

CHAPTER VIII

HOUSING

8.1 INTRODUCTION

Any analysis on the socioeconomic conditions cannot be completed without taking into account the housing aspects which primarily deal with the kinds of dwellings occupied by the Scheduled Tribe families, their quality in terms of amenities available. This chapter intends to analyse various characteristics of housing with respect to important indicators like, type of dwellings, structure of dwellings, accommodation in dwellings, average floor area available per family/member etc.

BOX-XI

Housing

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|---------------------------------------------------------------------------------------------|----------------|
| Percentage of Scheduled Tribe workers households reporting | |
| a) Self ownership of House | : 87 per cent. |
| b) Rented accommodation | : 6 per cent. |
| c) Rent-free accommodation | : 7 per cent. |
| Percentage of Scheduled Tribe worker households reporting type of structure of house | |
| a) Kutcha | : 37 per cent. |
| b) Pucca | : 36 per cent. |
| c) Semi-Pucca | : 27 per cent. |
| Percentage of Scheduled Tribe workers households reporting the size of dwelling | |
| a) One room | : 37 per cent. |
| b) Two Rooms | : 42 per cent. |
| c) Three Rooms | : 12 per cent. |
| d) More then three rooms | : 6 per cent. |
| e) Separate Kitchen | : 40 per cent. |
| Percentage of Scheduled Tribe workers households reporting ventilation. | |
| a) Good | : 31 per cent. |
| b) Satisfactory | : 66 per cent. |
| c) Bad | : 3 per cent. |
| Percentage of Scheduled Tribe workers household reporting provision of bathroom | |
| a) No provision | : 56 per cent. |
| b) Independent provision | : 28 per cent. |
| c) Shared provision | : 16 per cent. |
| Percentage of Scheduled Tribe workers households | |

reporting provision of Latrine	
a) No provision	: 73 per cent.
b) Independent provision	: 15 per cent.
c) Shared facilities	: 12 per cent.
• Percentage of Scheduled Tribe worker households reporting provision of latrine and their type.	
a) Saptic tank	: 58 per cent.
b) Flush	: 41 per cent.
c) Ordinary	: 1 per cent.
• Percentage of Scheduled Tribe worker households reporting sewerage arrangement:-	
a) No arrangement	: 61 per cent.
b) Unsatisfactory arrangement	: 16 per cent.
c) Satisfactory arrangement	: 23 per cent.
• Percentage of Scheduled Tribe worker households reporting availability of potable drinking water	
a) Within premises	: 34 per cent.
b) Common facility of tap water	: 16 per cent.
	: 18 per cent.
• Percentage of Scheduled Tribe workers households using unsafe sources of drinking water	: 66 per cent.
a) Hand pump of common facility	: 44 per cent.
b) Hand pump within premises	: 5 per cent.
c) Wells outside house	: 11 per cent.
d) Wells inside house	: 1 per cent.
e) Tubewells	: 4 per cent.
f) Tank/ Pond/ river / Lake	: 1 per cent.
g) Other Sources	: 1 per cent.
• Percentage of Scheduled Tribe workers household having access to drinking water	
a) Up to ½ km	: 97 per cent.
b) ½ to 1 km	: 2 per cent.
c) More then 1 Km	: 1 per cent.
• Percentage of Scheduled Tribe workers households :	
a) Using electricity for lighting purpose	: 96 per cent.
b) Using kerosene for lighting purpose	: 4 per cent.
• Percentage of Scheduled Tribe workers households dwelling located from the work place	
a) More then 3 km	: 73 per cent.
b) More then 1 km to 3 km	: 10 per cent.
c) Less then 1 km	: 13 per cent.
d) Residing in the premises of work place	: 4 per cent.
• Average floor area of living rooms for ST workers household.	
a) Per member	: 6.7 Sq. meters
b) Per Family	: 30 Sq. meters

8.2 HOUSING CONDITIONS

Table 8.1 gives percentage distribution of Scheduled Tribe families by ownership, structure of dwellings and living rooms.

Out of total 627 households covered during the course of the survey, it was observed that 87 per cent of families were having their own houses, 6 per cent of families were living in rented dwellings, whereas about 7 per cent of families enjoyed rent free accommodation provided by the employers.

Out of the total households about 37 per cent were 'Kutchcha' houses, 27 per cent were 'Semi-Pucca' and the remaining about 36 per cent as pucca houses. This when be compared with the data of 2001 census, only 24.4 per cent of the Scheduled Tribe households were reported having 'pucca' houses equated to a permanent house. Among these about 42 per cent are having two rooms, 39 per cent are having one room, whereas 'three rooms' and 'more than three rooms' accommodation is owned by about 12 per cent and 6 per cent households respectively. About 40 per cent of dwellings have separate kitchen, while the Ventilation in about 66 per cent of dwellings is found satisfactory and about 31 per cent dwellings are having good ventilation.

Independents and shared bathrooms are provided in about 28 per cent and 16 per cent of the houses, while 56 per cent of the houses have no bathrooms. About 15 per cent of the houses have Independent latrines and 12 per cent have shared latrines, of which about 41 per cent have flush type of latrines and the rest 58 per cent of houses had septic tank type latrines and 1 per cent ordinary type. Only 23 per cent of houses have satisfactory sewerage arrangements while 61 per cent houses have no sewerage arrangement, about 16 per cent of households are not satisfied with the sewerage arrangements provided. As per 2001 census Scheduled Tribe households have latrine facilities whereas 21.8 per cent Scheduled Tribe households have access to connectivity for waste water outlet.

In Vapi, out of total 238 households covered during the course of the survey, it is observed that 93 per cent of families are having their own houses, 4 per cent of families are living in rented dwellings, whereas about 3 per cent of household families enjoying rent free accommodation provided by the employers. Out of the total households about 43 per cent are 'Kutchha' houses, 29 per cent are 'Semi-Pucca' and the remaining about 28 per cent as pucca houses. Among them about 46 per cent are having two rooms, about 25 per cent are having one room, whereas 'three rooms' and 'more than three rooms' accommodation is owned by about 18 per cent and 11 per cent households respectively. About 42 per cent of dwellings, have separate kitchen. In about 70 per cent of dwellings Ventilation is found satisfactory and about 29 per cent dwellings are having good ventilation. Independents and shared bathrooms are provided in about 28 per cent and 16 per cent of the houses, while 69 per cent of the houses have no bathrooms. About 16 per cent of the houses have either Independent or shared latrines, of which about 38 per cent have flush type of latrines and the rest 62 per cent of houses had septic tank type latrines. Only 23 per cent of houses have satisfactory sewerage arrangements while 58 per cent houses have no sewerage arrangement, where about 19 per cent of households are not satisfied with the sewerage arrangements provided.

In Valsad stratum, out of a total of 167 households covered during the course of the survey, 97 per cent families have self owned house, about 1 per cent are living in rented dwelling, and whereas remaining about 2 per cent of families are enjoying rent free accommodation provided by the employers. The percentage of families residing in Kutchha, 'Semi-pucca' and Pucca' houses are about 38 per cent, 29 per cent and about 33 per cent respectively. About 44 per cent of households are residing in one room accommodation; about 40 per cent are having 'two rooms' accommodation while the families with 'three rooms and more are 16 per cent respectively. Only about 44 per cent of dwellings have separate kitchens, while the ventilation is found good and satisfactory in about 94 per cent of houses. Independents and shared bathrooms are provided in

about 25 per cent and 7 per cent of the houses while the rest 68 per cent of houses have no bathrooms. About 14 per cent and 9 per cent of houses have independent and shared latrines respectively, of which 29 per cent have flush type of latrines and about 68 per cent of houses have septic tank type latrines while only 3 per cent of houses have manually cleaned ordinary type of latrines. Only about 14 per cent of houses have satisfactory sewerage arrangements and the rest 86 per cent houses are having unsatisfactory or no arrangements of sewerage system.

In Navsari, out of a total of 111 households covered, about 94 per cent of families are having their own houses i.e. self-owned accommodation and the remaining 6 per cent are residing in private owned rented accommodation. Out of the total the percentage of families residing in 'Kutchha', 'Semi-pucca' and 'pucca' houses is about 43 per cent, 20 per cent and 37 per cent respectively. About 48 per cent of families are having two rooms accommodation, about 41 per cent having one room accommodation while the families in occupation of three rooms and more than three rooms are about 8 per cent and 3 per cent respectively. About 42 per cent of the dwellings have separate kitchens whereas in about 98 per cent of dwelling the ventilation is good/satisfactory. Independents and shared bathrooms are provided in about 48 per cent and 14 per cent of the houses, while the remaining 38 per cent of houses have no bathrooms. About 22 per cent of dwellings have independents latrines, whereas 11 per cent of houses are provided with shared latrines, while 67 per cent of houses have no provision for latrines. About 40 per cent of houses have flush type of latrines and 57 per cent have septic tank type of latrines, whereas 3 per cent of the houses still have manually cleaned, ordinary type of latrines. Only about 16 per cent of houses have satisfactory sewerage arrangement and the rest 84 per cent of houses have unsatisfactory or no arrangement for sewerage system.

In Sachin, out of the total 111 households covered, 52 per cent households are residing in self owned houses, 17 per cent of families are residing

in private owned rented dwelling while about 31 per cent of households are enjoying the facility of rent free accommodation provided by the employers. The percentage of 'Kutchra', Semi-pucca and 'Pucca' dwellings used for residential accommodation is about 16 per cent, 28 per cent and 56 per cent respectively. About 60 per cent of families are having 'one room' accommodation, about 32 per cent are residing in two rooms accommodation, while the percentage of 'three rooms' or more than three rooms are owned by 6 per cent and about 2 per cent of households respectively. Only 26 per cent households have separate 'Kitchens' whereas the percentage of dwellings having good/satisfactory ventilation is about 99 per cent. The percentage of Independent and shared bathrooms (combined) is comparatively high i.e. 35 per cent and 39 per cent respectively, while only 26 per cent of houses have no bathroom facility. About 23 per cent and 31 per cent of dwellings have Independent and shared latrines respectively, whereas 46 per cent of houses are without latrine facility. About 50 per cent each have flush type and septic tank type of latrines. Only about 43 per cent of houses have satisfactory arrangement for sewerage system while the rest about 67 per cent of houses have unsatisfactory or no arrangement for sewerage system.

8.3 SOURCE OF DRINKING WATER AND LIGHTING

Potable drinking water facility was available to 34 per cent of Scheduled Tribe households of which within dwelling to about 16 per cent families and out side dwelling to about 18 per cent of families. The remaining 66 per cent of families were using unsafe source of drinking water of which about 44 per cent families are taking water from the hand pumb of common nature and 5 per cent with in the premise and 11 per cent from well outside the house and 1 per cent with in the house, about 4 per cent from tube wells, one per cent from tank/pond/river/lake and rest from the other type of sources. About 97 per cent of families are taking water from a distance of less than 1/2Kms. for 2 per cent, the access is from 2/1 Km. to 1 Km. and for remaining one per cent it is more than on Km. as per the census 2001, out of 53.69 millions households, the

number of Scheduled Tribe Households was 2.328 million. As against 45.2 per cent general households having drinking water source with in premise, 15.2 per cent households had this facilities.

Electricity was available to about 96 per cent of families, while remaining 4 per cent of families were using kerosene oil. As per Census data 2001, 36.5 per cent of Scheduled Tribe villages did not have access to electricity. Taking 50 per cent or more households of villages to be Scheduled Tribe households, 47.8 per cent households were deprived of electricity.

In Vapi stratum, drinking water facility was available within dwelling to about 11 per cent families and out side dwelling to 89 per cent of families. About 19 per cent families were taking water from the well, 58 per cent from hand pump, 17 per cent from taps and the rest from other type of sources. About 98 per cent of families were taking water from a distance of less than 1/2Kms. Electricity was available to about 94 per cent of families, while remaining 4 per cent of families are using kerosene oil.

In Valsad stratum, it was observed that the percentage of families having access to drinking water with in dwelling was about 9 per cent. The remaining 91 per cent of the families have to depend upon the other source of water outside the dwellings. Hand pump is the main source of drinking water with about 68 per cent families reported under this source. The other main source of drinking water are tap and well out side the dwelling unit viz 14.9 per cent and 8.4 per cent respectively. The main source of drinking water is hand pump of which only 4.2 per cent families have been enjoying the facility of hand pump installed within dwelling while 63.5 per cent have to go outside the dwelling unit. About 99 per cent of families are taking water from a distance of less than 1/2 Km. Electricity was available to 95.8 per cent of families, while 4.2 per cent of families are using kerosene oil.

In Navsari stratum, it revealed that the percentage of families having access to drinking water within dwelling is about 41 per cent. The remaining 59 per cent of the families have to depend upon the source of water outside the dwellings. The tap constituted the main source of drinking water with 55 per cent families reported under this source. The other main source of drinking water is hand pump and well water outside the dwelling unit viz 17.1 per cent and 9 per cent respectively. The main source of drinking water is tap of which about 32 per cent families have been enjoying the facility of tap installed within dwelling, while 23 per cent have to go outside the dwelling unit. About 89 per cent of families are taking water from a distance of less than ½ Kms while the remaining 11 per cent are taking water from ½ Km and above. Electricity is available to cent per cent of families in Navsari.

In Sachin, the survey results reveal that the percentage of families having access to drinking water, within dwelling is about 43 per cent. The remaining 57 per cent of families have to depend upon the source of water outside the dwellings. Tap water constitutes the main source of drinking water with about 72 per cent families reported under this source. The other main source of drinking water is hand pump outside the dwelling unit viz 21.6 per cent. The main source of drinking water was tap of which about 41 per cent families have been enjoying the facility of tap installed within dwelling, while another 31 per cent families have to go outside the dwelling unit. All the families are taking water from a distance of less than ½ Km. Electricity is available to 94 per cent of families, while the remaining 6 per cent were using kerosene oil for lighting.

8.4 DISTANCES FROM WORK PLACE

At all stratum level 73 per cent of sample workers covered, their dwelling units were located at a distance of 3 Kms. and above from their place of work and about 10 per cent at a distance of 1 Km to less than 3 Km. 13 per cent were living at a distance of less than one Kilometer and the remaining 4 per cent were living in or around the unit i.e. place of work.

In Vapi, about 89 per cent of sample workers were living at a distance of 3 Km and above from their place of work and about 2 per cent at a distance of 1 Km to less than 3 Km. 6 per cent are living at a distance of less than one Km and the remaining 3 per cent living in or around the unit i.e. place of work.

In Valsad, about 66 per cent of sample workers covered were living at a distance of 3 Kms and above from their place of work and about 20 per cent of workers at a distance of 1 Kms to less than 3 Kms. 10 per cent were living at a distance of less than one Km, while the remaining 4 per cent of workers were living in or around the unit i.e. place of work.

In Navsari, 62 per cent of sampled workers covered were living at a distance of more than 3 Kms. from their place of work and 13 per cent at a distance of one kilometer to less than 3 Kms. About 21 per cent were living at a distance of less than one Km, while the remaining 4 per cent workers were living in or around the unit i.e. place of work.

In the case of Sachin, about 59 per cent of sampled workers covered were living at a distance of more than 3 Kms from their place of work and about 27 per cent living at a distance of less than one Km. About 10 per cent of workers were living at a distance of 1 Km to less than three Kilometers, while about 4 per cent workers were living in or around the unit i.e. place of work.

8.5 AVERAGE FLOOR AREA PER FAMILY AND PER PERSON

Taking all strata together average floor area for living room was 6.7 sq. metres per person and 30 sq. metres per family. The highest average floor area i.e. 53.3 sq. metres of the dwelling was for more than 10 member's families. while the lowest was 11 sq metres for single member families. The highest floor area per person was 11 sq. metres for single members families while the lowest floor area per person is 4.1 sq. metres in the case of 8 to 10 members of family.

In Vapi, the average floor area for living room was 6.7 sq mtrs. per person and 30 sq mtrs. per family. The highest average floor area i.e. 73.50 sq mtrs of the dwelling was for more than 10 members families while the lowest 10.22 sq mtrs for single members families. The maximum floor area per person is highest i.e. 10.38 sq meters for 2-4 members families while the lowest floor area i.e. 5.05 mts per person is in the case of 8 to 10 members' families.

In the case of Valsad, The highest average floor area i.e. 31.67 sq. mts of the dwelling is for eight to 10 members families while the lowest i.e. 8.00 sq mts for single member families. The average floor area of the living room per family members is highest i.e. 8.00 Sq. mts for single members families, while the lowest i.e. 1.82 sq mtrs for families with more than 10 members.

The average floor per family in Navasari area was the highest i.e. 46 Sq.mts for families having more than 10 members and the lowest i.e. 20 Sq.mts for families having single members and eight to ten members. The average floor area of the living room per family members was the highest i.e. 20 Sq. mts for families with single members and the lowest 2.35 Sq.mts for eight to ten member families.

In Sachin strata, the average floor area per family was the highest i.e. 33.42 Sq.mts for families with five to seven members and the lowest 10.89 sq.mts for families with single members. The average floor area of the living room per family members was the highest i.e. 10.89 sq.mts for families with single member and the lowest i.e. 2.67 sq.mts for families with eight to ten members.

Table 8.1: Distribution of Families by Ownership of House, Structure of Dwelling and Living Rooms

Name of Stratum	No.of families covered	Percentage of families reporting type of dwelling			Structure of house in (Percentage)			Dwelling having accomodation (in Percentage)					Percentage of dwelling having provision of ventilation		
		Self owned	Rented	Rent free provided by employer	Kutchha	Semi pucca	Pucca	One room	Two room	Three room	More than three room	Percentage of dwelling having separate kitchen	Good	Satisfactory	Bad
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Vapi	238	92.44	4.20	3.36	42.86	28.99	28.10	24.37	46.22	18.07	11.34	42.02	28.57	69.75	1.68
Valsad	167	97.01	1.20	1.80	37.72	28.80	33.53	44.31	40.12	10.78	4.79	43.71	3.59	90.42	5.99
Navsari	111	93.69	6.31	0.00	43.24	19.82	37.00	41.44	47.80	8.11	2.70	42.34	66.67	31.53	1.80
Sachin	111	52.25	17.12	30.63	16.22	27.93	55.86	60.36	31.53	6.31	1.80	26.13	44.14	54.95	0.90
Total	627	86.76	6.06	7.18	36.84	27.11	36.10	39.00	42.26	12.28	6.38	39.71	31.42	65.87	2.71

Table 8.2: Distribution of Dwellings of Schedules Tribes Families by Basic Amenities

Name of Stratum	Total No. of families covered	Percentage of Families having Provision of Bathroom			Percentage of Dwelling having Provision of Latrine			Percentage of Latrine having Provision of			Percentage of Dwelling having Sewerage Arrangement		
		Independent	Common	No provision	Independent	Common	No provision	Flush	Septic tank	Ordinary (manual cleaned)	Satisfactory	Unsatisfactory	No arrangement
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Vapi	238	18.91	11.76	69.33	10.08	5.46	84.40	37.80	62.20	0.00	23.11	18.49	58.40
Valsad	167	25.15	7.19	67.66	13.77	8.98	77.25	29.00	68.40	2.60	13.77	17.30	68.86
Navsari	111	47.80	14.41	37.84	22.52	10.81	66.67	4.50	56.80	2.70	16.22	3.60	80.18
Sachin	111	35.14	38.80	26.13	23.42	30.63	46.00	50.00	50.00	0.00	43.30	22.52	34.23
Total	627	28.55	15.79	55.66	15.63	11.80	72.57	40.70	58.10	1.20	22.90	16.27	60.77

Table 8.3: Distribution of Scheduled Tribes Families using Sources of Drinking Water

Name of Stratum	No. of families covered	Percentage of families using drinking water from									Percentage of families reporting distance				
		Tap		Well		Hand Pump		Tube well	Tank/Pond/River/Lake and Spring	Other	Less than Half Km.	1/2 Km to less than 1 Km	1 Km to less than 2 Km	2 Km & above	Not applicable
		Within dwelling	Outside dwelling	Within dwelling	outside dwelling	Within dwelling	outside dwelling								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Vapi	238	5.46	11.34	0.84	18.49	5.04	53.36	4.20	1.26	0.00	97.60	2.40	0.00	0.00	0.00
Valsad	167	2.40	14.90	2.40	8.38	4.19	63.47	2.40	0.00	1.80	98.70	1.30	0.00	0.00	0.00
Navsari	111	31.60	23.42	0.90	9.01	8.11	17.12	5.41	3.60	0.90	89.40	7.60	1.50	1.50	0.00
Sachin	111	40.60	31.53	0.00	1.80	2.70	21.62	1.80	0.00	0.00	100.00	0.00	0.00	0.00	0.00
Total	627	15.47	18.02	1.12	11.16	5.00	44.02	3.51	1.12	0.64	97.20	2.40	0.20	0.20	0.00

Table 8.4: Distribution of dwelling Units of**Scheduled Tribes Families by Source of Lighting**

Name of Stratum	No.of families covered	Percentage of families by consumption of source of energy	
		Electricity	Kerosene
1	2	3	4
Vapi	238	94.54	5.46
Valsad	167	95.81	4.19
Navsari	111	100.00	0.00
Sachin	111	93.69	6.31
Total	627	95.69	4.31

Table 8.4(a): Distribution of Dwelling Units of Scheduled Tribes Families by Distance from Work Place

Name of Stratum	No.of families covered	Percentage of families having dwelling at a distance from work place (in Kms)			
		Less than one Km.	1 Km. to <3 Km.	3 Km. and above	Not applicable
1	2	3	4	5	6
Vapi	238	5.46	2.10	89.50	2.94
Valsad	167	10.18	19.76	65.87	4.10
Navsari	111	20.72	13.51	62.16	3.60
Sachin	111	27.03	9.91	59.46	3.60
Total	627	13.24	10.21	73.10	3.51

Table 8.5: Distribution of Families Members by Family Size and Average Floor Area of Living Rooms

Name of Stratum	No. of families covered	Faimly size and average floor area of living rooms (in sq. mtrs.)											
		Single member		2-4 members		5-7 members		8-10 members		More than 10 members		All members	
		Per family	Per person	Per family	Per person	Per family	Per person	Per family	Per person	Per family	Per person	Per family	Per person
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Vapi	238	10.22	10.22	37.19	10.38	50.38	8.98	43.64	5.05	73.50	5.88	42.95	8.96
Valsad	167	8.00	8.00	19.90	5.46	25.50	4.59	31.67	3.65	20.00	1.82	23.35	4.71
Navsari	111	20.00	20.00	24.63	6.90	24.49	4.49	20.00	2.35	46.00	3.83	24.59	5.32
Sachin	111	10.89	10.89	20.35	5.96	33.42	6.08	24.00	2.67	0.00	0.00	20.04	6.28
Total	627	11.02	11.02	27.47	7.70	36.10	6.50	35.58	4.10	53.25	4.44	30.42	6.73

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