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 69th 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 19: Per 1000 distribution of households by types of drainage system.

Sl. No.	Types of drainage system	Rural	Urban	Combined
1	Underground	25	37	28
2	Covered pucca	37	154	66
3	Open pucca	540	609	557
4	Open katcha	264	147	235
5	No drainage	135	52	114
6	All (incl.n.r.)	1000	1000	1000

The survey found that 13.5% households in rural areas and 5.2% households in urban areas did not have any drainage system. Amongst households having drainage system, the most prevalent type of drainage arrangement was 'open pucca' drainage system accounting for 54% of rural households and 61% urban households. Further, underground drainage was the least used drainage system by 2.5% and 3.7% of rural and urban households respectively.

Disposal of household waste

Table 20: Per 1000 distribution of households by type of disposal of household waste water.

SI. No.	Type of disposal of household waste water	Rural	Urban	Combined
1	Safe reuse after treatment	1	14	4
2	2 Disposal off without treatment to			
	Open low land areas	462	290	420
	Ponds	10	17	12
	Nearby river	42	73	49
	Drainage system	94	410	173
3	Disposal off with or without treatment to other places	111	180	128
	Not known	279	17	214
	All (incl.n.r)	1000	1000	1000

It is observed that 46.2% of households in rural areas used to dispose household water waste without treatment to 'open low land areas' as compared to 29% of households in urban areas. Whereas 41% of urban households disposed off household water waste without treatment to drainage system, only 9.4% of rural counterparts does the same. Only 0.4% of households put their household water waste to safe reuse after treatment.

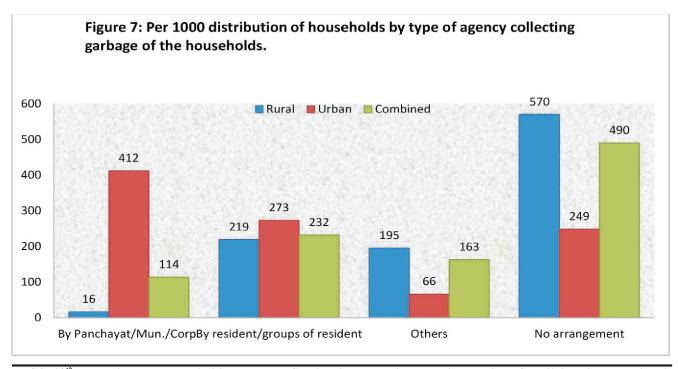
Garbage collection

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

Sl. No.	Type of agency removing garbage to the	Rural	Urban	Combined	
	final dumping spot				
1	Panchayat/municipality/corporation	16	412	114	
2.	By resident/groups of resident	219	273	232	
3.	Others	195	66	163	
4.	No arrangement	570	249	490	
5.	All (incl.n.r)	1000	1000	1000	

During 2012, garbage collection arrangement was available to only 43% of rural households as against to 75.1% of urban households. About 1.6% in rural areas had reported that the garbage of their households was collected by panchayat/municipal/ Corporation and 41.2% in urban areas. About 21.9% households in rural areas had garbage removed by resident/groups of resident to the final dumping spot as against 27.3% in urban areas. A very large proportion of 57% of rural households and 24.9% of urban households reported that there was no garbage collection arrangement. Overall, 49% of households in Nagaland 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 22: Per 1000 distribution of households by type of approach road/lane/constructed path to the house.

Sl. No.	Type of approach road/lane/constructed path			Rural	Urban	Combined
1	Direct	Motorable road	With street light	36	203	78
	opening		Without street light	447	403	436
	to	Other road/lane	With street light	37	47	39
			Without street light	383	251	351
2	No direct opening		96	96	96	
3	All		1000	1000	1000	

The table shows that 7.8 % households had access to direct opening to motorable road with street light and 43.6% households had accessed to motorable road without streetlight. It also observed that 9.6% of households lived in house without any 'direct opening to road/lane/constructed path'. In both rural and urban areas, major proportion of households that had access to either motorable or other types of road is without streetlight. Overall 90.4 % of households in Nagaland had '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 23: Per 1000 number of households reporting problems of flies & mosquitoes during the last 365 days 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.

SI. No.	Per 1000 number of households reporting problems of flies/mosquitoes			Urban	Combined
1	Problems of flies/	Severe	107	215	134
	mosquitoes	Moderate	717	575	682
	Efforts made by local bodies and States government to tackle problems on flies and mosquitoes		400	472	418
	Efforts made by households to tackle problems on flies and mosquitoes			589	486
2	Specific type of illness suffered by any	Stomach problem	514	473	504
	of the households	Malaria	184	144	174
	member during last 30 days	Skin disease	43	48	44
		Fever due to disease other than Malaria	634	513	604

The table depicts that during 2012, 13.4% of households in Nagaland had faced severe problems of flies/ mosquitoes during the last 365 days as compared to 68.2% who suffered moderate problem. About 42% of households reported that the local bodies and state government had made some effort to tackle the problems of flies and mosquitoes as against 48.6% of households who reported that efforts were taken by the households themselves to tackle the problem. Further, it also observed that most of the households (50.4%) suffered from stomach problem, 17.4%. from malaria and 4.4% from skin disease. Another major finding is that a very large proportion of 60.4% households in Nagaland reported that atleast one of the household members suffered from fever due to disease other than malaria during the last 30 days.