



**GOVERNMENT OF MAHARASHTRA**

**A REPORT ON**  
**‘PARTICULARS OF SLUM’**  
**BASED ON DATA COLLECTED IN STATE SAMPLE OF**  
**65<sup>th</sup> ROUND OF NATIONAL SAMPLE SURVEY**  
**(JULY, 2008 – JUNE, 2009)**

**VOL.I**

**Directorate of Economics and Statistics, Planning Department,**  
**Government of Maharashtra,**  
**Mumbai**

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## PREFACE

The Directorate of Economics and Statistics has prepared a report on 'Particulars of Slum' based on the data of state sample collected in the 65<sup>th</sup> round of National Sample Survey( July, 2008 - June, 2009).

2. Vol. I of the report contains important findings of the survey in 'Executive Summary' while detailed results are given in 'Survey Findings'. Estimation procedure, concepts and definitions and detailed statistical tables are given in vol. II, which is available on the website "<http://mahades.maharashtra.gov.in>".

3. I hope the results of this survey will be useful to senior officers of the Government involved in policy framing, researchers, economists and academicians.

Mumbai  
May, 2010

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# Chapter-1

## Executive Summary

There were 19,984 estimated no. of slums in the State during 2008-09 as against 15,205 during 2002 showing an increase of 31 per cent. *During 2008-09, about 78.8 per cent of slums were found to be notified as against 60.5 per cent during 2002. About 92.8 per cent of the total slum-dwelling households lived in notified slums compared to 66 per cent during 2002. The notified slums were found to be more densely populated than the non-notified ones.*

### Important Survey Results

1. About 75 percent of *notified* slums were developed on public land, with majority (50.9 per cent) of them occupying the land belonging to the local bodies. About 26 per cent of slums were located on private land.
2. About 64.4 per cent of *notified* and 50.7 percent of *non-notified* slums were surrounded by residential areas.
3. In *notified* slums, 91 per cent of households either had pucca or semi-pucca houses as against 80 per cent in *non-notified* slums.
4. Tap was the major source of water for drinking purposes in 85 per cent of households in *notified* slums compared to 74 per cent in *non-notified* slum areas.
5. About 98 per cent of slums had electricity connections either for household use or for street lights or for both during 2008-09 compared to 95 per cent during 2002.
6. About 71 per cent of slums had pucca roads within slum area while about 6 per cent of the slums had motorable approach roads.
7. About 44.8 per cent of slum dwellers used public/community latrine facility. However, about 11.2 per cent slum dwellers in *notified* and 30.2 per cent in *non-notified* slums did not have any latrine facility.
8. Underground sewerage system was available in 63.3 per cent of *notified* and 35 per cent of *non-notified* slums. About 33 per cent of slums had underground drainage system.
9. In 77.1 percent of slums, the garbage disposal system was arranged by local bodies like municipal council/corporations. In 27.7 per cent of *non-notified* slum, there was no arrangement of garbage disposal.
10. In about 86 per cent of *notified* slums and 83 per cent of *non-notified* slums the primary school facility was available within one kilometer. About 61 per cent of *notified* and 47 per cent of *non-notified* slums had the facility of Government hospital within one kilometer. About 91 per cent of slums had the facility of Government hospital within five kilometers.

11. It is seen that in both *notified* and *non-notified* slums, improvement was done mostly by the Government. The contribution of Non-Government Organisation (NGO) is noticeable as far as street lights and electricity are concerned in *notified* and drainage, roads within slums, approach roads and water supply in *non-notified* slums are concerned.

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## Chapter – 2

### Survey findings

#### Introduction

2.1 **Past surveys:** The first nationwide survey on the 'economic condition of slum dwellers in urban cities' was conducted by the NSSO in its 31<sup>st</sup> round (July 1976 - June 1977). The next survey on slum dwellers was carried out in the 49<sup>th</sup> round (January – June 1993), which covered rural as well as urban areas. After a gap of nearly ten years, the third survey was conducted in the 58<sup>th</sup> round (July-December 2002), covering only the urban slums.

2.2 **The present survey:** In the 65<sup>th</sup> round also, the survey was restricted to urban slums only. Schedule 0.21 had been framed to collect information on the present condition of the slums and on the change in the condition of some facilities available therein. The schedule was canvassed for urban block having slum(s). Information on each slum, notified or non-notified, found in the entire selected first stage unit (FSU) was collected even if sub-block formation had been resorted to. In some cases, the slum covered such a large area that it cut across more than one FSU, and the selected FSU was part of the slum. In such cases, all the slum particulars recorded would relate to only that part of the slum, which fell in the selected FSU. However, if the FSU contained a part of a notified slum with at least 20 households, then the part of the slum falling in the FSU was regarded as a notified slum and the schedule was canvassed accordingly.

#### About the survey

2.3 The period of the survey was of one-year duration starting from 1<sup>st</sup> July 2008 and ending on 30<sup>th</sup> June 2009. This survey period was divided into four sub-rounds of three months duration each as follows:

Sub-round 1: July – September 2008

Sub-round 2: October – December 2008

Sub-round 3: January – March 2009

Sub-round 4: April – June 2009

In each of these four sub-rounds equal number of sample blocks (First Stage Units i.e. FSUs) were surveyed with a view to ensure uniform spread of sample FSUs over the entire survey period. The results presented in this report are based on information collected from 256 sample slums spread over 776 urban blocks.

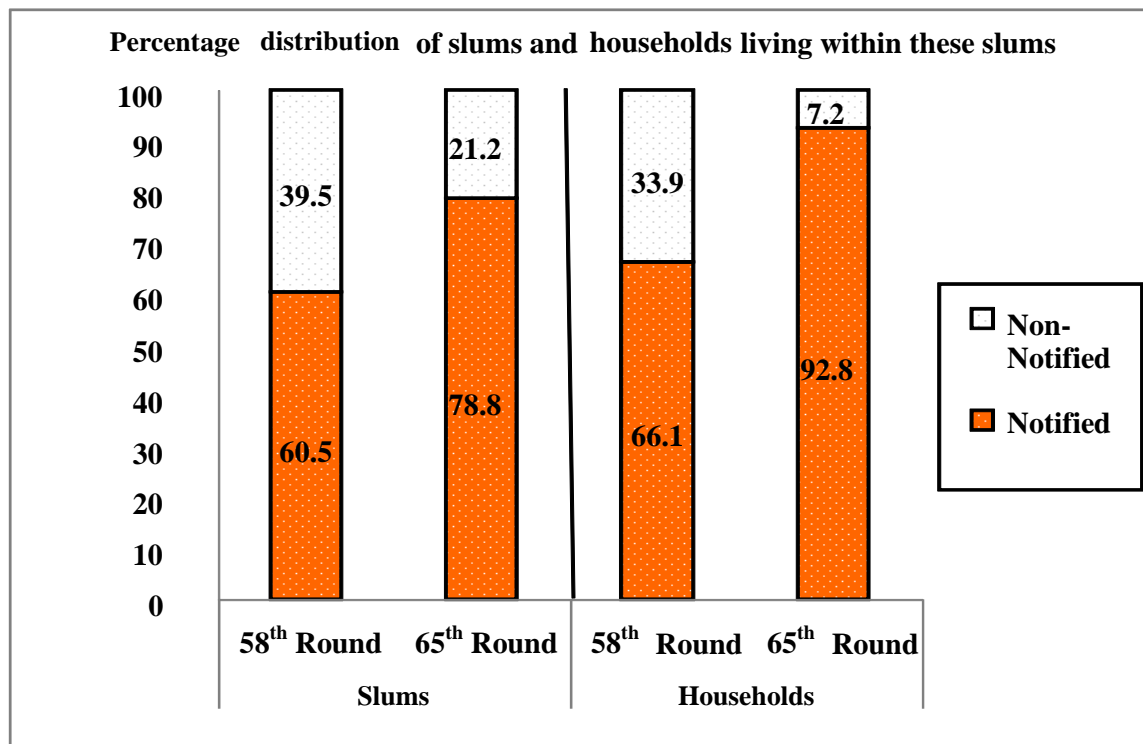
## Findings of the survey

2.4 The total estimated number of slums in the State were 19,984 during 2008-09, of which notified and non-notified slums was 15,737 and 4,247 respectively. Percentage distribution of slums and of households living in those slums is given in Table No.1. More than three-fourth of total estimated slums were found to be notified. About 93 per cent of total households slums were living in notified slums. The proportion of notified slums has increased remarkably from 60.5 percent in 2002 to 78.7 percent in 2008-09.

**Table 1**  
Percentage Distribution of slums and households living within these slums

Slums			Households		
Notified	Non notified	All	Notified	Non notified	All
78.8 (60.5)	21.2 (39.5)	100	92.8 (66.1)	7.2 (33.9)	100

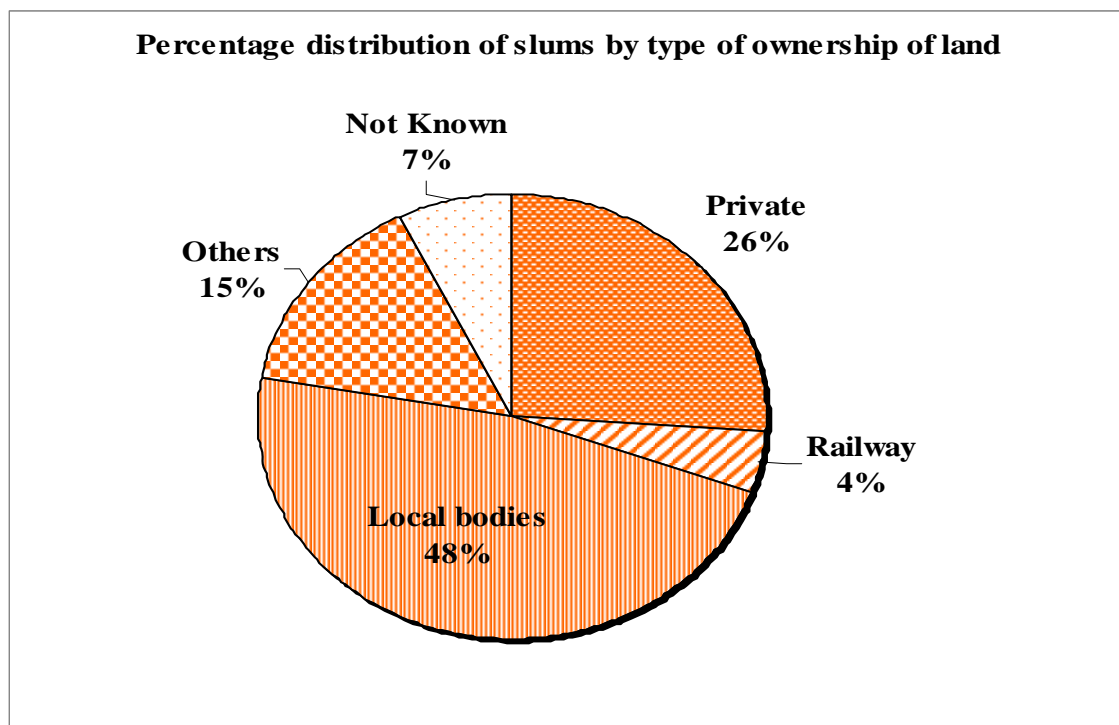
Note: Figures in parenthesis relate to NSS 58<sup>th</sup> Round.



2.5 Table 2 gives the percentage distribution of slums by type of ownership of land. About 75 per cent of notified slums were developed on public land, with majority of them occupying the land belonging to local bodies. However, the private land is also occupied by a sizable proportion of slums indicating wide-spread encroachment over private land.

**Table 2**  
Percentage distribution of slums by type of ownership of land

Type of slum	Ownership of land					All
	Private	Public				
		Railway	Local bodies	Others	Not Known	
Notified	25.3	2.4	60.0	14.4	6.9	100
Non notified	29.6	11.0	34.1	16.9	8.4	100
All	26.2	4.2	47.4	14.9	7.3	100



2.6 Table 3 reveals the percentage distribution of slums by type of area surrounding them. About 64.4 per cent of notified and 50.7 percent of non-notified slums are surrounded by residential area

**Table 3**  
Percentage distribution of slums by type of area surrounding them.

Type of slum	Type of area surrounding the slum					All
	Residential	Industrial	Commercial	Others	Slum	
Notified	64.4	4.7	6.5	3.5	20.9	100
Non notified	50.7	16.4	12.2	12.3	8.4	100
All	61.4	7.2	7.7	5.4	18.3	100

2.7 It can be observed from Table 4 that in notified slums, majority of households are living in pucca structures while for non-notified slums majority of households are living in semi-pucca structures. In notified slums, 91 per cent of households either have pucca or semi-pucca houses as against 80 percent in non-notified slums.



**Table 4**  
Percentage distribution of slums by type of structure of the houses.

Type of slum	Type of structure of the houses.					
	Pucca	Semi pucca	Serviceable Katcha	Unserviceable Katcha	No structure	All
Notified	48.3	42.7	6.8	1.8	0.4	100
Non notified	36.8	43.2	13.3	0.0	6.7	100
All	45.9	42.8	8.1	1.4	1.8	100

2.8 Table 5 gives the percentage distribution of slums by major source of drinking water. It is found that in both notified and non-notified slums the major source of drinking water was tap. However, comparing with 58<sup>th</sup> round data, the proportion of households depending on wells and tube wells in notified slums is found to have increased.

**Table 5**  
Percentage distribution of slums by major source of drinking water

Type of slum	Major source of drinking water				
	Tap	Tube well/ hand pump	Well	Others	All
Notified	86.0 (94.9)	8.2 (3.9)	5.4 (0.2)	0.4 (1.0)	100
Non notified	73.8 (82.3)	20.6 (10.7)	0.0 (6.7)	5.6 (0.3)	100
All	83.4 (89.9)	10.9 (6.6)	4.2 (2.8)	1.5 (0.7)	100

Note: Figures in parenthesis relate to NSS 58<sup>th</sup> Round.

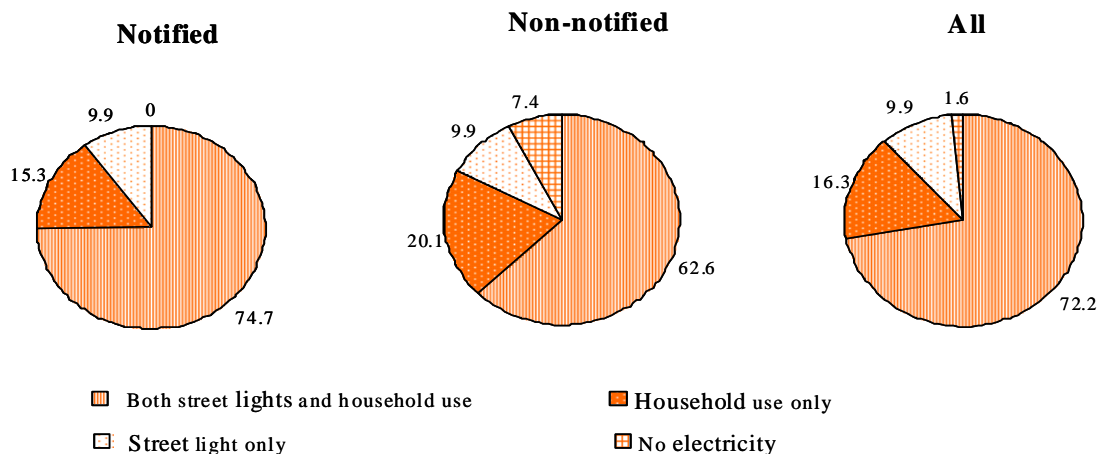
2.9 The percentage distribution of slums by type of availability of electricity connection is given in Table 6. About 98 per cent of slums had electricity connection, as compared to about 95 per cent during 58<sup>th</sup> round.

**Table 6**  
Percentage distribution of slums by status of electricity connection

Type of slum	Slums with				All
	Electricity for			No electricity	
	Both street lights and household use	Household use only	Street light only		
Notified	74.8 (82.5)	15.3 (7.8)	9.9 (9.5)	0.0 (0.2)	100
Non notified	62.6 (75.7)	20.1 (9.5)	9.9 (2.8)	7.4 (12.0)	10
All	72.1 (79.8)	16.4 (8.5)	9.9 (6.8)	1.6 (4.9)	100

Note: Figures in parenthesis relate to NSS 58<sup>th</sup> Round

**Percentage distribution of slums by status of electricity connection**



2.10 Table 7 gives percentage distribution of slums according to type of roads within the slums and according to type of approach roads to the slums. About 71 per cent of slums were found to have pucca roads within slums. This percentage is higher for notified slums than non-notified slums. About 60 per cent slums had motorable pucca approach roads.

**Table 7**

Percentage distribution of slums according to the type of roads within slums and approach roads

Type of slum	Type of road/lane/constructed path within the slum			Type of approach road/lane/constructed path to slum						
	Pucca	Katcha	Total	Motorable			Non-motorable			All
				Pucca	Katcha	Total	Pucca	Katcha	Total	
Notified	74.2	25.8	100	62.1	7.3	69.4	24.3	6.3	30.6	100
Non notified	60.0	40.0	100	53.8	13.9	67.7	20.7	11.6	32.3	100
All	71.2	28.8	100	60.3	8.7	69.0	23.5	7.5	31.0	100

2.11 Table 8 gives the percentage distribution of slums by latrine facility used by most of the residents of the slums. It is seen that most of the residents from notified and non-notified slums use public/community latrine facility. About 11 per cent and 30 per cent households from notified and non-notified slums respectively did not have any latrine facility.

**Table 8**

Percentage distribution of slums by latrine facility used by most of the residents of the slums

Type of slum	Latrine facility used by most of the residents of the slums											All
	Owned			Shared			Public/ community			Other latrine	No latrine	
	Septic tank/flush	Pit	Service	Septic tank/flush	Pit	Service	Septic tank/flush	Pit	Service			
Notified	5.0	1.0	2.2	9.4	0.0	4.4	46.2	0.2	19	1.3	11.2	100
Non notified	0.7	0.0	0.0	13.0	2.0	2.1	39.6	6.8	3.2	2.3	30.2	100
All	4.1	0.8	1.8	10.2	0.4	3.9	44.8	1.6	15.7	1.5	15.2	100

2.12 It can be observed from Table 9 that about 63 per cent notified slums had underground sewerage system as against only 35 per cent in non-notified slums. Among notified slums about 38 per cent had underground drainage system followed by open pucca drainage system (35.3 per cent) while for non-notified slums, 36.8 per cent had open pucca system followed by underground system. (18.4 per cent).

**Table 9**

Percentage distribution of slums by underground sewerage and drainage systems

Type of slum	Underground sewerage system			Type of drainage system					
	Available	Not available	All	Underground	Covered pucca	Open pucca	Open katcha	No drainage	All
Notified	63.3	36.7	100	37.6	15.2	35.3	9.5	2.4	100
Non notified	35.0	65.0	100	16.3	11.7	36.8	18.4	16.8	100
All	57.2	42.8	100	33.0	14.5	35.6	11.4	5.5	100

2.13 Table 10 gives the percentage distribution of slums by arrangement of garbage disposal. In about 77 per cent of slums, (82 per cent of notified and 58 per cent of non-notified slums) garbage was disposed off by Municipality/Corporation. About 11.7 per cent of slums had no arrangement of garbage disposal.

**Table 10**

Percentage distribution of slums by arrangement of garbage disposal

Type of slum	Garbage disposal system					All
	Arrangement by				No arrangement	
	Municipality/ corporation		Resident	Others		
Notified	82.2		8.5	1.9	7.4	100
Non notified	58.2		6.9	7.2	27.7	100
All	77.1		8.2	3.1	11.7	100

2.14 The percentage distribution of slums by availability of primary schools and Government hospitals is given in Table 11. In about 86 per cent of notified slums and 83 per cent of non-notified slums the primary school facility was available within one kilometer.

About 61 per cent of notified and 47 per cent of non-notified slums had the facility of Government hospital within one kilometer. About 91 per cent of slums had the facility of Government hospital within five kilometers.

**Table 11**

Percentage distribution of slums by availability of primary schools and Government hospitals

Type of slum	Distance from primary school (in km)				Distance from Government hospital (in km)			
	0-1	1-5	>5	All	0-1	1-5	>5	All
Notified	86.2	11.1	2.7	100	61.5	33.7	4.8	100
Non notified	83.2	10.4	6.5	100	47.2	26.9	25.9	100
All	85.5	11.0	3.5	100	58.5	32.3	9.2	100

2.15 Information on whether the slum area gets water logged during monsoon was collected from all the surveyed slums. Table 12 indicates that about 38.7 per cent of slums get water logged during monsoon and in 29.6 per cent of slums, the approach road also gets water logged. About 41.3 per cent of slums along with their approach roads do not suffer water logging problem during monsoon.

**Table 12**

Percentage distribution of slums by water logging during monsoon

Type of slum	Slums usually waterlogged during monsoon						
	Yes			No			All
	Approach road/lane/constructed path usually waterlogged in monsoon			Approach road/lane/constructed path usually waterlogged in monsoon			
	Yes	No	All	Yes	No	All	
Notified	30.5	5.8	36.3	21.0	42.7	63.7	100
Non notified	26.2	21.2	47.4	16.5	36.1	52.6	100
All	29.6	9.1	38.7	20.0	41.3	61.3	100

2.16 The percentage of slums reporting improvement of facilities during last 5 years by type of authority responsible for improvement is given in Table 13. It is seen that in both notified and non-notified slums, improvement was done mostly by the Government. The contribution of Non-Government Organisation (NGO) is noticeable as far as street lights and electricity are concerned in notified and drainage, roads within slums, approach roads and water supply in non-notified slums are concerned.

**Table 13**

Percentage of slums reporting improvement of facilities during last 5 years by type of authority responsible for improvement

Facility	Notified slum				Non notified slum			
	Government	NGO	Resident	Others	Government	NGO	Resident	Others
Water supply	89.3 (88.4)	2.9 (7.5)	7.8 (4.1)	0.0 (0.0)	74.3 (69.8)	17.5 (15.3)	8.2 (11.5)	0.0 (3.4)
Street light	83.9 (86.6)	12.5 (13.4)	2.3 (0.0)	1.3 (0.0)	96.6 (87.5)	3.4 (12.5)	0.0 (0.0)	0.0 (0.0)
Electricity	66.0 (86.4)	17.1 (11.7)	16.9 (1.9)	0.0 (0.0)	72.5 (85.3)	15.6 (14.7)	11.9 (0.0)	0.0 (0.0)
Latrine	87.6 (90.1)	6.1 (4.4)	6.3 (4.9)	0.0 (0.6)	76.1 (77.3)	10.3 (18.9)	13.6 (3.8)	0.0 (0.0)
Sewerage	96.2 (93.7)	2.4 (6.3)	1.4 (0.0)	0.0 (0.0)	89.2 (85.3)	6.0 (14.7)	4.8 (0.0)	0.0 (0.0)
Drainage	81.2 (95.0)	7.5 (5.0)	11.3 (0.0)	0.0 (0.0)	76.0 (65.0)	24.0 (35.0)	0.0 (0.0)	0.0 (0.0)
Garbage disposal	93.4 (93.8)	2.8 (6.2)	0.0 (0.0)	3.8 (0.0)	70.9 (92.6)	15.2 (7.4)	7.3 (0.0)	6.6 (0.0)
Road within the slum	83.5 (94.3)	4.7 (5.7)	11.8 (0.0)	0.0 (0.0)	81.0 (70.9)	19.0 (17.0)	0.0 (12.1)	0.0 (0.0)
Approach road to slum	90.9 (94.3)	7.6 (5.7)	1.5 (0.0)	0.0 (0.0)	72.9 (83.8)	18.0 (16.2)	6.9 (0.0)	2.3 (0.0)

Note: Figures in parenthesis relate to NSS 58<sup>th</sup> Round.

2.17 Table 14 reveals that about 62 per cent of all slums cover areas between 0.5 to 2 hectare. More notified slums have larger area compared to non-notified slums.

**Table 14**

Percentage distribution of slums according to area.

Type of slum	Approximate area of slum(in hectare)								All
	< 0.05	0.05-1.00	1.00-2.00	2.00-3.00	3.00-4.00	4.00-6.00	6.00-8.00	>8.00	
Notified	13.3	36.0	24.1	9.2	2.8	8.0	3.3	3.3	100
Non notified	14.4	47.5	21.6	7.7	5.2	0.0	0.0	3.6	100
All	13.6	38.4	23.6	8.9	3.3	6.3	2.6	3.3	100

2.18 Table 15 below reveals that the average number of households in the same area class is more in notified slums compared to non-notified slums indicating that the notified slums are more densely populated.

**Table 15**

Estimated approximate number of households per slum by approximate area of slum

Type of slum	Approximate area of slum(in hectare)								All
	< 0.05	0.05-1.00	1.00-2.00	2.00-3.00	3.00-4.00	4.00-6.00	6.00-8.00	>8.00	
Notified	147	378	252	519	570	623	449	435	359
Non notified	56	104	110	211	48	0	0	106	104
All	127	306	224	462	398	623	449	360	305

2.19 It may be observed from table 16 that about 35.5 per cent of slums are located in the fringe area. Higher proportion of notified slums are in fringe area than non-notified slums. About 80.6 per cent of non-notified slums are located in 'other-areas'.

**Table 16**  
Percentage of slums by location of slum

Type of slum	Fringe area						Other Area						All
	Along nallah/drain	Along railway line	River bank	River bed	Others	All	Along nallah/drain	Along railway line	River bank	River bed	Others	All	
Notified	18.5	4.1	5.9	1.4	9.9	39.9	15.6	4.1	3.6	0.4	36.5	60.1	100
Non notified	5.8	2.7	5.1	1.0	4.8	19.4	24.2	7.8	2.1	0.0	46.5	80.6	100
All	15.8	3.8	5.8	1.3	8.8	35.5	17.4	4.8	3.3	0.3	38.7	64.5	100

**Annexure-I**  
**Geographical Coverage**  
**Number of blocks surveyed**

Division	District	65th Round				
		Urban				Total
		S.R.1	S.R.2	S.R.3	S.R.4	
<b>Konkan Division</b>	Thane	30	29	30	31	120
	Mumbai	50	50	50	51	201
	Raigad	3	4	1	2	10
	Ratnagiri	-	-	2	-	2
	Sindhudurg	-	-	-	-	-
	<b>Total</b>	<b>83</b>	<b>83</b>	<b>83</b>	<b>84</b>	<b>333</b>
<b>Pune Division</b>	Pune	23	18	21	22	84
	Solapur	5	9	4	5	23
	Satara	1	2	1	3	7
	Kolhapur	5	4	6	3	18
	Sangli	3	2	3	4	12
	<b>Total</b>	<b>37</b>	<b>35</b>	<b>35</b>	<b>37</b>	<b>144</b>
<b>Nashik Division</b>	Ahmadnagar	3	5	5	3	16
	Nandurbar	-	1	3	-	4
	Dhule	2	3	2	2	9
	Jalgaon	5	3	5	6	19
	Nashik	11	11	8	8	38
	<b>Total</b>	<b>21</b>	<b>23</b>	<b>23</b>	<b>19</b>	<b>86</b>
<b>Aurangabad Division</b>	Nanded	2	4	3	3	12
	Hingoli	-	1	-	2	3
	Parbhani	3	2	3	3	11
	Jalna	-	3	1	1	5
	Aurangabad	6	4	5	4	19
	Bid	4	-	2	1	7
	Latur	2	4	2	4	12
	Osmanabad	2	1	3	1	7
	<b>Total</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>76</b>
<b>Amravati Division</b>	Buldhana	2	2	1	1	6
	Akola	5	2	5	3	15
	Washim	2	1	1	-	4
	Amravati	5	7	7	4	23
	Yavatmal	1	1	1	4	7
	<b>Total</b>	<b>15</b>	<b>13</b>	<b>15</b>	<b>12</b>	<b>55</b>
<b>Nagpur Division</b>	Wardha	2	2	1	1	6
	Nagpur	12	13	12	15	52
	Bhandara	1	-	-	1	2
	Gondiya	-	1	1	-	2
	Gadchiroli	1	-	1	-	2
	Chandrapur	4	5	4	5	18
	<b>Total</b>	<b>20</b>	<b>21</b>	<b>19</b>	<b>22</b>	<b>82</b>
	<b>State</b>	<b>195</b>	<b>194</b>	<b>194</b>	<b>193</b>	<b>776</b>

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