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GOVERNMENT OF HARYANA

**CONDITION
OF
SLUMS
IN
HARYANA**

**NSS 58TH ROUND
(JULY 2002-DECEMBER 2002)
STATE SAMPLE
2004**

**ISSUED BY:
ECONOMIC & STATISTICAL ADVISER
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PREFACE

The present report on “Condition of Slums in Haryana” is the first of its kind brought out by Tabulation Section on the basis of sample survey (State) conducted under the 58th round (July, 2002-December, 2002).

It contains three Chapters, Appendices and Charts. Chapter-I is introductory while Chapter-II deals with the concepts and definitions of important terms used in the survey, which are relevant to this report. Chapter-III deals with the findings on condition of slums in Haryana.

This report has been prepared by Sh. Manoj Kumar Goel, Research Officer under the supervision of Sh. Hari Om Siwach, Deputy Economic & Statistical Adviser and overall guidance of Sh. R.K. Bishnoi, Additional Economic & Statistical Adviser. The acknowledgement is made of the sincere efforts done by officers/officials of NSS and Tabulation Section for timely completion of scrutiny, data entry and data validation work of this survey. The credit also goes to Junior Field Investigators and Inspectors (NSS) for collecting information timely from the field against all odds. The computer typing of this report has been done by Smt. Tara Mani Steno typist.

Last but not least, credit also goes to all respondents of households, who provided the desired information to the field staff patiently during the survey.

Chandigarh
May, 2004.

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HIGHLIGHTS

- i) On an average about 150 households in a notified slum.
- ii) 100% of slums were built on public land, owned mostly by local bodies.
- iii) About 72% slums were surrounding by residential area.
- iv) About 14% of slums, the majority of the dwellings were pucca.
- v) About 57% of slums the majority of dwellings were semi-pucca.
- vi) For 57% slums, the major source of drinking water was tap.
- vii) 100% slums have electricity connection.
- viii) About 14% of slums had pucca road inside the slum.
- ix) About 71% of slums had a motorable pucca approach road.
- x) About 57% slums did not have any latrine facility.
- xi) No underground sewerage existed in any slum.
- xii) About 43% slums did not have any drainage facility.
- xiii) Government agencies collected garbage from 29% slums. About 57% slums did not have any regular arrangement for garbage disposal.
- xiv) In 86% slums, primary schools exist within 1 km. and in 43% slums, government hospital exist within 1 km.
- xv) About 43% of slums were waterlogged during monsoon.
- xvi) About 71% of the slums were not having any association for improvement the condition of the slum.
- xvii) About 86% of the slums were situated along nallahs.

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INTRODUCTION

Chapter-1

INTRODUCTION

1.1 The first nation-wide survey of the 'economic condition of slum dwellers in urban cities' was conducted by the National Sample Survey Organisation (NSSO) in its 31st round enquiry (July 1976-June 1977). The survey was restricted to (i) all the class- I towns having 1971 census population one lakh or more and (ii) two class-II towns viz. Shillong and Pondicherry. Only the cities proper and not the urban agglomerations were considered for the survey coverage. For identifying 'undeclared slums', a slum was defined as an areal unit having twenty five or more katcha structures mostly of temporary nature, or fifty or more households residing mostly in katcha structures, huddled together, or inhabited by persons with practically no private latrine and inadequate public latrine and water facilities.

1.2 The second nationwide survey on particulars of slums was conducted by the NSSO in its 49th round enquiry (January-June,1993), which covered rural as well as urban areas. A compact area 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 'slum' in the 49th round enquiry. For the purpose of the survey, such an area was considered as 'undeclared slum', if at least 20 households lived in that area. Certain areas declared as 'slum's by respective municipalities, corporations, local bodies or development authorities were treated as 'declared slum'.

1.3 After a gap of nearly ten years since then, the third survey in the series was conducted in the 58th round enquiry (July-December, 2002). Slum being an urban concept, on the recommendation of the working group on NSS 58th round, the Governing Council of the NSSO decided to cover only the urban slum in the present survey to which this report relates.

1.4 **The Survey in Brief:** The NSSO conducted an integrated household survey in its 58th round during the period July 2002 to December 2002. Some general features about the slum, including information on any improvement/change in the condition with respect to some amenities of the slum during the last 5 years were collected in this survey through Schedule 0.21. This apart, surveys on village facilities, disability including mental disability, housing condition, household consumer expenditure including some key characteristics on employment-unemployment were carried out in this enquiry.

1.5 **Objective of the Survey:** The main aim of the survey on condition of slum was to portray the condition of the urban slum, both notified and non-notified, with respect to infrastructural facilities like the area where the slum was located, road within and approaching

the slum, electricity, drinking water, sewerage, drainage, garbage disposal, etc. In addition, data on change in the condition of some of these facilities and source of the improvement, if there was any such improvement over the last five years, were also collected.

1.6 **Sample Design:** A stratified sampling design was adopted for selection of the sample first-stage units (FSUs). The FSUs, for the survey on condition of slums were Urban Frame Survey (UFS) blocks in urban areas. Information on each slum, notified or non-notified, found in the entire selected first stage units (FSUs) was collected. In some cases, area of a slum was very large and the selected FSU was part of the slum. In such cases, information was collected for the slum area falling under the sample FSU only. However, if the slum was notified, then the part of it falling under the sample FSU was considered as a notified slum. It may be noted that if a slum had cut across more than one FSU, all the slum particulars would relate to the part of the slum which fell in the selected FSU.

1.7 **Sub-round:** The entire survey period (1st July 2002-31st December-2002) was divided into two sub-rounds of three month's duration each (Sub-round 1: July-September 2002, Sub-round 2: October-December 2002) and an equal number of sample blocks were allocated to each sub-round. Each FSU was surveyed during the sub-round period to which it was allocated. Within a particular sub-round, the field-work spread out uniformly over the different months to the extent possible.

1.8 **Mode of data Collection:** Unlike household surveys where data are collected from a member of each household selected for the survey, in the survey on slums, data were collected for the entire slum from knowledgeable person (s). Information for most of the items was recorded in codes. If more than one code was applicable for any particular item, then the code was given on the basis of majority/predominance criterion.

1.9 **Presentation of Results:** As mentioned earlier, the present report is based on the data collected through Schedule 0.21 during July to December 2002. The relevant concepts and definitions used in this survey are presented in Chapter-II. The summary of findings based on the survey data are discussed in Chapter-III.

CONCEPTS & DEFINITIONS

Chapter-II

CONCEPTS & DEFINITIONS

2.1 For collection of data on the condition of slums, certain concepts and definitions were used in the survey. These are explained below.

2.2 **Slum:** A slum is a 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. Such an area, for the purpose of this survey, was considered as “**non-notified slum**” if at least 20 households lived in that area. Areas notified as slums by the respective municipalities, corporations, local bodies or development authorities are treated as “**notified slums**”. For the survey, slums in urban areas only were considered. The slum dwellings are commonly known as ‘Jhopad Patti’ in Bombay and ‘Jhuggi Jhopri’ in Delhi. It may be noted that the definition of “slum” followed in the current survey conforms to the one adopted in the previous NSS survey.

2.3 **Squatter settlement :** Sometimes an area develops into an unauthorised settlement with unauthorised structures put up by “squatters”. Squatter settlements were the slum like settlements which did not have the stipulated number of 20 households to be classified as a slum.

2.3.1 However, squatter settlements were not considered under the coverage of slums in the present survey. A more detailed enquiry on the housing condition was done through an individual enquiry at the level of households which included those living in slums as well as squatters.

2.4 **House:** Every structure, tent, shelter etc. was considered as house irrespective of the nature of its use. It might be used for residential or non-residential purpose or both or even might be vacant.

2.5 **Household:** A group of persons normally living together and taking food from a common kitchen constituted a household. The members of a household might or might not be related by blood to one another.

2.5.1 Each inmate (including residential staff) of a hostel, mess, hotel, boarding and lodging house, residential institutions for disabled, etc. constituted a single member household. It, however, a group of persons among them normally pooled their income for spending, they together were treated as forming a household. For example, a family living in a hotel was treated as a separate household by itself.

2.5.2 Undertrial prisoners in jails and indoor patients of hospitals, nursing homes etc., were excluded but residential staff therein were listed while listing was done in such institutions. The former persons were considered to be normal members of their parent households and were counted there. Convicted prisoners undergoing sentence were kept outside the coverage of the survey.

2.5.3 Floating population, i.e., persons having no 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.

2.5.4 Foreign nationals were not listed, nor their domestic servants, if by definition the latter belonged to the foreign national's household. If however, a foreign national became an Indian citizen for all practical purposes, he/she was covered.

2.5.5 Persons residing in barracks of military and paramilitary forces (like police, BSF etc.) were kept outside the survey coverage in view of the difficulty to conduct the survey therein. However, civilian population residing in their neighborhood, including the family quarters of service personnel were covered, for which, of course, permission was obtained from appropriate authorities.

2.5.6 Orphanages, rescue homes, ashrams and vagrant houses were kept outside the survey coverage. However, students staying in hostels (if any) and the residential staff (other than monks/nuns) of ashrams were listed. For orphanages, although orphans were not to be listed, the persons looking after them and staying there were considered for listing.

2.6 **Pucca structure:** A pucca structure was one having walls and roofs made of "pucca materials".

2.6.1 In the present survey, 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 constituted the list of pucca materials. All other materials were considered as "non-pucca materials". Non pucca materials included unburnt bricks, bamboo, mud, grass, leaves, reeds, thatch, etc.

2.7 **Katcha structure:** A structure having walls and roof made of non-pucca materials was regarded as a katcha structure. Katcha structures could be of the following two types:

(a) **'Unserviceable katcha'** which included all structures with thatch walls and thatch roof i.e. walls made of grass, leaves, reeds etc. and roof of a similar material, and

(b) **'Serviceable katcha'** which included all katcha structure other than unserviceable katcha structures.

2.8 **Semi-pucca structure:** A structure which could not be classified as pucca or a katcha structure as per definition given above was recorded as a semi-pucca structure. Such a structure had either the walls or the roof, but not both, made of pucca materials.

2.10 **Types of latrine:** The latrine facility used most of the slum dwellers was noted in this survey. Latrines serviced by scavengers were called “service latrines”. A latrine connected to underground sewerage system was called “flush system latrine”. A latrine connected to underground septic chambers was considered as a “septic tank latrine”. A latrine connected to a pit dug in earth was recorded as a “pit latrine”.

2.11 **Sewerage system:** Sewerage system consisted of underground pipe or conduit for carrying off drainage water, discharge from water closets, etc.

2.12 **Drainage system:** A system for carrying off waste water and liquid wastes of the area was considered as the drainage system.

2.13 **Garbage disposal:** In the urban areas, some arrangements usually exist to carry away the refuse and waste of households to some dumping place away from the residential areas. In some places, the public bodies collect the garbage from the premises of the household or from some fixed points in the locality where the residents put their garbage. In some places, a body of residents themselves make the arrangement of carrying the garbage to the dumping place away from residential areas without participation of any public body till the final disposal. Information on the arrangement prevailing for the colony/locality of the slum was obtained in the survey.

FINDINGS

Chapter-III

FINDINGS

A total of 64 Urban Frame Survey (UFS) blocks were allotted by National Sample Survey Organisation, Govt. of India to Haryana State for this survey. Out of these sample blocks, only 7 blocks have slum. Thus, about 11% UFS blocks were having a slum in Haryana. All the slums were found notified. The main findings of the survey are as under.

3.1 Type of Informant:

Table 1. Percentage distribution of sample slums by type of Informant.

| Type of slum | Type of informant | | |
|--------------|------------------------------------|--------|--------|
| | Knowledgeable person from the slum | | Others |
| | Male | Female | |
| Notified | 100 | 0 | 0 |

The above table shows that 100% informant were male knowledgeable persons from the slum.

3.2 **Area of the slum:** Information on the approximate area of the slum and approximate number of households living in the slum were collected during the survey. The following table shows that, on an average, about 150 households were living in a slum.

Table 2. Approximate number of households per slum by approximate area of the slum.

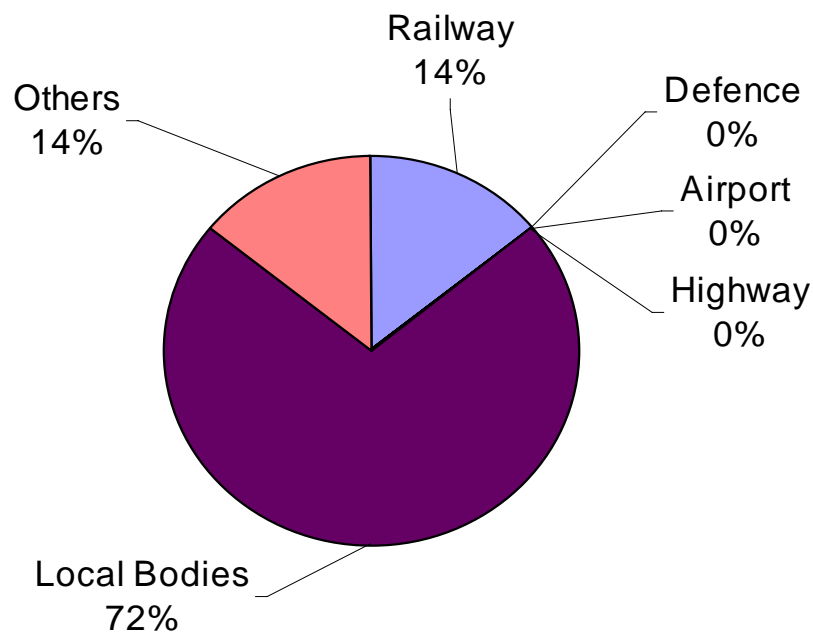
| Area of the slum (in hectares) | Average number of household in notified slums |
|--------------------------------|---|
| Less than .05 | - |
| .05-1 | 125 |
| 1-2 | 420 |
| 2-3 | 355 |
| 3-4 | - |
| 4-6 | 150 |
| 6-8 | - |
| >8 | - |
| Not reported | - |
| Average | 150 |

3.3 **Type of Ownership:-** Table 3 gives the distribution of slums by type of ownership of land on which the slums were built.

Table 3. Percentage distribution of slums by type of ownership of land.

| Type of slum | Ownership type | | | | | | | | |
|--------------|----------------|---------|---------|---------|---------|--------------|--------|-----------|-------|
| | Private | Public | | | | | | Not known | All |
| | | Railway | Defence | Airport | Highway | Local Bodies | Others | | |
| Notified | - | 14.3 | - | - | - | 71.4 | 14.3 | - | 100.0 |

Figure-1: Percentage distribution of slums built on land owned by public authorities.



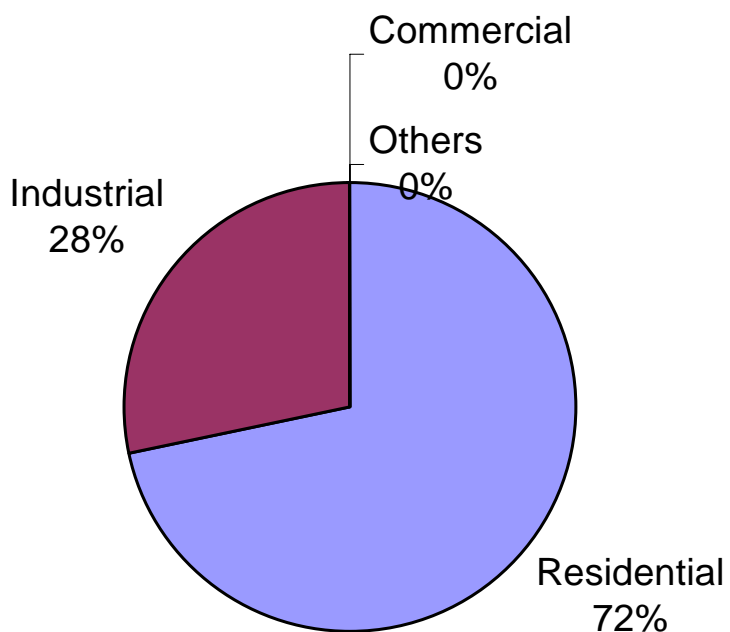
The above table & figure shows that 100.0% of the notified slums were built in public land. A further look into the ownership pattern of public land occupied by the slums, reveals that 71.4% were built on land belonging to local bodies like municipalities, 14.3% were built on land belonging to railways and 14.3% on others land like as State Govt.

3.4 **Area surrounding** : The table 4 gives the percentage of slum by type of area surrounding.

Table 4. Percentage distribution of slum by type of area surrounding.

| Type of slum | Type of area surrounding | | | | | |
|--------------|--------------------------|------------|------------|-------|---------------|-------|
| | Residential | Industrial | Commercial | Other | Not Reported. | All |
| Notified | 71.4 | 28.6 | - | - | - | 100.0 |

Figure-2: Percentage distribution by type of area surrounding.



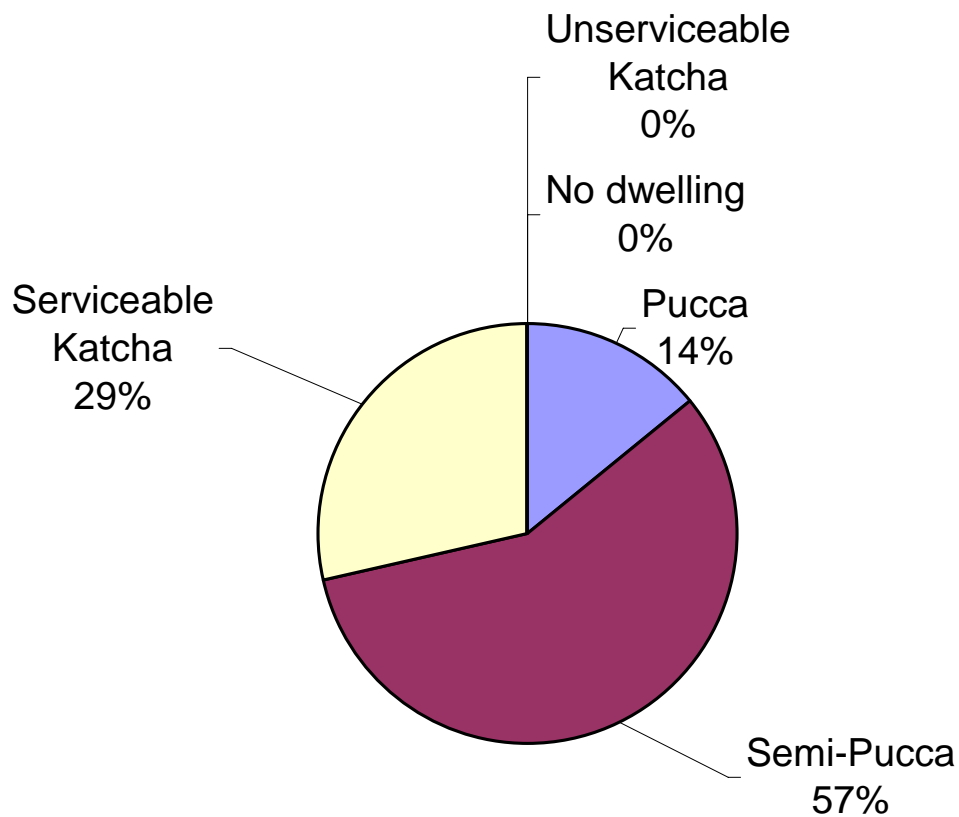
The above table & figure reveals that about 71% slum were located surrounding the residential area and about 29% were located surrounding the industrial area.

3.5 **Structure of majority of houses:** Information on the type of structure of the house was not collected separately for each house in the selected slum but a question was put to the informants regarding the type of structure of the majority of the houses.

Table 5. Percentage distribution of slums by type of structure of majority of houses.

| Type of slum | Type of structure | | | | | |
|--------------|-------------------|------------|--------------------|----------------------|-------------|-------|
| | Pucca | Semi-pucca | Serviceable katcha | Unserviceable katcha | No dwelling | All |
| Notified | 14.3 | 57.1 | 28.6 | - | - | 100.0 |

Figure-3: Percentage distribution of slums by type of structure of majority of households.

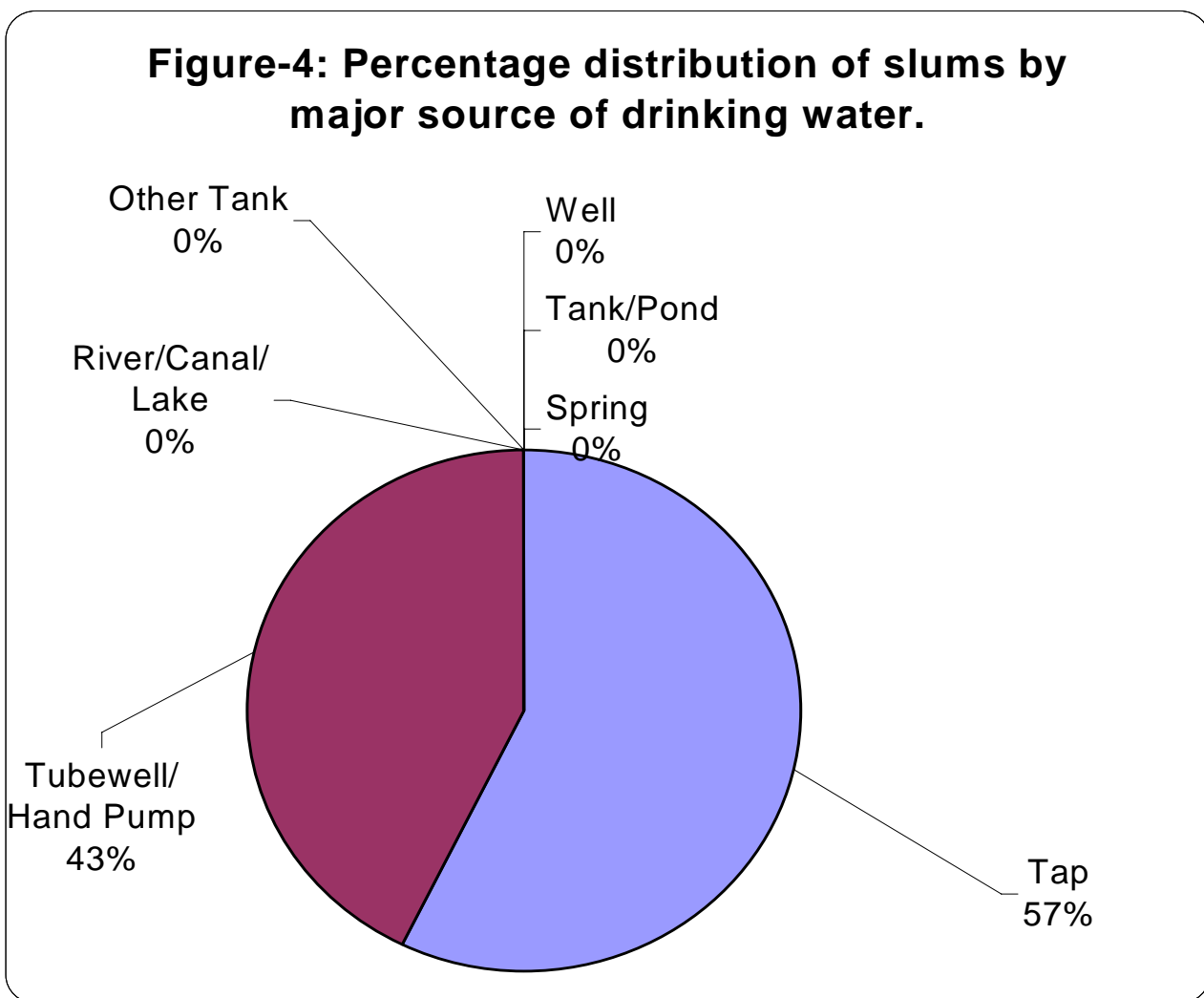


The above table & figure shows that about 57% of notified slums, the majority of the households were living in semi-pucca structure. About 14% & 29% of slums, the majority of the households were living in pucca & serviceable katcha structure respectively.

3.6 **Major source of drinking water** : Supply of safe drinking water to all has been one of the commitments in several five year plans. The table 6 gives the percentage of slums by type of major source of drinking water.

Table 6. Percentage distribution of slums by major source of drinking water.

| Type of slum | Source of drinking water | | | | | | | | | | All |
|--------------|--------------------------|-----------------------|------|-----------|---------------------|---------------------|--------|--------|---|---|-------|
| | Tap | Tubewell/ Handpump | Well | Tank/Pond | Other tank/ Pond | RiverCanal/ Lake | Spring | Others | | | |
| Notified | 57.1 | 42.9 | - | - | - | - | - | - | - | - | 100.0 |



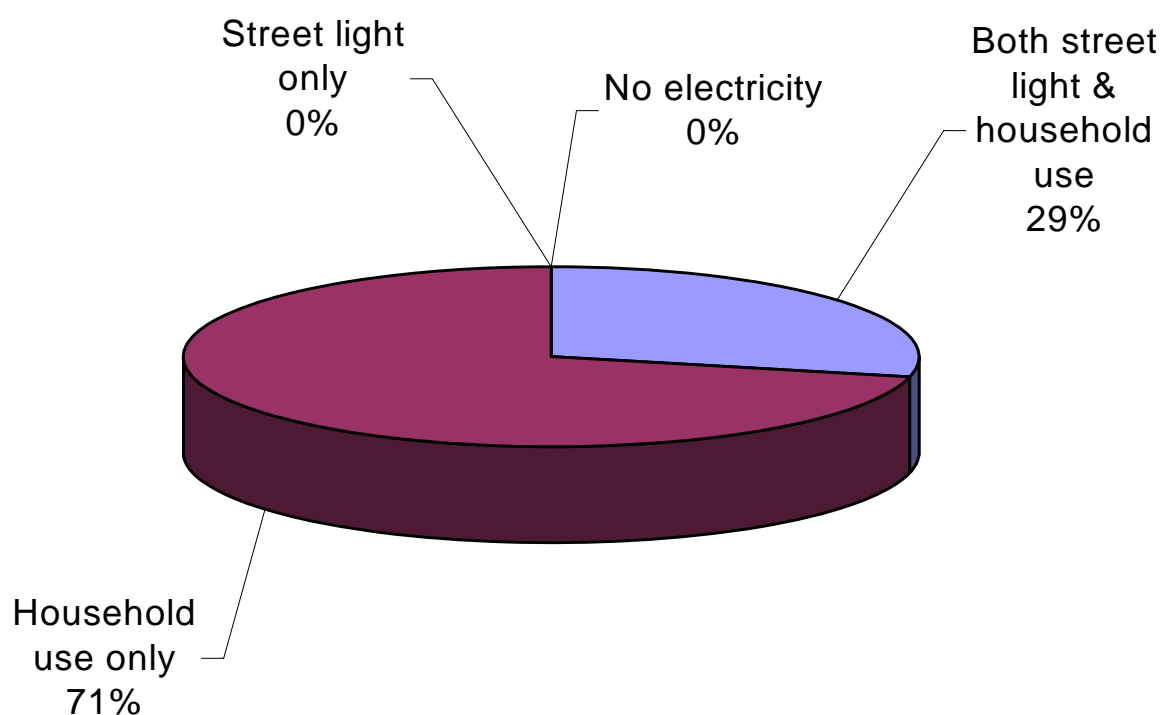
It is observed from the above table & figure that about 57% slums were using tap water & about 43% were using tube well/hand pump water for drinking.

3.7 **Availability of electricity:** Electricity connection in the slums may be of different types, viz. for household use, streetlight or both. In case of some slums, street light was available only in some locations inside or at the boundary of the slums. Such slums were also considered as having electricity connection. The following table gives the percentage distribution of slums by availability electricity.

Table 7. Percentage distribution of slums by type of availability of electricity connection.

| Type of slum | Electricity for | | | | |
|--------------|-----------------------------------|--------------------|-------------------|----------------|-------|
| | Both street light & household use | Household Use only | Street light only | No electricity | All |
| Notified | 28.6 | 71.4 | - | - | 100.0 |

Figure-5: Percentage distribution of slums by type of availability of electricity connection.



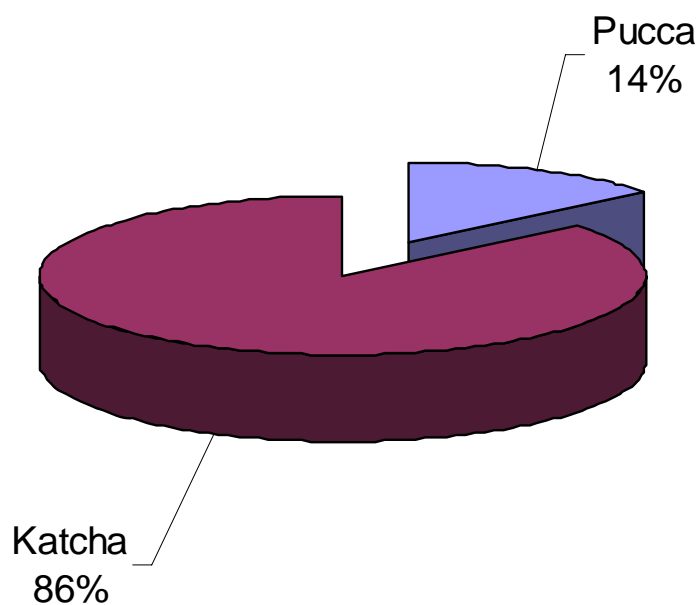
The above table & figure reveals that all the urban slums were having electricity. About 71% slums were using electricity in the houses only. And about 29% slums were using electricity for both streetlight & household use.

3.8 **Roads within slums:** Data on the nature of the roads/lanes/paths within the slums were collected in the survey and is given in table 8.

Table 8. Percentage of slums by type of roads within the slum.

| Type of slum | Type of road within the slum | | |
|--------------|------------------------------|--------|-------|
| | Pucca | Katcha | All |
| Notified | 14.3 | 85.7 | 100.0 |

Figure-6: Percentage distribution of slums by nature of roads within the slum.



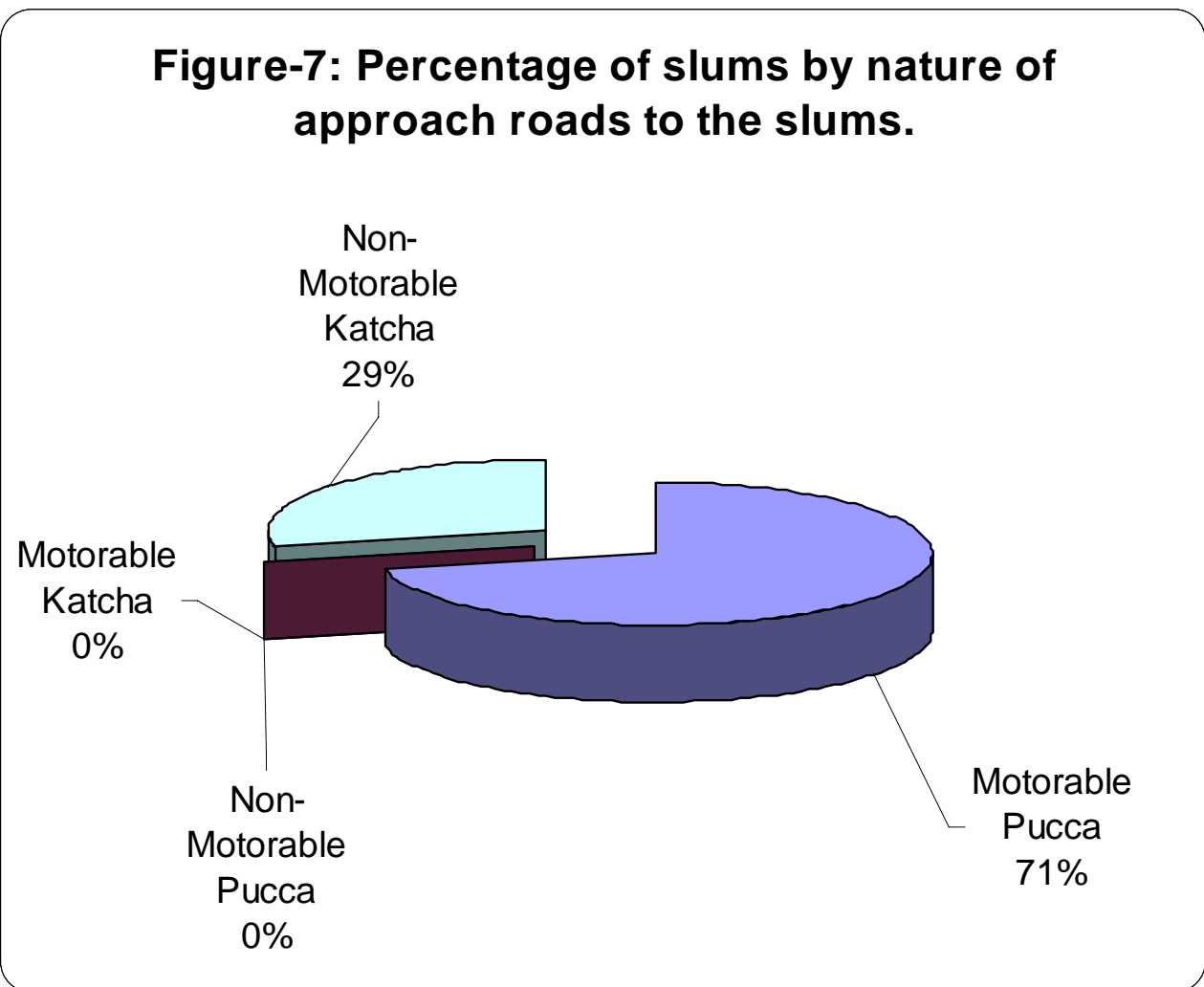
The above table & figure reveals that about 14% of the slums reported to have pucca roads within the slums. And about 86% of the slums reported to have katcha roads within the slums.

3.9 **Approach road to slums:** Data on the nature of the approach roads to the slums were also collected in the survey and is given in table 9.

Table 9. Percentage of slums approach roads to the slum.

| Type of slum | Type of approach road to the slum | | | | All |
|--------------|-----------------------------------|--------|---------------|--------|-------|
| | Motorable | | Non-Motorable | | |
| | Pucca | Katcha | Pucca | Katcha | |
| Notified | 71.4 | - | - | 28.6 | 100.0 |

Figure-7: Percentage of slums by nature of approach roads to the slums.



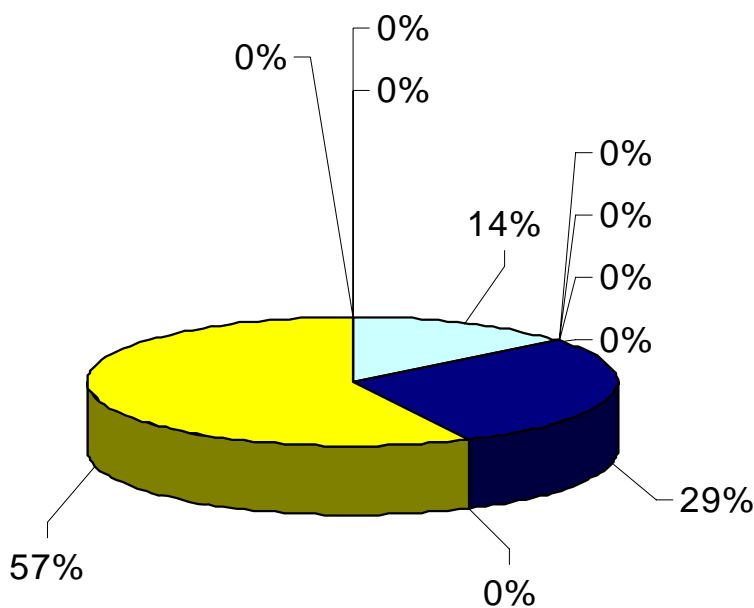
The above table & figure shows that the motorable pucca approach road/lane/constructed path to the slum was observed to be about 71%. Rest of the slums (about 29%) have non-motorable katcha approach road to the slums.

3.10 **Availability of latrine facility:** The table 10 gives the percentage of slums having latrine facilities.

Table 10. Percentage of slums having latrine facilities and not having latrine facility.

| Type of slum | Latrine facilities used by most by the residents of the slum | | | | | | | | | | | | 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 | - | - | - | 14.3 | - | - | - | - | 28.6 | - | 57.1 | 100.0 | |

Figure-8: Percentage of slums having latrine facilities & not having any latrine.



- Owned Septic Tank
- Owned Pit
- Owned Service
- Shared Septic Tank
- Shared Pit
- Shared Service
- Public Septic Tank
- Public Pit
- Public Service
- Other Latrine
- No Latrine

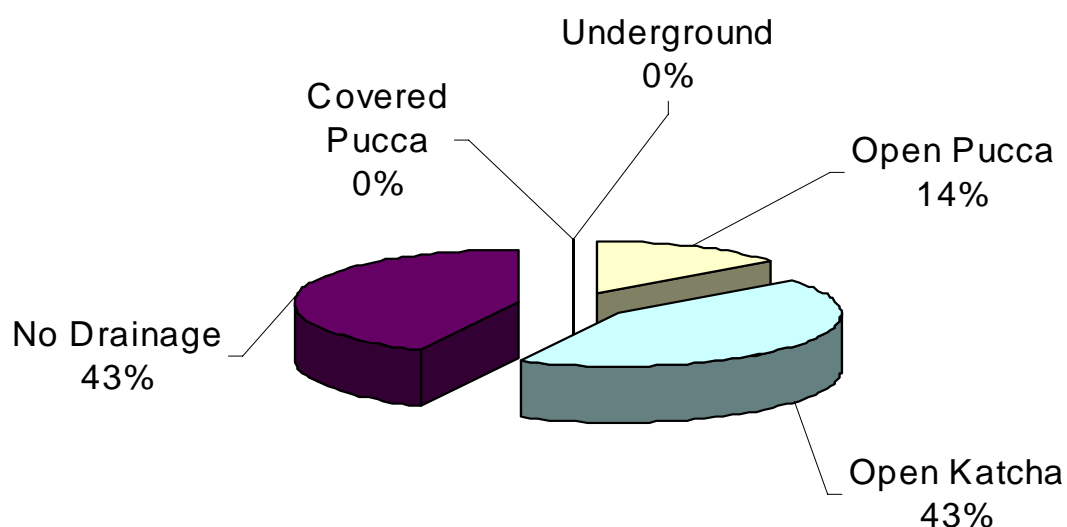
It is observed from the above table & figure that about 57% of the slums were not having any type of latrine facilities. About 14% of the slums were having shared septic tank/flush type latrine and about 29% of the slums were having public service latrine facility. The table shows that in the case of latrine facility, conditions in the slums were not good.

3.11 **Sewerage System and Drainage Facility:** The table 11 gives the percentage of slums having sewerage system and drainage facility.

Table 11. Percentage of slums having sewerage system and different types of drainage system.

| Type of slum | Underground sewerage system | | | Type of drainage system | | | | | |
|--------------|-----------------------------|---------------|-------|-------------------------|---------------|-------------|------------|-------------|-------|
| | available | Not available | All | Underground | Covered pucca | Open katcha | Open pucca | No drainage | All |
| Notified | - | 100.0 | 100.0 | - | - | 42.9 | 14.3 | 42.8 | 100.0 |

Figure-9: Percentage of slums by different types of drainage.



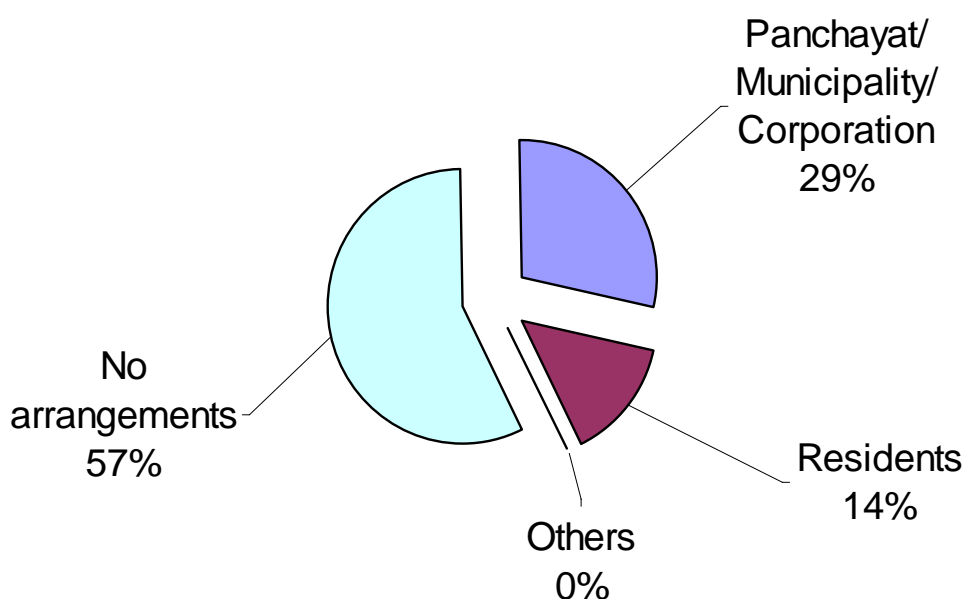
The above table shows that no underground sewerage system was available in any slum. It is also observed from the table & figure that about 43% of slum were not having any drainage facility. About 43% were having open katcha and only 14% were having open pucca drainage facility. It is also reported that the facility of drainage was practically absent if 'open' drains here ignored.

3.12 **Arrangement of Garbage Disposal:** Table 12 gives the percentage distribution of systems by type of agency disposing of the garbage.

Table 12. Percentage distribution of slums by type of agency disposing of the garbage.

| Type of slum | Agency of garbage collection | | | | |
|--------------|--------------------------------------|-----------|--------|-----------------|-------|
| | Panchayat/ Municipality/ Corporation | Residents | Others | No arrangements | All |
| Notified | 28.6 | 14.3 | - | 57.1 | 100.0 |

Figure-10: Percentage distribution of slums by type of agency disposing of the garbage.



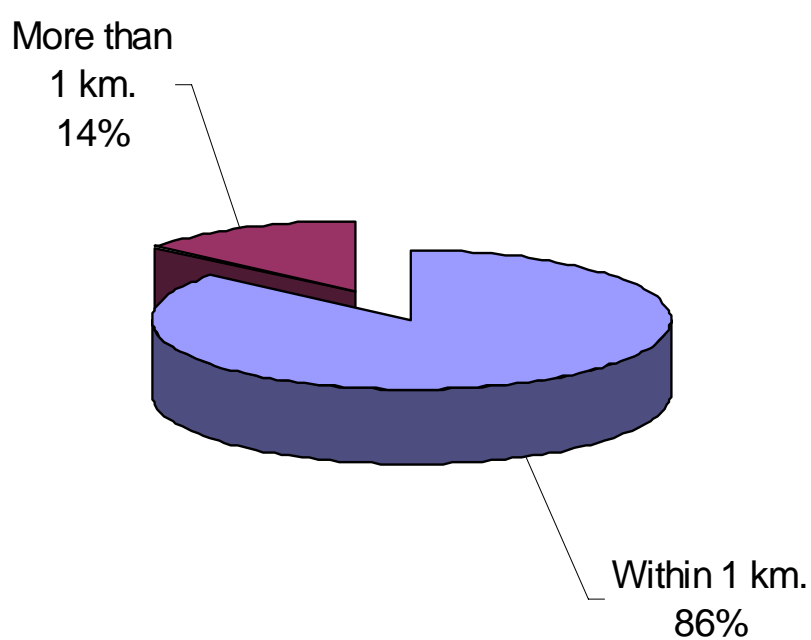
It is observed from the above table & figure that about 57% of the slums in Haryana had no arrangements of garbage disposal. The Govt. made arrangements of garbage disposal only in 29% the slums. In 14% of the slums, the residents made arrangement of garbage disposal from their own sources.

3.13 **Availability of Primary School:** Table 13 gives the percentage distribution of slums by distance from primary educational institutions.

Table 13. Percentage of slums by distance from primary school.

| Type of slum | Distance from Primary School | | |
|--------------|------------------------------|-----------------|-------|
| | Within 1 km. | More than 1 km. | All |
| Notified | 85.7 | 14.3 | 100.0 |

Figure-11: Percentage of slums by distance from primary school.



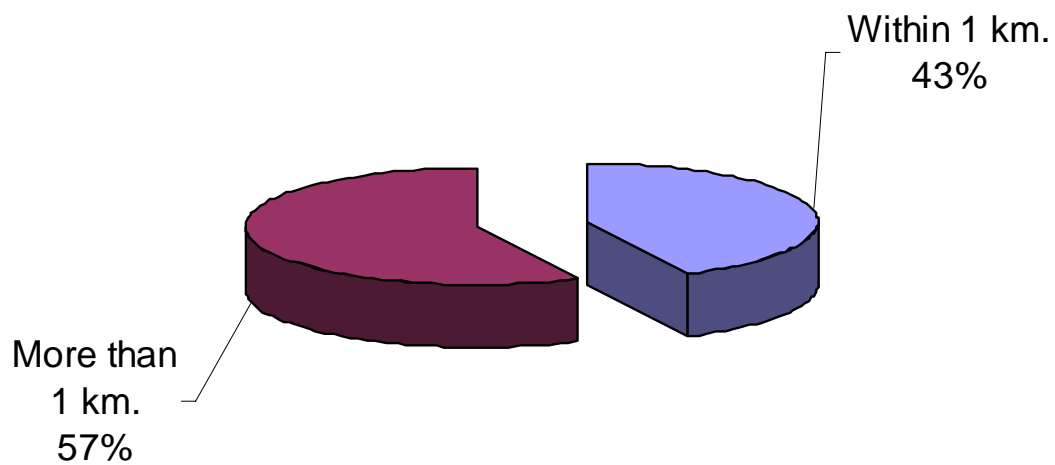
It is observed from the above table & figure that about 86% of the slums were found to have at least one primary school located within 1 km. Government hospital were available within 1 km. of 43% of slums.

3.14 **Availability of Government Hospital:** Table 14 gives the percentage distribution of slums by distance from govt. health institutions.

Table 14. Percentage of slums by distance from Government Hospital.

| Type of slum | Distance from Government Hospital | | |
|--------------|-----------------------------------|-----------------|-------|
| | Within 1 km. | More than 1 km. | All |
| Notified | 42.9 | 57.1 | 100.0 |

Figure-12: Percentage of slums by distance from government hospital.



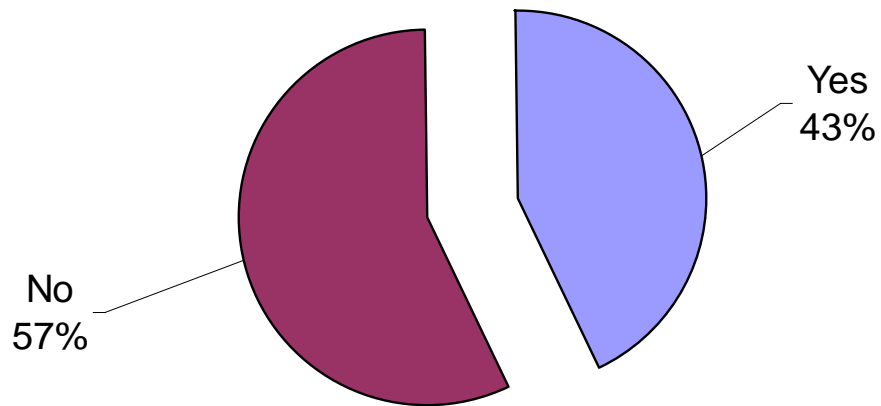
It is observed from the above table & figure that about 43% of the slums were found to have at least one government hospital located within 1 km.

3.15 **Waterlogging During Monsoon** : In the present round, in addition to the information on waterlogging on roads inside the slum, data on waterlogging on the approach road to the slum were also collected. Slums for which waterlogging was reported either on the roads within the slum or on the approach road to the slum were classified as affected by waterlogging. The percentage of slums affected by waterlogging during monsoon is given in table 15.

Table 15. Percentage of slums affected by Waterlogging during monsoon.

| Type of slum | Approach road lane/constructed path usually waterlogged in monsoon | | | |
|--------------|--|------|--------------|-------|
| | Yes | No | Not reported | All |
| Notified | 42.9 | 57.1 | - | 100.0 |

Figure-13: Percentage of slums affected by waterlogging during monsoon.



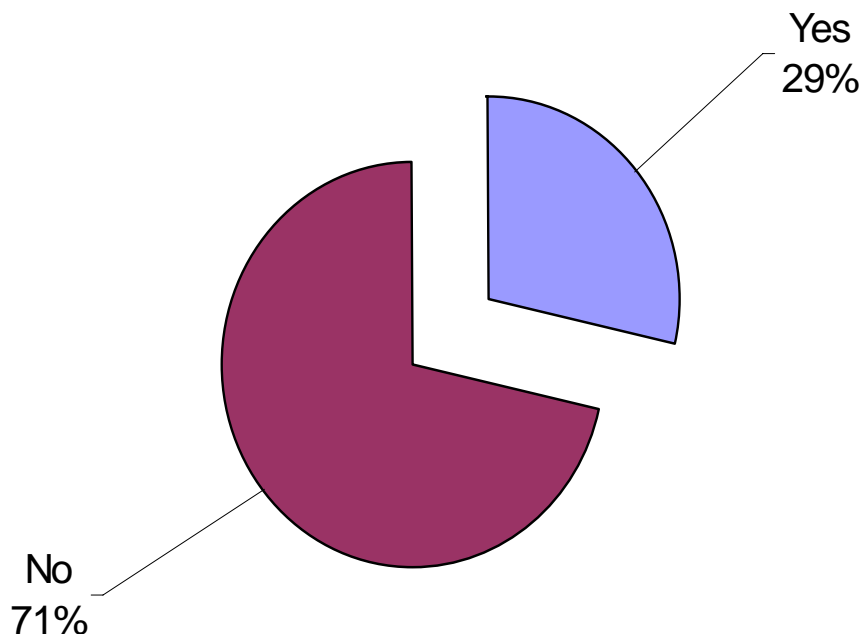
It is revealed from the above table & figure that about 43% of the slums waterlogging during monsoon. About 57% of the slums were not waterlogged during the monsoon.

3.16 **Availability of an Association:** Table 16 gives the percentage distribution of slums by availability of an association for improvement the condition of the slum.

Table 16. Percentage distribution of slums by availability of an association for improvement the condition of the slum.

| Type of slum | An association for improving the condition of the slum | | |
|--------------|--|------|-------|
| | Yes | No | All |
| Notified | 28.6 | 71.4 | 100.0 |

Figure-14: Percentage of slums by having an association for improvement the condition of the slum.



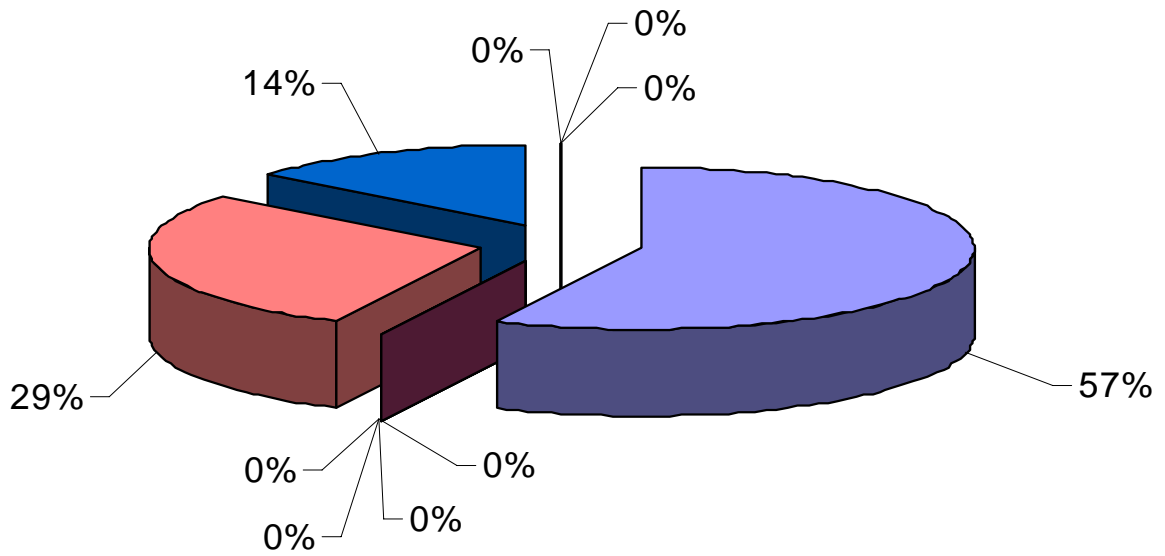
The above table & figure shows that about 71% of the slums were not having any association for improving the condition of the slum. Only 29% of the slums were having such type of association.

3.17 **Location of the slums:** Table 17 gives the percentage distribution of slums by location.

Table 17. Percentage distribution of slums by location.

| Type of slum | Fringe area | | | | | Other area | | | | | All |
|--------------|--------------|--------------------|------------|-----------|--------|--------------|--------------------|------------|-----------|--------|-------|
| | along nallah | along railway line | river bank | river bed | others | along nallah | along railway line | river bank | river bed | others | |
| Notified | 57.1 | - | - | - | - | 28.6 | 14.3 | - | - | - | 100.0 |

Figure-15: Percentage distribution of slums by location.



| | | | |
|--------------------------|--------------------------------|-------------------------------|-----------------------|
| along nallah Fringe area | along railway line Fringe area | river bank Fringe area | river bed Fringe area |
| others Fringe area | along nallah Other area | along railway line Other area | river bank Other area |
| river bed Other area | others Other area | | |

It is observed from the above table & figure that about 57% of the slums were situated in fringe area and about 43% were situated in other area. The table also shows that about 86% of the slums were situated along nallahs and about 14% were situated along railway line.

3.18 **Improvement of Facilities:** In respect of all the indicators discussed in the forgoing paragraphs, information regarding any improvement during the last 5 years, as felt by the informant, was collected and is summarized in table 18.

Table 18. Percentage of slums reporting improvement of facilities during last 5 years.

| Type of slum | Slums reporting improvement of facilities | | | | | | | | |
|--------------|---|----------|--------------|-------------|-------------|---------|----------|----------|------------------|
| | Road | | Water supply | Electricity | Streetlight | Latrine | Drainage | Sewerage | Garbage disposal |
| | Within | Approach | | | | | | | |
| Notified | - | 57.1 | 42.9 | 42.9 | - | 28.6 | - | - | - |

The above table shows that the improvement of facilities during the last 5 years, was reported in about 57% cases for approach road, 43% cases for water supply, 43% cases for electricity and 29% cases for latrine. However, there were no improvement in roads within slum, street light, drainage, sewerage & garbage disposal.

3.19 **No Change in Facilities :** Table 19 shows that there were no change in certain facilities.

Table 19. Percentage of slums reporting no change in facilities during last 5 years.

| Type of slum | Slums reporting no change in facilities | | | | | | | | |
|--------------|---|----------|--------------|-------------|--------------|---------|----------|----------|------------------|
| | Road | | Water supply | Electricity | Street Light | Latrine | Drainage | Sewerage | Garbage disposal |
| | Within | Approach | | | | | | | |
| Notified | 85.7 | 42.9 | 42.9 | 57.1 | 71.4 | 71.4 | 71.4 | 71.4 | 85.7 |

The above table shows that no change in the facilities during last 5 years was reported in about 86% cases for roads within the slum, 43% cases for approach roads, 43% cases for water supply, 57% cases for electricity, 71% cases for street light, 71% cases for latrine, 71% cases for drainage, 71% cases for sewerage and 86% cases for garbage disposal.

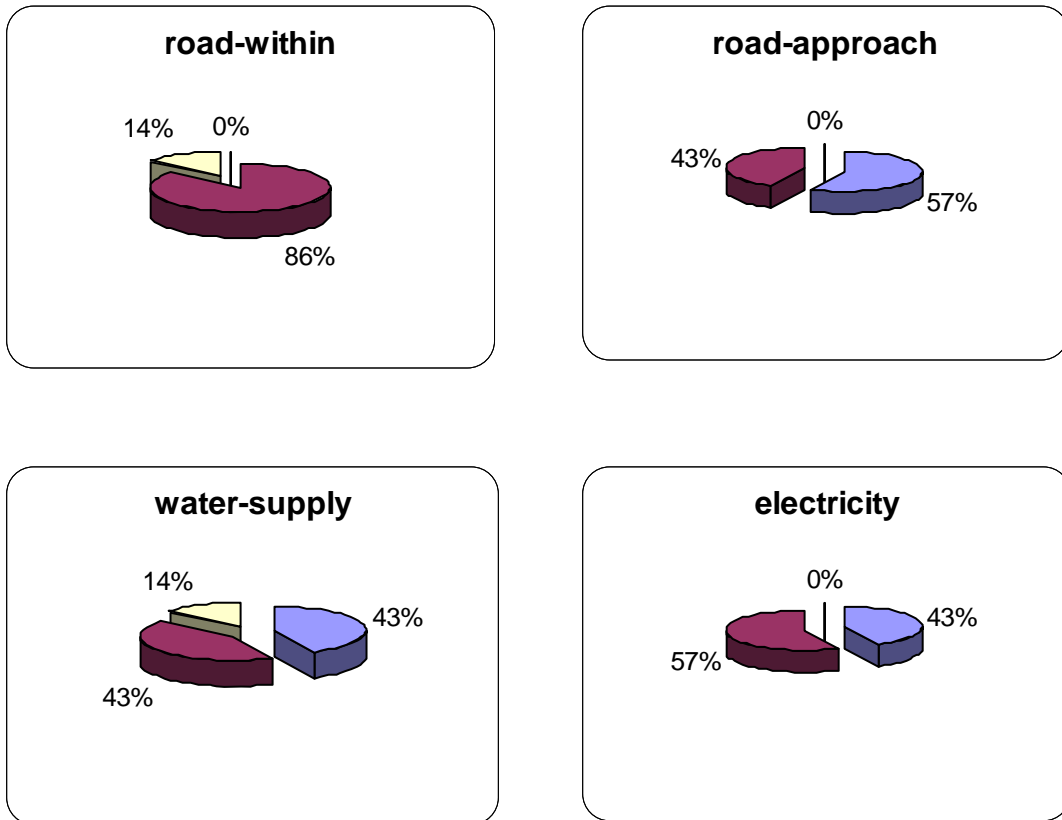
3.20 **Deteoriation of Facilities :** Table 20 presents a summary of information collected regarding any Deteoriation in the availability of facilities during the last 5 years.

Table 20. Percentage of slums reporting Deteoriation of facilities during last 5 years.

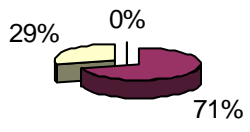
| Type of slum | slums reporting deteoriation of facilities | | | | | | | | |
|--------------|--|----------|--------------|-------------|--------------|---------|----------|----------|------------------|
| | Road | | Water supply | Electricity | Street Light | Latrine | Drainage | Sewerage | Garbage disposal |
| | Within | approach | | | | | | | |
| Notified | 14.3 | - | 14.3 | - | 28.6 | - | 28.6 | 28.6 | 14.3 |

The above table shows that in case of certain facilities the situation became deteoriated during last 5 years. The percentage of slums reporting deterioration of specific facilities were 14% cases for roads within the slum, 14% cases for water supply, 29% for street light 29% cases for drainage, 29% cases for sewerage and 14% cases for garbage disposal. The improvement, no change and deteoriation of facilities were also shown in the following figure.

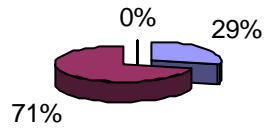
Figure-16: Percentage of slums reporting any type of change in facilities during last 5 years.



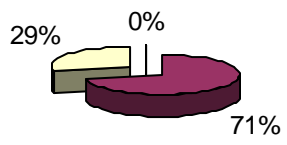
street light



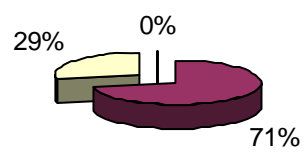
latrine



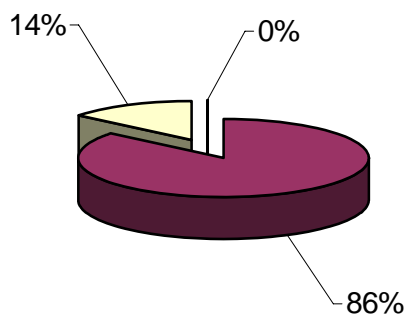
drainage



sewerage



garbage disposal



Improvement

No change

Deteriorated

3.21 **Source of Improvements of Facilities** : Table 21 presents the role of various authorities in the development of facilities in slums.

Table 21. Percentage of slums reporting improvement of facilities during last 5 years by type of authority responsible for improvement.

| Facility | Source of improvement | | | | |
|---------------------------|-----------------------|------------------------------|-----------|--------|-------|
| | Govt. | Non-govt. organisation (NGO) | Residents | Others | All |
| Water supply | 100.0 | - | - | - | 100.0 |
| Street light | - | - | - | - | - |
| Electricity | 100.0 | - | - | - | 100.0 |
| Latrine | 100.0 | - | - | - | 100.0 |
| Sewerage | - | - | - | - | - |
| Drainage | - | - | - | - | - |
| Garbage disposal | - | - | - | - | - |
| Road within the slum | - | - | - | - | - |
| Approach road to the slum | 100.0 | - | - | - | 100.0 |

The above table shows that the Government was played a major role in the development of facilities in slums. In this context, it may be noted that improvement of facilities attributed to the efforts of the government. The table also shows that there were some improvements in water supply, electricity, latrine & approach roads only.

APPENDIX

Table 1. Number of sample blocks allotted & surveyed, number of sample slums surveyed.

| Number of sample blocks | | Number of sample slums | | |
|-------------------------|----------|------------------------|--------------|-----|
| Allotted | Surveyed | Notified | Non-notified | All |
| 64 | 64 | 7 | - | 7 |

Table 2. Number of slums by type of informant.

| Type of Informant | | | | |
|------------------------------------|--------|--------|---|-----|
| Knowledgeable person from the slum | | Others | | All |
| Male | Female | | | |
| 7 | - | - | - | 7 |

Table 3. Approximate number of households in all the slums.

| Number of slums | | | Approx. number of households in | | |
|-----------------|--------------|-----|---------------------------------|--------------------|------|
| Notified | Non-notified | All | Notified slums | Non-notified slums | All |
| 7 | - | 7 | 1050 | - | 1050 |

Table 4. Number of slums by type of ownership of the land where the slum is located.

| Type of slum | Ownership type | | | | | | | | |
|--------------|----------------|---------|---------|---------|---------|--------------|--------|-----------|-----|
| | Private | Public | | | | | | Not known | All |
| | | Railway | Defence | Airport | Highway | Local Bodies | Others | | |
| Notified | - | 1 | - | - | - | 5 | 1 | - | 7 |

Table 5. Number of slum by type of area surrounding the slum.

| type of area surrounding the slum | | | | | |
|-----------------------------------|------------|------------|-------|--------------|-----|
| Residential | Industrial | Commercial | Other | Not reported | All |
| 5 | 2 | - | - | - | 7 |

Table 6. Number of slums by type of the structure of majority of households.

| Type of structure of the majority of the households | | | | | |
|---|------------|--------------------|----------------------|-------------|-----|
| Pucca | Semi-pucca | Serviceable katcha | Unserviceable katcha | No dwelling | All |
| 1 | 4 | 2 | - | - | 7 |

Table 7. Number of slum by major source of drinking water.

| Major Source of drinking water | | | | | | | | |
|--------------------------------|-----------------------|------|---------------|------------------------|-------------------------|--------|--------|-----|
| Tap | Tubewell/ Handpump | Well | Tank/ Pond | Other tank/ Pond | River Canal/ Lake | Spring | Others | All |
| 4 | 3 | - | - | - | - | - | - | 7 |

Table 8. Number of slums by status of electricity connection.

| Slums with | | | | | |
|--------------------------------------|-----------------------|----------------------|----------------|-----|--|
| Electricity for | | | | | |
| Both street light & household use | Household Use only | Street light only | No electricity | All | |
| 2 | 5 | - | - | 7 | |

Table 9. Number of slums by type of road/lane/constructed path with in the slum.

| Type of approach road/lane/constructed path to the slum | | |
|---|--------|-----|
| Pucca | Katcha | All |
| 1 | 6 | 7 |

Table 10. Number of slums by type of approach road/land constructed path to the slum.

| Type of approach road/lane/constructed path to the slum | | | | |
|---|--------|---------------|--------|-----|
| Motorable | | Non-motorable | | All |
| Pucca | Katcha | Pucca | Katcha | |
| 5 | - | - | 2 | 7 |

Table 11. Number of slums by latrine facility used by most of the residents of the slum.

| Latrine facilities used by most by the residents of the slum | | | | | | | | | | | | |
|--|-----|---------|-------------------|-----|---------|-------------------|-----|---------|---------------|------------|-----|--|
| Owned | | | Shared | | | Public/community | | | Other latrine | No latrine | All | |
| Septic tank/flush | Pit | Service | Septic tank/flush | Pit | Service | Septic tank/flush | Pit | Service | | | | |
| - | - | - | 1 | - | - | - | - | 2 | - | 4 | 7 | |

Table 12. Number of slums having sewerage system and different types of drainage.

| Underground sewerage system | | |
|-----------------------------|----------------|-----|
| Available | Not -available | All |
| - | 7 | 7 |

Table 13. Number of slums by type of drainage system.

| Type of drainage system | | | | | |
|-------------------------|---------------|------------|-------------|-------------|-----|
| Underground | Covered pucca | Open pucca | Open katcha | No drainage | All |
| | | 1 | 3 | 3 | 7 |

Table 14. Number of slums by arrangement of garbage disposal system.

| garbage disposal system | | | | |
|--------------------------------------|-----------|--------|-----------------|-----|
| Panchayat/ Municipality/ Corporation | Residents | Others | No arrangements | All |
| 2 | 1 | - | 4 | 7 |

Table 15. Number of slums not having motorable road by distance from nearest motorable road.

| Distance from nearest motorable by distance from nearest motorable road | | | | |
|---|-------|-----|-----|-----------|
| Less than 0.5 | 0.5-1 | 1-2 | 2-5 | 5 & above |
| 2 | - | - | - | - |

Table 16. Number of slums by distance from nearest primary school.

| Distance from nearest primary school (in km.) | | | | | |
|---|-------|-----|-----|-----------|-----|
| Less than 0.5 | 0.5-1 | 1-2 | 2-5 | 5 & above | All |
| 3 | 3 | 1 | - | - | 7 |

Table 17. Number of slums by distance from nearest government hospital/health centre.

| Distance from nearest government hospital/health centre | | | | | |
|---|-------|-----|-----|-----------|-----|
| Less than 0.5 | 0.5-1 | 1-2 | 2-5 | 5 & above | All |
| 1 | 2 | - | 4 | - | 7 |

Table 18. Number of slums by approximate area of slum.

| Approximate area of slum. (in hectare) | | | | | | | | |
|--|-----------|-----------|-----------|-----------|-----------|-----------|--------------|-----|
| Less than | 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 & above | All |
| - | 1 | 3 | 2 | - | 1 | - | - | 7 |

Table 19. Number of approach road/lane/constructed path in the slum usually by Waterlogged in monsoon.

| Approach road/ lane/constructed path usually waterlogged in monsoon | | | |
|---|----|------|-----|
| Yes | No | n.r. | All |
| 3 | 4 | - | 7 |

Table 20. Number of slums by location.

| Location of slum | | | | | | | | | | All |
|------------------|--------------------|------------|-----------|--------|-------------|--------------------|------------|-----------|--------|-----|
| Fringe area | | | | | Other area | | | | | |
| along nllah | along railway line | river bank | river bed | others | along nllah | along railway line | river bank | river bed | others | |
| 4 | - | - | - | - | 2 | 1 | - | - | - | 7 |

Table 21. Number of slums by availability of an association for improving the condition of the slum.

| An association for improving the condition of the slum | | |
|--|----|-----|
| Yes | No | All |
| 2 | 5 | 7 |

Table 22. Number of notified slums by year of notification of slum.

| Year of notification of slum | | | | | | | |
|------------------------------|-----------|-----------|-----------|-----------|-----------|---------------|-----|
| Before 1971 | 1971-1975 | 1976-1980 | 1981-1985 | 1986-1990 | 1991-1995 | 1996 or after | All |
| - | - | 1 | 2 | - | - | 4 | 7 |

Table 23. Number of slums by change in condition of the road of the slum during last 5 years.

| Road with in the slum | | | | Approach road to the slum | | | |
|-----------------------|-----------|--------------|-----|---------------------------|-----------|--------------|-----|
| Improved | No change | Deteriorated | All | Improved | No change | Deteriorated | All |
| - | 6 | 1 | 7 | 4 | 3 | - | 7 |

Table 24. Number of slums by change in water supply of the slum during last 5 years.

| Water supply | | | |
|--------------|-----------|--------------|-----|
| Improved | No change | Deteriorated | All |
| 3 | 3 | 1 | 7 |

Table 25. Number of slums by change in condition of the electricity and street light of the slum during last 5 years.

| Electricity | | | | Street light | | | |
|-------------|-----------|--------------|-----|--------------|-----------|--------------|-----|
| Improved | No change | Deteriorated | All | Improved | No change | Deteriorated | All |
| 3 | 4 | - | 7 | - | 5 | 2 | 7 |

Table 26. Number of slums by change in condition of latrine facility during last 5 years.

| Latrine facility | | | |
|------------------|-----------|--------------|-----|
| Improved | No change | Deteriorated | All |
| 2 | 5 | 1 | 7 |

Table 27. Number of slums by change in condition of drainage of the slum during last 5 years.

| Drainage facility | | | |
|-------------------|-----------|--------------|-----|
| Improved | No change | Deteriorated | All |
| - | 5 | 2 | 7 |

Table 28. Number of slums by change in condition of sewerage and garbage disposal of the slum during last 5 years.

| Sewerage | | | | Garbage disposal | | | |
|----------|-----------|--------------|-----|------------------|-----------|--------------|-----|
| Improved | No change | Deteriorated | All | Improved | No change | Deteriorated | All |
| - | 5 | 2 | 7 | - | 6 | 1 | 7 |

Table 29. Number of slums where condition of approach road to the slum has improved during last 5 years.

| Source of improvement | | | | |
|-----------------------|-----|-----------|--------|-----|
| Government | NGO | Residents | Others | All |
| 4 | - | - | - | 4 |

Table 30. Number of slums where water supply improved during last 5 years by source of improvement.

| Source of improvement | | | | |
|-----------------------|-----|-----------|--------|-----|
| Government | NGO | Residents | Others | All |
| 3 | - | - | - | 3 |

Table 31. Number of slums condition of electricity has improved during last 5 years by source of improvement.

| Source of improvement | | | | |
|-----------------------|-----|-----------|--------|-----|
| Government | NGO | Residents | Others | All |
| 3 | - | - | - | 3 |

Table 32. Number of slums where condition of latrine facility has improved during last 5 years by source of improvement.

| Source of improvement | | | | |
|-----------------------|-----|-----------|--------|-----|
| Government | NGO | Residents | Others | All |
| 2 | - | - | - | 2 |