cent of rural households in Mizoram. Another major sources of drinking water includes; spring (18.4 percent), river/canal (7.7 percent), others (6.9 percent), well (4.7 percent), etc. The main source of drinking water in Mizoram is presented in 3.14d.

Table- 3.14d: Households by main source of drinking water (Percentage) in Mizoram

Sl.no	Sources	Total	Rural	Urban
1	Tap water	58.7	41.4	74.4
2	Tap Water from treated source	39.4	14.6	61.8
3	Tap water from untreated source	19.3	26.8	12.5
4	Well	4.7	5.2	4.3
5	Covered Well	2	1.7	2.2
6	Uncovered Well	2.7	3.4	2.1
7	Hand pump	0.8	0.8	0.9
8	Tubewell/borehole	0.9	1.2	0.6
9	Spring	18.4	25.5	12
10	River/Canal	7.7	14.5	1.6
11	Tank/pond/lake	1.8	2.3	1.3
12	Other sources	6.9	9.1	5

Source: *H HH Series Tables, Census of India 2011*

In case of latrine facilities, 91.9 per cent of households i.e., 84.6 per cent in rural areas and 98.5 per cent in urban areas, in Mizoram have latrine facilities within the premises. While septic tank is the most use type of latrine in urban areas (71.3 percent), pit latrine is mostly use latrine type in rural areas (45.4 percent). Among those households without latrine facility within the premises (8.1 percent), 1.5 per cent use public latrine and the other (6.6 percent) did not have any latrine facility (open).

In case of source of lighting 84.2 per cent of households in Mizoram has electricity as their main source of lighting while kerosene (13.5 percent), solar (1.3 percent) are another important source of lighting in Mizoram. In urban areas, 98.5 per cent households use electricity as their main source of lighting while it was 68.8 per cent in rural areas.

3.6.5. Housing Condition in Mizoram- NSS 69th Round 2012

NSS 69th Round on “Drinking Water, Sanitation, Hygiene and Housing Condition” 2012 collected information relating to housing and living facilities like drinking water, sanitation, etc for the country as a whole. Some important findings of this report relating to housing and amenities in Mizoram are discussed below-

(a) Distribution of Households by Types of Structure: The first important characteristic of housing condition of a household is the type of structure of its house. NSS 69th Round survey categorized the type of structure of dwelling unit of households into pucca, semi-pucca and katcha which is split into two categories- serviceable katcha and unserviceable katcha. As presented in Table-3.15a, the result of the survey shows that 57.4 per cent and 89.7 per cent households in rural and urban Mizoram respectively lived in pucca structure, whereas 21.3 percent and 9.2 percent of the households in rural and urban areas respectively lived in a house with semi-pucca structure during 2012. Only 21.3 percent households in rural area and 1.1 percent households in urban area lived in a katcha house.

Table-3.15a: Distribution (per cent) of households living in a house by type of structure, Mizoram

Sector	Types of Structure				
	Pucca	Semi-Pucca	Katcha		
			Serviceable	Unserviceable	All Katcha
Rural	57.4	21.3	0.8	20.5	21.3
Urban	89.7	9.2	0	1.1	1.1
Rural+Urban	73.1	15.4	0.4	11.1	11.5
All India	74.6	18.4	4.8	2.2	7

Source: NSS 69th Round (2012), Page No. 117-119, Table-S15

(b) Distribution of Households by Condition of Structure: Table 3.15b shows percentage distribution of households by condition of structure in Mizoram during 2012. It shows that 35.2 percent rural households and 60.9 percent urban households in Mizoram lived in a house with ‘good’ condition, 50.9 per cent of rural households and 32.8 per cent of urban households lived with ‘satisfactory’ condition. The result shows that 14 percent rural household and 6 percent urban households had lived in a house with ‘bad’ condition.

Table-3.15b: Distribution (per cent) of households living in a house by condition of structure, Mizoram

Sector	Condition of Structure		
	Good	Satisfactory	Bad
Rural	35.2	50.9	14
Urban	60.9	32.8	6
Rural+Urban	47.7	42.1	10.1
All India	45.2	43.6	11.1

Source: NSS 69th Round (2012), Page No. 126-128, Table-S18

(c) Distribution of Households with Different Types of Tenure Status: Table 3.15c shows percentage distribution of households in Mizoram with different types of tenurial status of the dwelling unit in 2012. It shows that while more than 90 per cent of rural household owned their dwelling units in rural areas of Mizoram, only 69 per cent of urban households live in their owned dwelling unit. More than 20 per cent of urban households lived in a rented or hired dwelling and majority of them without written contract.

Table-3.15c: Distribution (per cent) of households with different types of tenurial status of the dwelling unit, Mizoram

Sector	No dwelling	Own dwelling-freehold	Own dwelling-leasehold	Employer's quarter	Hired dwelling with written contract	Hired dwelling without written contract	Other
Rural	0	94.5	0	2.4	0	2.9	0.2
Urban	0	69	0	3.8	0.4	26.6	0.2
Rural+Urban	0	82	0	3.1	0.2	14.5	0.2
All India	0	82.2	0.9	1.6	2.2	10.8	2.2

Source: NSS 69th Round (2012), Page No. 111- 113, Table-S13

(d) Households Access to Basic Amenities: Households access to basic living facilities like drinking water, sanitation facilities, electricity, etc determine standard of living of every households. By taking three cases- availability of drinking water, access to latrine facility and electricity, we will assess the condition of basic amenities in Mizoram using NSS 69th Round report.

First, in case of drinking water, among the principal sources of drinking water in Mizoram, larger proportion of rural households (47.6 percent) get drinking water from public taps/stand pipe whereas 61.2 per cent of urban households received water from 'piped water into dwelling'. Another important source includes; piped water into yard/plot, protected well, spring, rain water, etc. In terms of sufficiency, 84.5 per cent and 89 per cent of rural and urban households respectively had sufficient drinking water in Mizoram in 2012. 71.6 per cent of rural households and 83.8 per cent of urban households in Mizoram had treated water by any method (Treatment of water can be done through boiling, filtering or by using chemicals, by using electronic purifier or by any other method).

Second, access to latrine facility is an important aspect of living standards. The NSS 69th Round collect information on "whether the household's latrine facility

was for its exclusive use or was shared with one or more households in the building, or whether households had to use public/community latrine with and without payment, or whether the household did not have access to any latrine at all". According to the survey, while 0.7 per cent of rural households are without latrine facility in Mizoram, every urban household had access to latrine facility. While 98 per cent of rural households and 97.5 per cent of urban households in Mizoram had exclusive use of latrine, 93.5 per cent of rural and 99.9 per cent urban of households access to source of latrine (Improved source' of latrine includes sources such as 'flush/pour-flush to: piped sewer system/septic tank/pit latrine', 'ventilated improved pit latrine', 'pit latrine with slab' and 'composting toilet').

Third, in case of electricity, 90.8 per cent of rural households and hundred per cent of urban households had electricity for domestic use in Mizoram during 2012.

3.7. Poverty and Housing Shortage in Aizawl City

Aizawl is the capital city of the state of Mizoram. It is the biggest urban centre in the state and is the centre of administration, trade, business and most populous city in the state. The population of the city according to Census 2011 was 2,93,822, which as per the estimation of Urban Development and Poverty Alleviation (UD&PA) Department, Government of Mizoram, will cross five lakhs by 2021 and eight lakhs by 2031. The city is also home of more than fifteen thousand families living below poverty line and the number of BPL families in Aizawl city (15736) is more than the number of BPL families in all the district capital of the state (11489). The number of families and number of persons living below poverty line, according to BPL Census 2010 conducted by SJSRY Cell, UD&PA Department are presented in Table-3.16.

Table-3.16: No. of families and No. of persons living below poverty line in Aizawl, 2010

Name of Zone	Male	Female	Total	Families
Zone 1	3760	3879	7639	1853
Zone 2	5199	5727	10926	2424
Zone 3	4292	4532	8824	2040
Zone 4	5772	6095	11867	2623
Zone 5	3680	4038	7718	1736
Zone 6	6932	7351	14283	3238
Zone 7	3914	4204	8118	1822
<i>Total</i>	33549	35826	69375	15736

Source: SJSRY Cell, UD&PA Department, Govt. of Mizoram, BPL Census 2010

UD&PA Department, Government of Mizoram estimated that there was around 65000 houses in Aizawl in 2011 which is projected to increase to 1.12 lakhs in 2021 of which 50 per cent will be in dilapidated condition and will create a gap in residential housing stock up to 50600 in 2021. According to household survey conducted under Swachh Bharat Mission, in 2015, there was 53285 households in Aizawl city, of which 14109 families belongs to Economically Weaker Sections (EWS) and 24442 families belongs to Low Income Group (LIG). While 28176 households live in pucca house, 9590 households live in semi-pucca, 21762 in Assam type and 492 in kutchha houses. In case of source of drinking water, PHE Domestic Line (44270 households), PHE public point (3451 households), others (5717 households) and harvested rain water (19031) are the main source of drinking water. In case of latrine facility, the same survey found out that while majority of households (49499) had Septic Tank with Soak Pit as their main latrine facility, 287 households had no proper latrine facility.

3.8. Conclusion

Every welfare state has its responsibility to provide its citizens a quality and decent standard of living by creating healthy environment, providing beneficial employment, making all basic living facilities accessible or affordable to every classes of society, good governance and stable government, promoting social harmony among different classes, castes, race, creed and even rich and poor, etc. In order to handle these responsibility effectively, the government must strive to reduce the incidence of poverty which is one of the worst social evil and, perhaps, the source of others. A brief overview of poverty incidence in India as a whole and Mizoram in particular indicated that although The Government of India and the State Government, using numerous policy measures, tries to tackle poverty, poverty, hunger, homelessness, unemployment, still haunt millions of Indians. Poverty, unemployment, income inequalities regional disparities and unbalancing growth of rural and urban led to movement of millions of poor Indian to move to cities.

Beyond these factors, however, urban poverty is also a symptom of specific conditions in urban centres themselves, which affect how people live and work and therefore how they experience poverty. Many urban centres are unable or unwilling to address these conditions. They are unable to address because of limited resources while some are unwilling because many urban governance systems discriminate against the interests of poor people. Due to these factors, urban poverty is likely to increased

‘Urbanization of Poverty’ has been the most important factor responsible for shortage and problems of housing and basic living amenities in urban areas. The condition and availability of housing and housing amenities in Mizoram, in

comparison to India as a whole, is a little better. In case of urban poverty, poverty ratio of Mizoram is slightly better than the national average; in other housing conditions like housing structure, housing condition, ownership status, availability of basic amenities like drinking water, latrine facility, etc Census, 2011 and NSS 69th Round report shows that Mizoram is in good state although not satisfactory. However, as the urbanization pick up its pace in recent decades, and poverty and housing shortage looming large, the state needs more efforts and require new and more effective mechanism or policy measures to counter these increasing problems.

Chapter-4

HOUSING AND BASIC AMENITIES OF POOR IN AIZAWL CITY

4.1. Introduction

Attempt is made in this chapter to analyse the problems, current situation and other related problems of housing and basic amenities being faced by the poor (BPL) families in Aizawl City, the capital city of the state of Mizoram. The entire analysis is based on primary data collected from sample data collected from 105 BPL Households from 7 selected localities as follows: Thakthing Damveng, College Veng, Khatla East, Kanan, Chhinga Veng, Chaltlang North and Ramhlun South.

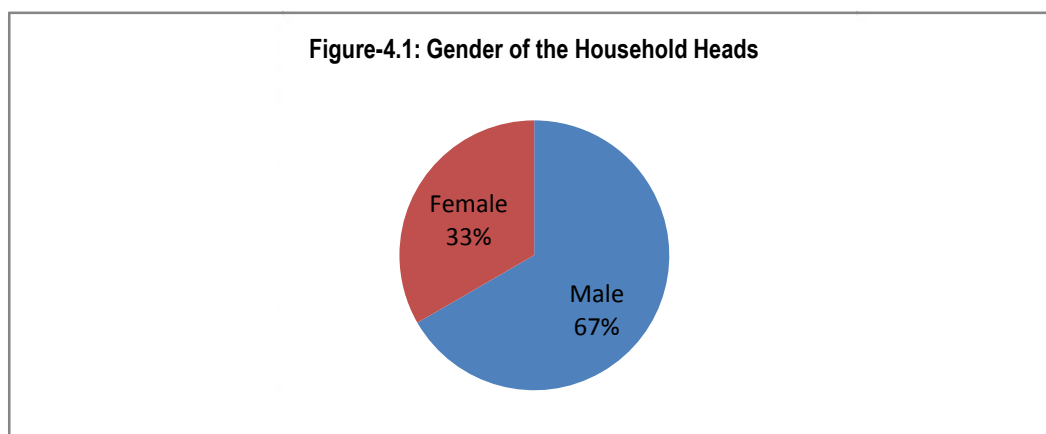
4.2. Gender of Household Head

Gender of head of household is an important indicator of the socio-economic condition of families. In a patriarchal society like Mizo society, families headed by female are assumed to be economically weaker in compare with other formal families, although there are some exceptions. As presented in Table 4.1 and Figure 4.1, out of 105 BPL families, 35 families were female headed which is 33.33 per cent of total families. Among different locality, while College Veng (Zone II) has highest percentage of female headed household/family i.e., 60 per cent of total BPL are headed by woman or female member of the family; in Chhinga Veng as much as 93.33 per cent are male headed household and 6.67 per cent families are headed by female member.

Table-4.1: Gender of the Household Heads

Locality	No of Households			Percentage of Households		
	Male	Female	Total	Male	Female	Total
Thakthing						
Damveng	9	6	15	60	40	100
College Veng	6	9	15	40	60	100
Khatla 'E"	11	4	15	73.33	26.67	100
Kanan	9	6	15	60	40	100
Chhinga veng	14	1	15	93.33	6.67	100
Chaltlang North	12	3	15	80	20	100
Ramhlun South	9	6	15	60	40	100
Total	70	35	105	66.67	33.33	100

Source: Field Survey, September, 2016



4.3. Average Household size

Table 4.2 shows that the mean or average size of household within the study areas comes at 4.52 persons per household or family. While for male, the mean is 2.37, for female it is 2.15. The value of standard deviation i.e 1.42 indicate that there exist high uniformity in the family size of poor households in Aizawl city that the size of family lies between 3 (3.1) and 6 (5.94).

Table-4.2: Average Households size

Particulars	Mean	Standard Deviation
Household Size-male	2.37	1.95
Household Size-female	2.15	1.14
Household Size-Total	4.52	1.42

Source: Field Survey, September,2016

4.4. Households main source of Income and Income Distribution

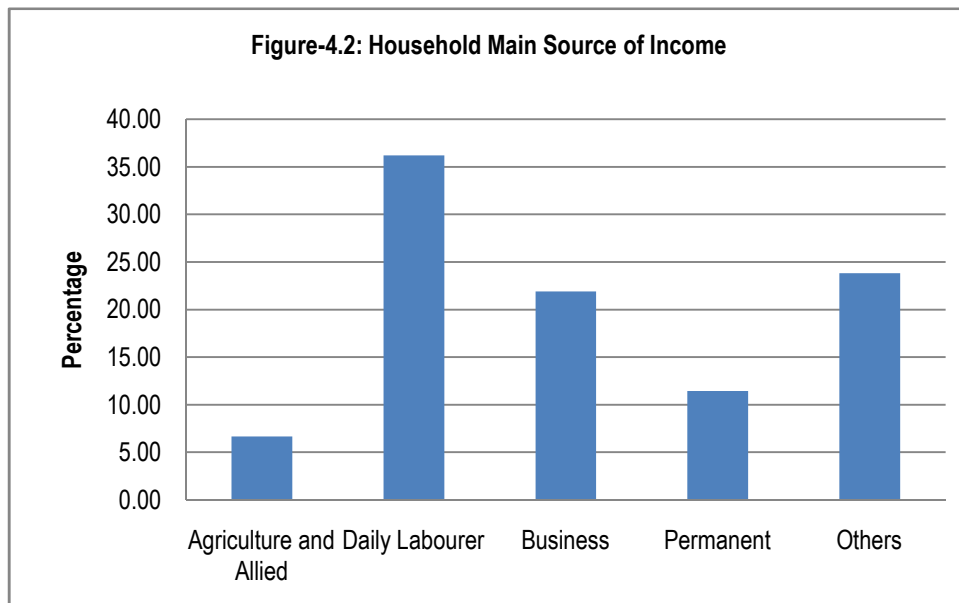
Analyzing household's income source and level probably be the best way to show household's socio-economic condition since income of households primarily determine its access to housing and other basic living facilities. To do so, Income data are collected under two heads-main sources and other sources. Since almost every household did not kept proper record of their income, it is difficult task to collect accurate information of income and expenditure as well. However, by calculating household average monthly income and patterns of their expenditure, their annual income can be worked out.

As shown in Table 4.3, families belong to BPL in Aizawl city engaged in various types of occupations which is their primary sources, or for most of them, their only source of income. Out of 105 sample households, 38 i.e 36.19 per cent families are daily wage earners classified as 'Daily Labourer' working on various types of works usually manual work. While another 23.81 per cent families depends on 'others' which includes various types of informal works, 21.90 per cent depends on 'Business' usually unorganized and self employment; another 11.43 per cent on 'permanent' which mainly includes lower grades government servant and other private agencies; and, the lowest percentage of 6.67 families depends on 'Agriculture and Allied'.

Table-4.3: Households Main Sources of Income

Sl.no	Sources	No. of Households	Percent
1	Agriculture and Allied	7	6.67
2	Daily Labourer	38	36.19
3	Business	23	21.9
4	Permanent	12	11.43
5	Others	25	23.81
6	Total	105	100

Source: Field Survey, September, 2016



In terms of income distribution, households were groups into 5 different income group. There has been high variation in the income level of BPL households that the average or mean income is Rs 141047.62 and standard deviation is 81052.38 indicating that income level of households is within the range of Rs 59995.24 to Rs 222100. This high variation in income probably happens due to unfair or difference in practices in the selection or classification of BPL at the local government machinery, even though there are clear cut criteria for selection/classification of BPL, every local government have their own approach and in some cases there has not been adequate verification of the selected family.

Table-4.4: Income Distribution of Household

Income Group	No of Households	Percent
less than 50000	6	5.71
50000-100000	37	35.24
100000-150000	26	24.76
150000-200000	15	14.29
200000 & above	21	20
Total	105	100

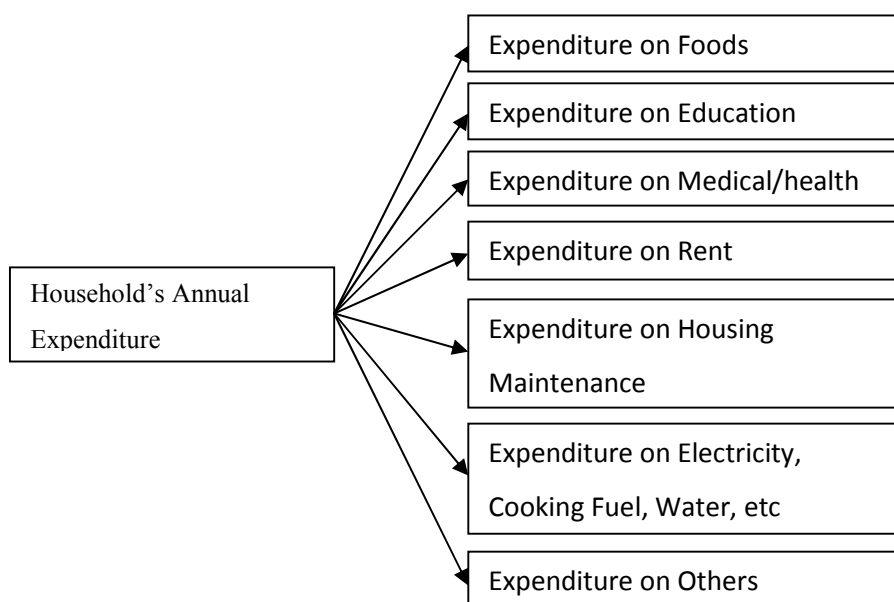
Source: Field Survey, September, 2016

Table-4.4 presents classification of 105 sample households into five different income groups. It can be seen that the highest percentage of household (35.24) are in the income group 50000-100000, whereas 24.76 per cent are in the income group of 100000-150000 and 14.29 per cent in 150000-200000. While only 6 households i.e., 5.71 are in the lowest income group (less than 50000), as much as 21 households i.e., 20 per cent are in the highest income group (above 200000).

4.5 Patterns of Households Expenditure

Collection of expenditure data, like collection of income data is not an easy task as most of households finds did not maintain records on various subjects of expenditure. In order to assess household's expenditure patterns, households expenditure on various items such as expenditure on foods, education, etc are collected as presented in Figure 4.3.

Figure-4.3: Items of Household's Expenditure



Among the above items, households expenditure on foods and rent (for households living in rented house) form the most important part of expenditure, though not necessarily the largest, since they are most regular and the volume of expenditure did not tends to change with the change in the level of income. It is true that propensity to consume is much higher for poor households than household with higher income. Households with an annual income of less than Rs 50000 spend Rs 41900 (average) annually on different heads given in figure 4.3. Different income groups seems to have similar expenditure pattern that based on their mean expenditure, almost all the families/households used up their income and has left little amount of income to save. As a whole, the average expenditure of 105 households stand at Rs 122000 annually while standard deviation is at 58073.46 indicating expenditure range of majority households lies between Rs 63926.54 to Rs 180073.46.

Table-4.5: Households Annual Average/mean Expenditure

Income Group	Average Expenditure/Mean	No. of Households	Std. Deviation
less than 50000	41900	6	14763.53
50000-100000	82100	37	21364.81
100000-150000	111000	26	24766.75
150000-200000	150000	15	22972.19
200000 & above	208000	21	46802.01
Total	122000	105	58073.46

Source: Field Survey, September, 2016

In order to explain expenditure pattern more vivid, let us compare mean expenditure of households on three major heads-foods, education, and medical and health. While the mean expenditure of 105 households on foods is 48673.14, mean expenditure on education and medical and health are 11940 and 12320 respectively. It clearly indicated that mean expenditure on foods, which is 39.89 per cent to the mean expenditure of the total expenditure, is significantly larger than mean expenditure on education, medical and health. Even compare with mean expenditure on rent i.e 16700 (13.69 per cent of the total mean), foods expenditure form the biggest expenditure.

4.6. Housing status of Households and Housing Condition

Analysis of households' level of access to housing and quality of housing basic amenities are the core of this study. Field survey shows there has been high degree of variation in the quality of housing accessible to households even among BPL households. The status of home ownership, condition of housing, type of dwelling and other variables of housing conditions were analyze in this section.

(a) Ownership status: Home ownership is one important aspect that largely determines household's social status, privilege and security. It however become inevitable for many households to hire their accommodation especially for poor families with a booming land prices and escalating construction cost, housing, of their own become unaffordable. Field survey shows the same result that majority of BPL family are lived in rented house. As presented in Table-4.6 and figure-4.4, 70 per cent of BPL families in Aizawl are live in hired accommodation whereas 29.52 per cent live in their own accommodation. Under the hypothesis that majority of the households lived in rented house, the calculated z-statistic (i.e., 4.2) is significant at 5 percent level.

Table -4.6: Ownership Status of Households

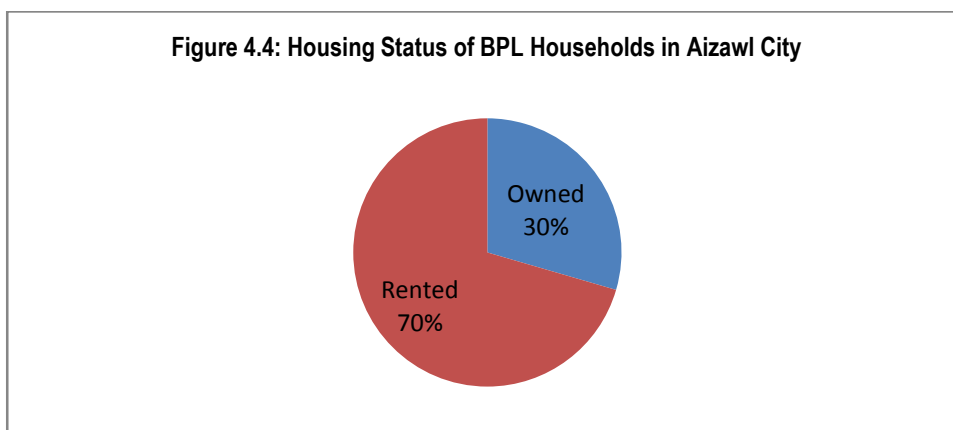
Ownership Status	No. of Households	Percentage
Owned	31	29.52
Rented	74	70.48
Total	105	100

Source: Field Survey, September, 2016

Z-value under the Hypothesis that renting households are greater 50 percent (i.e. $H_0: P=0.5$ & $H_1: P>0.50$) turned out to be 4.2 is significant at 5 percent level.

It may also be interesting to know that out of 105 households, as much as 82 households lived in 'flat' building while other 23 households lived in 'Independent building'.

Figure 4.4: Housing Status of BPL Households in Aizawl City



(b) Type of Structure

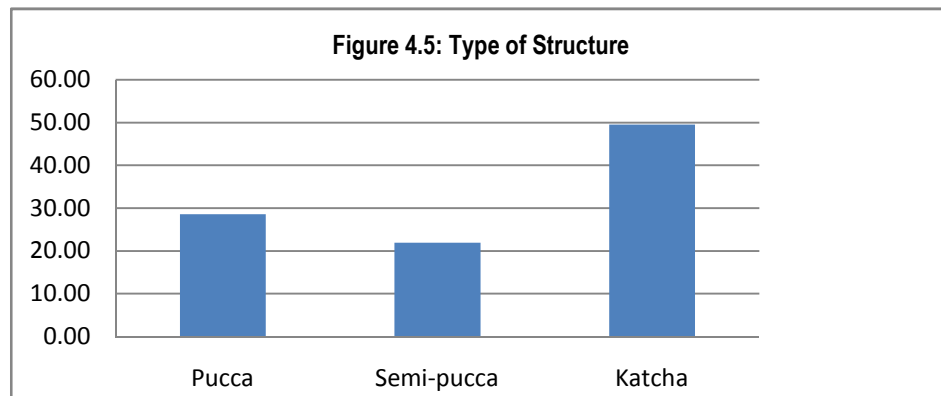
The type of structure of building is one important indicator of conditions of housing. The physical condition of structure of building has been classified into pucca, semi-pucca and katcha based on material used on walls and roofs of the building. A ‘pucca’ building is a type of building constructed using strong and high quality material such as stone, brick cement, iron rod, etc and is designed to be solid and permanent. While ‘semi-pucca is a type of building constructed using a combination of ‘pucca’ and other inferior material. All the other building which is not pucca or semi-pucca is classified as ‘katcha’. The numbers and percentage of different types of structure of BPL households in Aizawl city are presented in Table 4.7 and Figure 4.5 below.

Table-4.7: Types of Housing Structure

Types	No. of Households	Percentage
Pucca	30	28.57
Semi-pucca	23	21.9
Katcha	52	49.52
Total	105	100

Source: Field Survey, September, 2016

Out of 105 sample BPL households, 30 households i.e 28.57 per cent are lived in Pucca house, whereas 23 households (21.90%) live in semi-pucca and the majority 52 households (49.52%) live in Katcha house.



As already mentioned, structure of buildings has been classified based on material used on the construction of floor, walls and roofs. Let us first look at floor type of buildings, a large portion of households (56.19%) live in a house with a floor type of wood/plank while another 40 per cent has cement as floor. Only a few percentage (3.8) live in a house with mud and bamboo/log as floor. In case of wall type, the most common material use for wall is Tile (48 households, 45.71%) and cement (29.52%), iron or other metal sheet (13.33%) and grass/straw/leaves/reeds/bamboo (6.67%) are the most common material used for walls. In case of roof types, iron/asbestos/other metal sheet (62.86%) and cement/RBC/RCC (33.33%) are the major material used for roofs.

(c) Condition of housing

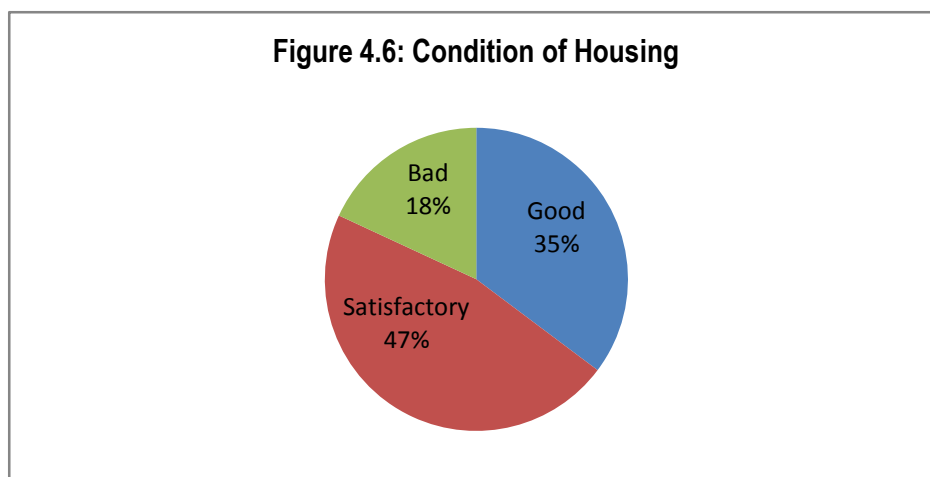
The condition of housing or dwelling unit has been categorized as ‘good’, ‘satisfactory’ or ‘bad’. If the condition of the structure did not require any immediate repairs, major or minor, it was considered as in ‘good’ condition whereas if the structure required immediate minor repairs but not major repairs, it was considered as in ‘satisfactory’ condition. If the structure of the building required immediate major

repairs without which it might be unsafe for habitation or required to be demolished and rebuilt, it was considered as in ‘bad’ condition. Table-4.8 presents the condition of dwelling unit of BPL households in Aizawl city.

Table-4.8: Housing Condition

Condition	No. of Households	Percentage
Good	37	35.24
Satisfactory	49	46.67
Bad	19	18.10
Total	105	100

Source: Field Survey, September, 2016



The habitable condition of housing or dwelling unit of households can also be elucidate by analyzing the condition of ventilation of the dwelling unit, whether it is ‘good’, ‘satisfactory’ or ‘bad’. It is clear from Table-4.9 that majority of dwelling unit-59.05 per cent has enough air and light vent and are categorize as ‘good’ while 33.43 per cent of dwelling unit are categorized as ‘satisfactory’ and 9.52 per cent as ‘bad’.

Table -4.9: Ventilation of Dwelling Unit

Ventilation condition	No. of Household	Percentage
Good	62	59.05
Satisfactory	33	31.43
Bad	10	9.52
Total	105	100

Source: Field Survey, September, 2016

Another important factor that explained quality housing may be availability of separate kitchen. Out of 105 sampled households, only 14 households (13.33%) has 'separate kitchen with water tap' and 26 households (24.76%) has 'separate kitchen without water tap' while majority 65 households (61.90%) has 'no separate kitchen'.

4.7. Rental system and Tenure Security

As already mentioned, as much as 70.48 per cent of BPL households in Aizawl city lived in rented house (see Table-4.6) which signifies that rental system and tenure security are a substantive issue and important matter that concern for majority of urban dwellers. Traditionally, in Mizo society, building own dwelling was the responsibility of a father and male member of the households and every households owned their dwelling unit. However, with the increasing urbanization, surging land prices, escalating costs of construction, hiring or renting a house-flat or independent become necessary evil now. With the absence of proper regulation and laws governing rental housing, the privilege, honour and security of renters become vulnerable and they are always at the mercy of their landlords and are subjected to expulsion anytime. In this section, the rental system and tenure security that are being prevailed in Aizawl city are analysed.

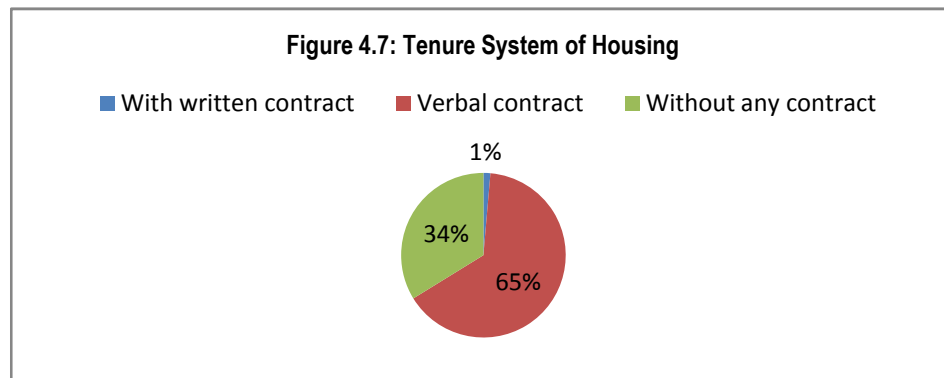
First, in case of mode of rent or terms of agreement (between landlords and renters), field study shows that legal contract or written agreement, between landlords and renters, has not been existent in the city that almost all of the renting families settle through ‘verbal contract’.

Table-4.10: Different Tenure System

Types of Contract	No of Households	Percentage
With written contract	1	1.35
Verbal contract	48	64.86
Without any contract	25	33.78
Total	74	100

Source: Field Survey, September, 2016

Table-4.10 shows different tenure system prevailing in Aizawl city. As already mention, out of 105 sampled households in the city, 74 of them lived in rented house. And, of that 74 households, only one household holds written contract with his/her landlord, a majority 48 households (64.86%) settles through ‘verbal contract’ with their landlords and 25 households i.e., 33.78 does not have any proper agreement or contract with their landlords. Absence of proper agreement or written document can be a problem which may cause serious effect on tenure security. Figure-4.7 also shows the different tenure system that prevails in the city.



Second important issue relating to rental system and tenure security has been households' expenditure on rent. Households' mean expenditure on rent forms second largest part of the total households' mean expenditure. Table-4.11 presents mean expenditure of different income group on rent.

Table -4.11: Households Expenditure on Rent

Income Group	Mean	No. of Households	Standard Deviation
less than 50000	2000.00	6	4898.979
50000-100000	11600.00	37	12085.707
100000-150000	17300.00	26	16306.148
150000-200000	26000.00	15	18236.541
200000 & above	22400.00	21	21876.014
Total	16700.00	105	17123.808

Source: Field Survey, September, 2016

Table-4.11 shows an abnormal figure that households' mean expenditure for income group of 'less than 50000', '50000-100000' and as a whole are less than its Standard deviation. It indicated that there has been high variation in the level of expenditure on rent by households that while some households are paying more than Rs 5000 per month, as much as 41 households did not spend on rent at all. This unusual figure has been caused by calculation of expenditure on rent for the whole 105 sampled households while only 74 households are lived in rented house and only

64 households are paying rent (10 households rented relatives houses and did not paid rent) which brought down average expenditure on rent.

Another important issue relating to rental housing has been households' ability to pay rent regularly. Payment of rent regularly is necessary for the renters to keep their tenure secure and avoid expulsion as well as to maintain good relationship with their landlords. Field survey shows that out of 64 paying renters, 60 households paid their rent monthly while 4 households has no specific period of rent payment. In case of payment of rent, 34 respondents said they have difficulty in paying rent in time due to reasons like 'shortage in income', 'deferred in wage payment' and 'other reasons'. The reasons for difficulty in payment of rent by households are presented in Table-4.12

Table -4.12: Reasons for difficulty in rent payment

Reasons	No. of Households	Percentage
shortage in income	16	47.06
defer in wage payment	6	17.65
others	12	35.29
Total	34	100

Source: Field Survey, September,2016

Out of the 34 households who are having faced difficulty in rent payment, 16 households cited 'shortage in income as' the reason, 12 households cited 'others' and for other 6 households delay or defer in their wage payment cause them to pay their rent irregularly.

Despite absence of written document or formal agreement between renters and landlords, the renters are seems secure and permanent in their rented home as indicated by the average years the households stayed in their current resident. Out of 105 sampled households, only 14 households i.e., 13.3 per cent moved to their present

area within 365 days or one year. Calculated average years of staying in their current area is 13.66 years which is a manifestation that renters in Aizawl are secure and occasional movement or change of residential area did not seem to happen. Plus, even those households who moved within one year cited reasons like 'free or low rent' (2 households), 'accommodation in better locality'(3 households), 'other reasons' (7 households) and 'proximity to place of work', 'other employment related reasons' as reasons for movement to their present area and there is no sign of forceful eviction from their previous residential area.

4.8. Households' access to Living Facilities in Aizawl City

Household's access to the basic living facilities like drinking water, sanitation facilities like bathroom and toilet facilities largely determine household's standard of living and quality of life. In order to assess the urban poor household's access to quality housing, in this section we will analyze the availability of these facilities to the housing lot of the urban poor using tables and figures.

4.8.1. Drinking Water

First, in case of drinking water, the Table-4.13 presents principal sources of drinking water

Table -4.13: Principal Source of Drinking Water

Sources	No. of Households	Percent
Pipe water into dwelling	33	31.43
Piped water into yard/plot	41	39.05
Public tap/standpipe	9	8.57
Spring: Protected	21	20.00
Rainwater collection	1	0.95
Total	105	100.00

Source: Field Survey, September, 2016

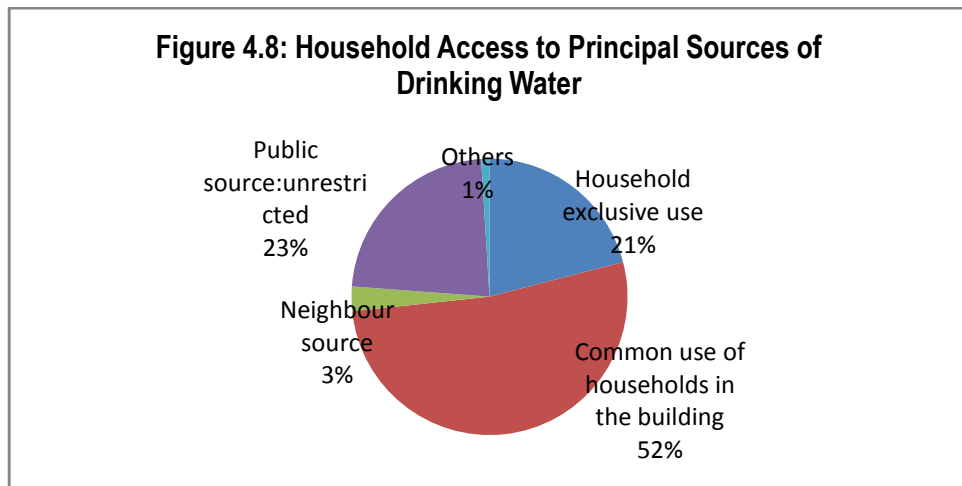
Among the different sources of drinking water, ‘piped water into dwelling’ and ‘Piped water into plot’ (both Public Health and Engineering Department distribution connection) has been the largest sources comprising 31.43 per cent and 39.05 per cent respectively. Piped water into yard/plot being the largest source coincide with largest number of sample households living in ‘flat’ building sharing one water connection by two or three households. Meanwhile, ‘Public tap/standpipe’ (8.57%) and ‘Spring:protected’ (20%) are other important sources of water.

In case of access to principal sources of drinking water, only 20.95 per cent households have exclusive use while the majority 52.38 per cent shared with other households of the same building. Another 22.86 per cent use public source: unrestricted while another households depends on neighbor source and other sources. Households’ access to principal source of drinking water are presented in Table-4.14 and Figure-4.8

Table-4.14: Access to Principal Sources of Drinking Water

Type of Access	No. of Households	Percent
Household exclusive use	22	20.95
Common use of households in the building	55	52.38
Neighbour source	3	2.86
Public source:unrestricted	24	22.86
Others	1	0.95
Total	105	100.00

Source: Field Survey, September, 2016



Regarding the distance to the principal source of drinking water, 25 households are able to receive water within their own dwelling while the largest portion of households received it 'outside dwelling but within the premises; another 34 from outside premises but within 0.2 km and one household from a distance between 0.2 to 0.5 km.

About the question of adequacy/availability of water throughout the year, 78 respondents said they have received adequate water throughout the year that they have no problem in getting water from their main source. However, another 27 respondents said they did not get adequate water particularly during the season of November to March/April next year. And, all of the respondents who depend on public distribution (PHE connection, standpoint) for drinking water said they received water supply every week.

Analysis of access to drinking water finds that although a majority of households in Aizawl received treated water from concerned department, as much as 20 per cent has not been able to received water from treated sources (see Table-4.13). Yet another disappointing fact is that 52.38 per cent of households are not afforded to have their own water connection and have to share with other households with whom they lived in the same building. Plus, as much as 25.71 per cent faced problems of water scarcity during seasons like November to March/April next year.

4.8.2. Sanitation facilities: Bathroom and Toilet

One significant indicator of urban poor settlements in developing country is that of ‘Sanitation’ facilities. The availability of sanitation facility is one important factor that determined the standard of urban poor housing in the city of Aizawl. In order to evaluate the true status of the urban poor concerning the availability and accessibility of sanitation system, collected primary data will be analyze and present using tables and figures.

First let’s see the facilities available and different types of access to bathroom by poor households in Aizawl city. Table-4.15 shows facility of bathroom by households.

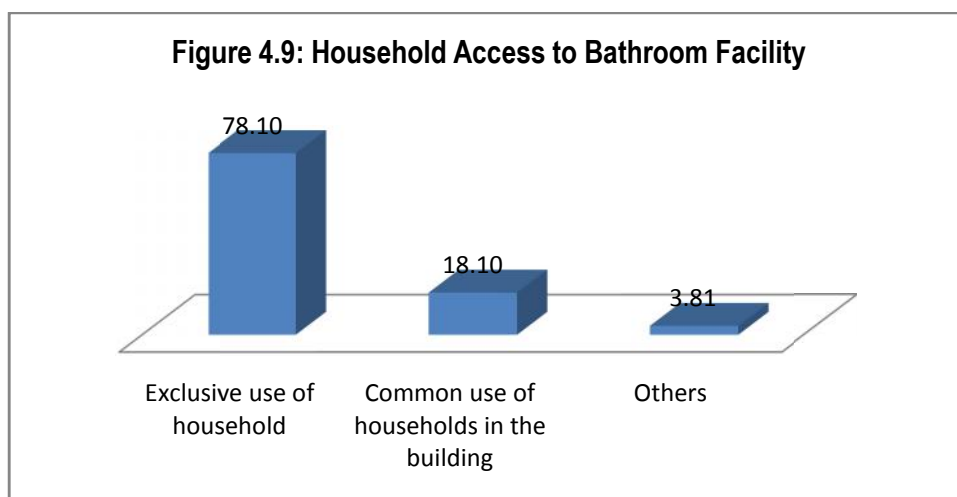
Table -4.15: Facility of bathroom

Bathroom facility	No of Households	Percent
Attached	71	67.62
Detached	30	28.57
No bathroom	4	3.81
Total	105	100

Source: Field Survey, September, 2016

As presented in Table-4.15, out of 105 respondent households, 71 households has bathroom attached to their building, It means that around two-third of the total household are having bathroom attached within the residence itself. 30 households has bathroom not attached to their house but nearby their house. Meanwhile a little portion of households-4 households, i.e 3.81 per cent of the respondents have no bathroom.

In case of access, figure-4.9 shows the status of poor households in Aizawl city in terms of access to bathroom facility.



As presented in figure-4.9, 78.10 per cent households of BPL household within Aizawl City are having bathroom which is shared only within the household or ‘Exclusive use of household’. They accounts for 78.10 per cent of the total households. This reveals that more than majority of the total households are having bathroom of their respective household and that is around four-fifth of the selected sample. . Secondly, there are 19 households who shared bathroom with other households. Those households who are sharing bathroom with other households account for 18.10 per cent of the selected sample which is around one-fifth of the

selected sample. Lastly, there are 4 households without a proper bathroom of their own or even a shared bathroom. Households without proper bathroom accounts for 3.81 per cent of the total BPL households.

It has been clearly observed that the access to bathroom, even among the BPL households is considered to be acceptable as far as Aizawl city is concerned, though it is yet to be hundred per cent accomplished in the future.

Another important sanitation facility that determines social status and living standard of households is the availability of toilet facility. Out of a selected 105 BPL households within Aizawl city, 72 households are having their own latrine which is unshared by other households. These households account for 68.57 per cent of the total selected households these imply that more than two-third of the total household of BPL households in Aizawl are having their respective latrine. Meanwhile, 33 households are sharing latrines with other households which accounts for 31.43 per cent of the total house under observation. It implies that less than one-third of the total households are sharing latrines with other households. In case of latrine type, 89.52 per cent of total households used 'septic tank' and other 10.47 per cent used traditional 'pit latrine'.

4.8.3. Electricity and Cooking fuel

Apart from other living facilities, households' access to electricity for lighting and other purpose and clean and affordable cooking fuel has been important in determining living standard of households. Clean and cheaper energy is needed for improving quality of life of poor urban dwellers. Since these poor households has rigid expenditure pattern with large portion of their income already earmarked for

foods and rent, they were left with not much option but to reduce other expenditure. Field survey however shows favourable condition that all of the sampled households have access to electricity in their house for all purposes.

In case of cooking fuel, almost all households (103 households) use LPG as coming fuel while 2 households use kerosene for cooking purpose. However, out of that 103 LPG user households, 7 does not hold Consumer Card for public distribution of LPG. Another unfortunate response relating to LPG has been the regularity of its distribution. While 47 respondents says they have received LPG supply ‘once in a month’, other 45 respondent says ‘once in two months’ whereas other 13 respondent said there are no specific period of distribution.

4.8.4. Testing the Relationship between Income level and access to Basic Amenities

Given the analysis of the access of the BPL families to different housing amenities, it is an academic interest to study the significance of the income levels to households access to these amenities. This is undertaken by correlating these parameters with the income distribution, and testing their significance using chi-square test. The result is presented in Table 4.16.

Table-4.16: Chi-Square Test of Independence between Access to Amenities and Income

Correlated Parameters	df	Chi-square Value	Sig. level
Principal Water Sources and Income	16	48.12***	0.000
Bathroom and Income	8	17.97**	0.021
Toilet and Income	4	13.01***	0.010
Cooking Fuel and Income	4	8.33*	0.080
Domestic Electricity and Income	4	0.00	1.00

***, **, & * implies significant at 1%, 5% & 10% respectively

It is observed from Table 4.16 that income levels of the households is directly related to their access to water, bathroom, toilet and cooking fuel. However, income level and household access to domestic electricity does not show significant relationship. As the relationship between income and most of the housing amenities considered here are significant, it can be concluded that households' access to basic housing amenities is directly related to income levels. This is in line with the study hypothesis No.1.

4.9. Level of Satisfaction

Whatever the condition of housing they were home, whatever the level of facility they access, what matters most to the households is that are they satisfied with their residence?? Or are they satisfied with the services available to them. We will analyze the level of satisfaction of the urban poor dwellers on their current housing condition and neighbourhood services

In case of households' level satisfaction to the 'physical condition of housing', 17.14 per cent cited they were 'very satisfied' with their home while half of the respondents were 'satisfied'. In the meantime, 26.67 per cent states that they are 'dissatisfied' with the physical condition of their house while other 5.71 per cent were 'very dissatisfied' with their house due to a numbers of reasons Table- 4.17 present different state of level of satisfaction.

Table-4.17: Households Level of Satisfaction on Physical Condition of Housing

Level of Satisfaction	No. of Households	Percent
Very Satisfied	18	17.14
Satisfied	53	50.48
Dissatisfied	28	26.67
Very Dissatisfied	6	5.71
Total	105	100

Source: Field Survey, September, 2016

A numbers of households states that having been able to live in a proper house whatever be the condition and whether they owned it or not, they are happy with their current condition and admitted that with their current income or others resources they have got, they lived their best possible. On the other hand, reasons like old and damage building needed repair, size, and many other reasons were cited for displeasure or dissatisfaction by households.

Relating to households' level of satisfaction on neighbourhood relations/services, Table-4.18 present different levels of satisfaction. Similar to the case of satisfaction on physical condition, most of households were satisfied with their neighbourhood services. 56.2 per cent of households were 'very satisfied' while 29.5 per cent were 'satisfied' indicating more than four-fifth of households were satisfied with neighbourhood services. On the other hand more than 10 per cent were 'dissatisfied' or 'very dissatisfied'.

Table-4.18: Households Level of Satisfaction on Neighbourhood Relations/Services

Level of Satisfaction	No. of Households	Percent
Very satisfied	59	56.2
Satisfied	31	29.5
Very dissatisfied	1	1
Dissatisfied	14	13.3
Total	105	100

Source: Field Survey, September,2016

Like in case of level of satisfaction on physical condition of housing, it is not easy to pin point reason of satisfaction or dissatisfaction. One important observation is that most of households states that their 'relations with neighbours' has been the most important reasons for satisfaction. On the contrary, distance to medical/health centre,

school, problems of waste and garbage disposal, crime or security related reasons; are the most cited reasons for dissatisfaction.

4.10: Housing loan or other government assistances

Government, in a welfare state has its role in every aspect of development and needed by every section of society especially by BPL or economically weaker sections of society. Its role in providing shelter to the needy through a number of schemes or policy measures has been considered as essential and important. Government assistances, sometimes however, could not reach its target group and failed to deliver its objectives. Our field survey has look for how government assistance in housing and one of flagship programme of current government of Mizoram-NLUP benefitted the urban poor in Aizawl city.

However, field survey shows that out of 105 respondent households, only 3 households received housing assistance/loan from the government/institution with an amount of Rs 84000, Rs 12500, and Rs 300000. It indicates that only 2.87 per cent of BPL households received housing assistance/loan. In case of NLUP, out of 105 sample households, 47 households i.e., 44.8 per cent received NLUP within the last 8 years.

4.11. Concluding Remarks

This chapter presents the basic living conditions and housing amenities of poor people in urban areas of Aizawl city, Mizoram. Based on the analysis, the following points may be noted. Firstly, a substantial number of poor households in Aizawl city are

female headed families. It is observed that around one-third (33.33 percent) of the BPL households are female headed. Secondly, the livelihood conditions of the urban poor are insecure as more than 36 percent of these households depend on daily labour as family main source of income. Thirdly, majority of the poor households (70.48 percent) live in rented house, of which more than 18 percent are in bad condition, and about 50 percent are Katcha house. Meanwhile, more than half of those who had to pay rent have difficulty in payment of rents. Thus, one thing that becomes very clear is that majority of the urban poor live in rented house and has difficulty in rent payment (Hypothesis No.2.). Fourthly, the tenure system of the rented houses by the poor households is mostly informal in nature. This is indicated by the fact that 64.86 percent rented their house on verbal agreement, and another 33.75 percent do not have any contract with the landlord. So, the tenure security is highly at the mercy of their respective landlord. Lastly, the urban poor has access to various housing amenities like water, bathroom, fuel, toilet, electricity, etc in a differing levels in such a way as those having higher income levels tended to have better access. The statistical hypothesis regarding the relationship between income levels and households access to such amenities are found significant in most of the cases. Thus, it can be concluded that access to housing amenities by the poor households is directly related to income level (Hypothesis No.1).

MAJOR FINDINGS AND CONCLUSION

5.1. Introduction

Housing is one of the component which is considered to be vital for human survival, and essential for socio-economic development. Provision of adequate housing is, perhaps, the most effective way of tackling poverty and its related social evil. Today the problem of housing and homelessness has been more severe and extreme in urban areas than in rural areas and now is a matter of debate and national issue.

For this study, Aizawl has been selected as area of study for it has been the largest urban centre and home of more than 1/5th of the population of the state of Mizoram. The analysis of primary data collected have given a number of results giving clearer picture of the condition and status of poor households' access to quality housing and level of access to other living facilities in Aizawl city. In this chapter we will present the main findings, recommendations and conclusion of the study.

5.2. Main Findings

The main findings of this study has been summarised as under:

1. The study observed that 1/3rd or 33.33 per cent of BPL households are female headed family. Based on this percentage, out of 15736 BPL families (BPL Survey, 2010), 5245 were female headed (while female head does not necessarily means she is the income earner of the household). Another

important point that defined socio-economic status of household is family size. The mean or average size of BPL households is 4.52 while most families are sized within 3 to 6 members.

2. 'Daily labour' has been main source of income for largest percentage of BPL households (36.19%) in Aizawl city; 'business' or small/petty trading has been main source of income for 21.9 per cent BPL households while 23.81 per cent households depends on 'others'. The mean or average annual income of BPL households in Aizawl city is 141047.62 and standard deviation is 81052.38. In terms of income distribution, majority-35.24 per cent households are within the income group of 50000-100000, while 24.76 per cent households are within the income group 100000-150000.
3. The average annual expenditure of BPL households in Aizawl stand at 122000 while standard deviation is at 58073.46 indicating expenditure range of majority households lies between Rs 63926.54 to Rs 180073.46. Among different heads, 'expenditure on foods' (39.89 per cent of total mean) forms the biggest head of expenditure for urban poor in Aizawl city. Meanwhile, average annual 'expenditure on rent' become the second biggest heads of expenditure for the poor which stand at Rs 16700 i.e., 13.69 per cent of total mean (Average Annual Expenditure on rent stand at Rs 18429.47 excluding households not paying rent). 'Expenditure on education', 'expenditure on water, electricity, cooking fuel' and, 'others' are the other major heads of expenditure for the urban poor.
4. The analysis shows different housing status and condition of poor households in Aizawl city. It was observed that 70 per cent of urban poor lived in rented house while only 30 per cent lived in their own dwelling unit. Of all the 70 per

cent living in rented house, 9.5 per cent are not paying rent (lives in relatives houses). Also, about 78 per cent lived in 'flat' building while other 22 per cent lived in 'independent' house.

5. The dwelling units of the poor households have been classified as 'good', 'satisfactory' or 'bad'. If the condition of structure did not require any immediate repairs, major or minor, it was considered as in 'good' condition whereas if the structure required immediate minor repairs but not major repairs, it was considered as in 'satisfactory' condition. If the structure of the building required immediate major repairs without which it might be unsafe for habitation or required to be demolished and rebuilt, it was considered as in 'bad' condition. It has been found that more than 1/3rd of the dwelling units of poor households in a 'good' condition. Meanwhile, nearly half (46.67%) of the dwelling units were classified as 'satisfactory' needing minor repair; and 18.10 per cent of dwelling unit of urban poor is in 'bad' condition needing immediate major repair.
6. As already mentioned, 70 per cent of BPL family in Aizawl city lives in rented house, rental system and rental structure, thus, become an important part of the analysis. Relating to rental system, the finding has been a bit disappointing that almost all of the renters have no proper contract or agreement with their landlords. While 64.86 per cent settles through 'verbal contract' while 33.78 have no contract with their landlords.
7. In case of rent payment, the average rent paid by the poor households in Aizawl is Rs 16700 annually while the highest rent payment is Rs 60000 annually or Rs 5000 monthly. It is also important to be noted that of all the 70 per cent poor renters in Aizawl, 9.5 per cent lives in relatives houses and do

not pay rent (Out of 105 sample BPL households, 74 households live in rented house, and out of these 74 renters, 10 households do not pay rent and 64 households are paying rent monthly). Again, relating to rent payment, more than half of paying renters (34 of 64 households) face difficulty in paying regularly. The most probable reasons for problems of rent payment include 'shortage in income' (47.06%), defer/delay in wage payment (17.65%) and 'other reasons' (35.29%). This observation is in support of our Hypothesis No.2 which says 'majority of urban poor live in rented house and face difficulty in payment of monthly rent'.

8. Household's level of access to basic living facilities like drinking water, bathroom facility, latrine facility, etc is also another factor that determines household's access to quality housing as well as standard of living. In case of access to quality drinking water, we have a healthy result that around 80 per cent ('piped water into dwelling', 'Piped water into plot' and 'public tap/standpipe') poor households in Aizawl received treated water, distributed by Public Health Engineering Department, as their main source of drinking water. However, the other 20 per cent who depend on 'spring', 'rainwater' as their main source of drinking are a serious matter of concern that they seem unable or unaffordable to access treated water.
9. In case of drinking water, another unpleasant fact is that only 1/5th of poor households in Aizawl have been able to get drinking water for exclusive use within their own household; while a huge percentage i.e., more than half (52.38%) have to share their source with other households living in the same building and some have to share their neighbour's sources. And yet, another problem has been the sufficiency and regularity of water supply that around

25 per cent poor households face water scarcity during seasons like November to April next year.

10. Access to bathroom and latrine facilities has been another important parameter of quality housing. In these case our findings has been positive that the access level to these two facilities has been almost hundred per cent. Only 3.81 per cent poor households have been reported to have 'no bathroom' whereas all households have latrine facility of different kind.
11. It has been found that the source of all these problems relating to availability of housing and basic amenities has been poverty and unemployment. Analysis of households income and income sources indicated that more than 90 per cent of BPL households in Aizawl were engaged in informal or unorganized, low paid, unsecure, mostly daily basis and other petty business. The income earned from these source are too low that they were just been able managing their daily needs. It has been a big problem for these households to save or spare their income for housing and for other basic needs.
12. Another big problem relating to access to basic amenities has been high sharing percentage especially in case of drinking water and latrine facilities. It has been found that more than half (52.38%) of poor households have to share their drinking water source with their landlords or other households in the buildings. In this case, sufficiency becomes a big issue that sometimes it may be a source of tension between households. Yet, the sharing percentage of latrine facility among poor households has been a bit disappointing that 31.43 per cent of poor households in Aizawl shared latrine facility with other households.

13. To test if there is significant relationship between the income levels of the poor households and their level of access to basic housing amenities, chi-square test was conducted. With the exception of domestic electric supply where all households are found to have access, all other indicators are found to be significantly related to income level of the family. This finding validates the hypothesis No.1 of this study i.e., 'access to basic housing amenities is directly related to income level of the urban poor households'.
14. For households living in rented house, security of tenure has been important. It has been found almost all households living in rented house have no proper contract or written document indicating absence or low level of tenure security. Absence of laws or rules governing private rental market create chances of manipulation, exploitation and forceful eviction of renters by their landlords.
15. Another disappointing finding has been limited access by poor/BPL households to housing credit or government assistance/schemes. It is found that only 2.87 per cent of poor households have access to organized or institutional finance or loan or government assistance for housing purposes.

5.3. Conclusion and Recommendations

Compare to the country as whole and big metropolitan cities in India, the current condition and status of housing of poor households is not very bad despite some negative findings of our study. One important positive point is that there has been no report of homelessness and slum practically does not exist (although there are some localities notified as slums for specific purpose) in Aizawl city. No doubt,

poverty has also been one of its biggest problems with numbers of its habitants living below poverty line. However, new BPL baseline survey being conducted across the city (as on October, 2016), with stricter criteria, is expected to bring down the number of persons living below poverty line by a huge margin.

In spite of their relatively better position when compared with other urban areas of India, the urban poor in Mizoram are very poor in terms of home ownership, livelihood condition, tenure security, access to basic amenities, etc. As absolute majority of the poor in the study areas lived in rented house, they may also be called housing poor, while they do not are not in a position to buy house in view of their limited income side by side with the highly inflating trends of housing prices in the country. The existing condition of security of housing tenure (or tenancy) is very disappointing that majority of the poor who lived in rented houses do not have written agreement signed with their landlords. Rather, they usually made verbally agreement regarding their rent and length of stay. This is considered insecure situation. Though most of the poor families have access to basic amenities like water, toilet, electricity, etc, their access level is below expected. This is basically due to sharing of these facilities by a number of tenants (families) who stay in different rooms within the same premises.

At the backdrop of the study of the housing problems of urban poor in Aizawl, it is considered pertinent to propose some policy recommendations based on the observations of the study.

1. The existing conditions of house rent and security of tenancy is informal in nature where there is no proper regulation to the advantage of the families who live in

rented houses. So, it is necessary to make laws to regulate house rent and tenure system to protect the interest of the renters and landlords.

2. Every family who intended to let their house may be bounded by law to provide separate arrangement to each renter of water, electricity, toilet, etc. This will significantly improve access of the poor to housing amenities.
3. The households' access to housing amenities is directly related to their income level, and their capacity to have owned house significantly depends on the income levels of the family. At the same time, large number of urban poor do not have stable livelihood source as they mainly depend on daily labour for family sustenance. So, it is necessary to undertake livelihood promotional activities through policy intervention. The initiatives will have unequivocal impact on their access to housing and basic amenities.

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Appendix-1

INTERVIEW SCHEDULE

Block-0: Identification

Sl.no	Items	Code/Entry
1	Name of Respondent	
2	Name of Head of Households	
3	Locality	
4	Zone	

Block-1: Households basic characteristics

Sl.no	Items	Code/Entry	
1	Households size	Male	
		Female	
		Total	
2	Gender of head of Household (male-1, female-2)		
3	Housing status (Owned-1, Rented-2)		
4	Family's main source of Income (Agriculture and allied-1, daily labourers-2, business-3, permanent-4, others-5)		
5	Number of household movable assets	Radio/transistor	
		Television	
		Refrigerator	
		Washing Machine	
		Telephone (Landline)	
		Mobile Phone	
		Computer/laptop	
		Bicycle	
		Scooter/motorcycle	
		Car/jeep/van	
	None of the specified assets		

Block-2: Household level of Income and Expenditure

A: Income

Sl.no	Sources	Monthly	Annually	Total
1	Main source			
2	Other sources			
3	Total			

B: Expenditure

Sl.no	Expenditure	Monthly	Annually	Total
4	Foods			
5	Education			
6	Medical			
7	Rent (if code 2 in item-3 of block-1)			

8	Housing maintenance (if code-1 in item-3 of block-1)			
9	Electricity, cooking fuel, water, etc			
10	Others			
11	Total			

Block-3: Structure of rent and tenure security (if code 2 in item 3 of block-1)

Sl.no	Items	Code/Entry
1	Rent system (with written contract-1, verbal contract-2 without written contract-3, without any contract-4)	
2	Mode of rent payment (monthly-1, half yearly-2, no particular time-3)	
3	Rate of rental payment (up to 1000-1, 1000-2000-2, 2000-3000-3, 3000-4000-4, 4000-5000-5, above 5000-6)	
4	How much percentage of your income spend for rent (less than 10-1, 10-20-2, 20-30-3, 30-40-4, 40-50-5, more than 50-6)	
5	Did you ever faced difficulty in payment of rent (yes-1, no-2)	
6	If yes (i.e if coded 1 in item 5), what are the reasons (shortage in income-1, defer in wage payment-2, other reasons-3)	

Block-4: Housing characteristics

Sl.no	Items	Code/Entry
1	Type of structure of house (pucca-1, semi-pucca-2, katcha-3)	
2	Condition of structure (good-1, satisfactory-2, bad-3)	

Block-5: Particulars of dwellings

Sl.no	Items	Code/Entry
1	Type of the dwelling (1-independent house, 2-flat, 3-others)	
2	number of rooms in the dwelling	Living rooms
3		Other rooms
4	Floor area of the dwelling (in square feet and in whole number)	Living rooms
5		Other rooms
6		Covered verandah
7		Uncovered verandah
8		Total(sum of items 4-7)
9	ventilation of the dwelling unit (1-good, 2-satisfactory, 3-bad)	
10	total number of married couples in the household	
11	If entry>0 in item 10, number of married couples having separate room	
12	kitchen type (separate kitchen: with water tap – 1, without water tap – 2; no separate kitchen – 3)	
13	floor type (mud – 1, bamboo / log – 2, wood / plank – 3, brick / lime stone / stone – 4, cement – 5, mosaic / tiles – 6, others – 9)	
14	wall type (grass/ straw/ bamboo, etc. – 1, mud / unburnt brick – 2, other katcha – 3, timber – 4, burnt brick – 5, Tile-6 iron or other metal sheet – 7, cement / RBC / RCC – 8, other pucca –9)	
15	roof type (grass/ straw/ bamboo etc. – 1, mud / unburnt brick – 2, other katcha – 3, tiles / slate – 4, burnt brick – 6, iron / zinc /other metal sheet / asbestos sheet – 6, cement / RBC / RCC – 7, other pucca – 8)	

Block-6: Some general particulars of households living in houses

Sl.no	Items	Code/Entry
1	duration of stay in the present area* (years)	
2	whether the household moved to the present area during last 365 days (yes-1, no-2)	
3	If 1 in item 2	type of structure of the accommodation availed of immediately before coming to the present area (pucca – 1, semi -pucca – 2, katcha – 3, no dwelling – 4)
4		reason for movement to the present area (free / low rent – 1, independent accommodation – 2, accommodation in better locality-3, employment related reasons: proximity to place of work – 4, other employment related reasons-5, others-9)

Block-7: Particulars of living facilities (drinking water, bathroom, sanitation facilities

A: Drinking Water

Sl.no	Items	Code/Entry
1	Principal source of drinking water (piped water into dwelling-1, piped water to yard/plot-2, public tap/standpipe-3, tube well/borehole-4; spring: protected-5, unprotected-6; rainwater collection -7.	
2	whether availability of drinking water from the principal source is sufficient throughout the year?(yes– 1, no – 2)	
3	access to the principal source of drinking water (household's exclusive use- 1, common use of households in the building -2, neighbour's source -3, public source-4, private-5, private source-5; others-9)	
4	Distance to the principal source of drinking water (within dwelling – 1, outside dwelling but within the premises – 2, outside premises: less than 0.2 k.m. – 3, 0.2 to 0.5 k.m. – 4, 0.5 to 1.0 k.m. – 5.	
5	for entry 02, 03 and 04 in item 1, , frequency of supply of water (daily -1, once in two days-2, once in three days-3, once in a week-4, others-9)	
6	for entry 02, 03 and 04 in item 1, whether the bill paid for water is high/low (high-1, low-2)	
B. Bathroom		
7	facility of bathroom (attached – 1, detached – 2, no bathroom – 3)	
8	for code 1 and 2 in item 7, access to bathroom(exclusive use of household- 1, common use of households in the building – 2, public/community use – 3, others -9)	
C. Latrine		
9	access to latrine (exclusive use of household-1, common use of households in the building -2, public/community latrine without payment-3, public/community latrine with payment-4, others -9, no latrine-5)	
10	Type of latrine used: septic tank-1, pit latrine-2, elsewhere (open drain, open pit, open field, etc)-3; ventilated improved pit latrine-	

	05, pit latrine with slab-06, pit latrine without slab/open pit-07, composting toilet-08, others-09; not used-10	
D. Electricity		
11	Whether the household has electricity for domestic use? (yes-1, no-2)	
E. Cooking fuel.		
12	Type of fuel used by household for cooking (fire wood-1,charcoal-2, kerosene-3, LPG-4, electricity-5, any other-9	
13	If code 4 in item 12,whether the households has a consumer card (yes-1, no-2)	
14	If code 6 in item 12, frequency of supply of LPG cylinder (Once in two weeks-1, once in a month-2, once in two month-3, no specific period-4)	

Block-8: Level of Satisfaction

Sl.no	Items	Code/Entry
1	Are you satisfied with the physical condition of your present dwelling unit (very satisfied-1, satisfied-2, dissatisfied-3, very dissatisfied-4)	
2	If satisfied , reasons for satisfaction were (number and size of bedroom-1, Kitchen facility-2,Living area-3, size and condition of washing and drying areas-4, Availability of Ventilation-5, toilet facilities-6)	
3	If not satisfied, reasons for dissatisfaction were (number and size of bedroom-1, Kitchen facility-2, Living area-3, size and condition of washing and drying areas-4, Availability of Ventilation-5, toilet facilities-6)	
4	Are you satisfied with services provided near to your dwelling unit (neighbourhood facilities)- (very satisfied-1, satisfied-2, dissatisfied-3, very dissatisfied-4)	
5	If satisfied, reasons for satisfaction were (security-1, availability of open spaces-2, transport system-3, garbage and waste disposal-4, street light-5, relationship with neighbours-6, access to medical health care facilities-7, school-8)	
6	If not satisfied, reasons for dissatisfaction were (security-1, availability of open spaces-2, transport system-3, garbage and waste disposal-4, street light-5, relationship with neighbours-6, access to medical health care facilities-7, school-8)	

Block-9: Whether the household receive benefit or assistance from government in the following items

Sl.no	Items	Code/Entry
1	Ration card (yes-1, no-2)	
2	Cooking gas (yes-1, no-2)	
3	Electricity (yes-1, no-2)	
4	Housing loan (yes-1, no-2)	
5	If yes (code 1 in item 4) amount	
6	NLUP (yes-1, no-2)	

Appendix-2

CRITERIA ADOPTED FOR SELECTION OF BPL IN URBAN AREA (BPL SURVEY 2010)

1. Should be a citizen of India.
2. Should reside in urban area for at least one year.
3. Working under government, banks, corporations, Mission offices, on regular basis cannot be a member of BPL.
4. More than one member of family employed under government on M/R basis cannot be included in BPL list.
5. Who owns vehicle (including two wheelers) cannot be a BPL member.
6. Family having computer set cannot be a BPL member.
7. Established businessman cannot be a member of BPL.
8. A family who owns RCC building cannot be included in BPL.
9. A family paying more than Rs 2000 as monthly rent cannot be a member of BPL.
10. Family having regular income of Rs 1500 or more per month from house rent should not be included in BPL
11. Elected member of Village Panchayat (Local Council/Village Council) cannot be a member of BPL.
12. As per the level of income fixed by Planning Commission or Ministry of Housing and Urban Poverty Alleviation, Government of India, from time to time.
13. From general observation.

(Source: UD&PA Dept, Government of Mizoram).

