Surveying Slums
Process of Survey and Use of Data

Shahana Sheikh, Subhadra Banda

The process of surveying slums in India has a long and complicated history. Residents of slums in Indian cities have experienced being surveyed by different agencies—in some cities, the urban local body (ULB) has conducted surveys, whereas in others it has been slum improvement boards established by state governments. These processes have usually been designed by the agency carrying out the survey, and, consequently, their implementation has varied greatly across cities.

Section 1 of this paper discusses slum surveying in some of India’s largest cities. This analysis is based on a review of the existing legal and administrative frameworks applicable to various states and cities. Section 2 explains the context of slum surveys in Delhi, including the relevant definitions of slums and the “power to survey” vested in the Delhi Urban Shelter Improvement Board (DUSIB). Section 3 analyses recent data on jhuggi jhopdi (slum dwelling) clusters (JJC) in Delhi. We conclude that apart from concerns over the transparency of such slum survey data, the process of collecting it and its use, and possible abuse, need to be carefully understood, especially in the light of a growing policy emphasis on slums and their rehabilitation.

1 Review of Legal and Administrative Frameworks

The process of surveying is often understood as a statistical exercise where information on a place and/or its residents is carefully collected, to be then used for a specific purpose. Surveying a slum might involve collecting information on its physical or infrastructural aspects, or on aspects such as the livelihoods, education, and health of its residents. Data collected from a slum survey could be used to decide on infrastructural improvements or policy interventions to improve the lives of residents. However, until now, slum surveys in Indian cities have been used in a more limited manner—to list the number of households for rehabilitation or eviction.

In recent years, the policy importance of slum surveying has increased. At the national level, the Rajiv Awas Yojana (RAY) has introduced guidelines that detail slum surveying processes. According to these, a survey is to be carried out by ULBs, involving other actors from institutions at the municipal level (GoI 2012: Guideline 3.2.2). In addition, the Model Property Rights to Slum Dwellers Bill, 2011, released as part of the RAY, clearly states that the “City Area Slum Redevelopment Committee … has the duty to survey and implement schemes for redevelopment” (Section 9). The guidelines mandate...
that representatives of the community (volunteers/leaders/facilitators), who are non-state actors, be involved in the surveying. Specifically, the data is to be verified and validated by the community after the survey (got 2012: Guideline 3.2.2. [d]). Further, the community can either survey itself or do it in conjunction with the ULB.

A review of the existing slum legislations across India, however, reveals that most states modified and adopted the central model slum legislation, the 1956 Slum Areas (Improvement and Clearance) Act, in the 1970s. This legislation dealt with identifying slums, their notification, providing basic services, the protocol for eviction, and establishing slum boards at the state level to coordinate these processes. Slum surveying processes are not listed in it; instead, they were usually detailed in administrative orders and other delegated legislation issued by slum boards. Consequently, aspects of slum surveying such as the purpose of surveys, who carries them out and at what frequency, the type of data collected, the dissemination of the data after it is collected, and whether being enumerated in these surveys confers any rights to the residents or the settlement surveyed vary across Indian cities.

What is clear from existing slum legislations is that a settlement must go through a process of notification and declaration, whereby it is “declared” a slum for policy interventions such as relocation or improvement. For example, according to the Tamil Nadu Slum Areas (Improvement and Clearance) Act, which established the Tamil Nadu Slum Clearance Board (TNSCB), interventions such as improvements and procedural protection from eviction can only be undertaken in “slum areas” that are “declared” under a process defined by it. But the act does not detail a process for surveying these declared slum areas. Similarly, the Karnataka Slum Areas (Improvement and Clearance) Act, which established the Karnataka Slum Development Board (KSDB) has the same section on the declaration of slums before any government intervention, but it does not detail a process for surveying them.

The practice of conducting socio-economic surveys in slums appears to have begun during the 1970s. For instance, socio-economic surveys of declared slums were conducted by the TNSCB in 1975. But it was only in 2002 that a survey of unrecognised slums was commissioned in Tamil Nadu. One of the KSDB’s objectives is “to take up socio-economic survey of the slums, in order to study the socio-economic conditions of the slum dwellers.” In the large cities of Bengaluru and Chennai, the surveying has been limited to declared slums. If non-notified slums have been surveyed, it has conferred no additional recognition on them.

In Kolkata, surprisingly, the Kolkata Metropolitan Development Authority, a state land development agency, undertook a survey of bustees in the city in July 1980, and it continues to conduct periodic surveys. In Mumbai, the Slum Rehabilitation Authority (SRA) is in charge of slum redevelopment, an exercise that involves a survey of the structures on a plot by the developer.

In slum rehabilitation, one objective that slum surveys have had is ascertaining the number of households eligible for benefits, based on a “cut-off date.” A family is deemed eligible if it is able to prove residence in a slum prior to this date. Slums in Mumbai had 1995 as the cut-off date until March 2014, when it was changed to 2000. After a survey for an SRA project, a table of house numbers and the names of the occupants is prepared. The survey confers rights on all residents who are eligible on the basis of the cut-off date.

In Chennai, there is no single cut-off date for all projects; it differs for each.

More recently, many state governments have invited tenders for socio-economic surveys in keeping with the RAY guidelines. While we are yet to see if such guidelines have made the surveying process more intensive and inclusive, it is the first time that an attempt has been made at creating uniformity in slum survey procedures.

2 Surveying Slums in Delhi

In this section, we examine the specific case of Delhi and its experience with surveying slums. After an overview of the existing literature on slum surveys in Delhi and their data, the current definitions of “slums” in Delhi are presented. Following this, the power to survey, which has been vested in the DUSIB, is discussed. We then examine some aspects of current surveys undertaken by the DUSIB.

2.1 Slum Surveying in the 1990s

An extensive survey of slums in Delhi was conducted in 1989–90 during V P Singh’s tenure as prime minister. The four-month survey by the Delhi Administration—the governing body that preceded the Government of the National Capital Territory of Delhi (GNCTD)—aimed to enumerate every slum household in the city (Ghertner 2010). The households surveyed were issued silver-coloured tokens (later known as V P Singh tokens), which were nailed to a wall of their jhuggi as formal proof of residence (Ghertner 2010). However, no documentary proof of “ownership” was issued. This survey, for the first time in Delhi’s history, was linked with resettlement, thus incentivising residents of JJCs to participate in it (Ghertner 2010). During our fieldwork in Delhi, we found that even after more than two decades, residents continue to preserve these tokens and consider them as formal proof of residence.

Official data on slums in Delhi during the 1990s is available from the Delhi Development Authority’s (DDA) website and from the City Development Plan (CDP) of Delhi. The DDA’s website provides three estimates for the number of “squatters” in Delhi. The Food and Civil Supplies Department of the GNCTD and the Slum and JJ Department of the Municipal Corporation of Delhi (MCD) are mentioned as the sources for this data (Table 1).

The data for 1990s is presumably based on the slum survey conducted under V P Singh’s leadership. The data for 1994 is based on a comprehensive enumeration of JJCs conducted.
by the Slum and JJ Department of the MCD, which was released in the form of zone-wise lists with the number of jhuggi households in each JJC (Dupont 2008). The CDP of Delhi (2006), which sourced its data from the Slum and JJ Department of the MCD, reported data for JJCs in Delhi for 1990 and 1997 (GNCTD 2006). It mentioned the same estimate as the DDA for the number of JJCs in Delhi in 1990, and added that the population living in them was 1,295,000, in an area of 431.7 acres (1.75 square kilometres). By 1997, according to it, the number of JJCs had increased to 1,100 with 6,00,000 jhuggis and a population of 30,00,000, occupying 902.1 acres (3.65 sq km).

The late 1990s and the early 2000s saw a large number of evictions of slum residents in Delhi on the pretext of land being required for infrastructure projects associated with the Commonwealth Games (Dupont 2011). Though the evictions were to be relocated to resettlement colonies, many were found to be ineligible for this (Dupont 2008). Any slum surveys that may have been carried out during this period would have included those whose residents were to be evicted and relocated. However, no systematic survey data on the evictions is available (Bhan and Shivanand 2013). The only official data for this period reveals 217 evictions of residents took place from various JJC sites, followed by relocation (Dupont 2008). However, this data does not capture entire JJCs that may have been evicted without any resettlement (Bhan and Shivanand 2013). Even at the eviction sites where surveys were carried out, there were multiple complaints that the surveying had been inadequate and that the data underrepresented the residents because the surveyors had arrived when they were away at work. These evictions and relocations understandably altered the data on JJCs in Delhi. By 2001, according to the CDP, the number of JJCs had considerably declined to 728, with 4,29,662 jhuggi households and a population of 21,48,310 in an area of 650.2 acres (2.63 sq km). Thereafter, for nearly a decade, there was no new, updated data on JJCs in Delhi released by official sources (Dupont 2008).

**Definitions of Slums in Delhi**

Policy and planning documents for Delhi refer to two categories of slum-like areas—slum designated areas (SDAs) and JJCs. SDAs have been notified under the most prominent legislation on the governance of slum-like settlements in a union territory, which Delhi was until 1992—the 1956 Slum Areas (Improvement and Clearance) Act. This Act allowed for areas to be notified as slums. The entire area of the walled city and its extension have been notified as slum areas. Once notified, an SDA is guaranteed basic services and due procedure and notice before eviction. The last settlement was notified as a “slum” in 1994 (Bhan 2013), more than two decades ago.

While notification has not taken place, slum-like areas continue to exist and grow across Delhi. These remaining non-notified slums are called JJCs, or more generally, squatter settlements. While SDAs are governed by the 1956 Act, the JJCs are governed by the 2010 DUSIB Act, which established the DUSIB as an agency of the GNCTD. The DUSIB replaced the Slum and JJ Department of the MCD.

The DUSIB Act defines “jhuggi jhopri bastis” as

Any group of jhuggis which the DUSIB may, by notification, declare as a jhuggi jhopri basti in accordance with the following factors, namely: (i) the group of jhuggis is unfit for human habitation; (ii) it, by reason of dilapidation, overcrowding, faulty arrangement and design of such jhuggis, narrowness or faulty arrangement of streets, lack of ventilation, light or sanitation facilities, or any combination of these factors, is detrimental to safety, health or hygiene; and (iii) it is inhabited at least by fifty households as existing on 31st March, 2002.4

This definition reveals that the DUSIB has the power to notify JJCs after identifying them. However, the DUSIB has, till date, not notified a single JJC.5 In this context, surveying is even more important because the DUSIB uses such data to identify JJCs in which development can be undertaken. While notification is necessary to bring JJCs within the ambit of the DUSIB Act, the DUSIB has carried out works in settlements, replacing the notification requirement with a surveying procedure.

In addition to the power to notify, the DUSIB Act empowers the board with the authority to survey any JJC to determine its population as well as a range of health, sanitation, and education indicators. A comparison of the DUSIB Act with slum legislation in other Indian states reveals that the power to survey is a unique one. This power is quite broad, including, in the board’s purview, “any other matter which may appear necessary to it to enable it to perform its functions under this Act” (Section 9.1). This provision in the DUSIB Act is not only the first of its kind, but also very significant in Delhi where land on which JJCs stand are owned by more than 15 public agencies.6 The DUSIB has conducted two types of surveys—surveys at “priority JJCs” selected for rehabilitation, and a socio-economic survey in all JJCs.7

**Surveys before Rehabilitation**

These surveys are carried out at JJCs selected for rehabilitation by the DUSIB, and the process for them is detailed in guidelines released by the GNCTD in 2013.

They are jointly conducted by the sociology division of the DUSIB and the landowning agency on whose land the JJC is located. The process is to be initiated by a notice to the residents at least four weeks before the survey (GNCTD 2013). During the joint survey, all residents (whether “owners” or renters) occupying jhuggis in a JJC are to be enumerated, and given 21 days to submit their identity and residence documents to prove their eligibility for rehabilitation. Further, in case a “genuine” household is left out, it may be considered at the discretion of the chief executive officer (CEO) of the DUSIB.

While this appears to be a fair process, the final step of communicating the survey results to the residents is not explicitly included. The survey list, including decisions on eligibility, would have to be communicated to the community, so that they can vet it, and engage with the authorities to redress grievances, if any.

The DUSIB had previously put up lists of eligible and ineligible JJC residents on its website and also displayed them in the
JJC concerned, including reportedly publicising them by beating
Drums (GNCTD 2012a). A second opportunity was even
given to residents who were surveyed but either could not fill
forms or were declared ineligible (GNCTD 2012a). While the
DUSIB did so, the DDA, which owns the land on which more
than 50% of the JJC are located, was not keen on doing it until
recently (Dupont et al 2014).8 This happened only after several
applications were filed by residents under the Right to Informa-
tion (RTI) Act (Box 1).

Box 1: Confusing Official Numbers on Residents at Kathputli Colony, Delhi
Kathputli Colony, a JJ in central-west Delhi, is the site for the city’s first-in-
situ rehabilitation project by the DDA. Even as residents were moving out of the colony
into a transit camp, there was no real estimate of how many people were eligible for
the economically weaker section (EWS) flats that are to be constructed where the
colony now stands.

The number of units in the transit camp was decided before all the surveys were
completed. The first survey of the colony, conducted by the DDA in 2010–11, indicated
that 2,754 families were eligible. The agreement between the private developer and
the DDA stated that 2,800 EWS flats were to be built. Accordingly, 2,800 units
were also built for the transit camp. The list of eligible households released on 1 February
2014 by the DDA, after more than two years of pleas from residents under the RTI Act,
had 2,641 households, with the caveat “original documents to be verified at the time of
shifting.” As many residents pointed out, there was no mention which document was
considered as proof, leaving the number uncertain and liable to reduction.

An interview with a DDA official at the end of February 2014 indicated that there was
another list of 400 households, which “could not be verified” as they were locked or
may have been used for commercial activities. A number that a key representative of
the community as well as housing rights activists often quote, based on a community
survey, is 3,200 households. Another representative of the colony said the number
could easily be 3,500 households. It can be safely assumed that these are only “eligible
residents,” which usually excludes tenants who do not have the documents required to
establish eligibility, because the DUSIB had estimated the number of households at
Kathputli Colony to be 5,300 in 2011. Incredibly, the DUSIB’s 2014 data (presumably
based on its 2012 survey) states that the number of jhuggis has dramatically fallen
to 2,539.

The Central Information Commission has ruled that in keeping
with Section 4 of the RTI Act, agencies have to disclose de-
tails about slums and JJC being rehabilitated, the rehabili-
tation scheme, and the policies to do with resettlement. These
include details of the household-wise survey conducted; area-
wise and beneficiary-wise details of plots allotted to different
beneficiaries; area-wise details of vacant plots; policies related
to allotment of plots/flats to slum dwellers and policies related
to the transfer of plots/flats allotted to slum dwellers, if any;
eligibility criteria for persons who can apply under different
schemes; and action that may be taken against illegal transfer
of plots/flats (GoI 2010).

Socio-economic Survey
In 2012, the DUSIB conducted a house-to-house socio-economic
survey of JJC, which was called the “Slum Survey 2012.” The
DUSIB released the Request for Proposal (RFP) calling in inter-
ested agencies to conduct the survey in April 2012. The main
objective was “to assess number of people and households in
approximately 652 JJ settlements/JJCs with documents on
their status and eligibility for resettlement/in-situ develop-
ment programme” (GNCTD 2012b).9 At the time, the DUSIB
estimated that these settlements had a population between
200,000 and 250,000 who would have to be surveyed. An im-
portant line in the RFP said, “If during the survey, some addi-
tional JJ clusters are found beyond 652, the same would be
also included” (GNCTD 2012b).

Four private agencies were selected by the DUSIB to carry out
the socio-economic survey in August 2012.10 The survey was to
be fully completed (from pre-survey preparation to the final
report) within four months, that is, by the end of 2012 (GNCTD
2012b). The questionnaire gives a clear idea of the data that
was to be collected.11 It includes questions on households and
on the settlement. The household part collected data on each
household member’s gender, marital status, age, and details
regarding their education, livelihood, and migration.12 In addi-
tion, details on the voter ID card and ration card of the head
of household were to be recorded, as were details on the building
material used to build the jhuggi, the basic facilities in it, and
the assets of the household. The settlement-level part collected
data on the JJ such as name of the pradhan (local leader), its
physical features, and infrastructure.13 The questionnaire
was well designed, covering physical features, infrastructure, and
the livelihood aspects of JJCs. However, given that it was
administered by four different agencies across Delhi, it is
unclear whether there was any training to ensure that it would
be administered in the same manner.

In July 2014, a top official of the DUSIB informed us that “the
survey had been completed but the verification process could
not be done on time.” At the time, a sample survey for verification
was being conducted and a set of guidelines were to be formu-
lated before engaging an agency to carry out the task in “two or
three months.”14 Since this was more than a year after the sur-
vey, the question is how much of a change in data would be ac-
tceptable before the main data itself would have to be changed.

Given that the objective of both types of surveys undertaken
by the DUSIB was to determine eligibility for slum rehabilita-
tion, their results are expected to lead to dramatic changes in
the lives of the residents of JJCs. In the next section of this
paper, we analyse the results of the 2012 socio-economic
survey of JJCs in Delhi and its potential use.

Data on JJCs in Delhi
The DUSIB released a list of 685 JJCs in Delhi in 2011. The data
on the number of jhuggis and the area of JJCs was not based on
a field survey (Zimmer 2011; Dupont 2013). Instead, as a top
official of the DUSIB stated, the “population figures [in the 2011
list] were based on guesses.”15 Three years later, in March
2014, the DUSIB released another list of JJCs.16 A few months
later, this was replaced by another list.17 Curiously, there is no
date on this most recent list and the DUSIB website says, “The data
is tentative and is in the process of being verified.” The 2014
lists, we understand, are based on the socio-economic survey or
the Slum Survey 2012. Though these are referred to as merely
“lists” by the DUSIB, they contain data on various parameters
such as the number of jhuggis, the area, the land-owning agency,
and most recently, data on their “tenability.” What follows are
observations from a comparison of these different rounds of data.

Changes in Numbers of Jhuggis and Areas of JJCs
A comparison of the data on Delhi’s JJCs from 2011 and 2014
reveals large changes in the numbers of jhuggis in various JJCs,
and in their areas. While minor changes in slum populations
are expected and understandable, large changes are difficult to comprehend.

At an aggregate level, the 2011 list had 685 JJC in Delhi and this went up to 699 unique JJC in the March 2014 list. It has fallen to 672 JJC in the most recent list. As of 2011, the number of jhuggis across Delhi was estimated to be 4,18,282. This decreased to 2,95,859 by March 2014, but has increased to 3,04,188 jhuggis in the most recent list. This, in effect, means that the number of jhuggis declined by 1,14,094, a little more than 27% between 2011 and 2014. If the data on numbers is compared, there are some very large variations.18

Of the 659 JJC for which data is available on both the lists, there was a decline in the number of jhuggis in 391 and an increase in 201, while it remained constant in 67. The decreases range from 1 to 5,091; in percentage terms, from -0.42% to -100%.19

Table 2 shows the number of JJC and the change in their number of jhuggis.

<table>
<thead>
<tr>
<th>% Change in Number of Jhuggis</th>
<th>Number of Jhuggis</th>
</tr>
</thead>
<tbody>
<tr>
<td>-100% to -50%</td>
<td>142</td>
</tr>
<tr>
<td>-50% to -40%</td>
<td>52</td>
</tr>
<tr>
<td>-40% to -30%</td>
<td>47</td>
</tr>
<tr>
<td>-30% to -20%</td>
<td>45</td>
</tr>
<tr>
<td>-20% to -10%</td>
<td>55</td>
</tr>
<tr>
<td>-10% to 0%</td>
<td>50</td>
</tr>
<tr>
<td>0%</td>
<td>67</td>
</tr>
<tr>
<td>Increase</td>
<td>201</td>
</tr>
</tbody>
</table>

This is a clear instance where the data on jhuggis is in Table 3. The data reveals that large changes occurred in the area of JJC too. Overall, in 2011, JJC occupied a little over 7 sq km of land. This increased to a little over 9 sq km in the March 2014 list and then decreased to 8.85 sq km in the most recent list. Of 659 JJC for which this data is available on both lists, 223 experienced a decrease in their area, whereas 435 experienced an increase, and one JJC experienced neither. Of those that experienced a decrease, there were 88 where the area in 2014 was less than half of what it was in 2011. The number of JJC by extent of decrease in area and the net change in the number of jhuggis is in Table 3.

Of the JJC whose area increased from 2011 to 2014, there were 108 whose area had more than doubled, but there was a reduction in the number of jhuggis in some of them. The details are in Table 4.

Inconsistencies in the 2014 Data

The 2014 data appears to have some glaring inconsistencies that call for rectification. It has a column with remarks where the number of “jhuggis as per field staff” is given. Such remarks are available for 28 JJC. If we compare the numbers in this column with the number of jhuggis in the corresponding column, some huge variations are seen. Overall, the number of jhuggis in these 28 JJC is 16,560, but the total based on the number of “jhuggis as per field staff” is more than double this at 34,078. This difference of 17,518 jhuggis is difficult to understand. Is the DUSIB acknowledging that its numbers are very different from the data according to the field staff? It remains unclear which is more credible and should be considered more accurate. Here, a few cases can be highlighted. In one JJC, the DUSIB’s number of jhuggis is 1,775, whereas it is 4,000 as per the field staff—a difference of 2,225 jhuggis. Similarly, in another JJC, the DUSIB’s number of jhuggis is 783, whereas it is 3,000 as per the field staff—a difference of 2,217 jhuggis.

For the first time in the history of slum surveys in Delhi, the DUSIB released a map with its March 2014 list.20 Each JJC is marked on this map and by clicking on a JJC, details such as the number of jhuggis, the landowning agency, and the area appear. While the March 2014 list is no longer available on the DUSIB’s website, the map is still there and the data that appears is from the March 2014 list, not the most recent list. This means that for the 30 JJC in which the number of jhuggis changed in the most recent list, and for the 12 JJC in which the area changed, the old data continues to accompany the map. For 14 of the 30 JJC, the March 2014 list said, “No jhuggis found.” For these JJC, the numbers of jhuggis in the most recent 2014 list are the same as those in the 2011 list. It is unclear whether the numbers have actually remained the same, or whether they have not been updated and the old 2011 data has been used instead.

Analysis of Data on ‘Tenability’

The lists released in 2014 have information on the “tenability” of the listed JJC. Each JJC is classified as tenable or non-tenable. We analysed the data on tenability from the most recent list. Overall, 477 of the 672 JJC (71%) are found to be “non-tenable” and the remaining 195 “tenable.” Though the exact definition of “tenability” is not provided, from definitions in Ray documents, it is clear that when a JJC is found to be tenable, its residents do not have to be relocated because of a safety hazard or incorrect land use (GoI 2013b). This is a clear instance where the data on

Table 2: Percentage Changes in Number of Jhuggis in JJC in Delhi, 2011 to 2014

<table>
<thead>
<tr>
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<tbody>
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<td>55</td>
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<td>-10% to 0%</td>
<td>50</td>
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<tr>
<td>0%</td>
<td>67</td>
</tr>
<tr>
<td>Increase</td>
<td>201</td>
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</table>

Table 3: Percentages Decreases in Areas of JJC in Delhi, 2011 to 2014

<table>
<thead>
<tr>
<th>Change in Area of JJC</th>
<th>Number of JJC</th>
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<tbody>
<tr>
<td>-100% to -50%</td>
<td>88</td>
</tr>
<tr>
<td>-50% to -40%</td>
<td>20</td>
</tr>
<tr>
<td>-40% to -30%</td>
<td>23</td>
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<tr>
<td>-30% to -20%</td>
<td>21</td>
</tr>
<tr>
<td>-20% to -10%</td>
<td>34</td>
</tr>
<tr>
<td>-10% to 0%</td>
<td>37</td>
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Table 4: Percentage Increases in Areas of JJC in Delhi, 2011 to 2014

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<thead>
<tr>
<th>Change in Area of JJC</th>
<th>Number of JJC</th>
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<tr>
<td>0% to 10%</td>
<td>44</td>
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<td>10% to 20%</td>
<td>52</td>
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<td>20% to 30%</td>
<td>48</td>
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<td>30% to 40%</td>
<td>56</td>
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<td>40% to 50%</td>
<td>42</td>
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<tr>
<td>50% to 100%</td>
<td>85</td>
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<tr>
<td>&gt; 100%</td>
<td>108</td>
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Table 5: Non-Tenable JJC in Delhi, 2014

<table>
<thead>
<tr>
<th>Non-tenable JJC</th>
<th>On Road Bern</th>
<th>Nalla</th>
<th>Forest Area</th>
<th>ASI Prohibition</th>
<th>ASI Regulation</th>
<th>Flood Prone</th>
<th>Gardens in Parks</th>
<th>High-voltage Line</th>
<th>Dumping Ground</th>
<th>Flyover Bridge</th>
<th>Railway Zone</th>
<th>Steep Slope</th>
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<td></td>
</tr>
<tr>
<td>Number of JJC</td>
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<td>3</td>
<td>26</td>
<td>19</td>
<td>44</td>
<td>20</td>
<td>130</td>
<td>75</td>
<td>1</td>
<td>6</td>
<td>41</td>
<td>87</td>
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<tr>
<td>% of all JCC</td>
<td>11.16</td>
<td>0.45</td>
<td>0.36</td>
<td>0.28</td>
<td>0.64</td>
<td>0.30</td>
<td>0.19</td>
<td>0.15</td>
<td>0.08</td>
<td>0.02</td>
<td>0.04</td>
<td>0.87</td>
</tr>
<tr>
<td>Number of jhuggis</td>
<td>17,759</td>
<td>701</td>
<td>22,332</td>
<td>4,902</td>
<td>12,328</td>
<td>29,391</td>
<td>82,531</td>
<td>4,392</td>
<td>124</td>
<td>15,588</td>
<td>25,146</td>
<td>57,385</td>
</tr>
<tr>
<td>% of all jhuggis</td>
<td>5.84</td>
<td>0.23</td>
<td>7.28</td>
<td>1.61</td>
<td>4.05</td>
<td>9.66</td>
<td>27.13</td>
<td>1.62</td>
<td>0.04</td>
<td>5.12</td>
<td>8.27</td>
<td>18.86</td>
</tr>
</tbody>
</table>
“tenability” has been collected after the policy guidelines were issued, and this data will be key to deciding the mode of rehabilitation. This, in turn, will significantly affect the lives of residents in those JJC\(S\) classified as non-tenable (Table 5, p 77).

The analysis shows that 130 JJC\(S\), with a little over 27% of the jhuggis in Delhi, are on land demarcated for gardens or parks, which is one of the reasons they are classified as non-tenable. Further, 87 JJC\(S\) on land in railway zones (99% of jhuggis) and 75 on road berms (65% of jhuggis) are deemed “non-tenable.”

There are 108 JJC\(S\) that have been classified as non-tenable even though they are neither on land where there might be a safety hazard (such as a high-voltage electric line or a steep slope) nor on land demarcated for a different use according to the master plan (such as for gardens or parks, a flyover or a bridge). A closer look reveals that these JJC\(S\) have been classified so because their area is less than 2,000 square metres. This criterion of a size cut-off for determining “tenability” is unique. While it has been mentioned as the minimum plot size for in-situ upgrading or rehabilitation projects in the Master Plan of Delhi 2021 (DDA 2007: Section 4.2.3.4), it is not mentioned in other policy documents, including RAY documents.

The definition of “tenability” that seems to have been followed by the DUSIB appears to be a strict one where three criteria are considered—safety hazard, land demarcated for a non-residential use, and an area less than 2,000 sq m. JJC\(S\) satisfying any one of these have been classified as non-tenable, making 71% of JJC\(S\) in Delhi (having more than 65% of jhuggis) fall in that category. In this context, it is useful to consider a categorisation suggested by the RAY. According to this, slums should at first be classified as those facing “environmental vulnerability” (safety hazards) and those with “non-confirming uses” (not following the land use in the applicable master plan). The slums with non-confirming uses are to be classified as “semi-tenable” (goi 2013a). A review is suggested for these where a decision will be taken on whether the land use can be changed to residential to accommodate the slum. If not, the slum is moved to the non-tenable category. The way the classification has been done in Delhi, it appears that all the non-tenable 477 JJC\(S\) have to be relocated, without considering a possible change in land use to accommodate the residents.

The most recent list also has data on the land use plan of the Master Plan 2021 for the sites on which 672 JJC\(S\) are located. Of the 477 non-tenable JJC\(S\), 52 are on land for residential use, though half of them are on land demarcated for gardens or parks. For these JJC\(S\), the master plan could possibly be revised to include the settlements within the larger residential areas they already are a part of.

Across the lists, the ownership pattern of the land on which JJC\(S\) are situated has remained the same. A little more than two-thirds of them are on land belonging to departments or agencies of the union government. Less than a quarter are on land that belongs to agencies of the state government (GNCTD) and less than 10% on land that belongs to the local government (New Delhi Municipal Council or one of the Municipal Corporations of Delhi). We know that the DUSIB is the “nodal agency” for rehabilitation of the JJC\(S\) on lands that belong to the state government or its agencies, and to the local governments or their agencies (GNCTD 2013). This responsibility, coupled with the data on tenability of these JJC\(S\), could allow the DUSIB to plan more innovatively for them. A change in land use or even in land ownership may be contemplated to make the existing JJC tenable. If in-situ upgrading is possible, services can be planned while considering the data from the recent survey. If relocation is the only alternative, then options could be explored within a few kilometres, perhaps, within the same assembly constituency.

**Conclusions**

With an increased policy emphasis on slum surveys, there is a need to very closely analyse the way in which these surveys are carried out, the data that are being collected, and the purposes for which they might be used. A review of the legal frameworks on slum surveying and the specific case of Delhi reveal that there is much variation in the process of survey data collection. For instance, the RAY guidelines require that the data be validated by residents. This is to be treated as the last step of the survey process and first step of micro planning for the settlement concerned. However, except for the SRA in Mumbai, no other slum board or related law requires this step.

The purposes of slum surveys and the use of the data thus collected have to be thought through. Surveys that determine the mode of rehabilitation of a slum have life-changing implications for their residents, and survey processes have to be designed to be accurate and participative. In other words, the survey will have to be designed to make the resulting data “fit for purpose.” The surveying agencies have to be aware of the far-reaching impact that the data could have, dissuading them from guesstimates, or even estimates.

Ironically, surveying puts JJC on the map in Delhi. Though surveying enables agencies to identify potential areas for redevelopment, paving the way for some displacement, it confers on residents, at least on paper, access to alternative housing in the event of eviction. JJC\(S\) in Delhi have experienced three waves of relocation—from the 1960s to the late 2000s. Due to this history and the absence of any long-term engagement of state agencies with JJC\(S\), residents believe that the state only surveys them when it wants to evict them. However, with the power to survey, the power to notify, and the responsibility of planning schemes for JJC\(S\) all vested in the DUSIB, it has an opportunity to use the slum survey data to initiate a long-term engagement with JJC residents. Specifically, the tenability status of a JJC, an increasingly important aspect of surveying, will determine what mode of slum redevelopment will be followed—in-situ redevelopment or relocation. Therefore, surveying is a tool by which many JCC residents could potentially gain access to better housing and basic services.
NOTES
1 See the KSDB website, http://housing.kar.nic.in/DOH_KSDB_page.htm
3 Popularly known as Old Delhi, it refers to what is now north of the Shahjahanabad. Here, about 1,00,000 “kutras” or properties with 10,000,000 families have been identified (Sehgal 2009).
4 Further, the definition affirms “a jhuggi” as follows: “A structure whether temporary or pucca, of whatever material made, with the following characteristics, namely: (i) it is built for residential purpose; (ii) its location is not in conformity with the land use of the Delhi Master Plan; (iii) it is not duly authorised by the local authority having jurisdiction; and (iv) it is included in a jhuggi / jhopdi basti as declared by the Board, as notified.” See Chapter 3, DUSIB Act, 2010.
5 Interview with a top DUSIB official, 21 July 2014.
6 List of JJC s for 2014, DUSIB.
7 Interview with a top DUSIB official, 21 July 2014.
8 According to the DUSIB’s 2014 list, 352 of the 591 JJCs in Delhi are on land owned by the DDA.
9 More broadly, the RFP said, “DUSIB is implementing a three-pronged strategy of in-situ upgrading, redevelopment and rehabilitation/ relocation of Jhuggi Jhopdis in a phased manner. The task is stupendous and requires planning and management of a very high order and proper formulation and implementation. The work of planning and development can be fruitful with reasonably accurate data and information about the present status in the J JCs in Delhi. DUSIB intends to carry out a survey to collect data of households in J J clusters and to establish benchmarks” (GNGTD 2012b).
10 The four private agencies were GFK, RDL, Webcos, and SPYM. Interview with a top DUSIB official, 21 July 2014.
12 Livelihood including months worked in the previous year, days worked in the previous month, class of worker, skill subset, distance to the nearest road, bus stops, and metro. Infrastructure including water lines, dispensary/ health clinics, sewerage lines, community toilets, parks and playgrounds, schools, community centres, ration shops, police station, and post office.
13 For example, JJC code no 571 at Kusumpur Pahari, according to the lists, had 10,000 jhuggis in 2011 and only 4,909 in 2014, reportedly experiencing the largest decrease in jhuggis, of 5,091. We have been studying this site as part of our larger project at CPR (Cities of Delhi), but neither did we observe this large decrease nor did the residents report it.
14 There are 20 JJCs for which the decrease is 100%. All these JJCs have been either clubbed or merged with other JJCs and hence, do not exist any longer as independent JJCs in the most recent list of 2014.
15 The map is available at https://mapsengine.google.com/1695/16950102227417821939300 4153570433452/-4/mapview?authuser=0
21 Interview with a top DUSIB official on 21 July 2014.
REFERENCES

Sameeksha Trust Books

Village Society
Edited by Surinder S Jodhka
The village is an important idea in the history of post-Independence India. A collection of articles that covers various features of village society: caste and community, land and labour, migration, discrimination and use of common property resources.

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