

REPORTS ON NSS 76th ROUND (July 2018 - December 2018)

DRINKING WATER, SANITATION, HYGIENE AND HOUSING CONDITION IN MIZORAM







DIRECTORATE OF ECONOMICS & STATISTICS SOCIO-ECONOMIC SURVEY BRANCH, MIZORAM

PREFACE

The Directorate of Economics and Statistics (DES), Mizoram has been participating in the nationwide Socio-Economic Surveys, conducted perennially by the NSO, NSSO, Ministry of Statistics and Programme Implementation, Government of India. The present 76th Round report presents key State level parameters of drinking water, sanitation, hygiene and housing condition in Mizoram during the period July 2018 to December 2018.

The main objectives of the 76th Round survey on "Drinking water, Sanitation, Hygiene, and Housing condition" conducted by NSSO was designed to collect information on housing condition with special emphasis on the aspects of drinking water, sanitation and hygiene.

This publication has been prepared by Socio-Economic Survey Branch and is the result of sincere works done by Pi R.Lalmuanpuii, Deputy Director, Pu C.Vanlalvena, Asst. Director, Miss ST.Lalcrownmawii, Supervisor, Miss C.Lalvenzeli, Investigator and Miss R.Lalhlimpuii, Investigator.I appreciate the efforts rendered by all.

I hope this publication will serve a great purpose for Administrators, Policy makers, Academicians, Scholars, Research Scholars and the general public.

Suggestions from every corner for improvement of the contents of this publication would highly be appreciated.

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HIGHLIGHTS

The Directorate of Economics and Statistics, Government of Mizoram under the guidelines of the National Sample Survey Office (NSSO), Ministry of Statistics & Programme Implementation (MOSPI), Government of India conducted survey on 'Drinking Water, Sanitation, Hygiene and Housing Condition' in the 76th round (July 2012-December 2012).

The schedule of enquiry on 'Drinking Water, Sanitation, Hygiene and Housing Conditions' (known as Schedule 1.2) was designed to collect information on housing condition with special emphasis on the aspects of drinking water, sanitation and hygiene.

This report is based on the estimates obtained from the Mizoram State sample only. In this survey, a total of 128 first stage units (FSUs) were surveyed covering 44 villages in rural areas and 84 urban frame survey (UFS) blocks in urban areas. For this particular survey, from each sample village and urban block of the state sample, 12 households were selected for canvassing Schedule 1.2. The survey covered a total of 1536 households i.e 528 in rural areas and 1008 in urban areas. Some of the key survey findings are stated below.

1. Drinking water facility

- The major source of drinking water in rural areas was 'Public taps/stand pipe' serving 41.2% of the rural households, and in urban areas it was 'piped water into dwelling' serving 85.9% of the urban households.
- For the state as a whole, 'Piped water into dwelling' was the main source of drinking water which served 58.8% households, followed by 'Public taps/stand pipe' as the second major source of drinking water serving 24.7% households.
- Availability of drinking water was at its best between the months of July to January in Mizoram. The rest of the months in a year were considered as water scarce months. February to June were the months where the scarcity of water is more severe where it reaches its peak in the month of April. 53.1% households did not get sufficient drinking water.

- 63.8% of households got their principal source of drinking water within the dwelling unit. 35.3% of households in rural areas and 92.9% of households in urban areas had got their principal source of drinking water within the dwelling unit.
- 32.5% of households in rural sector and 86.1% in the urban sector had access to the principal source of drinking water using it exclusively for their own households.
- The proportion of households resorting to 'community use' as their principal source was more prevalent among rural households which was 47.1% as compared to only 4.4% of urban households in Mizoram.
- 53.1% of rural and 7.4% of urban households in Mizoram were not required to pay any water charges. Household who paid and whose full payment information for water charges was available were found to be only 31.7% in rural and 78.7% in urban areas.

2. Bathroom facility and sanitation facility

- The dwellings of 98% of the urban households and 94.4% of rural households in Mizoram had exclusive use of bathroom facility.
- Households having common use of bathrooms in a building is more predominant amongst urban household which stands at 1.5% as compared to 0.8% in rural areas.
- 0.4% of the households in Urban areas reported having no access to Latrine, which results in 0.2% of the overall population of the state having no access to latrine.
- 74% of the households in the state used septic tank type of latrine, and the proportion is 94.7% and 54.7% of urban and rural households

3. Electricity for domestic use

- 97.3% of rural households and 100% of urban households had electricity for domestic use.
- Among households having electricity for domestic use, 36.7% of rural households and 18.9% of urban households were using electric wiring fixed to the walls.

4. Distance Travelled

- 34.6% of households need to travel less than 1 km to the place of work and 52.4% of households 1km to less than 5 km to the place of work.
- 61.7% of households do not need to travel to their place of work.

5. Tenurial Status

• Nearly 92% rural households and 52.5% urban households had secured tenure, where 'secured tenure' of the dwelling includes the tenurial statuses: 'owned freehold/ leasehold', 'hired: employer's quarters' and 'hired dwelling units with written contract'.

6. Housing characteristics

- 70.5% households in rural areas and 92.7% households in urban areas lived in houses with pucca structure, whereas19.2% and 5.1% in rural and urban areas respectively lived in houses with semi pucca structure. 6.6% households in rural areas and 0% households in urban areas lived in unserviceable katcha houses.
- The average floor area of a dwelling was 70.04 sq. m. in rural Mizoram and 81.9 sq. m. in urban Mizoram.
- 90.5% of the households used house for residential purpose only. 94.8% of households in rural areas and 85.8% of households in urban areas used the house for residential purpose only.

- 49% of households lived in a house with good condition, 31.7% with satisfactory condition and 9.8% with bad condition.
- 95.8% of rural households were living in 'independent house' out of which 92% were owned by the households as against 57.3% of urban households living in 'independent house' where 52.5% were owned by the households.
- 3.2% households in rural household and 16.9% households in urban had a separate kitchen in their dwellings.

7. Micro Environment

- 40.5% households in rural areas and 10.8% households in urban areas did not have any drainage system.
- 37.8% of rural households and 42.9% urban households had 'open pucca' drainage system.
- 44.8 % of households in rural areas used to dispose water waste without treatment to 'open low land areas' as compared to 34.9 % of households in urban areas.
- 38.8% rural households and 6.1% urban households respectively had no garbage collecting arrangement.
- About 40.6% households in rural areas and 87.1% urban households had reported that the garbage of their households was collected by Panchayat/Municipality/ Corporation.
- 20.4% in rural and 3.1% in urban areas used to dump the garbage to the final dumping zone by residents/ group of residents.
- 49.8% households had access to direct opening to motorable road with street light and 20.8% households had accessed to motorable road without streetlight. It is also observed that 6.1% of households lived in house without any 'direct opening to road/lane/constructed path'.

- About 10.7% of rural households and 21.5% of urban households had reported that they face severe problem of flies and mosquitoes during the last 365 days.
- 1.6% of households in Mizoram had faced severe problems of flies/mosquitoes during the last 365 days as compared to 92.4% who suffered moderate problem.
- Most of the households in Mizoram i.e 59.9% suffered from stomach problem, 8.6%. from malaria and 23.5% from skin disease.

Chapter One

Introduction

Background

The National Sample Survey (NSS), set up by the Government of India in 1950 to collect socio-economic data employing scientific sampling methods, conducted nation-wide survey on 'Drinking water, Sanitation, Hygiene and Housing condition' and survey on 'Particulars of slums' in its 69th round (July 2012-December 2012) of operation. The last survey on these subjects was covered in 65th round of NSS (July 2008- June 2009).

Objective and conduct of the Survey

Housing is a basic requirement of human well-being. Along with the requirement of shelter, other facilities in the micro environment of housing such as type of dwelling unit, drinking water, sanitation, hygiene, etc., form vital components of overall quality of life of the population. The objective of the survey on 'Drinking water, Sanitation, Hygiene and Housing condition' was to examine and study different aspects of living conditions necessary for decent and healthy living of the household members by developing suitable indicators based upon collected information.

Information on the aspects outlined in the previous paragraph was related to the household as a whole. On drinking water, important information was collected on (i) sources and sufficiency of drinking water, (ii) distance to the principal source of drinking water and (iii) quality of drinking water. On the sanitation facilities, information was collected on (i) access to latrine, in terms of exclusive use, common use or no access, (ii) type of latrine, (iii) reason for not using latrine despite having access. Some information on micro-environment surrounding the house that was collected relates to (i) garbage disposal, (ii) drainage arrangement, (iii) problem of flies/mosquitoes. Other information on housing condition like, age of the house, condition of the house, type of the dwelling unit (viz., pucca, semipucca and katcha), floor area of the dwelling unit, sources of financing for construction/purchase of houses/flats for residential purpose was also collected. Using the collected information, important indicators of living facilities have been developed and presented in this report. Some of the important indicators are:

proportion of households (i) using improved sources of drinking water, (ii) getting sufficient drinking water, (iii) fetching drinking water from outside the premises, (iv) using improved latrine facilities, (v) having no arrangement for garbage disposal, (vi) having drainage arrangement. On the characteristics of the house and dwelling unit, important indicators that have been developed are (i) proportion of households with secure tenure status of dwelling, (ii) proportion of households having electricity for domestic use etc.

Outline of the survey programme

Geographical coverage: The survey will covered the whole of Mizoram except interior villages situated beyond five kilometers of the bus route.

Period of survey and work programme: The period of the survey was for six months starting from 1st July 2012 and ended on 31 of December 2012. The survey period was divided into two sub-rounds of three months' each:

sub-round 1 : July September 2012 sub-round 2 : October- December 2012

In each of these two sub-surveys equal number of sample villages/blocks(FSUs) was allotted for survey with a view to ensuring uniform spread of sample FSUs over the entire survey period.

Sample design: A stratified multi-stage design was adopted for the 69th round survey. The First Stage Unit (FSU) was the census villages in the rural sector and Urban Frame Survey (UFS) blocks in the urban sector. The Ultimate Stage Unit (USU) was the households in both the sectors. In case of large FSUs, one intermediate stage of sampling was the selection of two hamlet-groups (hgs)/ subblocks (sbs) from each rural/ urban FSU.

Sampling Frame for First Stage Units: For the rural sector, the list of 2001 census villages updated by excluding the villages urbanized and including the towns de-urbanized after 2001 census constituted the sampling frame. For the urban sector, the latest updated list of UFS blocks (2007-12) was considered as sampling frame.

Stratification: Within each district of a state, two basic strata were formed: i) rural stratum comprising of all rural areas of the district and (ii) urban stratum comprising of all the urban areas of the district. In case of rural areas of Mizoram, the coverage was extended to the entire state from this round. One special stratum

was formed within the state consisting of all the interior and inaccessible villages which were not covered in previous rounds.

Total sample size (FSUs): A total of 128 FSUs was allotted for the state of Mizoram out of which 44 for rural and 84 for urban.

Selection of FSUs: For the rural sector, each stratum/sub-stratum was selected by probability proportion to size with replacement (PPSWR), being the population of the village as per 2001 census. For the urban sector, UFS 2007-12 phases was used for all the towns and cities and from each stratum/sub-stratum FSUs was selected by using Simple Random Sampling without Replacement (SRSWOR).

Reference period: A reference period of last 365 days was used for most of the items under particulars of living facilities, housing characteristics and micro environment, particulars of the dwelling, general particulars of the households living in houses etc. However for some items like specific types of illness, water charges, rent, consumer expenditure etc. reference period of last 30 days was used.

Chapter Two

Concepts and Definitions

Some concepts and definition of important terms which were used in this survey on Drinking Water, Sanitation, Hygiene and Housing Condition during NSS 76th round are described below.

Population coverage: The following rules regarding the population to be covered were adhered to during survey operation.

- 1. Under-trial prisoners in jails and indoor patients of hospitals, nursing homes etc., were excluded, but residential staff therein was listed while listing was done in such institutions. The persons of the first category were considered as normal members of their parent households and were counted there. Convicted prisoners undergoing sentence were outside the coverage of the survey.
- 2. Floating population, i.e., persons without any normal residence were not listed. But households residing in open space, roadside shelter, under a bridge, etc., more or less regularly in the same place, were listed.
- 3. Foreign nationals were not listed, nor do their domestic servants, if by definition the latter belong to the foreign national's household. If, however, a foreign national becomes an Indian citizen for all practical purposes, he or she was covered.
- 4. Persons residing in barracks of military and paramilitary forces (like police, BSF, etc.) was kept outside the survey coverage due to difficulty in conduct of survey therein. However, civilian population residing in their neighbourhood, including the family quarters of service personnel, were covered.
- 5. Orphanages, rescue homes, *ashrams* and vagrant houses were outside the survey coverage.

However, persons staying in old age homes, students staying in *ashrams*/ hostels and the residential staff (other than monks/ nuns) of these ashrams were listed. For orphanages, although orphans were not to be listed, the persons looking after them and staying there were considered for listing.

House: Every structure, tent, shelter, etc. is a house irrespective of its use. It may be used for residential or non-residential purpose or both or even may be vacant.

Household: A group of persons normally living together and taking food from a common kitchen constitutes a household. It includes temporary stay-aways (those whose total period of absence from the household is expected to be less than 6 months) but excludes temporary visitors and guests (expected total period of stay less than 6 months). Even though the determination of the actual composition of a household was left to the judgment of the head of the household, the following procedures was adopted as guidelines.

- (i) Each inmate (including residential staff) of a hostel, mess, hotel, boarding and lodging house, etc., would constitute a single-member household. If, however, a group of persons among them normally pool their income for spending, they would together be treated as forming a single household. For example, a family living in a hotel would be treated as a single household.
- (ii) In deciding the composition of a household, more emphasis was to be placed on 'normally living together' than on 'ordinarily taking food from a common kitchen'. In case the place of residence of a person was different from the place of boarding, he or she was treated as a member of the household with whom he or she resides.
- (iii) A resident employee, or domestic servant, or a paying guest (but not just a tenant in the household) was considered as a member of the household with whom he or she resides even though he or she was not a member of the same family.
- (iv)When a person sleeps in one place (say, in a shop or in a room in another house because of space shortage) but usually takes food with his or her family, he or she was treated not as a single member household but as a member of the household in which other members of his or her family stayed.
- (v) If a member of a family (say, a son or a daughter of the head of the family) stayed elsewhere (say, in hostel for studies or for any other reason), he/ she was not considered as a member of his/ her parent's household. However, he/ she were listed as a single member household if the hostel was listed.

Household size: The number of members of a household is its size.

Household monthly per capita expenditure: Generally household consumer expenditure is measured as the expenditure incurred by a household on domestic account during a specified period, called reference period. It also includes the imputed values of goods and services, which are not purchased but procured otherwise for consumption. In other words, it is the sum total of monetary values of all the items (i.e. goods and services) consumed by the household on domestic account during the reference period. The imputed rent of owner-occupied houses is excluded from consumption expenditure. Any expenditure incurred towards the productive enterprises of the households is also excluded from the household consumer expenditure. Monthly per capita expenditure (MPCE) is the household consumer expenditure over a period of 30 days divided by household size.

Dwelling unit: It is defined as the accommodation availed of by a household for its residential purpose. It may be an entire structure or a part thereof or consisting of more than one structure. There may be cases of more than one household occupying a single structure such as those living in independent flats or sharing a single housing unit, in which case, there will be as many dwelling units as the number of households sharing the structure. There may also be cases of one household occupying more than one structure (i.e. detached structures for sitting, sleeping, cooking, bathing etc.) for its housing accommodation. In this case, all the structures together would constitute a single dwelling unit. In general, a dwelling unit consists of living room, kitchen, store, bath, latrine, garage, open and closed veranda etc. A structure or a portion thereof used exclusively for non-residential purposes or let out to other households did not form part of the dwelling unit of the household under consideration. However, a portion of a structure used for both residential and non-residential purposes was treated as part of the dwelling unit except when the use of such portion for residential purpose was very nominal. The dwelling unit covers all pucca, semi-pucca and katcha structures used by a household. Households living more or less regularly in tents, under bridges, in pipes, under staircase, in purely temporary flimsy improvisations built by the road side (which are liable to be removed at any moment) etc., were considered to have no dwelling.

Building: Building is defined as a free-standing structure comprising one or more rooms or other spaces covered by a roof and usually enclosed within external walls or dividing walls which extend from the foundation to the roof. Dividing walls refer to the walls of adjoining buildings, which are practically independent of one

another and likely to have been built at different times and owned by different persons. If more than one physically separated structure constitute one living unit, all of them together also form a building. Usually, building will have four external walls. But in some areas the nature of building construction is such that it has no walls. Instead, it has a roof which almost touches the ground and it is provided with an entrance. Such structures and also structures standing only on pillars were treated as buildings for the purpose of the survey.

Floor area of the dwelling: The inside area of the floor excluding the area covered by the walls was considered as floor area. If a room was used both for business and residential purposes and the residential use was not very nominal, the total area of the room was considered as floor area. On the other hand, if only a portion of a room was used for residential purposes, only the area of that portion was considered as floor area. The same procedure was adopted in case of room being shared with another household.

Tenurial status of dwelling: Information in respect of the tenurial status of the dwelling unit of the sample household was collected. For the purpose of the survey the following classifications of the tenurial status of the dwelling were used:

- 1. owned:
 - 1.1 freehold
 - 1.2 leasehold
- 2. hired:
 - 2.1 employer quarter
 - 2.2 hired dwelling units with written contract
 - 2.3 hired dwelling units without written contract
- 3. others
- 4. no dwelling

Owned: A dwelling unit was considered 'owned' by the sample household if permanent heritable possession with or without the right to transfer the title was vested in a member or members of the household. Dwelling units in owner-like possession under long term lease or assignment was also considered as 'owned'. If the sample household had the right of permanent heritable possession of the dwelling unit with or without the right to transfer the title, such dwelling units were considered as 'freehold'. Dwelling units held under special conditions such that the holder did not possess the title of ownership of the dwelling unit but the right for long term possession of the dwelling unit (e.g., dwelling units possessed under perpetual lease, hereditary tenure and long term lease for 30 years or more) was considered 'leasehold'.

Hired: In this survey three types of hired accommodation were distinguished. These were employer quarter, hired dwelling with written contract and hired dwelling without written contract. If the dwelling unit, in which the sample household lived, was provided by an employer to a member of the sample household, such dwelling units were considered as 'employer quarter'. If the dwelling was taken on rent, by the sample household, which was payable at monthly, quarterly or any other periodic intervals or on lease, for a period of less than 30 years, it was treated as a 'hired dwelling'. Hired dwelling unit might be free of rent also. If the sample household had taken the dwelling unit on rent with written contract with its owner, it was considered as 'hired dwelling with written contract'. On the other hand, if the sample household lived in a hired dwelling unit without a written contract, such dwelling unit was considered as 'hired dwelling without written contract'.

Others: In all other types of possession of the dwelling unit (e.g., encroached one) for the households, these were classified as 'others'.

No dwelling: Households which lived more or less regularly, under bridges, in pipe, etc., in purely temporary flimsy improvisations built by the roadside (which are liable to be removed any moment), were considered as having 'no dwellings'.

Independent house: A dwelling unit is considered as an independent house if it has a separate structure and the structure is not shared with any other household. In other words, if the dwelling unit and the entire structure of the house are physically the same, it was considered as an independent house. In some parts, particularly in rural areas, two or more structures together may constitute a single housing unit. While the main residence may be in one of the structures, the other structures may be used for sleeping, sitting and for store, bath etc. In all such cases, all the structures together would form a single housing unit and was treated as an independent house.

Flat: A dwelling unit is considered as a flat if it is a part of a structure which is shared with at least two households and the dwelling unit has housing facilities of water supply, bathroom and latrine, which are used exclusively by the households or shared with households residing in that structure. If the household reports that the facilities of water supply, bathroom and latrine are shared with households residing in other structures, in such cases also such dwelling unit was considered as flat. If households were residing in flat-like structure without any one of the

housing facilities like water supply, bathroom and latrine; those structures/dwelling units were not considered as flat.

Pucca structure: A pucca structure is one whose walls and roofs are made of pucca materials such as cement, concrete, oven burnt bricks, hollow cement / ash bricks, stone, stone blocks, jack boards (cement plastered reeds), iron, zinc or other metal sheets, timber, tiles, slate, corrugated iron, asbestos cement sheet, veneer, plywood, artificial wood of synthetic material and poly vinyl chloride (PVC) material.

Katcha structure: A structure which has walls and roof made of non-pucca materials is considered as a katcha structure. Non-pucca materials include unburnt bricks, bamboo, mud, grass, leaves, reeds, thatch, etc. By definition, Katcha structures can be of the following two types;

- (i) *Unserviceable katcha structure*, which includes all structures with thatch walls and thatch roof, i.e., walls made of grass, leaves, reeds, etc. and roof of a similar material and
- (ii) Serviceable katcha structure, which includes all katcha structures other than unserviceable katcha structures.

Semi-pucca structure: A structure which cannot be classified as a pucca or a katcha structure as per definition is a semi-pucca structure. Such a structure will have either the walls or the roof but not both, made of pucca materials.

Room: it is defined as a constructed area with walls or partitions on all side with at least one door way and a roof overhead. Wall / partition means a continuous solid structure (except for the doors, windows, ventilators, air-holes, etc.) extending from floor to ceiling. A constructed space with grill or net on one or more sides in place of wall or partition was not considered as a room. In case of conical shaped structures in which the roof itself was built to the floor level, the roof was considered as wall.

Living room: A room with floor area (carpet area) of at least 4 square metres (i.e., approximately 43 square feet), a height of at least 2 metres (i.e., approximately 6.6 feet) from the floor to the highest point in the ceiling and used for living purposes was considered as a living room.

Other room: It is defined as a room which does not satisfy the specification of 4 square metres floor area and 2 metres height from the floor to the highest point of the ceiling or a room which though satisfies the specification is not used for living

purposes. A room satisfying the size criterion when shared by more than one household or when used for both residential and business purposes was treated as other room.

Verandah: It is a roofed space adjacent to living/other room and is not walled from all sides. In other words, at least one side of such space is either open or walled only to some height or protected by grill, net, etc. A verandah is defined as a 'covered verandah', if it is protected from all sides and an 'uncovered verandah', if is not protected at least from any one of the sides. A covered veranda may have a door also. Sometimes verandah is used as an access to the room(s). Corridor or passage within the dwelling unit is generally treated as portion of a room or a verandah depending on its layout. However, veranda does not cover a common corridor or passage used mainly as an access to the dwelling itself.

Notified slums: These are areas notified as slums by the concerned State governments, municipalities, corporations, local bodies or development authorities.

Non-notified slums: Also, any compact settlement with a collection of poorly built tenements, mostly of temporary nature, crowded together, usually with inadequate sanitary and drinking water facilities in unhygienic conditions, was considered as a slum by the survey, provided at least 20 households live there. If such a settlement was not notified as a slum, it was considered as a non-notified slum.

Slums: The word "slum" includes both *notified slums* and *non-notified slums*.

Squatter settlement: Slum like settlements with less than 20 households were considered as squatter settlements. The criterion of 20 households was not restricted within an FSU only but by considering the whole of such an area, which may cut across more than one FSU.

Economic activity: The entire spectrum of human activity falls into two categories: economic activity and non-economic activity. Any activity that results in production of goods and services that adds value to national product is considered as an economic activity. The economic activities have two parts — market activities and non-market activities. Market activities are those that involve remuneration to those who perform it, i.e., activity performed for pay or profit. Such activities include production of all goods and services for market including those of government services, etc. Non-market activities are those

involving the production of primary commodities for own consumption and own account production of fixed assets.

The full spectrum of economic activities as defined in the UN System of National Accounts was not covered in the definition of economic activity adopted in 69th round survey of NSSO. Production of any good for own consumption is considered as economic activity by UN System of National Accounts, but in NSS surveys, production of only primary goods for own consumption is considered as economic activity. While the former includes activities like own account processing of primary products among other things, in the NSS surveys, processing of primary products for own consumption is not considered as economic activity. However, it may be noted that 'production of agricultural goods for own consumption' covering all activities up to and including stages of threshing and storing of produce for own consumption, comes under the coverage of the economic activities of NSS.

The term 'economic activity' in this round included the following:
(i) all the market activities described above, i.e., the activities performed for pay or profit which result in production of goods and services for exchange,

(ii) all the non-market activities,

- (a) all the activities relating to the primary sector (i.e., industry Divisions 01 to 09 of NIC- 2008) which result in production (including free collection of uncultivated crops, forestry, firewood, hunting, fishing, mining, quarrying, etc.) of primary goods, including threshing and storing of grains for own consumption and
- (b) the activities relating to the own-account production of fixed assets. Own account production of fixed assets include construction of own houses, roads, wells, etc., and of machinery, tools, etc., for household enterprise and also construction of any private or community facilities free of charge. A person may be engaged in own account construction in the capacity of either a labourer or a supervisor.

Determination of economic activities described above had been done irrespective of the situation whether such activity was carried out illegally in the form of smuggling or not. However, by convention, in this round as in earlier rounds, the activities like prostitution, begging, etc., which may result in earnings, were not considered as economic activities.

Household type: The household type, based on the means of livelihood of a household, was decided on the basis of the sources of the household's income during the 365 days preceding the date of survey. For this purpose, only the household's income (net income and not gross income) from economic activities was considered; but the incomes of servants and paying guests were not taken into account.

In rural areas, a household belongs to any one of the six household types viz. (a) self-employed in agriculture, (b) self-employed in non-agriculture, (c) regular wage/salary earning, (d) casual labour in agriculture, (e) casual labour in non-agriculture and (f) others. In urban area, four different types of households may be obtained. These types are (a) self-employed, (b) regular wage/salary earners, (c) casual labour and (d) others.

The broad household types in rural areas used in this round were self-employed, regular wage/salary earning, casual labour and others. A household which did not have any income from economic activities was classified under others. Within each of the broad category of self-employed and casual labours two specific household types were distinguished, depending on their major income from agricultural activities (section A of NIC-2008) and non-agricultural activities (all NIC-2008 sections, excluding sectionA). The specific household types for self-employed were considered as self-employed in agriculture and self-employed in non-agriculture. For casual labour, the specific household types were considered as casual labour in agriculture and casual labour in non-agriculture. In the determination of the household type in the rural areas, first the household's income from economic activities was considered. A rural household was first categorized as 'selfemployed', 'regular wage/salary earning' or 'casual labour' depending on the single major source of its income from economic activities during last 365 days. Further, for those households which were categorized either as self-employed or casual labours, specific household types (self-employed in agriculture or self-employed in non-agriculture and casual labour in agriculture or casual labour in nonagriculture) was assigned depending on the single major source of income from agricultural or non-agricultural activities.

An urban household was assigned the household type self-employed, regular wage/salary earning, casual labour or others depending on the major source of its

income from economic activities during the last 365 days. A household which did not have any income from economic activities was classified as others.

Earner of a household, place of work and maximum distance travelled by the earner: A household member with earning either from economic activities and/or from non-economic activities was considered as an earner in the household. Place of work meant a place where the activities, considering both the economic and non-economic activities together, were performed by the earners. Distance meant the one way actual distance from residence to the place of work normally travelled by the earner.

Procedure for determining Household principal industry and occupation: To determine the household principal industry and occupation, the general procedure to be followed is to list all the occupations pertaining to economic activities pursued by the members of the household excluding those employed by the household and paying guests during the one year period preceding the date of survey, no matter whether such occupations are pursued by the members in their principal or subsidiary capacity. Out of the occupations listed that one which fetched the maximum earning to the household during the last 365 days preceding the date of survey would be considered as the principal household occupation. It is quite possible that one or more members of the household may pursue the household occupation in different industries corresponding to the principal occupation, which fetched the maximum earnings, should be considered as the principal industry of the household. In extreme cases, the earnings may be equal in two different occupations or industry-occupation combination of the senior most members.

Land possessed: In this survey, the 'area of land possessed' included land 'owned', 'leased in' and 'land neither owned nor leased in' (i.e. encroached) by the household but excluded land 'leased out'. The total land area possessed by the household as on the date of survey was taken into account.

To determine the area under land possessed by a household, the following points were kept in mind.

- (a) A piece of land was considered to be owned by the household if permanent heritable possession with or without the right to transfer the title vested in a member or members of the household. Land held in owner-like possession say, under perpetual lease, hereditary tenure, long-term lease for 30 years or more, etc., was considered as land owned.
- (b) As regards lease, land given to others on rent or free by owner of the land without surrendering the right of permanent heritable title was defined as land leased out. Land leased in was defined as land taken by a household on rent or free without any right of permanent or heritable possession. The lease contract was written or oral.
- (c) For a piece of public/institutional land under the possession of the household, if the household lacked title of ownership and also did not have lease agreement for the use of land transacted, either orally or in writing, such land was considered as 'neither owned nor leased in'. Private land (i.e. land owned by the household sector) possessed by the household without title of ownership and occupancy right was not considered in the 'otherwise possessed' category. All private land encroached upon by the household was treated as leased-in land.
- (d) Land possessed by the household members by virtue of family ties with the owner who stays elsewhere (forms a different household), was also to be treated as a case of land leased in. For such owners (those found to be living away from their family members who are in possession of the land), the land was to be recorded as owned and leased out.
- (e) Land owned, leased in, etc., by a particular household did not include the area of land owned, leased in, etc., by the servants/paying guests who are considered as normal members of the household. However, land owned/cultivated jointly by two or more households was apportioned to determine the land owned/cultivated by any one of them.
- (f) Land possessed by the households living in a block of flats was calculated by apportioning the total area occupied by the building among the households in proportion to the size of the flats.

Chapter Three

Particulars of Living Facilities

Information on 'drinking water, sanitation, hygiene and housing condition' collected through Schedule 1.2 canvassed in the NSS 76th Round is broadly categorized into three groups. Firstly, information on the particulars of various facilities available to the sample households for decent living such as drinking water, latrine, bathroom, electricity etc. were collected from all the selected households. Secondly, information was collected on some of the characteristics of the house, particulars of the dwelling unit and the micro-environment surrounding of the dwelling unit from the households who were living in houses. These broadly relate to different aspects of the structure of the houses, number of rooms, floor area, rent of the hired dwelling, use of the house, age of the structure, condition of the structure, drainage arrangement, garbage collection arrangement, etc. Finally, information regarding number of constructions undertaken, number of constructions completed, type of constructions, cost of constructions, sources of finance, etc. was collected from the households who undertook constructions during the last 365 days. Besides, information was also collected on first hand purchase of constructed house/flat by the households during the last 365 days such as number of such purchases, their area and cost.

Table 1: Number of first stage units (FSUs) allotted, surveyed and number of sample households surveyed for Mizoram State Sample.

| Sl. No. | Number of First Stage Units (FSUs) | Rural | Urban | Combined |
|---------|------------------------------------|-------|-------|----------|
| 1 | Allotted | 44 | 84 | 128 |
| 2 | No. of households surveyed | 528 | 1008 | 1536 |

Number of Households Surveyed: In the NSS 76th round, a total of 128 First Stage Units (FSUs) has been allotted for the Mizoram State Sample: 44 in rural areas and 84 in urban areas. All the FSUs allotted were surveyed covering a total of 1536 households: 528 households in rural areas and 1008 households in urban areas of Mizoram.

Drinking water facility

The study of the drinking water facility requires an analysis of access to different sources of drinking water and sufficiency of drinking water. The issue of accessibility of drinking water at household level covers other aspects like the distance travelled by members of a household to reach the principal source of drinking water, intra-household gender disparity in fetching the drinking water from distant sources, total time taken by the household members to reach the principal source of drinking water and coming back, and how much time they had to wait in a day at the source for fetching drinking water. The quality of drinking water is another important concern for maintaining good health of the community. Many households strive to enhance the quality of water they drink by adopting various methods for treating the water before drinking and how many of these households are actually treating water before drinking would be of interest. The quality and treatment of drinking water also depends upon the place where the drinking water is usually stored. Also, some households may have to resort to various other supplementary sources to meet their daily need of drinking water. The following analysis seeks to address all these issues.

Principal source

In 76th round, information in respect of the household's principal source of drinking water was collected. Principal source of drinking water was taken as that source of drinking water which was used most commonly (in terms of frequency) by the household during the last 365 days. Some of such sources were 'bottled water', 'piped water into dwelling', 'piped water to yard/plot', 'public taps/standpipe', 'tubewell /borehole', 'protected well', 'unprotected well' etc. Table 2 shows per 1000 distribution of households by different principal source of drinking water.

Table 2: Per 1000 distribution of households by principal source of drinking water.

| Sl. No. | Principal source of drinking water | Rural | Urban | Combined |
|---------|------------------------------------|-------|-------|----------|
| 1 | Bottled water | 3 | 0 | 1 |
| 2 | Piped water into dwelling | 339 | 859 | 588 |
| 3 | Piped water to yard/ward | 16 | 11 | 14 |
| 4 | Public taps/stand pipe | 412 | 66 | 247 |
| 5 | Tube well/borehole | 0 | 0 | 0 |
| 6 | Protected well | 0 | 0 | 0 |
| 7 | Unprotected well | 0 | 0 | 0 |
| 8 | Protected spring | 139 | 37 | 90 |
| 9 | Unprotected spring | 34 | 8 | 22 |
| 10 | Rain water collection | 0 | 4 | 2 |
| 11 | Tank/pond | 19 | 4 | 12 |
| 12 | Other surface water | 29 | 0 | 15 |
| 13 | Others | 9 | 11 | 9 |
| 14 | All (incl.n.r) | 1000 | 1000 | 1000 |

The above table shows per 1000 distribution of households by principal source of drinking water which indicates that during 2018, the major source of drinking water in rural areas was 'Public taps/stand pipe' serving 41.2% of the rural households, and in urban areas it was 'piped water into dwelling' serving 85.9% of the urban households. For the state as a whole, 'Piped water into dwelling' was the main source of drinking water which served 85.9% households, followed by 'Public taps/stand pipe' as the second major source of drinking water serving 6.6% households.

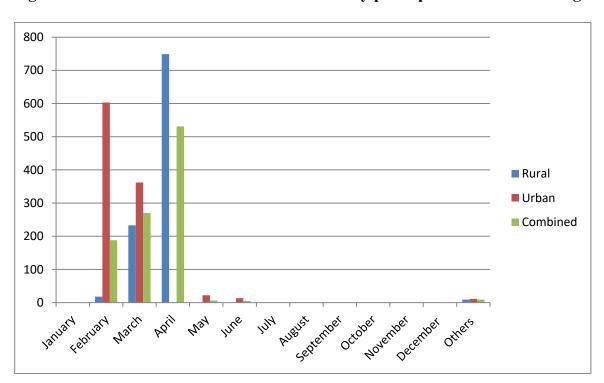


Figure 1: Per 1000 distribution of households by principal source of drinking water.

Sufficiency

Another important aspect of drinking water facility is its availability in sufficient amount throughout the year. The availability of drinking water from the principal source was taken as sufficient throughout the year if, in each of the calendar month of the year, availability of drinking water was sufficient. If in any particular month, the availability of drinking water was not sufficient for majority of the days, availability was considered as insufficient in that month.

Table 3: Proportion (per 1000) of households which did not get sufficient drinking water during different months of the year.

| Sl. No | Month of the year | Rural | Urban | Combined |
|--------|-------------------|-------|-------|----------|
| 1 | January | 0 | 0 | 0 |
| 2 | February | 18 | 603 | 188 |
| 3 | March | 233 | 362 | 270 |
| 4 | April | 749 | 0 | 531 |
| 5 | May | 0 | 22 | 6 |
| 6 | June | 0 | 13 | 5 |
| 7 | July | 0 | 0 | 0 |
| 8 | August | 0 | 0 | 0 |
| 9 | September | 0 | 0 | 0 |
| 10 | October | 0 | 0 | 0 |
| 11 | November | 0 | 0 | 0 |
| 12 | December | 0 | 0 | 0 |

The survey found that in Mizoram scarcity of drinking water reaches its peak in the month of April where 53.1% households did not get sufficient drinking water. The scarcity of drinking water lasts from February to June but the situation gets better by the month of July. With the onset of monsoon, the availability of water improves and starting from July till January there was sufficient drinking water in the state. It can be inferred that Mizoram experiences water scarcity for all almost half of the year starting from February to June but the scarcity is severest during the month of April.

FIGURE 2 800 700 600 500 Rural 400 __ ■ Urban 300 Combined 200 100 0 January **February** March April

Distance travelled to reach principal source of drinking water

Travelling a considerable distance to reach the principal source of drinking water outside the premises is definitely a disadvantage as compared to having drinking water facility within the household premises. Here 'within premises' includes both 'within dwelling' and 'outside dwelling' but within the premises.

Table 4: Per 1000 distribution of households by distance to the principal source of drinking water.

| Sl. No | Distance travelled to the source of drinking | | Rural | Urban | Combined |
|--------|--|------------------|-------|-------|----------|
| | | water | | | |
| 1 | Within dwelling | | 353 | 929 | 638 |
| 2 | Outside dwelling but within premises | | 20 | 11 | 15 |
| 3 | Outside | Less than 0.2 km | 533 | 51 | 294 |
| | premises at a | 0.2 - 0.5 km | 84 | 8 | 47 |
| | distance of | 0.5 - 1.0 km | 10 | 1 | 6 |
| | All | | 1000 | 1000 | 1000 |

It is observed that in Mizoram 63.8% of households got drinking water within their dwelling. The proportion of households getting principal source of drinking water within dwelling was 35.3% for rural areas and 92.9% for urban areas. The household getting drinking water within premises but outside dwelling was 20% for rural and 11% for urban and 15% for combined sector. About 84% of rural households and 8% of urban households had to travel less than half a kilometer to fetch water from the principal source situated outside the premises.

Nature of access

Households having exclusive use of principal drinking water source are in better position than those who have to resort to community use for the same purpose. Here access was defined in terms of the prevailing situation reported by the sample household in respect of the principal source of drinking water that was used and not the legal right to use the source of drinking water

Table 5: Per 1000 distribution of households by nature of access to the principal source of drinking water.

| Sl. No. | Nature of access to the principal source of drinking water | | Rural | Urban | Combined |
|---------|--|--|-------|-------|----------|
| 1. | Exclusive | use of households | 32.5 | 86.1 | 58.4 |
| 2. | Common use of households in the building | | 0.1 | 5.2 | 2.6 |
| 3. | Neighbors source | | 0.3 | 0.5 | 0.4 |
| 4. | Comm- unity use | Public source restricted to particular community | 7.7 | 2.6 | 5.3 |
| | - | Public source unrestricted | 39.1 | 1.8 | 21.1 |
| | | Private source restricted | 0 | 0 | 0 |
| | | Private source unrestricted | 0.3 | 0 | 0.1 |
| 5. | Others | | 19.9 | 3.7 | 12.1 |
| 6. | All | | 100 | 100 | 100 |

Table 5 represents per 1000 distribution of households by nature of access to the principal source of drinking water. The 32.5% of households in rural sector and 86.1% in the urban sector had access to the principal source of drinking water using it exclusively for their own households. The proportion of households resorting to 'community use' as their principal source was more prevalent among rural households which was 47.1% as compared to only 4.4% of urban households in Mizoram.

Water charges

Water charge is another important issue as it is no longer considered as a free commodity. In NSS 76th round, information on water charges paid per month by the households to the delivery agency/organization had been collected. For collecting the information from a household, it was first ascertained whether water charges had been paid and then, if paid, the average amount paid per month by the household was ascertained. Payable approach was used to collect the information.

Table 6: Per 1000 distribution of households by water charges payment category and average amount (Rs.) paid for water charges per month.

| Sl. No. | Monthly water charges payment category and average amount (Rs.) paid for water charges | | Rural | Urban | Combined |
|---------|--|--|-------------|------------|----------|
| 1. | Per 1000 distribution of | Paid and information on full amount of payment is available | 31.7 | 78.7 | 54.3 |
| | households by water charges | households Paid and information on some amount of payment | | 12.9 | 12.7 |
| | payment category | Paid but no information on amount paid is separately available | 2.8 | 1.1 | 2 |
| | | Not required to pay All | 53.1 100 | 7.4 100 | 31 |
| 2. | Average amount (Rs.) of water | Information on full amount of payment is available | 122.61 | 348.12 | 280.1 |
| | charge paid per month where | Information on some amount of payment is available | 76.72 | 227.61 | 150.64 |

From the table, it is observed that 53.1% of rural and 7.4% of urban households in Mizoram were not required to pay any water charges. Household who paid and whose full payment information for water charges was available were found to be only 31.7% in rural and 78.7% in urban areas.

Bathroom and Sanitation Facility Bathroom facility

In this survey, for collecting information on bathroom facilities available to the members of the household, categories of bathroom were recorded viz., attached bathroom and detached bathroom. If the dwelling unit had one or more bathrooms attached to the dwelling unit, it was considered to have an attached bathroom. Otherwise, a bathroom within the premises but not attached to the dwelling units, was classified as a detached bathroom.

Table 7: Per 1000 distribution of households by facility of bathrooms and access to bathroom.

| Sl. No. | Facility of bathroom and access to bathroom | Rural | Urban | Combined |
|---------|---|-------|-------|----------|
| 1 | Exclusive use of households | 944 | 980 | 961 |
| 2 | Common use of households in the building | 8 | 15 | 12 |
| 3 | Public/community use without payment | 2 | 1 | 2 |
| 4 | Public/community use with payment | 1 | 0 | 1 |
| 4 | Others | 4 | 1 | 3 |
| 5 | No bathroom | 41 | 3 | 21 |
| 6 | All | 1000 | 1000 | 1000 |

The proportion of households having exclusive use of bathrooms is higher in urban Mizoram which was 98% as against 94.4% of rural households. On the other hand, households having common use of bathrooms in a building are more predominant amongst urban household which stands at 1.5% in urban areas as compared to 0.8% in rural areas. Another pertinent finding is that only 4.1% and 3% of rural and urban households respectively does not have bathroom facility.

1200 1000 800 600 400 200 0 Rural Urban Combined Excursive use of notise that sea in the sea in th

Sanitation facility

The study of sanitation facilities available to households is an important aspect of living standards. In World Health Organization and United Nations Children's Fund's Global Water Supply and Sanitation Assessment 2000 Report, sanitation was defined to include connection to a sewer or septic tank system, pour-flush latrine, simple pit or ventilated improved pit latrine, with allowance for acceptable local technologies.

Latrine

In this survey, 'access to latrine' was defined in relation to the latrine that could be used by the majority of the household members, irrespective of whether it was being used or not. Information was collected on whether the household's latrine facility was for its exclusive use or common use, 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.

Table 8: Per 1000 distribution of households by access to latrine.

| Sl. No. | Access to latrine | Rural | Urban | Combined |
|---------|----------------------------------|-------|-------|----------|
| 1 | Exclusive use of the households | 99.8 | 99.3 | 99.7 |
| 2 | Common use of household in the | 0.1 | 0.4 | 0.2 |
| | building | | | |
| 3 | Public/community latrine without | 00 | 00 | 00 |
| | payment | | | |
| 4 | Public/community latrine with | 00 | 00 | 00 |
| | payment | | | |
| 5 | Others | 0.2 | 00 | 0.1 |
| | | | | |
| 6 | No latrine | 00 | 0.4 | 0.2 |
| 7 | All | | | |

The above table shows that in Mizoram, exclusive use of latrine was more common for both rural and urban areas which were 99.8% and 99.3% respectively. Overall, 99.7% of the households in the state had latrine for exclusive use of the households. Surprisingly 0.4% of the households in urban areas reported having no access to Latrine, which results in 0.2% of the overall population of the state having no access to latrine.

Different types of access to latrine

In this survey information was collected on different types of access to latrine and types of latrine. This includes like flush/pour flush to piped sewer, septic tank, pit, or elsewhere, and various other types like ventilated improved pit latrine, pit latrine with slab, pit latrine without slab/open pit, composing toilet, others.

Table 9: Proportion (per 1000) of households with different types of latrine and access to latrine.

| Sl. No. | | of latrine for those ccess to latrine | households who | Rural | Urban | Combined |
|---------|--------|---------------------------------------|--------------------|-------|-------|----------|
| 1 | Used | Flush/pour — flush to | Piped sewer system | 0.7 | 0.2 | 0.4 |
| | | | Septic tank | 54.7 | 94.7 | 74 |
| | | | Single Pit | 3.2 | 0.5 | 1.9 |
| | | | Elsewhere | 0 | 0 | 0 |
| | | Ventilated improv | ed pit latrine | 0.7 | 1.1 | 0.9 |
| | | Pit latrine with sla | ıb | 32.6 | 2.4 | 18 |
| | | Pit latrine without | slab/open pit | 6.3 | 0.1 | 3.3 |
| | | Composing toilet | | 1.4 | 0 | 0.7 |
| | | Others | | 0 | 0 | 0 |
| 2 | Not us | sed | | 0.1 | 1 | 0.5 |

From the table, it is observed that 74% of the households in the state used septic tank type of latrine, and the proportion is 94.7% and 54.7% of urban and rural household respectively. The second pre-dominant type Pit latrine with slab for both rural and urban households with 32.6% and 2.4% respectively.

Electricity for domestic use

Electricity is an important facility to households and has a bearing on the quality of life of the people. Hence information was collected on availability of electricity to households for domestic use. Besides, for the households that had electricity for domestic use, data on the type of electrical wiring was also collected.

Table 10: Proportion (per 1000) of households having electricity for domestic use and per 1000 distribution of households having electricity for domestic use by type of electric wiring.

| Sl. No. | ė v | | Rural | Urban | Combined |
|---------|---------------|--------------------|-------|-------|----------|
| | and type of e | electric wiring | | | |
| 1 | Proportion | 97.3 | 100 | 98.6 | |
| | electricity f | | | | |
| 2 | Type of | Conduit | 47.3 | 78.4 | 62.6 |
| | wiring | Fixed to the walls | 36.7 | 18.9 | 27.9 |
| | | Temporary | 16 | 2.7 | 9.5 |
| | | All (incl. n. r.) | 100 | 100 | 100 |

The table depicts that 97.3% of rural households and 100% of urban households had electricity for domestic use thereby indicating that almost every household in Mizoram are electrified. Among households having electricity for domestic use, 36.7% of rural households and 18.9% of urban households were using electric wiring fixed to the walls.

Tenurial Status

Tenure type of dwelling unit of the households is considered as one of the important parameters of quality of housing facility as it provides an overview of the tenurial status and corresponding security in the housing condition. Ownership of the dwelling can be considered as the most secured tenure status.

Table 11: Percentage distribution of households with dwelling units by tenurial status of the household.

| Sl. No. | Tenurial status | | Rural | Urban | All |
|---------|-----------------|------------------------|-------|-------|------|
| 1 | independent | owned | 92 | 52.5 | 72.9 |
| | house | hired employer quarter | 0.6 | 0.7 | 0.7 |
| | | hired others | 3.2 | 3.5 | 3.3 |
| | | others | 0.1 | 0.5 | 0.3 |
| | | All | 95.9 | 57.3 | 77.2 |
| 2 | flat | owned | 3.1 | 18.7 | 10.7 |
| | | hired employer | 0.1 | 0.9 | 0.5 |
| | | quarter | | | |
| | | hired others | 0.5 | 2 | 9.9 |
| | | others | 0 | 0.1 | 0 |
| | | All | 3.7 | 39.7 | 21.1 |
| 3 | others | owned | 0.5 | 2.2 | 1.3 |
| | | hired employer quarter | 0 | 0 | 0 |
| | | hired others | 0 | 0.2 | 0.1 |
| | | others | 0 | 0.6 | 0.3 |
| | | All | 0.5 | 3 | 1.7 |

Table 11 indicates percentage distribution of dwelling units by tenurial status of the households. Independently owned houses were the most prevalent type of tenurial status for 92% of rural households and 52.5% of urban households.

Overall, 72.9% of the households in Mizoram had freehold owned tenurial status indicating secured tenure.

Table 12: Percentage distribution of households by types of dwelling and tenurial status of dwelling for each type of structure

| Sl. No. | Type of Structure | Independent House | | | Flat | | | others | | |
|------------|----------------------|-------------------|-------|------|-------|-------|------|--------|-------|-----|
| | | Rural | Urban | All | Rural | Urban | All | Rural | Urban | All |
| 1 | Pacca | 95.4 | 56 | 73.7 | 4.5 | 42.1 | 25.2 | 0.1 | 1.8 | 1.1 |
| 2 | Semi-Pacca | 96.4 | 78.1 | 92.8 | 2.7 | 12.4 | 4.6 | 0.8 | 9.5 | 2.6 |
| 3 | Katcha | 97.6 | 61.6 | 91.6 | 0 | 0 | 0 | 2.4 | 38.4 | 8.4 |
| All | | 95.8 | 57.3 | 77.2 | 3.7 | 39.7 | 21.1 | 0.5 | 3 | 1.7 |

Table 12 indicates the percentage distribution of households by type of dwelling and tenurial status of dwelling for each type of structure. Independently owned Katcha type of structure with 97.6% was the most prevalent in rural areas while independently owned Semi-pacca type of structure with 78.1% was most prevalent in urban areas.

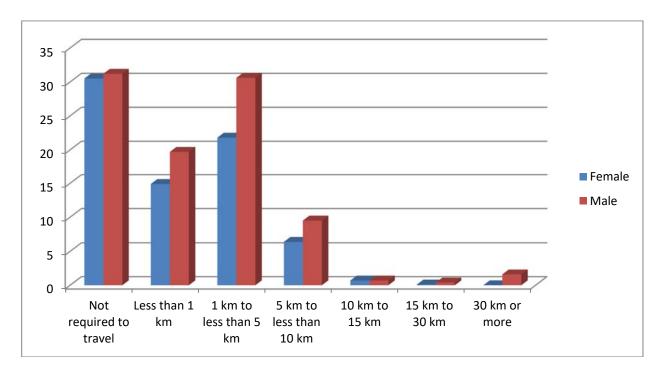
Maximum distance travelled to the place of work

The distance travelled to the place of work is an important aspect of the quality of life of the people and an indicator of civic amenities. It is a prime factor in the study of different aspects of place of residence and place of work of the people.

Table 13: Percentage distribution of households by maximum distance to the place of work normally travelled by any earner of the household.

| Sl. No. | Distance travelle | ed | Female | Male |
|---------|--------------------|-------------------------|--------|------|
| 1 | Not required to tr | avel | 30.5 | 31.2 |
| 2 | Travelled a | Less than 1 km | 14.9 | 19.7 |
| | distance of | 1 km to less than 5 km | 21.8 | 30.6 |
| | | 5 km to less than 10 km | 6.4 | 9.5 |
| | | 10 km to 15 km | 0.7 | 0.7 |
| | | 15 km to 30 km | 0.1 | 0.4 |
| | | 30 km or more | 0 | 1.6 |
| 3 | | All | 100 | 100 |

Figure 4



The above table presents an analysis of distance travelled by any earner of the household to the place of work. 30.5% of female and 31.2% of male workers were reported to not required to travel to their place of work. Whereas 34.6% had to travel less than 1 km, 52.4% had to travel 1 km to less than 5 km to their place of work.

Chapter Four

Housing Characteristics

Housing characteristics and the environment, in which the dwelling unit is located, are two important facets of condition of living of a household. Housing characteristics includes 'type of structure of the dwelling unit', 'use of the house', 'condition of structure', 'type of dwelling unit', etc. In this chapter some important survey findings relating to housing characteristics of the household have been discussed.

Type of structure

The first important characteristic of housing condition of a household is the type of structure of its house. In NSS 76th round survey, type of structures of the dwelling unit of households was categorized as pucca, semi-pucca and katcha, the last one, i.e. katcha, being further split into two categories: serviceable katcha and unserviceable katcha. The structure type classification was on the basis of materials used inthe construction of roof and wall of the dwelling unit.

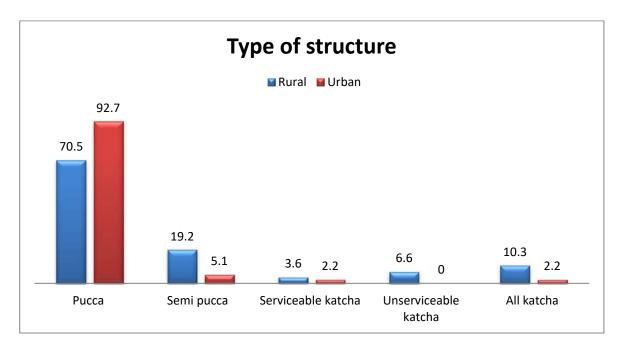
Table 14: Per 1000 distribution of households by type of structure and average floor area of the dwelling.

| Sl. No. | Type of structure | Rural | Urban |
|---------|---------------------------------|-------|-------|
| 1. | Pucca | 70.5 | 92.7 |
| | Semi pucca | 19.2 | 5.1 |
| | Serviceable katcha | 3.6 | 2.2 |
| | Unserviceable katcha | 6.6 | 0 |
| | All katcha | 10.3 | 2.2 |
| | All (incl. n. r.) | 100 | 100 |
| 2. | Average floor area (0.00sq. m.) | 70.04 | 81.9 |

During 2018 it was reported that in Mizoram 70.5% of the households in rural area and 92.7% households in urban area lived in houses with pucca structure, whereas 19.2% and 5.1% in rural and urban areas respectively lived in houses with semi-pucca structure. Also, 10.3% households in rural areas and only 2.2% households in urban areas lived in katcha houses. Thus it is observed that houses with katcha

structures are more predominant in rural areas whereas pucca structure houses are more prevalent among urban households. Further, the average floor area of a dwelling was larger in rural areas (70.04 sq. m.) than in urban (81.9 sq. m).

Figure 5



Plinth level

Plinth level of a house plays a vital role by preventing seepage of waste water and overflow of the dirty water from roads/drains/surrounding areas into the ground floor of the dwelling unit. Plinth level is defined as the level of the constructed ground floor from the land on which the building was constructed. If the ground floor was at the same level as the land on which the house stands, it was considered as having no plinth. Plinth level of the building was recorded, even if the household was residing on a floor or lower than the ground floor. If the building consisted of more than one structure, plinth level of the mains structure was considered.

Table 15: Proportion (per 1000) of households that experience flood during last 5 years and per 1000 distribution of household by plinth level and average plinth level (in meters) of the house.

| Sl. No. | Households that explinth level of the l | Rural | Urban | combined | |
|------------|---|---------------------------------|-------|----------|------|
| 1 | Proportion (per 1000) of | Excessive rain during monsoon | 0 | 1.3 | 0.6 |
| | households that experience flood from | River, sea, etc. | 2.3 | 3 | 2.7 |
| 2 | Proportion (per | No plinth | 41.6 | 44.8 | 43.1 |
| | 1000) of households by | 0.00 - 0.30 | 21 | 18.1 | 19.6 |
| | plinth level of | 0.30 - 0.61 | 25.2 | 19.9 | 22.7 |
| | the house (in meter) | 0.61 - 1.00 | 8.3 | 10.2 | 9.2 |
| | , | 1.00 or more | 3.9 | 6.9 | 5.4 |
| 3 | Average plinth le | Average plinth level (in meter) | | 0.39 | 0.36 |

The table depicts that 0.6% households in Mizoram experienced flood during last 5 years due to excessive rain during monsoon, 2.7% due to overflowing from river, sea, etc. Further, 41.6% and 44.8% of households in rural and urban areas respectively lived in houses with 'no plinth' level. The average plinth level was 0.34 meter and 0.39 meter in rural and Urban areas respectively.

Use of house and condition of structure

Type of use of a house is another important housing characteristic. In this survey three types of uses of a house were considered viz (i) residential only (ii) residential-cum-commercial, and (iii) residential-cum-others. Apart from use of a house, information on condition of structure of the dwelling unit was also collected. Three types of condition of structure were considered viz (i) good, (ii) satisfactory, and (iii) bad. 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 and 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.

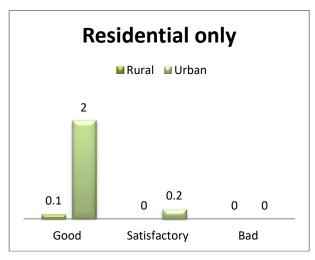
Table 16: Per 1000 distribution of households by use of house and condition for each

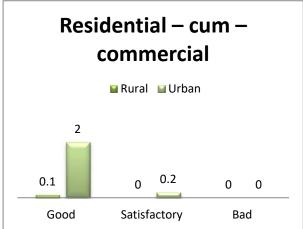
type of structure.

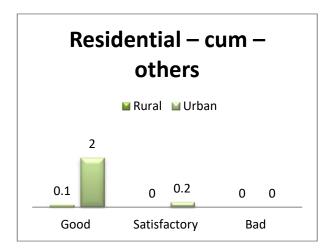
| Sl. No. | Per 1000 distribution of households by use of house and condition for each type of structure | | | Urban | All |
|---------|--|--------------------------------|------|-------|------|
| | nouse and condit | ion for each type of structure | | | |
| 1 | Residential | Good | 41.2 | 57.4 | 49 |
| | only | Satisfactory | 36.4 | 26.6 | 31.7 |
| | | Bad | 17.2 | 1.8 | 9.8 |
| | | All (incl. n. r.) | 94.8 | 85.8 | 90.5 |
| 2 | Residential – | Good | 3.4 | 9.6 | 6.4 |
| | cum – Satisfactory | | 1.7 | 2.4 | 2 |
| | commercial | mercial Bad | | 0.1 | 0 |
| | | All (incl. n. r.) | 5 | 12.1 | 8.4 |
| 3 | Residential – | Good | 0.1 | 2 | 1 |
| | cum – others | Satisfactory | 0 | 0.2 | 0.1 |
| | | Bad | 0 | 0 | 0 |
| | | All (incl. n. r.) | 0.1 | 2.2 | 1.1 |
| 4 | All | Good | 44.8 | 69 | 56.4 |
| | (incl. n. r.) | incl. n. r.) Satisfactory | | 29.2 | 33.8 |
| | | Bad | 17.2 | 1.9 | 9.8 |
| | | All (incl. n. r.) | 100 | 100 | 100 |

Table shows that 94.8% of households in rural areas and 85.8% in urban areas who lived in a house had used the house for residential purpose only. Houses which are being used exclusively for residential, 49 % was found to be 'good', 31.7% as 'satisfactory', and only 9.8% were found to be in 'bad' condition. Only 8.4% households had used the house for 'residential-cum-commercial' purpose. Under the category of 'residential-cum-others' it was only 1.1%. For the state as a whole, 56.4% of structure was found to be 'good', 33.8% as 'satisfactory', and only 9.8% as in 'bad' condition.

Figure 6







Type of dwelling and tenurial status of dwelling

The type of dwelling occupied by the households and tenurial status of dwelling is another important housing characteristic. Prominent survey findings on these aspects have been discussed in this section.

Table 17: Per 1000 distribution of households by type of dwelling and tenurial status of the dwelling.

| Sl. No. | Type of dwelling | ng and tenurial status of the dwo | elling | Rural | Urban | All |
|---------|------------------|-----------------------------------|--------|-------|-------|------|
| 1 | Independent | Tenurial status of the | Owned | 92 | 52.5 | 72.9 |
| | house | dwelling | Hired | 0.6 | 0.7 | 0.7 |
| | | | | 3.2 | 3.5 | 3.3 |
| | | | Others | 0.1 | 0.5 | 0.3 |
| | | | All | 95.8 | 57.3 | 77.2 |
| 2 | Flat | Tenurial status of the | Owned | 3.1 | 18.7 | 10.7 |
| | | dwelling | Hired | 0.1 | 0.9 | 0.5 |
| | | | | 0.5 | 20 | 9.9 |
| | | | Others | 0 | 0.1 | 0 |
| | | | All | 3.7 | 39.7 | 21.1 |
| 3 | Others | Tenurial status of the | Owned | 0.5 | 2.2 | 1.3 |
| | | dwelling | Hired | 0 | 0 | 0 |
| | | | | 0 | 0.2 | 0.1 |
| | | | Others | 0 | 0.6 | 0.3 |
| | | | All | 0.5 | 3 | 1.7 |

During 2018, it was reported that 95.8% of rural households were living in 'independent house' out of which 92% were owned by the households as against 57.3% of urban households living in 'independent house' where 52.5% were owned by the households.

Type of kitchen

In this survey, information on kitchen type of the dwelling unit was collected. Dwelling units were identified as either having 'separate kitchen with tap water' or 'separate kitchen without water tap' or 'no separate kitchen'.

Table 18: Percentage distribution of households having separate kitchen.

| Sl.no | Proportion (per 100) of households having separate kitchen | Rural | Urban | All |
|-------|--|-------|-------|-----|
| 1 | With water tap | 6.1 | 13.6 | 9.7 |
| 2 | Without water tap | 3.2 | 16.9 | 9.8 |

In rural Mizoram, proportion of households having separate kitchen with water tap was found to be 6.1 as compared to 13.6% in urban households. 3.2% rural households and 16.9% urban households had separate kitchen with no facility of tap water.

Construction for residential purposes

In NSS 76th round, it was ascertained whether any amount was spent by the household on construction/first-hand purchase of houses/flats for residential purpose during last 365 days. For this purpose amount spent during the last 365 days on all construction/ first-hand purchases of houses/flats for residential purpose were considered along with the information on sources of finance.

Table 19: Proportion (per 1000) of households who spent some amount for construction or first-hand purchase of houses/flats for residential purpose during last 365 days, average amount (Rs.) spent by these households during last 365 days and proportion (per 1000) of these households financed the amount by different source of finance.

| Sl. No. | Proportion (per 1000 amount for construc | , | _ | Rural | Urban | All |
|------------|--|---|--------------------------------------|--------|--------|--------|
| 1 | Proportion (per 1000) of households | Proportion (per 1000) of households who spent some amount | | 4.7 | 5.6 | 5.1 |
| | who spent some amount for construction of houses/flat | Average amount (Rs.) spent per households who spent some amount | | 404487 | 282898 | 340733 |
| 2 | Proportion (per | Own source | | 85.5 | 50.8 | 67.3 |
| | 1000) of households financed the amount | Institutional | Government | 8.7 | 4.6 | 6.6 |
| | by different source | agencies | Bank | 27.3 | 51.8 | 40.1 |
| | of finance | | Insurance | 0 | 0 | 0 |
| | | | PF | 3.3 | 12.4 | 8.1 |
| | | | Financial corporation / institution | 0 | 0 | 0 |
| | | | Other institutional agency | 0 | 0 | 0 |
| | | Non – | Money lender | 0 | 3.8 | 2 |
| | | institutional | Friend and relative | 12.7 | 13.5 | 13.1 |
| | | agencies | Other non- institutional agencies | 0 | 12.4 | 6.5 |

From the table, it is observed that 4.7% of rural households and 5.6% of urban households in Mizoram had spent some amount for constructions of houses, first-hand purchase of houses or flats for residential purpose during last 365 days and, on average, they were spending Rs. 404487 and Rs. 282898 respectively. Among rural households of the same category, 85.5% had financed the amount from their own source, followed by institutional agencies (39.3%) and non-institutional agencies (12.7%). Similarly, among urban households, 50.8% had financed the amount from their own source, followed by institutional agencies (50.8%) and non-institutional agencies (21.6%).

Chapter Five

Micro Environment

The environment in which a dwelling unit is located is very important in maintaining health and hygiene of the members of the households, as well as, for maintaining environmental balance and overall cleanliness of surroundings. In this section, three main aspects, viz. drainage arrangement, garbage disposal system and availability of direct opening to roads are discussed. In NSS 76th round, it was also ascertained whether households had faced problems of flies/mosquitoes during last 365 days and if so, whether any effort either at government level or at household level was made during the last 365 days to tackle the problem. Besides, information was collected on prevalence of four specific types of illness: stomach problem, malaria, skin disease, and fever due to disease other than malaria.

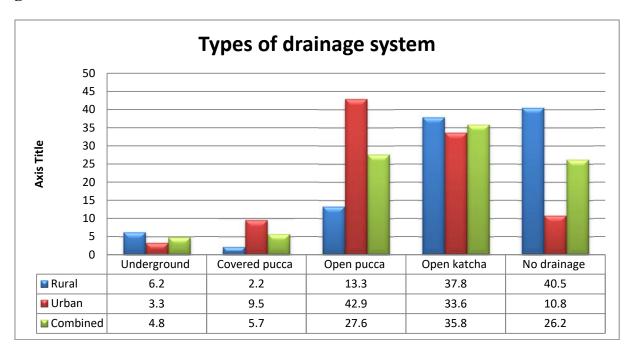
Drainage system

Proper drainage arrangement ensures easy carrying-off waste water and liquid waste of the house without any overflow or seepage. The survey obtained information on whether a drainage system for the household was present and if so, identified its nature: underground, covered pucca, open pucca or open katcha. Besides, information was also collected on disposal of waste water and whether the waste water put to safe re-use after treatment or places where it was disposed off without treatment.

Table 20: Per 1000 distribution of households by types of drainage system.

| Sl. No. | Types of drainage system | Rural | Urban | Combined |
|---------|--------------------------|-------|-------|----------|
| 1 | Underground | 6.2 | 3.3 | 4.8 |
| 2 | Covered pucca | 2.2 | 9.5 | 5.7 |
| 3 | Open pucca | 13.3 | 42.9 | 27.6 |
| 4 | Open katcha | 37.8 | 33.6 | 35.8 |
| 5 | No drainage | 40.5 | 10.8 | 26.2 |
| 6 | All (incl. n. r.) | 100 | 100 | 100 |

Figure 7



The survey found that 40.5% households in rural areas and 10.8% households in urban areas did not have any drainage system. Amongst households having drainage system, the most prevalent type of drainage arrangement in rural areas was 'open katcha' drainage system accounting for 37.8% of the households and for urban households open pucca accounts for 42.9% of the drainage system.

Disposal of household waste

Table 21: Per 1000 distribution of households by type of disposal of household waste water.

| Sl. | Type of disposal of household waste | Rural | Urban | Combined |
|-----|-------------------------------------|-------|-------|----------|
| No. | water | | | |
| 1 | Safe reuse after treatment | 0 | 0.4 | 0.2 |
| 2 | Disposal off without treatment to: | | | |
| | Open low land areas | 7.9 | 32.9 | 20 |
| | Ponds | 44.8 | 26.9 | 36.2 |
| | Nearby river | 0.7 | 0.1 | 0.4 |
| | Drainage system | 29.6 | 34.9 | 32.1 |
| 3 | Disposal off with or without | 9.2 | 2.9 | 6.2 |
| | treatment to other places | 9.2 | 2.9 | 0.2 |
| | Not known | 7.8 | 1.9 | 4.9 |
| | All (incl. n. r.) | 100 | 100 | 100 |

For Disposal of household waste water without treatment It is observed that 44.8% of households in rural areas used to dispose household water to 'ponds' where as 34.9% of the Urban household disposes their waste water to a drainage system. Disposal off with or without treatment to other places constitute 6.2% from the overall state data and Only 0.2% of households put their household water waste to safe reuse after treatment.

Garbage collection

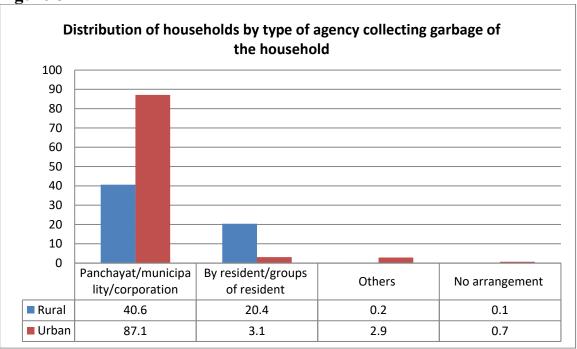
Garbage collection system is another important factor in micro-environment. Here garbage collection arrangement means the arrangement which usually exists to carry the refuse and waste of households to a final dumping place away from the residential areas.

Table 22: Per 1000 distribution of households by type of agency collecting garbage of the households.

| Sl. No. | Type of agency removing garbage to the final dumping spot | Rural | Urban | Combined |
|------------|---|-------|-------|----------|
| 1 | Panchayat/municipality/corporation | 40.6 | 87.1 | 63 |
| 2 | By resident/groups of resident | 20.4 | 3.1 | 12.1 |
| 3 | Others | 0.2 | 2.9 | 1.5 |
| 4 | No arrangement | 0.1 | 0.7 | 0.4 |
| 5 | All (incl. n. r.) | 38.8 | 6.1 | 23 |

During 2018(July-December), garbage collection arrangement was available to 38.8% of rural households against only to 6.1% of urban households. 40.6% in rural areas had reported that the garbage of their households was collected by panchayat/municipal/corporation and 87.1% in urban areas. 20.4% households in rural areas had garbage removed by resident/groups of resident to the final dumping spot as against 3.1% in urban areas. Only 0.1% of rural households and 0.7% of urban households reported that there was no garbage collection arrangement. Overall, only 23% of households in Mizoram had no garbage disposal arrangement.





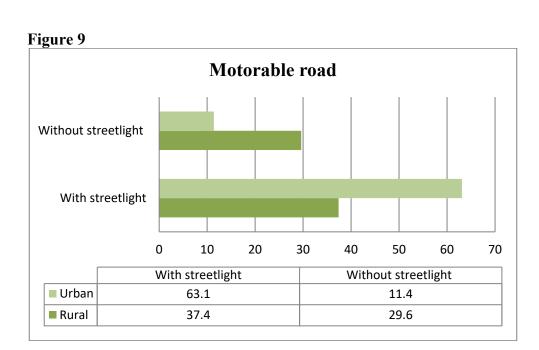
Direct opening to road

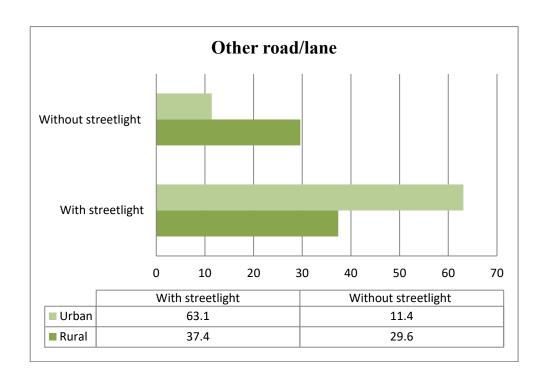
The absence of a direct opening to road from the house is an indicator of congestion in housing. A household living in a house without any direct opening to the road is deprived of easy access to surroundings areas and will face problems in accessing those many services which are dependent on road transport.

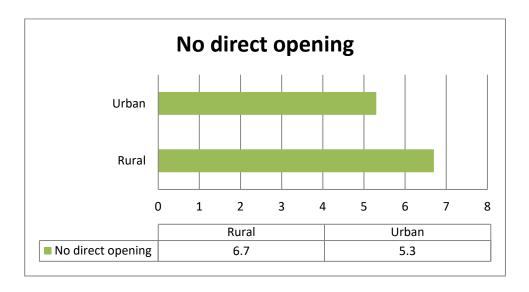
Table 23: Per 1000 distribution of households by type of approach road/lane/constructed path to the house.

| Sl. | Type of approach road/lane/constructed path | | | Rural | Urban | Combined |
|-----|---|-----------------|---------------------|-------|-------|----------|
| No. | | | | | | |
| 1 | Direct opening | Motorable road | With streetlight | 37.4 | 63.1 | 49.8 |
| | to | | Without streetlight | 29.6 | 11.4 | 20.8 |
| | | Other road/lane | With streetlight | 5.4 | 14.3 | 9.7 |
| | | | Without streetlight | 20.8 | 5.9 | 13.6 |
| 2 | No direct opening | | | 6.7 | 5.3 | 6.1 |
| 3 | All | | | 100 | 100 | 100 |

The table shows that 49.8 % households had access to direct opening to motorable road with street light and 20.8% households had accessed to motorable road without streetlight. It is also observed that 6.1% of households lived in house without any 'direct opening to road/lane/constructed path'.







Problems of flies/mosquitoes

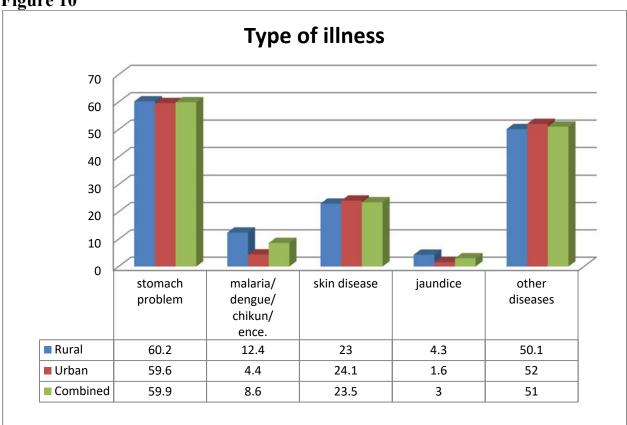
The problem was categorized as 'severe' when it generally disturbed the normal way of life of the household members, like taking rest, reading, performing household chores, etc. Otherwise, the problem was classified as 'moderate'. Besides, it was also ascertained whether any measures was taken by local bodies/state govt. /or by the household itself to tackle the problem of flies/mosquitoes.

Table 24: Per 1000 number of households reporting problems of flies & mosquitoes during the last 365days and efforts made by different agencies to tackle the problems, and incidence of specific type of illness suffered by any member of the households during the last 30 days.

| | of households reporting problems f flies/mosquitoes | Rural | Urban | Combined |
|--------------------------------------|--|-------|-------|----------|
| Problems of | Severe | 3.1 | 0.1 | 1.6 |
| flies/mosquitoes | Moderate | 93.8 | 91 | 92.4 |
| • | ocal bodies and States kle problems on flies and | 99.5 | 98.9 | 99.2 |
| Efforts made by h flies and mosquito | ouseholds to tackle problems on oes | 91.6 | 93.9 | 92.7 |
| Specific type of | stomach problem | 60.2 | 59.6 | 59.9 |
| illness suffered by any of the | malaria/ dengue/ chikun/ ence. | 12.4 | 4.4 | 8.6 |
| households | skin disease | 23 | 24.1 | 23.5 |
| member during | jaundice | 4.3 | 1.6 | 3 |
| last 30 days | other diseases | 50.1 | 52 | 51 |

The table depicts that during 2018, 1.6% of households in Mizoram had faced severe problems of flies/mosquitoes during the last 365 days as compared to 92.4% who suffered moderate problem. 99.2% of households reported that the local bodies and state government had made some effort to tackle the problems of flies and mosquitoes as against 92.7% of households who reported that efforts were taken by the households themselves to tackle the problem. It is also observed that most of the households (59.9%) suffered from stomach problem, 8.6%. from malaria and 23.5% from skin disease.





Appendix

Schedule 1.2 Drinking water, Sanitation, Hygiene and Housing Condition

RURAL *

| CENTRAL | * |
|---------|---|
| STATE | |

GOVERNMENT OF INDIA NATIONAL SAMPLE SURVEY OFFICE SOCIO-ECONOMIC SURVEY SEVENTY-SIXTH ROUND: JULY 2018 – DECEMBER 2018 SCHEDULE 1.2: DRINKING WATER, SANITATION, HYGIENE and HOUSING CONDITION

| [0] descriptive identification of sample housel | hold |
|---|--|
| 1. state/u.t.: | 5. investigator unit number /block number: |
| 2. district: | 6. sample sub-unit (SU) number |
| 3. sub-district/tehsil/town:* | 7. name of head of household: |
| 4. village name: | 8. name of informant: |

| [1] ide | ntification of sample household | | | | | | |
|---------|-----------------------------------|---|-----|----|---------------------------------------|--|------|
| item | item | | cod | le | item | item | code |
| no. | | | | | no. | | |
| 1. | srl. no. of sample FSU | | | | 6. | serial number of informant (as in column 1 of block 3) | |
| 2. | round number | 7 | | 6 | 7. | response code | |
| 3. | schedule number | 1 | 2 | 0 | 8. | survey code | |
| 4. | second-stage stratum number (1/2) | | | | 9. | reason for substitution of | |
| 5. | sample household number | | | | , , , , , , , , , , , , , , , , , , , | original household (code) | |

Codes for Block 1

item 7: **response code**: informant: co-operative and capable - 1, co-operative but not capable - 2, busy - 3, reluctant - 4, others - 9.

item 8: survey code: household surveyed: original - 1, substitute - 2; casualty - 3.

item 9: reason for substitution of original household:

informant busy - 1, members away from home - 2, informant non-cooperative - 3, others - 9.

* tick mark $(\sqrt{\ })$ may be put in the appropriate place.

| [3] D | Demographic and other p | articu | lars | of hou | sehold | l mem | bers | | | | | Schedul | |
|-------|-------------------------|-------------------------|---------------|-------------|-----------------------|-----------------------------------|---------------|-------------------------|----------------------------|-----------------------|-----------------------------|---|-------------------------------------|
| | | | | | | | | al prin activit | | | | to 4 and 9 n 25, block 5 | |
| | | | | | | | | | 1 to 51 col. 8 | | for 1 in col. 11 | for 01 to 04, 06, 07 and 10 in col. 12 | for 3 in col. 11 |
| srl. | name | relation to head (code) | gender (code) | age (years) | marital status (code) | highest level of education (code) | status (code) | industry (2 digit code) | occupation (2 digit code) | use of latrine (code) | type of latrine used (code) | whether latrine used is for exclusive use of the household? (yes $-I$, no -2) | reason for not using latrine (code) |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
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Note: col. 11 to col. 14 will be filled in after canvassing block 5.

Codes for Block 3

- col. 3: **relation to head:** self 1, spouse of head 2, married child 3, spouse of married child 4, unmarried child 5, grandchild 6, father/mother/father-in-law/mother-in-law 7, brother/sister/brother-in-law/sister-in-law/other relatives 8, servant/employees/other non-relatives 9.
- col. 4: gender: male -1, female 2, transgender 3.
- col. 6: marital status: never married 1, currently married 2, widowed -3, divorced/separated 4.
- col. 7: highest level of education: not literate 01, literate without any schooling 02, literate without formal schooling: through NFEC 03, through TLC/AEC 04, others 05; literate with formal schooling: below primary 06, primary 07, upper primary/middle 08, secondary 10, higher secondary -11, diploma/certificate course (upto secondary) -12, diploma/certificate course (higher secondary) -13, diploma/certificate course (graduation & above) -14, graduate -15, post graduate and above -16.

col. 8: usual principal activity status:

worked in household enterprise (self-employed):own account worker - 11, employer - 12, worked as helper in household enterprise (unpaid family worker) - 21; worked as regular salaried/ wage employee - 31; worked as casual wage labour: in public works - 41, in other types of work - 51; did not work but was seeking and/or available for work - 81, attended educational institution - 91, attended domestic duties only - 92, attended domestic duties and was also engaged in free collection of goods (vegetables, roots, firewood, cattle feed, etc.), sewing, tailoring, weaving, etc. for household use - 93, rentiers, pensioners, remittance recipients, etc. - 94, not able to work due to disability - 95, others (including begging, prostitution, etc.) - 97.

- col. 9: industry: 2-digit code as per NIC -2008.
- col. 10: occupation: 2-digit code as per NCO -2004.
- col. 11:use of latrine: regularly 1, occasionally 2, never 3.
- col. 12: type of latrine used: flush/pour-flush to: piped sewer system 01, septic tank 02, twin leach pit 03, single pit 04, elsewhere (open drain, open pit, open field, etc) 05; ventilated improved pit latrine 06, pit latrine with slab 07, pit latrine without slab/open pit 08, composting latrine 10, others 19.
- col. 14: reason for not using latrine: latrine has no superstructure 1, latrine is not clean/sufficient water is not available in the latrine 2, malfunctioning of the latrine 3, shortage of latrine 4, latrine is used for other purposes 5, lack of privacy/safety 6, personal preference 7, cannot afford charges for paid latrine 8, others 9.

| [4] h | ousehold characteristics | | | | | nedule 1.2:4 |
|-------|--|--------------|--|---|---|--|
| 1. | household size | purch | nt spent by the ho ase of houses/ f es of finance | | | |
| 2. | religion (code) | 12. | whether spent any 365 days? (yes-1, | | during last | |
| 3. | social group (code) | 13. | | amount | spent (Rs.) | |
| 4. | land possessed as on the date of survey (code) | | for 1 | (0 | s of finance codes) | |
| ho | usehold's usual monthly consumer expenditur (Rs.) | e 14. | in item 12 | (four sources | | |
| 5. | usual consumer expenditure in a month for household purposes out of purchase (A) | | | descend of finance | amount | |
| 6. | imputed value of usual consumption in a month from home grown stock (B) | schem | it received by t nes for drinkin ification, LPG conn | g water | r, sanitatio | |
| 7. | imputed value of usual consumption in a month from wages in kind, free collection, gifts, etc. (C) | | | received any I, no - 2, | any benefit, ed benefit (yes - I, - 3) | if received any benefit during last 3 years, |
| 8. | expenditure on purchase of household durables during last 365 days (D) | | facility | whether ever receive benefit? (yes - I, no not known - 3) | ed eiv ars | scheme from which maximum benefit was received (code) |
| | | 15.1 | drinking water | | | |
| | usual monthly consumer | 15.2 | sanitation | | | |
| 9. | expenditure | 15.3 | housing | | | |
| | [A + B + C + (D/12)] | 15.4 | electrification | | | |
| | | 15.5 | LPG connection | | | |
| 10. | tenurial status of dwelling (code) | maxin | num distance norm | ally trave | lled to the pl | ace of work: |
| | | 16.1 | among the male e | earners (co | ode) | |
| | for 1 to 5 or 9 in item 10, area | 16.2 | among the female | e earners (| (code) | |
| 11. | type in which the dwelling unit is located (code) | 16.3 | among the transg | ender ear | ners (code) | |

Codes for Block 4

- item 2: **religion:** Hinduism 1, Islam 2, Christianity 3, Sikhism 4, Jainism 5, Buddhism 6, Zoroastrianism 7, others 9.
- item 3: **social group:** scheduled tribe (ST) 1, scheduled caste (SC) 2, other backward class (OBC) 3, others 9.

item 4: land possessed:

| area in hectare | code | area in hectare | code |
|-----------------|------|-------------------------------|------|
| less than 0.005 | 01 | 2.01 – 3.01 | 07 |
| 0.005 - 0.02 | 02 | 3.01 - 4.01 | 08 |
| 0.02 - 0.21 | 03 | 4.01 - 6.01 | 10 |
| 0.21 - 0.41 | 04 | 6.01 - 8.01 | 11 |
| 0.41 - 1.01 | 05 | | 12 |
| 1.01 – 2.01 | 06 | greater than or equal to 8.01 | 12 |

Note 1: 1 acre = 0.4047 hectare, 1 hectare=10,000 square metre.

Note 2: Entry will be '99' if the sample household does not possess any land.

item 10: tenurial status of dwelling: owned: freehold - 1, leasehold - 2; hired: employer quarter -3, hired dwelling unit with written contract -4, hired dwelling unit without written contract -5; others -9, no dwelling -6.

item 11: **area type of dwelling unit:** notified slum - 1, non-notified slum - 2, squatter settlement - 3, other areas -9. item 14: **sources of finance:**

| own source (including own labour) | 01 | | |
|-----------------------------------|----|----------------------------------|----|
| institutional agencies | | non-institutional agencies | |
| government | 02 | self help group | 08 |
| bank | 03 | money lender | 09 |
| insurance | 04 | friends and relatives | 10 |
| provident fund (advance/loan) | 05 | other non-institutional agencies | 11 |
| financial corporation/institution | 06 | | |
| other institutional agencies | 07 | | |

- item 15.1: schemes for drinking water: National Rural Drinking Water Programme (NRDWP) -1, Atal Mission for Rejuvenation and Urban Transformation (AMRUT) -2, Smart Cities Mission -3, other scheme -9, not known -5.
- item 15.2: **schemes for sanitation:** Swachh Bharat Mission (SBM) -1, Atal Mission for Rejuvenation and Urban Transformation (AMRUT) 2, Smart Cities Mission 3, other scheme 9, not known 5.
- item 15.3: schemes for housing: Pradhan Mantri Awaas Yojana (PMAY) -1, other scheme 9, not known 5.
- item 15.4: **schemes for electrification:** Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) -1, other scheme -9, not known 5.
- item 15.5: **schemes for LPG connection:** Pradhan Mantri Ujjwala Yojana (PMUY) 1, other scheme 9, not known 5.
- item 16.1-16.3: distance: not required to travel 1; travelled a distance of: less than 1 k.m. 2, 1 to 5 k.m. 3, 5 to 10 k.m. 4, 10 to 15 k.m. 5, 15 to 30 k.m. 6, 30 k.m. or more 7.

| [5] parti | iculars of l | iving facilities: drinking water, bathroom, sa | nitation, | etc. | | | | | |
|-----------|---|--|------------------------------------|--|--------------------------|----------------------------|---------|------|--------|
| srl. no. | | item | | | | | | code | /entry |
| (1) | | (2) | | | | | | (. | 3) |
| A. drink | king water | | | | | | | | |
| 1. | (bottled woneighbour unprotecte rainwater | source of drinking water vater - 01, piped water into dwelling - 02, piped v- 04, public tap/standpipe - 05, tube well - 06 ed - 09; tanker-truck: public - 10, private - 11; collection -14, surface water: tank/pond - 15, o e, etc.) - 16; others (cart with small tank or dru | , hand pur spring: pother surfa | mp - 07, w protected - 1 ice water (ri | ell: protec 12, unpro | cted - 08, otected - 13 | | | |
| 2. | whether av (yes - 1, n | vailability of drinking water from the principal $so - 2$ | source is s | ufficient thi | oughout | the year? | | | |
| | for 2 in i | item 2, during which calendar months of the | Jan | Feb | Mar | Apr | May | J | un |
| 3. | year avail (record '1 | ability of drinking water was not sufficient? l'against the applicable month(s) and rest of s to be left blank) | Jul | Aug | Sep | Oct | Nov | D |)ec |
| 4. | (exclusive community | he principal source of drinking water use of household - 1, common use of households y use: public source restricted to particular com urce restricted to particular community - 6, priva | munity - 4 | 1, public soi | ırce unre: | stricted - 5 | | | |
| 5. | (within dw | to the principal source of drinking water welling - 1, outside dwelling but within the prem k.m 4, 0.5 to 1.0 k.m 5, 1.0 to 1.5 k.m 6, | | outside pre or more - 7) | | ess than 0.2 | ? k.m3, | | |
| 6. | | who fetches drinking water from principal sour (male members of the household of age: below female members of the household of age: below hired labour - 5, others - 9) | w 18 years | | | | | | |
| 7. | for 3 to 7 in item 5 | time taken for a single trip to reach the principa and back to household (in minutes) [no decima | | f drinking w | vater, obta | ain water | | | |
| 8. | | waiting time at the principal source of drinking [no decimal point] | water in a | single trip | (in minut | es) | | | |
| 9. | | number of trips required in a day for fetching of | drinking w | ater from p | rincipal s | ource | | | |
| 10. | for 02 to 1 | 14 in item 1, is there stagnant water around the | source of | drinking wa | ter? (yes | - 1, no - 2 | ?) | | |
| 11. | | ntary source of drinking water acture same as item 1: principal source of dri | inking wa | ter) | | | | | |
| 12. | (treated: el | treatment of drinking water by the household lectric purifier - 1, boiling - 2, chemically treate orine tablets - 4, non-electric purifier - 5, filtere | | | | | <u></u> | | |
| 13. | (non-metal | f the main container in which drinking water is d: earthen - 1, plastic - 2, other non-metal - 3; nother metal - 8; no storage - 9) | | ı - 4, copper | ·- 5, stair | ıless steel · | - 6, | | |

| [5] part | iculars of living | facilities | : drinki | ng water, bathroom, sanitation, etc. | | |
|-----------|---|--------------------------------|-------------------------|--|------|--------|
| srl. no. | | | | item | code | /entry |
| (1) | | | | (2) | (| 3) |
| 14. | | | - | ing water is stored in the main container? - 1, 1 day or more but less than 3 days - 2, 3 days or more -3) | | |
| 15. | for | whether | drinkir | ng water stored in the main container is covered? (yes - 1, no - 2) | | |
| 16. | 1 to 8 in item 13 | (through | h tap - 1 | rater is taken out from the main container? 1, vessel with handle dipped in to take out water - 2, 1, handle dipped in to take out water - 3, poured out - 4) | | |
| B. water | r for all househo | ld activit | ties | | L | |
| 17. | | | | nousehold activities excluding drinking (viz., cooking, washing, bathing, em 1: principal source of drinking water) | | |
| 18. | whether the house cooking, washin | | | cient water throughout the year for all household activities (viz., drinking, (yes - 1, no - 2) | | |
| 19. | | | | ritem 1, 11 or 17, frequency of supply of water nce in three days - 3, once in a week - 4, others - 9) | | |
| 20. | for 02 and 03 in | ı either i | tem 1, | 11 or 17 , whether water is metered ? (<i>yes - 1, no - 2</i>) | | |
| 21. | amount paid (p per month for p of water/ to the agency, organi | urchase delivery sation, | 21.1 | whether any amount is usually paid in a month? (yes: information on full amount of payment is available -1, information on some amount of payment is available - 2, no information on amount paid is separately available - 3; not required to pay - 4) | | |
| | office etc. water charg | | 21.2 | for 1 and 2 in item 21.1, average amount paid per month (Rs.) | | |
| C. bath | room | | | | | |
| 22. | | househo | ld - 1, co | om common use of households in the building - 2, public/community community use with payment - 4, others - 9, no bathroom - 5) | | |
| 23. | | | | of bathroom used by the household (used: attached to the dwelling unit but within the household premises - 2, others - 9; not used - 3) | | |
| 24. | | - 1, outsi | de dwel | ling but within the premises - 2, outside premises: less than 0.2 k.m 3, 5, 1.0 k.m. to 1.5 k.m 6, 1.5 k.m. or more - 7) | | |
| D. latrir | ne | | | | • | |
| 25. | | househo | ld - 1, c | ommon use of households in the building - 2, public/community ic/community latrine with payment - 4, others - 9, no latrine - 5) | | |
| 26. | (used: flush/pour elsewhere (open | flush to | : piped s pen pit, c | e of latrine used by the household sewer system - 01, septic tank - 02, twin leach pit - 03, single pit - 04, open field, etc) - 05; ventilated improved pit latrine - 06, pit latrine with o/open pit - 08, composting latrine - 10, others - 19; not used - 11) | | |

| [5] part | iculars of living fa | acilities: drinking water, bathroom, sanitation, etc. | |
|----------|----------------------|---|------------|
| srl. no. | | item | code/entry |
| (1) | | (2) | (3) |
| 27. | whether bathroom | and latrine both are within the household premises? (yes - 1, no - 2) | |
| 28. | | and 02 to 04, 06, 07 and 10 in item 26, whether excreta from septic tank/pit/composting been emptied? (yes- 1, no - 2, not known - 3) | |
| 29. | | who emptied the excreta last time? | |
| | | (panchayet/municipality /corporation - 1, private agency - 2, hired labour engaged by the household - 3, member(s) of the household - 4, others - 9, not known - 5) | |
| 30. | | place of disposal of excreta last time | |
| | for 1 in item 28 | (treatment plant - 1, buried in covered twin leach pit/single pit - 2, uncovered pit/open land/pond/river etc 3, other places - 9, not known - 4) | |
| 31. | | amount paid (payable) for emptying the excreta last time (Rs.) | |
| 32. | | how frequently excreta is emptied? | |
| | | (once or more in a year - 1, once in 2 years - 2, once in 5 years - 3, once in 10 years - 4, others - 9, not known - 5) | |
| 33. | disposal of faeces | for children of age below 3 years | |
| | | rine -1, put/rinsed into latrine - 2, put/rinsed into drain or ditch - 3, thrown into garbage - n open area -5, buried - 6, others - 9, not applicable -7) | |
| 34. | for 01 to 08, 10, 1 | 19 in item 26, availability of water in or around the latrine used | |
| | | e with soap/detergent - 1, water is available with ash/mud/sand etc 2, lable - 3; not available - 4) | |
| E. pract | tice of hand washi | ng | |
| 35. | whether household | d members regularly wash their hands before meal? | |
| | (yes: with water a | and soap/detergent - 1, with water and ash/mud/sand etc 2, with water only - 3; no - 4) | |
| 36. | whether household | d members regularly wash their hands after defecation? | |
| | (yes: with water a | and soap/detergent - 1, with water and ash/mud/sand etc 2, with water only - 3; no - 4) | |

| | using characteristics and micro environmor 9 in item 10 of block 4) | ent of the households living in houses (i.e | e., with | ı code | s 1, 2, | |
|----------|--|---|----------|--------|---------|---|
| srl. no. | it | em | | code | / entry | |
| (1) | | (2) | | | (3) | |
| A. hou | sing characteristics | | | | | |
| 1. | plinth level of the house (in feet and in who (record '0', if there is no plinth) | ole numbers) | | | | |
| 2. | number of floor (s) in the house | | | | | |
| 3. | use of house (residential only - 1, residential-cum-comm | nercial - 2, residential-cum-others - 9) | | | | |
| 4. | for 1 or 2 in item 10 of block 4, period sin (less than 1 year - 01, 1 to 2 years - 02, 2 to 4 to 5 years - 05, 5 to 10 years - 06, 10 to 40 to 60 years - 10, 60 years or more - 11, | o 3 years - 03, 3 to 4 years - 04, 20 years - 07, 20 to 40 years - 08, | | | | |
| 5. | for | year of start | Y | Y | Y | Y |
| 6. | 01 to 05 in item 4 | year of completion | | | | |
| 7. | condition of structure (good - 1, satisfact | tory - 2, bad - 3) | | | | |
| 8. | whether the household has electricity for de | omestic use? (yes - 1, no - 2) | | | | |
| 9. | for 1 in item 8, type of electric wiring (conduit wiring - 1, fixed to the walls - 2, to | temporary - 3) | | | | |
| 10. | drainage system of the household (underground -1, covered pucca -2, open) | pucca -3, open katcha -4, no drainage -5) | | | | |
| B. mici | ro environment | | | | | |
| 11. | system of disposal of household waste wat (safe re-use after treatment -1, disposed system - 2, open low land areas/streets - 3 disposed off with or without treatment to o | off without treatment to: drainage 1, ponds - 4, nearby river/nalla - 5; | | | | |
| 12. | place of disposal of household garbage (disposed to: bio-gas plant or manure pit - spot(s) - 2, community dumping spot (vat, than community dumping spot (open area/s not known - 5) | container, etc.) - 3, common place other | | | | |
| 13. | agency made arrangement for collection of (panchayet/municipality/corporation - 1, re others - 9, not known - 3; no arrangement | esident/group of residents - 2, | | | | |
| 14. | for 3 and 4 in item 12, how frequently ga (daily - 1, not daily but at least once in a w not known - 4) | _ | | | | |
| 15. | whether experienced any flood during last (yes: from excessive rain during monsoon | · · | | | | |

| srl. no | | | item | code / entry |
|---------|---|-----------------------------------|---|--------------|
| (1) | | | (2) | (3) |
| 16. | motorable road / lane constructed path with | otorable / constr street li | road / lane / constructed path with street light - 1, ructed path without street light - 2, other road / lane / ight - 3, other road / lane / constructed path without sting to road / lane / constructed path - 5) | |
| 17. | whether the household premises? (yes - 1, no | | problem of stagnant water in or around the household | |
| 18. | whether human faeces (yes - 1, no - 2) | s are vis | ible in or around the household premises? | |
| 10 | animal shed | 19.1 | existence of animal shed/poultry farm (attached to the house - 1, detached from the house - 2, no animal shed/poultry farm - 3) | |
| 19. | and poultry farm | 19.2 | for 1 or 2 in item 19.1, disposal of animal/poultry excreta (to biogas plant - 1, manure pit -2, used as fuel - 3, others - 9, not known - 4) | |
| C. pro | blem of flies and mose | quitoes | | |
| 20. | whether the household (yes: severe - 1, mode | | problem of flies/mosquitoes during last 365 days? no - 3) | |
| 21. | | | by the Local Bodies/State Government during last f flies/mosquitoes? (yes - 1, no - 2, not known - 3) | |
| | | | r any effort was made by the household during last flies/mosquitoes? (yes - 1, no - 2) | |
| 22. | 303 days to tackic pro | | | |
| | | the ho | usehold members during last 365 days | |
| | | 23.1 | stomach problems like diarrhea/dysentery/cholera (yes - 1, no - 2) | |
| | whether any of the household member(s) suffered | | stomach problems like diarrhea/dysentery/cholera | |
| | whether any of the household member(s) suffered from the types of illness specified in items 23.1 to 23.5 | 23.1 | stomach problems like diarrhea/dysentery/cholera (yes - 1, no - 2) malaria/dengue/chikungunya/encephalitis | |
| D. spe | whether any of the household member(s) suffered from the types of illness specified in | 23.1 | stomach problems like diarrhea/dysentery/cholera (yes - 1, no - 2) malaria/dengue/chikungunya/encephalitis (yes - 1, no - 2) | |

Note: for items relating to 'house', information will be collected for the whole 'structure' in which the dwelling unit is located.

| [7] p | | seholds li | iving in houses (i.e., with codes 1, 2, 3, 4, 5 or 9 |) in item 10 of | | | |
|---------|--|---|--|-----------------|--|--|--|
| srl. | | code / entry | | | | | |
| no. (1) | | (3) | | | | | |
| 1. | type of the dwelling (independent ho | (3) | | | | | |
| 2. | | | | | | | |
| 3. | number of rooms in the dwelling | number of rooms in the dwelling other rooms | | | | | |
| 4. | | living r | | | | | |
| 5. | | other ro | | | | | |
| 6. | floor area of the dwelling [in square feet and | covered | | | | | |
| 7. | in whole numbers] | uncove | red veranda | | | | |
| 8. | | total (s | um of items 4 to 7) | | | | |
| 9. | ventilation of the dwelling unit (good - 1, satisfactory - 2, bad - 3) | | | | | | |
| 10. | total number of married couples in the household | | | | | | |
| 11. | for 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. | type of fuel used by household for cooking (firewood, chips & crop residue - 01, LPG - 02, other natural gas - 03, dung cake - 04, kerosene - 05, coke / coal - 06, gobar gas - 07, other biogas - 08, charcoal - 09, electricity (incl. generated by solar or wind power generators) - 10, solar cooker - 11, others - 19, no cooking arrangement - 12) | | | | | | |
| 14. | floor type (mud - 1, bamboo / log - 2, wood / plank - 3, brick / stone / lime stone - 4, cement -5, mosaic / tiles - 6, others - 9) | | | | | | |
| 15. | wall type (grass/straw/leaves/reeds/bamboo, etc 1, mud (with / without bamboo) / unburnt brick - 2, canvas / cloth - 3, other katcha - 4, timber - 5, burnt brick /stone/lime stone - 6, iron or other metal sheet - 7, cement / RBC / RCC - 8, other pucca - 9) | | | | | | |
| 16. | roof type (grass/straw/leaves/reeds/bamboo etc 1, mud/unburnt brick - 2, canvas/cloth - 3, other katcha - 4, tiles/slate - 5, burnt brick/stone/lime stone - 6, iron/zinc/other metal sheet/asbestos sheet - 7, cement/RBC/RCC - 8, other pucca - 9) | | | | | | |
| 17. | if hired (i.e., for 3, 4 or 5 in item 10 of b | monthly rent (Rs.) (payable approach) | | | | | |

| [8] some general particulars of the households living in houses (i.e., with codes 1, 2, 3, 4, 5 or 9 in item 10 of block 4) in respect of their stay in present area | | | | | | | | |
|--|---|--|-----|--|--|--|--|--|
| srl. | | item | | | | | | |
| (1) | | (2) | (3) | | | | | |
| A. fo | A. for all households | | | | | | | |
| 1. | duration of stay of the household in the present area* | | | | | | | |
| | (less than 1 year - 01, 1 to 2 years - 02, 2 to 5 years - 03, 5 to 10 years - 04, 10 to 20 years - 05, 20 to 40 years - 06, 40 to 60 years - 07, 60 years or more - 08, not known - 10) | | | | | | | |
| 2. | | where the household was residing before coming to the present area? | • | | | | | |
| | | (in slum/squatter settlement of the same town - 1, in other areas of the same town - 2, in slum/squatter settlement of other town - 3, in other areas of other town - 4, village - 5) | | | | | | |
| 3. | for 01 in item 1 | 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 | | | | | | |
| 4. | | (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) | | | | | | |
| 5. | number of members who moved into the household during the last 365 days | | | | | | | |
| 6. | number of mer | mbers who moved out of the household during the last 365 days | | | | | | |
| | | iving in slums/squatter settlements (for urban only) ea type code 1, 2 or 3 in item 11, block 4) | | | | | | |
| 7. | status in the property (possesses: rat | I of the household possess any of the documents pertaining to the residence resent slum/squatter settlement? tion card - 1, voter ID card - 2, passport - 3, on of codes 1 to 3 - 4, other - 9; none - 5) | | | | | | |
| 8. | whether the household received any benefit as a dweller of present slum/squatter settlement? (received allotment of land / tenement - 1, received other benefits - 9; received no benefit - 2) | | | | | | | |
| 9. | whether the household tried to move out of the present slum/squatter settlement? (yes - 1, no - 2) | | | | | | | |
| 10. | · · | if 1 in item 9, main reason (better accommodation - 1, proximity to place of work - 2, social / religious factors - 3, others - 9) | | | | | | |
| *: The present area is the area in which the household is being enumerated and is identified by the area types as recorded in item 11 of block 4. Therefore, present area means present village for rural households and for urban households, present area means present notified slum or non-notified slum or squatter settlement or | | | | | | | | |

'other areas' of the town.

| [2] particulars of field operations | | | | | | | | | |
|---|--|--------------------------------|---|---|----|----|---|-----|----|
| srl. no. | item | | Field Investigator (FI)/ Junior Statistical Officer (JSO) | | | | Field Officer (FO)/ Senior Statistical Officer (SSO) | | |
| (1) | (2) | | (3) | | | | (4) | | |
| | i) name (block letters) | | | | | | | | |
| 1 (a) | ii) code | | | | | | | | |
| | iii) signature | | | | I | | l e | LL | |
| | i) name (block letters) | | | | | | | | |
| 1 (b) | ii) code | | | | | | | | |
| | iii) signature | | | | | | | | |
| 2. | date(s) of: | | DD | ľ | MM | YY | DD | MM | YY |
| | (i) survey/ inspection | | | | | | | | |
| | (ii) receipt | | | | | | | | |
| | (iii) scrutiny | | | | | | | | |
| | (iv) despatch | | - | | | | | | |
| 3. | number of additional sheet(s) attached | | | | | | | 1 1 | |
| 4. | total time taken to canvass the schedule by the team of investigators (FI/JSO) (in minutes) [no decimal point] | | | | | | | | |
| 5. | number of investigators (FI/JSO) in the team who canvassed the schedule | | | | | | | | |
| 6. | whether remarks have been entered by FI/JSO/ supervisory officer | (i) in block 9/ block 10 | | | | | | | |
| | (yes - 1, no - 2) | (ii) elsewhere in the schedule | | | | | | | |
| [0] | andra by investigator(-) (F | I/ISO) | 1 | | | | 1 | | |
| [9] remarks by investigator(s) (FI/JSO) | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| [10] co | mments by supervisory of | ficer(s) | | | | | | | |
| , , | v i | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |



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