Citizenship, Inequality, and Urban Governance: A Study of Indian Cities

About the Project

The Citizenship, Inequality, and Urban Governance (CIUG) Project is a collaborative project of academics in India and at Brown University. The project aims to systematically collect data on urban India, focusing in particular on assessing the quality of basic services and how urban Indian citizens use their civil, political, and social rights in cities.

About the Saxena Center for Contemporary South Asia

Based at the Watson Institute for International and Public Affairs at Brown University, the Saxena Center for Contemporary South Asia (CCSA) supports faculty, graduate, and undergraduate research, as well as teaching on the region, and is home to the South Asian Studies concentration. The Center promotes research, teaching, and public engagement on modern South Asia's key issues in an interdisciplinary framework and in a historically and culturally grounded manner.

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Executive Summary

In this study, we probe in detail two kinds of contemporary urban experience in India: (a) how India's urban citizens relate to the state and how the state provides basic public services to them; and (b) how citizens interact with one another, whether their social interactions extend beyond their own caste and religious communities, and how they view issues of citizen equality and freedom. The data reported here was collected from 14 cities covering every region of India and ranging from India's largest cities to a sample of its smaller cities. The data was collected through focus groups and key respondent interviews conducted in all 14 cities as well as a questionnaire that was administered to 31,803 randomly sampled households.

Along the dimensions above, here is what this study has discovered.

1. There is significant variation in the quality of basic services delivered across cities. Bhavnagar, Kochi and Vadodara had the best services, and Chennai and Mumbai had the worst.

2. The unevenness captured above, first of all, covers availability of water. In many cities, more than half the households get water for 2 hours or less a day. This is compounded by the fact that in some cities large percentages of citizens only have buckets to rely on for storing water.

3. The quality of sanitation also varies substantially by city. While Kochi, Vadodara, Ahmedabad, and Delhi provide good sanitation to the vast majority of their populations, a majority of households in Mumbai have compromised sanitation.

4. In explaining the unequal distribution of services within cities, we found that the primary determinant was housing type, which is our indicator for class. Indeed, not only does class have the strongest effects on basic service delivery, but it also has the highest explanatory power across all our models. Class determines the availability of public services in India's cities more than any other variable.

5. Long ago, Ambedkar had suggested that cities were going to be a site of liberation from the fixed and corrosive quality of **caste** identities in villages. Though we have not compared villages and cities in this project and thus we can't precisely estimate how much weaker, compared to rural India, the impact of caste on group welfare in urban settings is, we can certainly say that the Dalit and Adivasi households, with very isolated exceptions, are systematically underserved by public and infrastructural services. Ambedkar's insight may well turn out to be true in the longer run, but if his point is only about Dalits, then the fact that Dalits are badly served in cities does not fully affirm his argument.

6. However, if we read Ambedkar more broadly, meaning that he is speaking of Dalits as well as lower castes in general, then he is partially vindicated. This is because in some cities, the Other Backward Castes (OBCs) do as well as the Upper or General Castes (GCs), and sometimes even better.

7. In another sense, urban India seems to be partly deviating from Ambedkar's projections – at least as of now, if not in the long run. With very few exceptions, social life in urban India is still heavily governed by caste. Social ties, as seen at least via friendships, are marked by strong bonding (*intra*-caste togetherness), as opposed to bridging (*inter*-caste networks). Again, since this project does not compare urban and rural India, we are unable to say whether urban bonding is weaker than rural bonding. However, it is clear that so long we are confined to urban India, the prevalence of bonding ties outweighs bridging ties. In our project, only Chennai and Kochi are partial exceptions to this.

8. Scheduled Castes (SCs) and Scheduled Tribes (STs), on average, receive lower levels of basic services than Other Backward Castes (OBCs) and Upper or General Castes (GCs), but the effect has more to do with their class position than their caste status. That said, patterns of housing segregation are highly pronounced for SCs and STs. In a majority of cities they are dramatically over-represented in informal shacks and significantly under-represented in middle class and higher class housing. It is notable that in Bhavnagar, Mumbai and Kochi, there is far less caste-based housing segregation.

9. As for **religion** as a factor in urban life, Muslims are generally underserved by public services and infrastructure. However, if we disaggregate this overall result by city, we find that in some cities (for example, in Mumbai, Lucknow, Bhubaneswar, Jalandhar and Ajmer), this is not true.

10. Housing segregation on religious lines is not uniform across cities. Although Muslims are not concentrated in shacks (HT1) as much as the SC and STs are, they are significantly under-represented in upper class housing. The pattern also varies across cities. In Ahmedabad, Ajmer, Bhavnagar, Bhubaneswar, Hyderabad, Lucknow, Mumbai, Vadodara, Jalandhar and Kolkata, Muslims are more likely to live in informal slums (HT2) than Hindus. But the pattern is *reversed* in Chennai, Kochi, Bhopal and quite dramatically so in Delhi, where Hindus are more likely to live in HT1 and HT2 than Muslims.

11. As far as Muslim participation in political and civic life is concerned, we observe that compared to the Hindus, their participation is systematically greater. Contrary to the literature that says Muslims participate less than Hindus in the polity and civil society, we find that not be true.

12. On the whole, very few citizens have friends outside their religious community. Most friendships are of a bonding nature. Smaller cities do tend to deviate from this trend, but among the larger cities, only Chennai does. One might add that this is also partly true of inter-caste bridging ties. Except for Jalandhar, the other smaller cities have greater bridging ties and Chennai, yet again, is the only big city, where such bridging caste networks are substantial. Remarkably, Delhi is among the most insular cities for friendships, both in caste and religious terms.

13. Does **city size** matter? We have already spoken about the greater bridging networks of smaller cities. In addition, unsurprisingly, the bigger the size of the city, the greater the level of informality. But we should also note that even though shacks are in lower

proportions in small cities, the adverse effect of informality on public service provision is greater. In short, the spatial reach of informality is narrower in smaller cities, but the negative effect is greater than in larger cities.

14. We also want to draw attention to a relatively new and important political phenomenon in Indian cities – namely, the role of the **municipal corporator or councillor**. Across our cities, the municipal corporator is viewed as the most important person for facilitating public service provision in the neighbourhoods. The exceptions are Vadodara and Hyderabad, where the concerned government office is viewed as more important. (In Chennai, too, the corporator is not important. But this may well be because the municipal government was in a state of suspension during the time of our survey.) Everywhere else, the corporator has emerged as the most important facilitator of public services.

15. Across our cities, the municipal corporators are also mostly viewed as serving the interests of all communities ("constituency service") as opposed serving their own community ("group patronage") or serving their personal interests through quid pro quos ("clientelism"). Delhi, Chennai and Bhavnagar are partial exceptions. We also find that with the exception of Bhavnagar, as the city size decreases, the favourable view of the corporator increases.

16. Let us now turn to **migrants** arriving in cities. In almost all cities, most of the recent migrants tend to settle in informal settlements (shacks and slums). Migrants who have been in the city for longer tend to be in higher housing types. Kochi seems to be the only exception. This is perhaps because informal settlements in Kochi are, in and of themselves, significantly fewer.

17. On the citizen-felt **discrimination**, we have an important finding. Our respondents say that the poorer citizens are treated worse than the richer citizens by the police. Class turns out to be a much greater determinant of police conduct than religion or caste. On the greater salience of class, there are no exceptions across our cities.

18. If we compare our models for public service delivery and infrastructure (BSDII) on one hand and citizen participation (CPI) on the other, we find that on the whole, socio-structural variables – caste, religion, class – are better able to explain BSDII than CPI. As variables, caste, class and religion go quite far in explaining the provision of public services and infrastructure. One might ask why socio-structural variables (class, caste, religion) do not matter much for citizen participation. Perhaps the reason is that unlike the basic services and infrastructure, *participation is action based and highly contingent.* Such actions may well be linked to some city-specific contextual factors, which vary from one place to another and are likely to have affected our participation results in complex ways. These contextual factors require deeper probes into a few cities, as opposed to a comparative survey of many cities.

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Project Overview

One of the greatest challenges that India faces in the 21st century is the governance of its cities. Primarily a rural nation thus far, India will be increasingly urban in the coming years and decades. Cities are, moreover, widely viewed as sites of innovation, opportunity, and growth. However, their full potential can only be achieved if they are well-governed. In any democracy, and especially in one as diverse as India's, the quality of governance is inextricably tied to whether and how citizens exercise their rights. A self-aware citizenry is more likely to produce better outcomes than an inert one.

With this understanding in mind, academics from Brown University and India formed a partnership and developed a research project exploring urban governance and citizenship. The project aims to gather systematic and robust data on the relationship between citizenship, basic services, and infrastructure delivery in cities across India.

Our first report was on Bengaluru (Bertorelli et al. 2014; Heller et al. 2023). We have since conducted research in fourteen other cities. These include six megacities (populations greater than four and a half million) - Delhi, Kolkata, Mumbai, Hyderabad, Ahmedabad, and Chennai; four mid-size cities (population between one and three million) - Vadodara, Bhopal and Lucknow, and four small sized cities (population less than 1 million) - Ajmer, Bhavnagar, Bhubaneswar, Jalandhar, and Kochi. This report provides a comprehensive comparative overview of our findings from these 14 cities. The findings are based on the team's extensive research, which included focus groups, key respondent interviews, and an extensive and comprehensive household survey, perhaps the first of its kind in urban India research

The results section of this report has two parts. The first part (Sections 3-7) describes the data through frequencies and cross-tabulations. Here, we identify broad patterns in how basic services and infrastructure, as well as citizenship practices, vary across key social and structural factors such as class, caste, and religious identity. The second part of the results (Section 8) examines variation in both basic services and infrastructure and citizenship practices using statistical modeling techniques.

But before we present the results, we start with a basic description of the project's motivation (Section 1), followed by how the project was methodologically designed (Section 2). Details beyond what we present in the main text, such as the survey questionnaire and the variable construction, are available in the Appendix.

1. Why Study Citizenship

Citizenship rights are at the heart of modern democracy. The rights conferred upon citizens have both intrinsic and instrumental value. Citizens may value their rights as a recognition of their fundamental dignity as individuals. Citizenship also empowers individuals to organize, exert a voice, demand accountability, and make substantive claims about the state. However, this idea of citizenship is contravened by social and institutional realities. Persistent material and status inequality means that citizens' actual, as opposed to legal, rights can be highly differentiated, with some groups or classes being much better positioned to use their rights. Institutional weaknesses mean that the law and government bureaucracies can treat citizens quite differently. A growing body of research has shown that the quality of citizenship varies not only across countries but also across sub-national entities and cities (O'Donnell 2004; Baiocchi et al. 2011). But what exactly does citizenship look like, and how can we assess it?

The classic theoretical statement on citizenship is Marshall's *Citizenship and Social Class*. Marshall sought to divide citizenship into three components: civil, political, and social. The civil component refers to individual freedoms, such as freedom of speech, religion, association, and the right to property, contracts, and justice. The courts were the main institutions concerned with this aspect of citizenship. The political component of citizenship encompassed franchise as well as the right to run for office. The local governments and legislatures were the principal institutional arenas for these rights. Marshall split the third social element of citizenship into two parts: (a) "the right to a modicum of economic welfare and security" and (b) "the right to share to the full in the social heritage and to live the life of a civilized being according to the standards prevailing in the society" (Marshall, 1950 & 1992). The so-called social services, especially (though not only) public provision of healthcare and education, were the institutions most closely associated with the third set of rights. This third aspect of citizenship, also called social citizenship, is tied to the rise of a welfare state.

It is noteworthy that Marshall conceptualized the problem of deprivation entirely in class terms. The economically poor had "the right to a modicum of economic welfare and security" and "the right to share to the full in the social heritage." If the state did not guarantee and allocate such rights through state-financed health, housing, and education schemes, markets would not provide them. Indeed, left unchecked, markets would deprive the poor of full citizenship. Markets might be consistent with political and civil citizenship, but they were certainly in conflict with social citizenship. The relative neglect of non-class forms of exclusion, which, as we shall see, play a big role in India, comes with some other limitations of the Marshallian model. Most notably, Marshall conflated *rights-as-status* with *rights-as-practice*. All citizens are presumed to have the basic rights and the capacity to exercise free will, associate as they choose, and vote for whom and what they prefer. Unlike Marshall, Somers (1993) argued that this conventional treatment wrongly equates the status of citizenship (a *bundle of rights*) with the practice of citizenship (*a set of*

practices and relationships). Formal rights matter, but formal rights must also be actionable. Somers goes on to argue that given the highly uneven rates of political participation and influence across social categories that persist in richer democracies (especially the United States), the notion of citizenship should always be viewed as contested. However, in the context of democracies in developing countries, where inequalities can be even higher and access to rights is also often circumscribed by social position and low overall literacy or compromised by the state's institutional weaknesses, the problem can become even more serious (Heller, 2000; Mahajan, 1999; Fox, 1994).

Which communities of India, defined in non-class terms, experience truncated citizenship? Given what we know from existing studies, Dalits[1] (Scheduled Castes, or SCs), Adivasis[2] (Scheduled Tribes, or STs), Muslims and women are some of the obvious candidates for investigation. Also relevant here is a well-known idea of B.R. Ambedkar, the principal architect of India's Constitution. He used to call the village a cesspool for Dalits and viewed the city as a site of potential emancipation. Is that true? Are cities sites where achievement and ability matter more than social origin? Or do caste inequalities and discrimination (as well as other social markers) persist in urban India, compromising citizenship? By definition, this question acquires significance in studying citizenship in urban India. We thus seek to go beyond Marshall and much of the contemporary literature on citizenship in two ways. First, Marshall concentrates on class deprivation; we include non-class forms of deprivation - caste, religion, and gender - as well. In the Indian context, these are important sources of social exclusion in their own right. Second, Marshall focuses on the legal availability of rights, not on how the legally enshrined rights are experienced on the ground. Our focus is less on the laws or rights in theory and more on the practices on the ground.

Echoing Somers (1993), as noted above, we argue that the formal nature of citizenship, rights-as-status or the legal codification of basic rights of citizenship, should be analytically distinguished from its efficacy (rights-as-practice), that is, the degree to which a citizen can effectively use their rights independently of their social position and without compromising their ability to speak and organize freely. There is no dispute as to the formal character of citizenship in India, at least with respect to basic civic and political rights. These are enshrined in the constitution, have been upheld by the courts and are the bread-and-butter of Indian democratic life. Social rights in the Marshallian sense - right to food and education, if not health - have only recently come into play as formal

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[1] "Dalit" is the term now used to describe what were historically referred to as "untouchable" castes. The term "scheduled caste" is the bureaucratic category. Because most readers familiar with India will be used to seeing data presented using the bureaucratic term, we use SC in reporting data but use Dalit elsewhere.

[2] "Adivasi" is the term used to describe populations in India that live outside the major religious groups and that elsewhere would be designated as indigenous. They are originally concentrated in hilly or forest-based areas. The bureaucratic term for them is ST (Scheduled Tribes), but the political term is Adivasi. Because most readers familiar with India will be used to seeing data presented using the bureaucratic term, we use ST in reporting data but use Adivasi elsewhere.

rights of citizenship, although the principle of being able to deploy civic and political rights to demand social rights has been well established for some time.

The effective dimension of citizenship is, in contrast, much less clear and, in fact, presents the central conceptual and empirical challenge of this study. How effectively do urban Indians use their rights to associate, vote, participate, and engage the state? There is certainly widespread recognition that India's citizenship is highly differentiated. Chatterjee's claim that the realm of civil society - the realm in which citizens use their rights - is largely the privileged domain of the middle classes and that the poor have only their electoral clout to work with has become a dominant argument in the literature (Chatterjee, 2006). Is Chatterjee right? Do the poor exercise only political, not civil, rights?

We argue that *effective citizenship* means essentially two things. First, it means being able to effectively participate in public life. This cannot merely be confined to voting but means enjoying the freedom to engage in public activities and mobilize and organize freely. Democratic citizenship isn't just about elections but also how citizens experience their day-to-day lives between elections. Second, effective citizenship means actually being able to claim and obtain public goods from the state. The welfare state in the Indian context remains poorly developed, yet the state does provide key services such as water, sanitation, housing, and transport that are critical to building the basic capabilities of citizens. Effective citizenship's participatory and substantive dimensions stand in a potentially mutually reinforcing relationship. More effective participatory citizenship can lead to better substantive provisioning of public services, which in turn enhances participatory capacity. A large body of research has documented the substantive impact of this demand-side of citizenship, linking more politically and civically engaged citizens with higher levels of welfare (Rueschemeyer et al. 1992; Esping-Anderson 1990; Putnam 1993; Baiocchi et al. 2011; Kruks-Wisner 2018).

This report focuses on basic services as a substantive goal and measure of effective citizenship for three reasons. First, either by law or by basic political pressure, all Indian cities are compelled to provide a modicum of basic services. In contrast to health and education, which are provided through a multiplicity of government agencies at different levels (local, state, central) and through different programs and allocations (e.g., specified subsidies or programs for specific groups), basic public services are generally provided by a single agency (municipal or state) and *in principle* on a universal basis. Second, access to basic services is critical to enhancing capabilities. Having clean and reliable water and sanitation, good transportation, and decent housing are not only directly supportive of better health and education, but they also allow urban citizens to make the most of the opportunities in cities. Conversely, rationing access to these basic amenities is arguably one of the most important basic sources of urban inequality, as witnessed by the perverse developmental effects of slums. Third, basic services are relatively easy to measure compared to

other social rights. In earlier work on Bengaluru, we have established a statistical relationship between our measures of citizenship and service delivery (Bertorelli et al., 2017).

2. Methods & Data Collection

We have followed the same nested research strategy for all cities studied in this project. In each city, we began with field visits by the team to conduct interviews with key respondents (e.g., city commissioners, corporators, heads of departments, and civil society activists). These primary materials were supplemented with secondary works dealing with the historical and contemporary accounts of urban governance in the selected cities. We also conducted 2-5 focus group discussions (FGDs) in each city, especially in shack settlements (shacks hereafter) and informal slums (as opposed to what are in government terminology called slums). We focused on shacks and informal slums because these are where the practice of citizenship and access to services are most compromised. FGDs were conducted in each city with different target groups. The group size in each FGD varied from 10 to 15 members. The FGDs were conducted with SC/ST women, Muslim women, and a mixed group of people, both male and female, typically from very low-income neighborhoods. We deliberately prioritized hearing directly from the most marginalized in urban India. In each city, we conducted at least one focus group with Dalits and another with Muslims.

The focus groups' goals were twofold. The first was to collect qualitative data on how citizens access services, how they engage with politicians and the state, how communities are organized, and how subaltern communities, in particular, understand their rights. The second was to use focus group responses to adapt and fine-tune our survey instrument to actual conditions and practices in these communities.

The third stage of research was a survey, which provides the bulk of the data reported here. Depending on the size of the city, the sample ranged from one to three thousand households. Our design and sampling strategy enables us to generate a representative sample of households within a city stratified along caste, religion, and class dimensions. We elaborate on the methods we employed to create a sampling frame, select households, and respondents from within households (including the training process) in detail in Appendix 2.

Before we present how the sample was drawn, we outline our measure of class as defined by housing types. Class is not always conceptualized this way. Let us explain why housing type is better than alternative measures.

2.1 Measuring Class by Housing Type (HT)

Measuring class is a notoriously difficult proposition. There are definitional and measurement problems. Though we collected data on household assets and occupational status, we decided that

our Housing Type (HT) measure is the most reliable measure of class (See Appendix 3 for additional details).

Conceptually, housing type conveys a very different material dimension of class than assets. Assets are, for the most part, procured on the market and directly reflect purchasing power — that is, income. By contrast, access to housing in India is driven by market forces but is also highly regulated and sometimes directly supplied by the state, as well as shaped by social networks. In addition to disposable income, housing type reflects one's location within formal and informal distribution networks, including access through state patronage, inherited position, social networks, etc. In this sense, "housing type" is a much noisier proxy for class but is more likely to capture the actual dynamics of class practices in an Indian city. It matters where and how one lives and the networks they are surrounded by, supported, or excluded from by the state.

Another key advantage of our HT variable is that it was not self-reported. Instead, after extensive field training, field surveyors were asked to classify every household in every polling part we sampled into one of five HTs. We confirmed a very robust record across surveyors of assigning classification from the pilots conducted in every city. The classifications were as follows:
HT 1: Informal shack settlement
HT 2: Informal slum settlement
HT 3: Lower middle-class housing
HT 4: Middle-class housing
HT 5: Upper-class housing

Detailed descriptions of each housing type and pictures showing examples of each classification are presented in Appendix 3. It is important to comment here on HT1 and HT2. The census definition of slums is disaggregated into three types: designated, recognized, and identified. These designations are bureaucratic, political, and inevitably somewhat arbitrary. This is because they depend on varying definitions and how officials subjectively evaluate the overall nature of a neighborhood. Critics Bhan and Jana (2013) argue that the definition of the census suffers from two problems. First, many small shack settlements are often not counted in the census because they don't meet a size threshold or have not been recognized. Second, many shacks or very poorly constructed houses that are located in non-slum neighborhoods are not counted as part of the slum population even though they may otherwise meet all the criteria for being slum-like. To correct this, our classifications are based on the housing type itself, not on the status of the neighborhood in which it is located (slum or other). Also, because of the problem of unseen or unnotified settlements, we created a booster sample of informal shack settlements. We classify both HT1 (shacks) and HT2 (slums) as "informal" to underscore the precarious nature of such housing. To simplify, we deploy the term "shacks" for HT1 and the term "informal slums" for HT2. We use the term "informal slum" to avoid confusing our category with the census categories of slums.

To reiterate, our categories of HT1 and HT2 refer to the *housing type*. They are both housing types that are clearly slum-like and categorized as such, depending on whether or not they are located in what the census designates as *slum*. We note two possible sources of difference between our classification system and that of the census. First, as already noted, between classifying the housing type rather than the neighborhood and having a booster sample for shacks, we believe we are capturing many slum-like households that the census misses or ignores. Second, and going in the opposite direction, our classification would not designate as slum-like (HT1 or HT2) the many houses that are of higher quality (HT3 and even HT4) but that are sometimes located in areas that have been designated as slums by the Census. An obvious example would be Old Delhi: the dense conditions and poor overall infrastructure have produced an official recognition of it as a slum, but many of the houses located there are of the same quality as houses in non-slum areas and more properly designated as lower middle class (HT3) or even middle class (HT4).

2.2 Household Survey

Developing a representative sample in Indian cities is a major challenge. First, there are no reliable baseline sampling frames from which to draw a representative sample. Second, the informal nature of many settlements in Indian cities poses the risk of undercounting certain populations, most notably those who live in informal shack settlements or other impermanent settings. Third, as with any sample, we run the risk of getting too few respondents for statistical analysis for groups that are only a small proportion of the total population (e.g., Adivasis). To address these challenges, we developed a sampling strategy that stratifies the sampling frame based on Muslims and SC/STs and generated an additional frame to include informal settlements using a spatial strategy.

2.3 Classifying and Sampling Polling Parts

To sample respondents for the survey, we first identified the Assembly Constituencies (ACs) in each city and obtained lists of all polling parts in the wards that fall within these ACs. We chose to work with polling parts because these are defined in all cities using the same methodology by the Election Commission of India. Furthermore, they can be geographically located through information and maps on the electoral list, or if not, a landmark within them can be identified, such as a polling station.

We stratified the list of ACs/wards and polling parts based on the population distribution of SC/STs and Muslims in order to ensure sufficient coverage of SC/STs and Muslims. SC/STs were identified using 2011 census data to identify wards with high SC/ST proportions. Since religion is not reported at the ward level in the census, high-proportion Muslim wards were identified through key respondent interviews. Using a "proportion to size" approach, we then included a proportion of these high SC/ST and high Muslim wards in the overall set of wards, from which we then

randomly selected between 29-94 polling parts (city and sample-size dependent). Each polling part tends to have 300-350 households and around 1000-1400 constituents.

2.4 Booster Sample

During the survey period, to boost the inclusion of citizens from lower socio-economic classes, we decided to add a series of booster polling parts to the sample (over and above the polling parts mentioned above). This was for all cities except Mumbai. We did not draw a booster sample for Mumbai as the sampling frame yielded a sufficient number of HT1 and 2. Areas with larger proportions of informal settlements, particularly informal shacks, were identified using local knowledge and Google Earth imagery (e.g., blue tarps were used as indicators).

2.5 Listing Buildings in Sampled Polling Parts

For each polling part, we used Google Maps to pin the polling station location and created an area map of a 100-meter radius around this pin. Every structure - from informal shacks to buildings with multiple units, temples, malls, etc. - in the area covered by the base map was counted, listed, and drawn onto the base map. Each *residential* building was assigned to a housing type (HT) category. Other buildings or landmarks, such as a temple or a mall, were listed as they were but not assigned an HT. For the full listing purpose, five categories of housing type were used: HT-1 (Informal shacks), HT-2 (Informal slums), HT-3 (Lower middle class), HT-4 (Middle class), and HT-5 (Upper-class housing). The field team physically visited and walked through the area, identifying and validating the information and classifying each structure into different HTs. The parameters used to decide on the housing type categories are outlined in Appendix 4, and for an example of the household listing for a polling part, see Appendix 5.

2.6 Sampling Buildings and Households

Once the total number of buildings was counted, listed, and given a housing type designation, a sampling interval was determined, and households were systematically sampled with a random start in each polling part. The sampling interval- to decide which building was to be selected- was calculated using the total number of buildings in the area map of the city and the total number of households to be sampled from those buildings (one per building) in that area.

Once the building was selected, the interviewer had to conduct one interview from that building (i.e., one respondent from one household). Interviewers followed a "right-hand rule" for multi-story or apartment buildings and started at the top floor of a block. From the point of entry, they approached the nearest apartment and moved clockwise.

2.7 Sampling Respondents

For each household, a single respondent who was 18 years or older and had lived in the city for at least a year was randomly selected. If an interview could not be obtained after three visits, an alternative respondent was identified through a protocol for household selection aligned with our sampling criteria. The survey instrument was digitized and available in English, Hindi, and the relevant state languages. Interviews lasted 45-60 minutes and were conducted by enumerators fluent in the relevant language and trained through workshops and piloting exercises by our field team.[3]

3. Basic Findings

3.1 Demography

We conducted our research and surveys in 14 cities, as shown in Table 3.1. These fall into three basic size categories. The first are six of India's eight megacities (population over 4.5 million as per census 2011): Ahmedabad, Delhi, Hyderabad, Kolkata, Mumbai and Chennai.[4] The second group consists of cities with populations between 1 and 3 million: Bhopal, Lucknow, and Vadodara. The third category consists of cities with populations below 1 million: Ajmer, Bhavnagar, Bhubaneswar, Jalandhar, and Kochi.

This is not a random sample of cities. Given limitations in how many cities we could sample, we felt that representation was better served by selecting cities in terms of key variables - such as population size (the large megacities, as well as smaller ones), regional representation (covering all regions of the nation), and covering a substantial proportion of minorities, Dalits as well as Adivasis wherever possible, rather than a random selection of cities. Throughout this report, we report findings from (i) individual cities, wherever relevant, and (ii) the grouping of cities in three different size categories. and (iii) from the overall larger groups of fourteen cities. While the findings are not statistically representative of all Indian cities, they capture a diverse range of urban

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[3] The enumerators in each city were trained in three rounds. The first round of training happened in January 2019 where city heads and managers were trained on the questionnaire and the field survey's nuances at a common location. They, in turn, trained their local field staff in their respective cities. The second round of training happened in early February 2019, when the project team traveled and trained the enumerators just before the pilot survey. The final round of training was done before the main survey commenced. Over 100 enumerators across fourteen cities were trained to conduct the listing and survey work.

[4] We also surveyed Bangalore as our first case in 2011. We have since significantly expanded and adapted the survey instrument. There are some important differences in how we measure some of our basic indexes after Bangalore, so we do not include them here. However, there are two published articles on Bangalore, see Bertorelli et al., 2017, and Heller et al., 2023.

settings. Our coverage is more extensive and representative of the megacities, given that we report data from six of India's eight most populous cities.[5]

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Table 3.1: Sample Cities by Size

Size	City	Population (2011)	Sample Size
Large	Ahmedabad	5,577,940	3,018
	Chennai	4,646,732	3,023
	Delhi	11,034,555	3,113
	Hyderabad	6,993,262	3,006
	Kolkata	4,496,694	3,013
	Mumbai	12,442,373	3,077
Medium	Bhopal	1,798,218	2,129
	Lucknow	2,817,105	2,167
	Vadodara	1,670,806	2,012
Small	Jalandhar	862,196	1,133
	Bhubaneswar	837,737	2,058
	Ajmer	542,580	1,030
	Bhavnagar	593,768	1,001
	Kochi	601,574	2,023

Note: Population data sourced from Census 2011

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The sample size varied across the cities, ranging from about 1,000 households in smaller cities to 3,000 in the larger cities. In total we sampled 31,803 households. At 90%, the response rate to the survey was high.

Our survey collected demographic information on gender, education, religion, and caste groups. In addition, the survey enumerators were tasked with identifying the housing type of each respondent's dwelling. As outlined above, dwellings were categorized as one of five types: informal shacks, (HT1), informal slums (HT2), lower middle class (HT3), middle class (HT4), and upper class (HT5). Shacks and slums were deliberately oversampled. This was done by including a "booster" sample which was executed in addition to the original sample.[6] By oversampling the

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[5] As reported above, we also surveyed Bengaluru in an earlier round of research. We left out only Pune from among the eight largest cities of India. Given this, for a number of variables, if not all, our big-city conclusions are more or less generalizable to the entire category of megacities. However, the results from the sample of the middle and smaller-sized cities should be viewed more as descriptive, given the fewer number of such cities in our study.

[6] The booster was applied to all cities except Mumbai, where the sampling frame alone yielded a large number of HT1s. With 710 households in the HT1 category, we had enough households for analysis, requiring no boosters.

lower housing types, we have also increased the relative sample proportions for Dalits (SC), Adivasis (ST) and Muslims since all three categories are over-represented in HT1s.

Table 3.2 shows our sample's raw proportions and provides the census statistics. Muslims represent 15.1 % of our raw sample, compared to 14.2 % in the census. Similarly, Dalits (SC) comprise 21% of our sample, while they are 17 % of the population in the census. Adivasis (ST) is about 10.7 % in our sample compared to 9 % in the census. If we had not oversampled HT1s and HT2s through boosters, a simple random sample might have missed them altogether or picked up very few respondents in these categories. Later, by applying a suitable weighting strategy (as explained in the Appendix), we can make our sample more representative than would have been possible otherwise. 53.1% of the respondents in our total sample were women (Table 3.2).

Table 3.2: Caste, Religion and Gender

Categories	Classification	Census 2011	Sample
Gender	Female	48.5	53.1
	Male	51.5	46.8
	Other	0.04[7]	0.01
Religion	Muslim	14.2	15.1
Caste	SC	17	21
	ST	9	10.7

Table 3.3: Education

Education Level	Frequency	Percent (%)
Up to 4th Grade	2,457	7.73
5th-9th Grade	3,719	11.69
Senior Secondary/High School	7,828	24.61
College (non-graduate)	1,893	5.95
College Graduate or Higher	6,768	21.28
Don't Know (DK)	9,034	28.41

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[7] The 2011 Census of India recorded approximately 4.88 lakh (488,000) individuals under the "Other" gender category

The educational profile of our respondents approximates an inverted U-shape (Table 3.3 and Figure 3.1). The largest group, 24.61%, reported completing senior secondary/high school education. At the lower end, 7.73% had education up to 4th grade, and 5.95% had some college education without completing their degree ("Nongrad"). Male and female respondents had no discernible difference in educational levels, highlighting parity in urban education access. "Nongrad" refers to unfinished college education, while "Gradplus" includes college graduates and those with higher degrees.

Figure 3.1: Education Profile
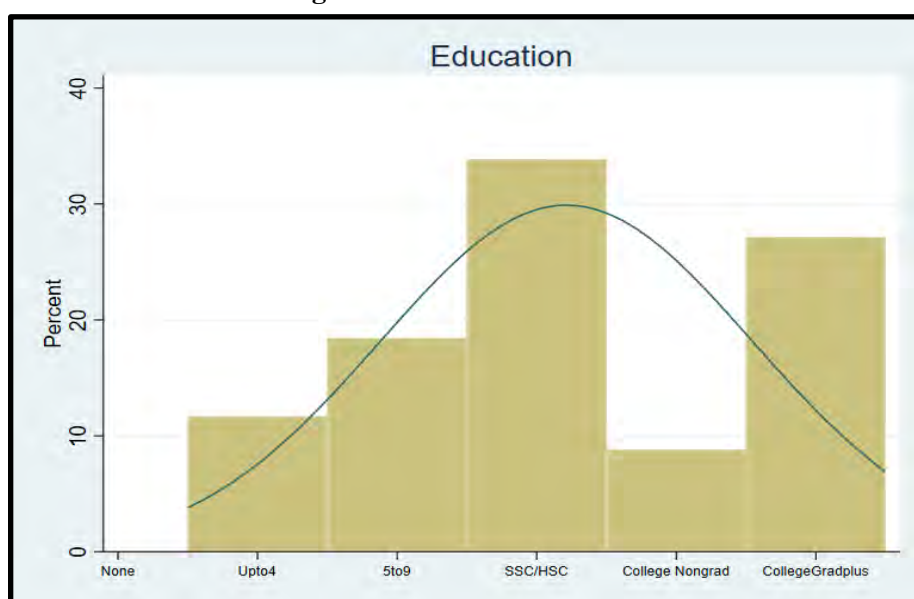
Figure 3.2 shows the distribution of castes across our cities. Mumbai is dominated by General Castes (GC), whereas OBCs dominate Kolkata and Kochi, with Chennai and Bhubaneshwar not far behind. Hyderabad, followed by Jalandhar, has the largest proportion of SC/STS, with Kochi and Bhavnagar having the lowest. Figure 3.3 shows the distribution of religious groups across our cities. Hindus represent large majorities in all cities, except Kochi. Bhopal and Hyderabad have the largest Muslim communities, and Kochi has the largest "other," specifically Christian population.

Figure 3.2: Caste Category Distribution
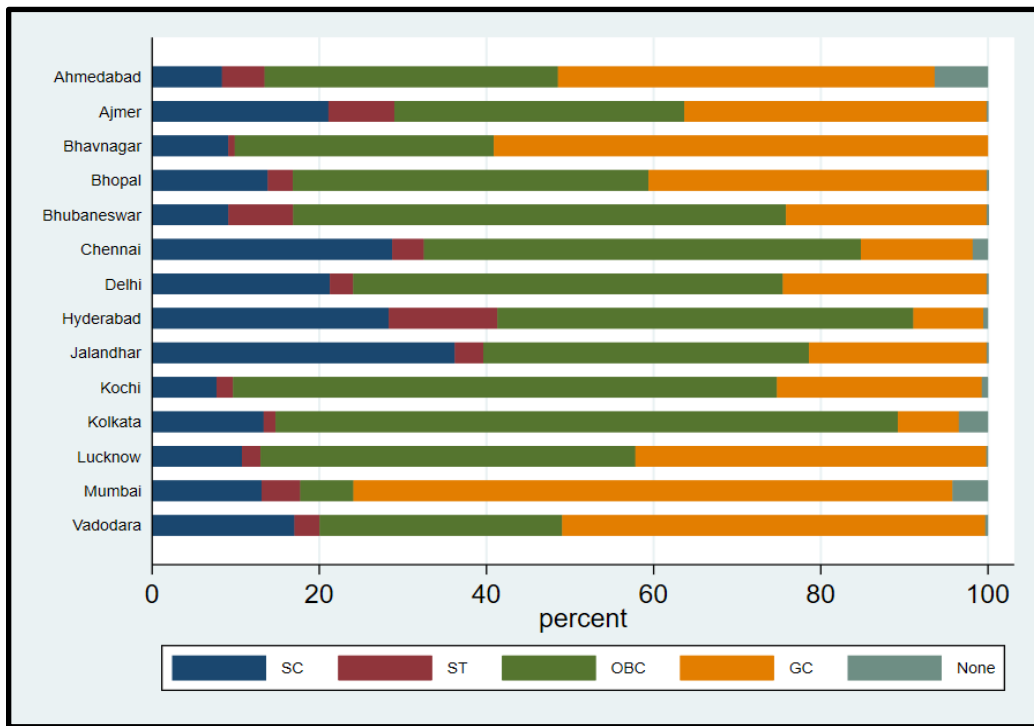
Figure 3.3: Religion Share Distribution
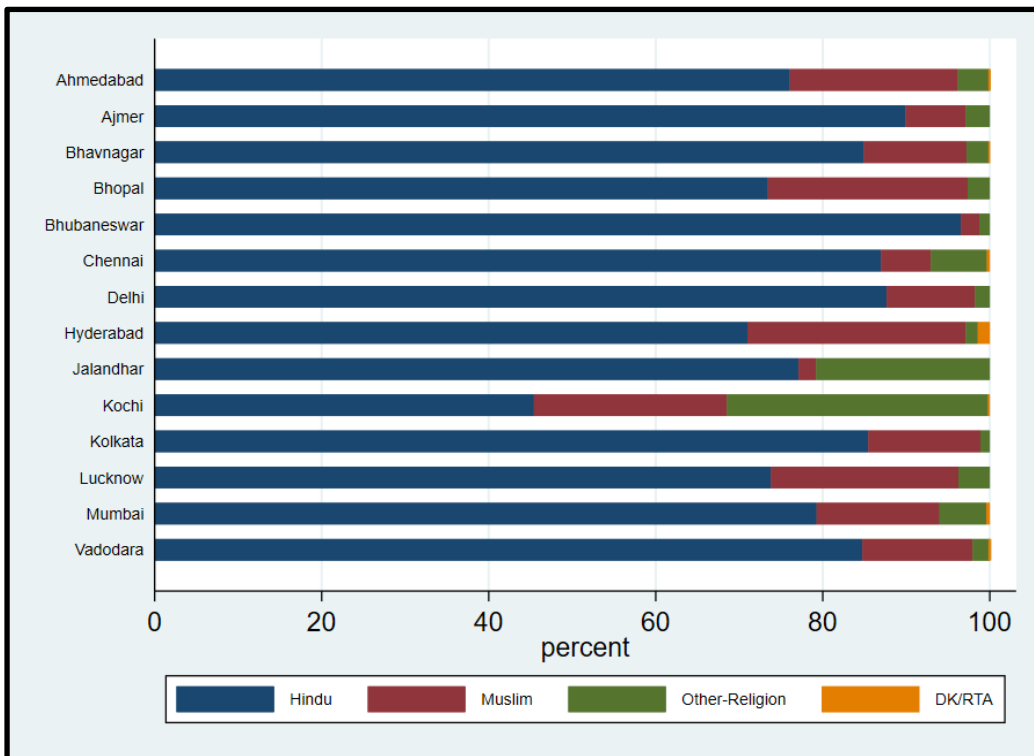
Table 3.4 shows the distribution of households across housing types lumped together as slums (HT 1 and 2) and as non-slums (HT 3, 4, and 5). We provide our raw numbers without the booster, the sample with the booster but weighted using the census and compare these to the slum figures from the 2011 Census.[8] Overall, our estimates of the slum populations are different for most cities compared to the census. The difference is small in many cases, but notable exceptions exist, such as Bhubaneswar and Mumbai. Our data shows that Mumbai has the largest slum population at 62.6%, followed by Hyderabad (36.1) and also in Kolkata (23.7). Kochi is by far the lowest at 1.4%, with only Vadodara (8%) and Ahmedabad (7.5%) in the single digits.

Table 3.4: Housing Type Distribution in Sample vs. Census

	Unweighted Sample[*]		Weighted Sample[**]		Slum Figures[***]	
City	**Slum**	**Non-slum**	**Slum**	**Non-slum**	**Slum**	**Non-slum**
Kolkata	23.7%	76.3%	31.3	68.7	31.3	68.7
Delhi	19.5%	80.5%	16.3	83.7	14.9	85.0
Lucknow	7.6%	92.4%	12.9	87.1	3.4	96.5
Bhopal	27.5%	72.5%	26.7	73.3	36.2	63.7
Bhubaneshwar	29.5%	70.5%	18.5	81.5	34.3	65.6
Ajmer	15.5%	84.5%	20.4	79.6	19.5	80.0
Jalandhar	5.9%	94.5%	16.8	83.2	16.8	83.1
Ahmedabad	45.2%	54.8%	7.5	92.5	4.5	95.5
Vadodara	37.2%	62.8%	8	92	5.1	94.9
Kochi	21.1%	78.9%	1.4	98.6	1.0	99.0
Chennai	25.2%	74.2%	29.2	70.8	28.9	71.1
Hyderabad	36.1%	63.9%	35.3	64.7	32.7	67.2
Mumbai	62.6%	37.4%	62.6	37.4	41.8	58.1
Bhavnagar	33.4%	66.6%	14.6	85.4	10.4	89.6

* Without including booster sample; ** Using Census 2011 weights; *** Census 2011

As hinted earlier, our data suggest that the census and other sources undercount slums in Indian cities. One of the reasons we are confident in our measure is its definition. The census does not count small clusters of shack households as slums, nor does it count slum-like housing in areas not otherwise classified as slums.[9] However, we also speculate that our sampling methodology

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[8] We use the Primary Census Abstract (PCA) (Census 2011) slum estimates as the point of comparison. The District Census Handbook also reports slum numbers, which, in many instances, differ from the PCA estimates.

[9] There is a definitional inconsistency with what is regarded as a slum. Census 2011 enumerates slums as *Notified Slums* - i.e., notified by a statute including Slum Acts or a *Recognised Slum* which may not be notified by a statute but recognized by state or local authorities and Identified Slum. The Census enumeration defines a slum "of at least 300 residents or about 60-70 households of poorly built congested tenements, in-hygienic environments usually with inadequate infrastructure and lacking in proper sanitary and drinking facilities". These aspects of a house are not specifically determined, so the slum identification is in part left to the enumerator's discretion. The National Sample Survey, however, defined the slum as a cluster of 20 or more households which is different from the Census. Scholars

captures areas the census leaves out because of their high degree of informality. It is also possible that our sample captures settlements that have cropped up since the last census date (2011). If the latter point is true, it would indicate that the overall percentage of shack areas has hugely increased since 2011.

3.2 Migration

As Figure 3.4 shows, in the aggregate, over half of our households are migrants, that is, the respondents there were not born in their city of residence. Figure 3.5 contains information on the share of each city's migrant population. On average, migrants reported moving to their current city approximately 12 years ago, suggesting a mix of recent and medium-term migration waves. Cities like Bhubaneswar (78.5%) and Hyderabad (63%), which have the highest proportions of migrants, also show a relatively recent average migration year, with many respondents reporting having moved to these cities within the past 10 years. On the other hand, cities like Kochi and Mumbai have more established local populations, with migrants in these cities reporting an average migration year of 15-20 years ago, indicating older settlement trends.

Figure 3.4: Average Years Spent in the Surveyed City
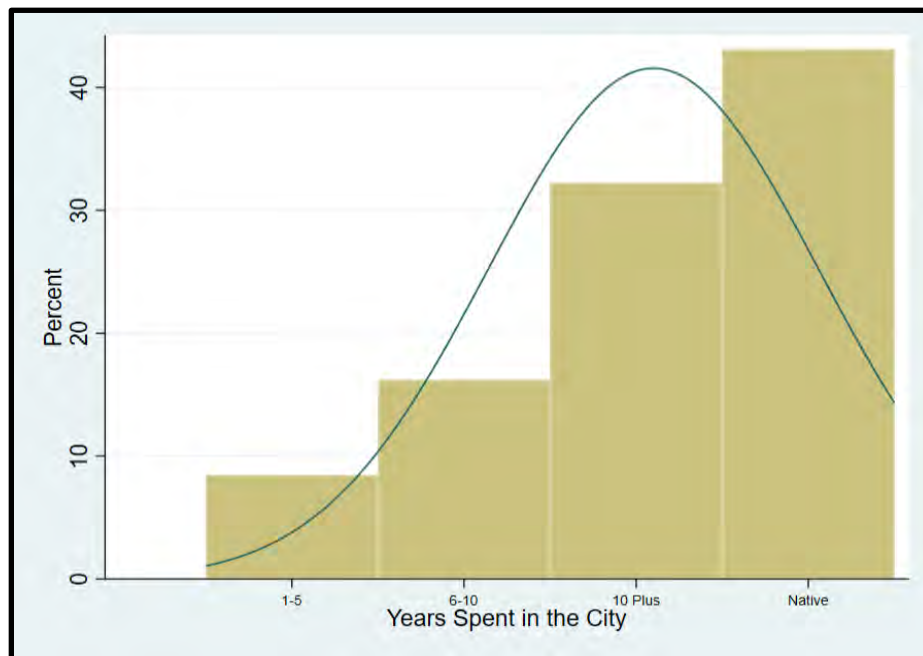
23

Figure 3.5: Years Spent in the City
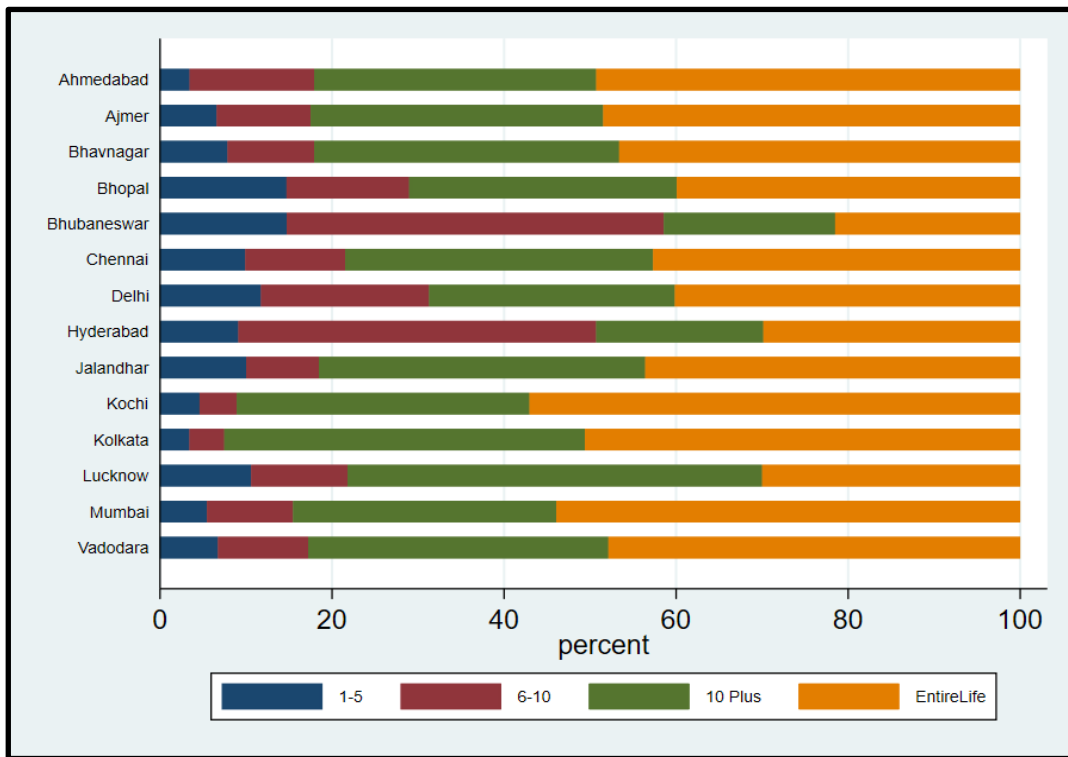
Figure 3.6: Migration by City and Housing Type

When we break this down by housing type, some interesting patterns emerge. Figure 3.6 shows migration by city and by housing type. In most cities, the more recent migrants tend to settle in HT1 or HT2 relative to longer-term migrants or city natives, who tend to reside in HT3 and above. This is especially true of Bhopal, Hyderabad, Lucknow, and Jalandhar. This strongly suggests that as these cities have grown in recent years, they have absorbed more lower income migrants than high income migrants.

Table 3.5: Distribution of Social Groups by Migrant Status

Migrant status	Recent[*]	Medium-term[**]	Long-term[***]	Native[****]
Housing Type				
HT1	1.80	1.06	0.97	0.83
HT2	0.85	1.06	0.93	1.07
HT3	0.88	0.95	1.02	1.03
HT4	1.09	1.07	1.06	0.92
HT5	0.61	0.79	1.03	1.13
Caste				
ST	1.45	1.94	0.79	0.70
SC	1.31	1.11	0.92	0.96
OBC	1.10	1.00	1.02	0.97
GC	0.74	0.81	1.03	1.10
Other	1.00	1.18	1.05	0.88
Religion				
Hindu	1.08	1.05	1.01	0.96
Muslim	0.69	0.87	0.93	1.16
Other	0.76	0.61	1.02	1.16

Note: Green highlighted cells indicate the intensity of over-representation of each group in a migrant category. Red highlighted cells indicate the intensity of under-representation in a migrant category. Both are expressed as likelihood ratios. A value of 1.0 indicates that the group's distribution in a given migrant status equals their sample proportion.
* 1-5 years; ** 5-10 years, *** >10 years, ****Entire Life

Table 3.5 presents the data differently. This table shows how over- or under-represented a group is, compared to a baseline assumption of the even distribution of groups in relation to their sample proportions. For example, if a particular group (e.g., Muslims) represents 10% of the overall sample, then the ratio in that cell will be 1.0 in the event that they also constitute 10% of a particular migrant category. Any number above 1 means that the group is overrepresented in that migrant category (green shading). Any number below 1 means that it is under-represented (red shading). Most of the cells hover near 1, meaning that we observe patterns of migration that mostly reflect the overall demographic distribution of the categories. But there are notable exceptions. First, those living in HT1 are significantly over-represented as recent migrants (1-5 years spent in the city) and are about 80% *more likely* to be recent migrants if we assume an even baseline distribution. By

contrast, those living in HT5 are about 39% *less likely* to be recent migrants. In other words, informal settlements clearly absorb a disproportionate share of recent migrants, and upper-class housing (HT5) is the preserve of native or long-term residents. There is also a clearly identifiable caste pattern, with STs significantly overrepresented in the categories of recent and medium-term migrants and SCs overrepresented in recent migrants. Thus, lower castes constitute a disproportionate share of recent migrants. The pattern for Muslims is the obverse: recent migration into our cities has significantly underrepresented Muslims. By the same logic, Muslims are more likely than Hindus to be lifelong residents (natives) of the city.

A clear pattern also influences the drivers of migration as shown in Figure 3.7. The boxplot visualizes the drivers of migration across caste groups, focusing on the dominant drivers, namely Marriage-related migration (purple) and Work-related migration (green) for GC, OBC, SC, and ST. (Other reasons for migration, such as education, family reunion, and unfair treatment, were not included in the plot as their overall contribution to migration across caste groups was significantly lower or inconsistent.) Marriage-related migration shows a declining trend as we move from GC to ST, with a smaller IQR (box height) for GC and OBC, indicating consistent patterns. In contrast, SC and ST show slightly wider IQRs and longer whiskers, reflecting greater variability in marriage migration experiences within these groups. On the other hand, work-related migration shows an increasing trend from GC to ST, with a progressively higher median and a much larger IQR and whiskers for SC and ST. This indicates greater diversity and unpredictability in work migration among marginalized groups, likely due to economic vulnerabilities and precarious employment opportunities[10].

Figure 3.7: Patterns of Migration Caste Category Wise

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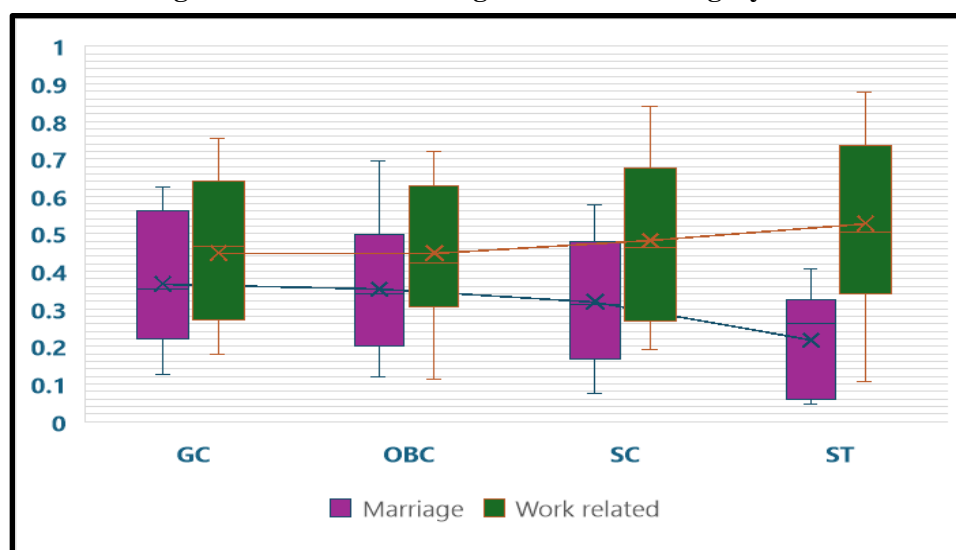
[10] The IQR plays a significant role in understanding variability within each caste group. The IQR, represented by the height of the box, measures how spread out the middle 50% of the data is. A smaller IQR, as observed for marriage-related migration in GC and OBC, indicates that most people in these groups migrate for marriage at similar rates, reflecting a consistent and uniform pattern. In contrast, a larger IQR, seen for work-related migration in SC and ST, signifies that migration experiences within these groups are more diverse—some individuals migrate frequently for work, while others migrate much less.

3.3 House Ownership

Figures 3.8 and 3.9 identify whether respondents live in rented, leased, or owned houses. We find that ownership is very high, representing 70.4% of all households. However, ownership varies dramatically across cities, from a high of 88.5% in Ahmedabad to a low of 51.5% in Hyderabad. Unsurprisingly, ownership levels are significantly higher for HT4 and HT5 (Figure 3.9). That said, ownership levels in HT1 and HT2 in several cities are above 50%, which might surprise some, especially for HT1s. But this is no doubt explained by the fact that many slum households have purchased from sellers (who are often unauthorized) and perhaps have nominal titles (which are not the equivalent of binding ownership because the land on which they are settled is itself illegal). It should, of course, be noted that ownership figures for HT1 vary from a low of 24% in Lucknow to a high of 95% in Bhopal. The high for HT2 is 91% in Vadodara, with a low of 46% in Kolkata.

Figure 3.8: Distribution of Home Ownership by City
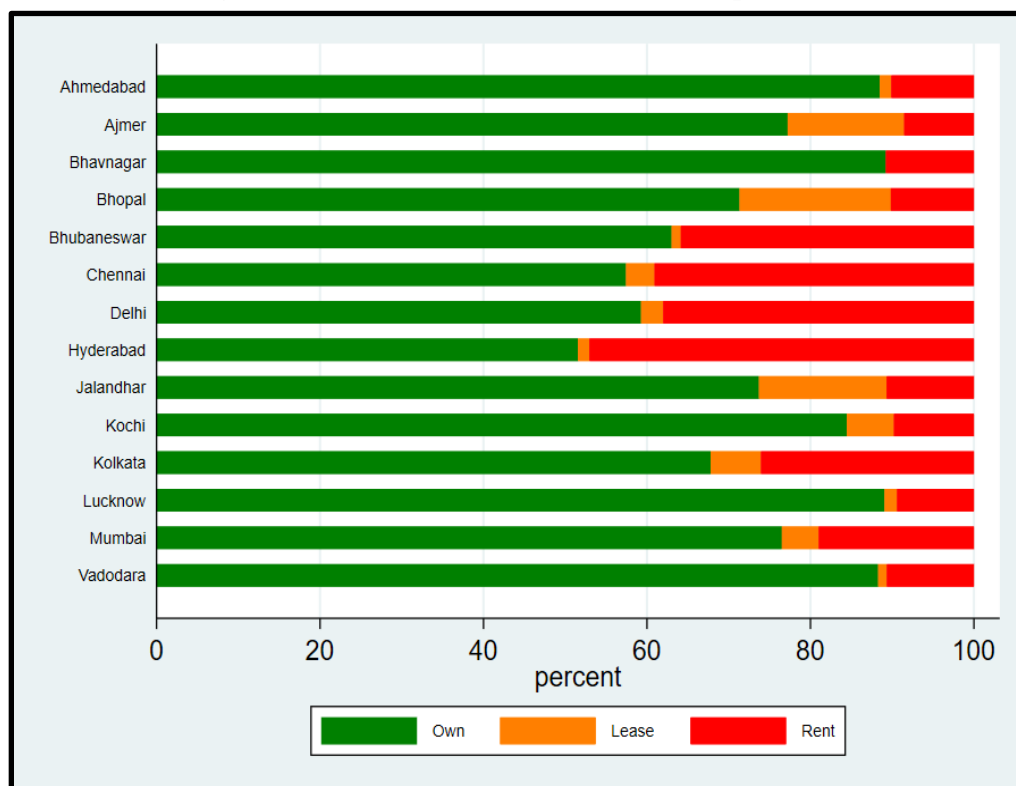
Figure 3.9: Distribution of Homeownership by Housing Type and City

Figure 3.10: Fear of Eviction by City
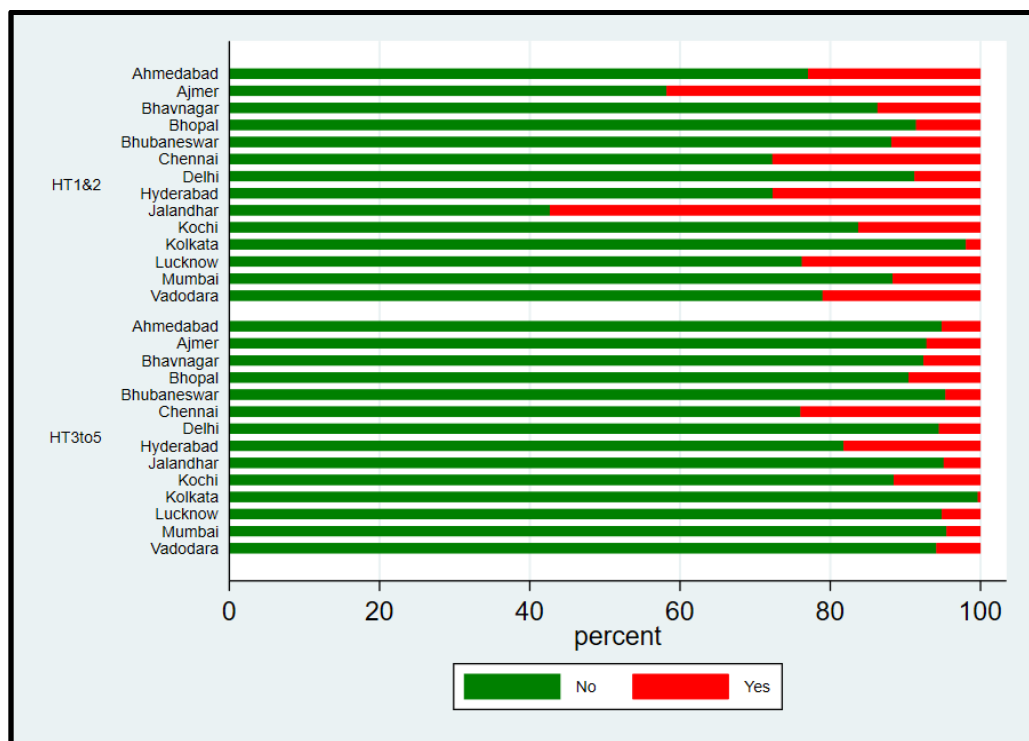
Given the precarity of titles to housing in India, we also asked households if they feared eviction. As Figure 3.10 shows, the fear of eviction is far higher for those living in HT1 and HT2 than in middle and upper-class housing. This is held in every city except Bhopal. The variation across cities is also remarkable. In Kolkata, there is very little fear of eviction, whereas, in Jalandhar, more than half of all households in HT1 and HT2 fear eviction, indicating an extremely high rate of insecurity.

3.4 Housing Types

When used comparatively, our housing data is, in effect, a good measure of how poor or prosperous a city is. As Table 3.6 shows, in our all-city sample, 9.4% of our respondents live in HT1, with 16% residing in HT2. The most prominent housing type is HT3, accounting for 46% of our sample. The distribution of housing types varies dramatically across cities. Kochi has the lowest percentage of informal housing (HT1: 0.2%, HT2: 1.2%). Ahmedabad and Vadodara also have low informal populations (HT1 and HT2) below 10%. In contrast, Mumbai has the highest informal housing population, with HT1 and HT2 at 62%. At the other end of the housing distribution, Kochi has the largest HT5 (upper class) population at 33%. Middle-class housing (HT3) is most dominant in Delhi (73%) and Lucknow (63%), a fact that can be attributed to a high density of government workers and stable middle-income populations. Figure 3.11 presents the same numbers diagrammatically.

Table 3.6: Distribution of Housing Types by City

	HT1	HT2	HT3	HT4	HT5
Aggregate	**9.4%**	**16.1%**	**46.1%**	**21.9%**	**6.5%**
Ahmedabad	1.6%	6.0%	40.6%	45.4%	6.4%
Ajmer	13.4%	6.1%	46.4%	28.6%	5.6%
Bhavnagar	3.2%	11.4%	39.5%	29.4%	16.5%
Bhopal	11.0%	15.9%	49.4%	20.4%	3.3%
Bhubaneswar	6.2%	16.0%	30.9%	45.0%	2.0%
Chennai	9.4%	19.7%	41.6%	24.2%	5.1%
Delhi	9.7%	7.2%	72.7%	8.2%	2.4%
Hyderabad	7.9%	27.5%	41.6%	15.9%	7.3%
Jalandhar	8.8%	8.2%	54.4%	14.1%	14.5%
Kochi	0.2%	1.2%	52.5%	13.0%	33.1%
Kolkata	10.5%	20.0%	53.0%	13.3%	3.2%
Lucknow	8.2%	5.1%	62.9%	19.1%	4.7%
Mumbai	23.1%	39.5%	16.8%	17.9%	2.7%
Vadodara	2.3%	5.7%	40.8%	42.9%	8.3%

Figure 3.11: Housing Type Distribution by Cities
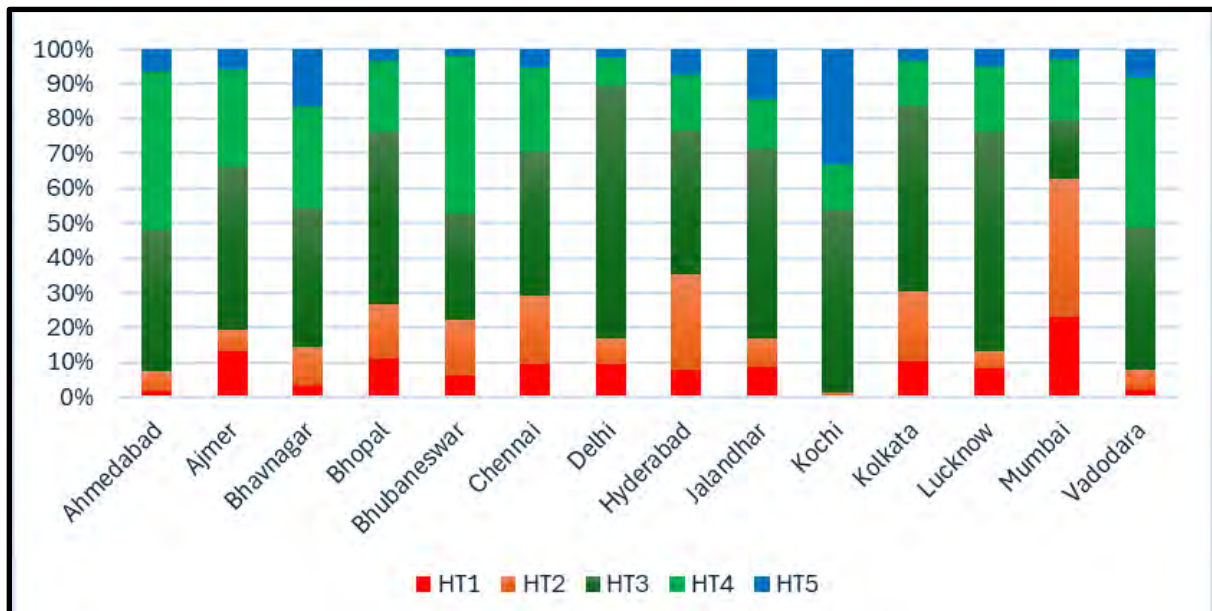
When we break down these numbers by city size (large, medium, small) we find that a larger percentage of population live in HT1 and HT2 in large cities (30.4%) than in medium (17.1%) or small cities (15%). Smaller cities, on the other hand, have the highest share of HT5 (14.3%). The pattern here is clear: *the larger the city, the higher the degree of housing informality.*

Figure 3.12: Housing Type Distribution by City Sizes
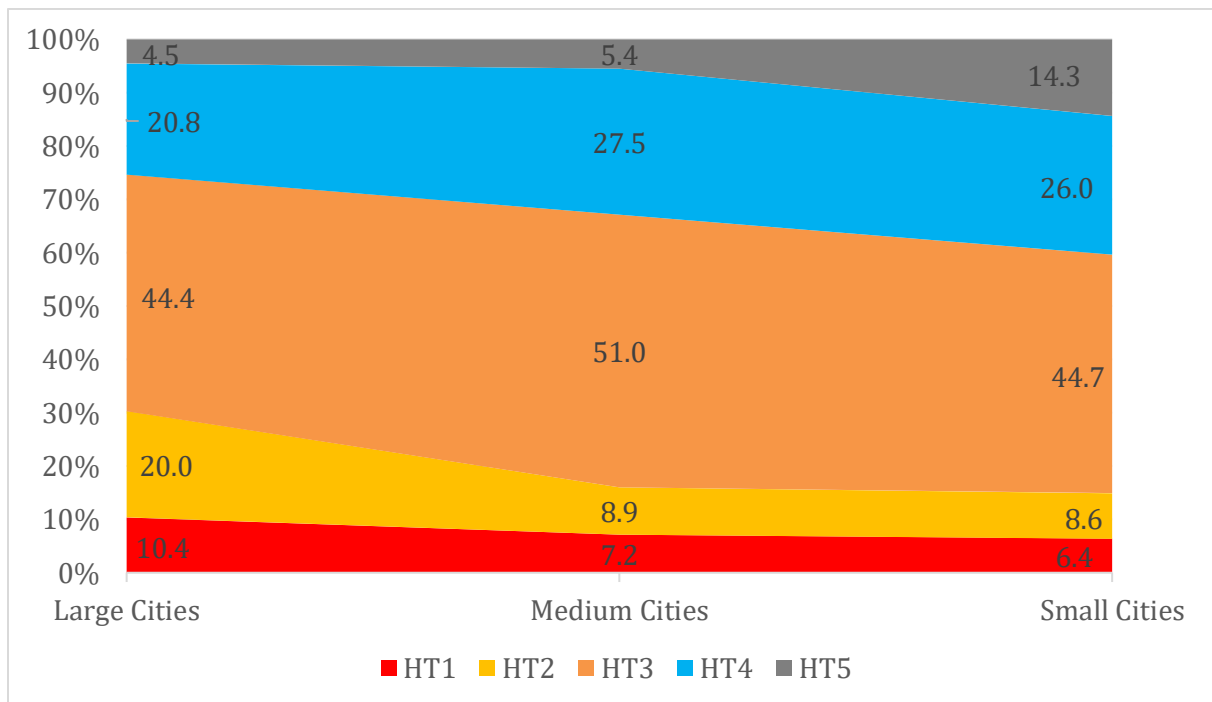
3.5 Relationships between Class (Housing Type), Caste and Religion

As is true in most cities, Indian cities are also spatially segregated by durable social categories, specifically class, caste, and religion. Figure 3.13 shows the correlation between caste and housing type. All the correlations are statistically significant (except ST in HT5 and GC in HT3). They point to a pattern of segregation in which lower castes live in lower housing and higher castes in higher housing. Specifically, SC and ST are more likely to live in HT1 and HT2 and less likely to live in HT3-5, and the inverse pattern holds for GC. The one exception to a consistent pattern is that while OBCs are less likely to live in HT1 and HT2, they are also less likely to live in HT4.

Figure 3.13: Correlation between Caste and Housing Type
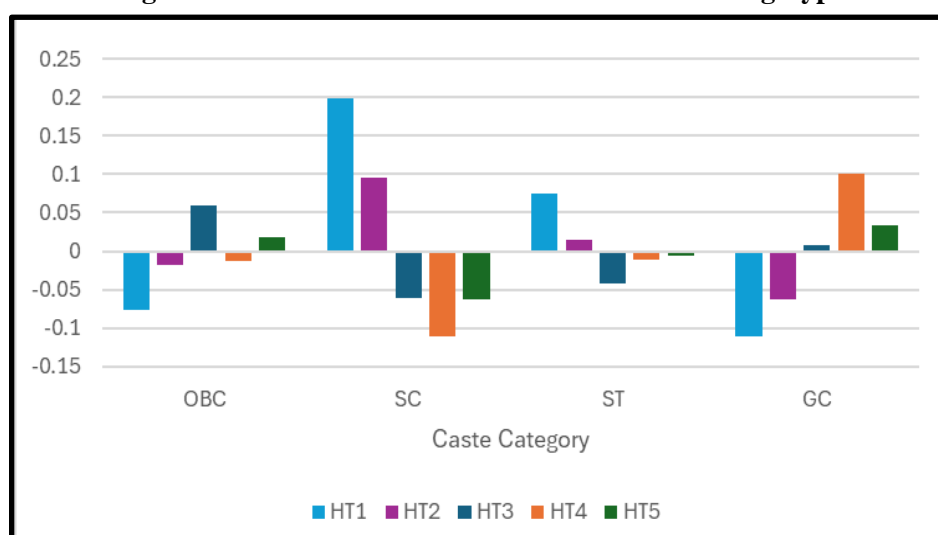
Table 3.7: Distribution of Caste Across Housing Type

Castes	HT1	HT2	HT3	HT4	HT5
SC	21.59	23.13	39.62	12.43	3.23
ST	19.25	18.25	36.49	20.19	5.83
OBC	3.28	12.44	52.80	24.34	7.14
GC	9.37	15.78	41.81	25.39	7.65
None	8.72	27.87	42.27	16.44	4.70

Table 3.7 provides the percentages of how a caste is distributed across housing types for all our cities. The inequalities are pronounced. Nearly 45% of SC and 37.5% of ST live in HT1 and HT2 (informal housing), compared to only 16% for OBC and 25% for GC. In contrast, only 16% of SC and 26% of ST live in HT4 and HT5, compared to 31% for OBCs and 33% for GC.

Figure 3.14: Distribution of Caste Category residing in HT1 and 2 by City
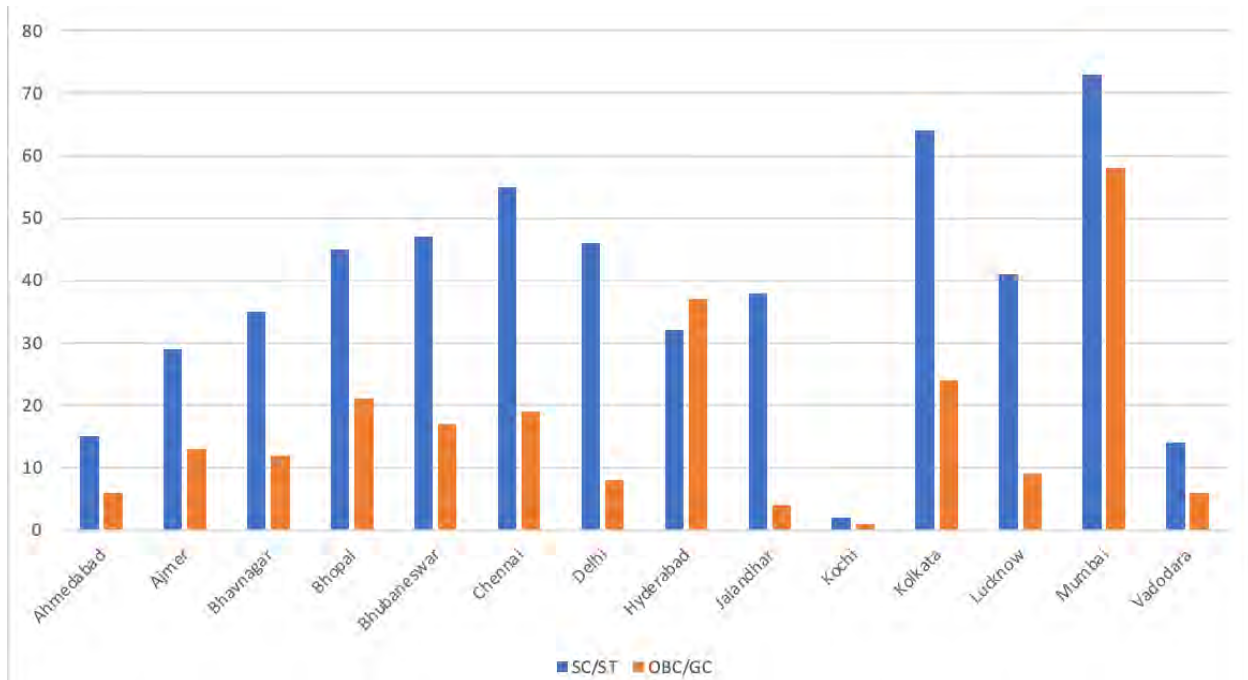
When we break this down by city, the divergences are striking. In most cities, the percentage of SC/ST living in HT1-2 is significantly greater than for OBCs or GCs. In Ahmedabad, Ajmer, Bhavnagar, Bhopal, Bhubaneswar, Chennai, Delhi, Jalandhar, Kolkata, Lucknow, and Vadodara, SC/ST are, in fact, at least twice as likely as OBC/GC to live in HT1 and HT2. In Mumbai and Kochi, the difference is not very high between SC/ST and OBC. Hyderabad is the only city where SC/ST are less likely than OBC to live in HT1 and HT2. In sum, some cities in India are much more caste segregated than others.

The size of the city also appears to be a factor driving caste-based housing segregation. As shown in Figure 3.15, SCs are more likely to live in HT1 and HT2 in larger cities than in medium and small cities. For STs, the proportion in HT1 and HT2 does not vary significantly across city size.

Figure 3.15: Distribution of Housing Type Across Caste Category By City Sizes
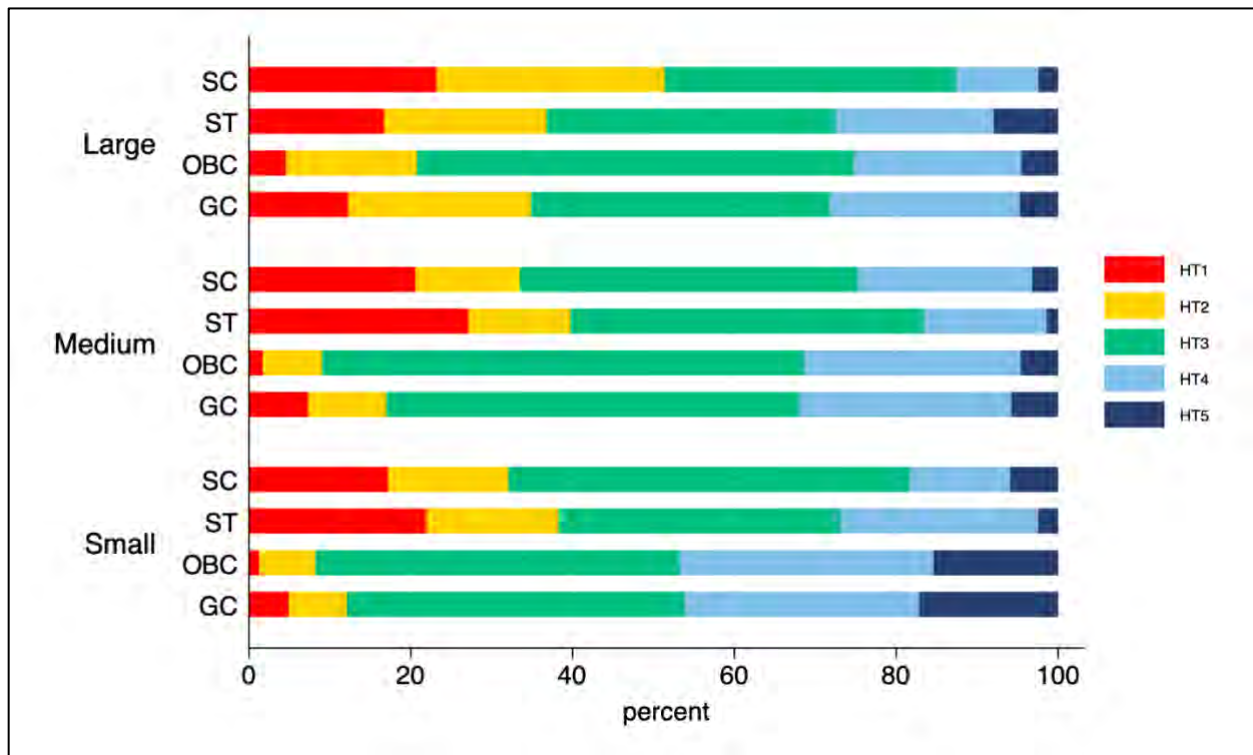
The correlations between housing types and religion provide a more complex picture. The pattern is less consistent than with caste. Compared to Hindus, Muslims are marginally more likely to live in HT1 and HT2 (taken together), more likely to live in HT3, and less likely to live in HT4 and HT5 (Table 3.8).

Table 3.8: Distribution of Religion Across Housing Type

Religion	HT1	HT2	HT3	HT4	HT5
Hindu	9.76	15.67	44.31	23.78	6.48
Muslim	8.03	19.75	57.10	12.04	3.08
Other-Religion	6.90	11.68	42.70	21.45	17.28

However, what is true in the aggregate changes dramatically when we look at individual cities (Figure 3.16). In Ajmer, Bhavnagar, Bhubaneswar, Hyderabad, Jalandhar, Kolkata and Mumbai, Muslims are significantly more likely to live in informal settlements (HT1 and HT2) than Hindus. In these cities, there is clearly housing segregation that disadvantages the minority. The pattern is *reversed* in Chennai, Kochi, and Bhopal, and quite dramatically so in Delhi, where Hindus are more three times more likely to live in HT1 and HT2 than Muslims. This finding, however, should not necessarily be taken to imply that Muslims are integrated in these latter cities. We know from the literature that in many cities, Muslims are concentrated in certain areas of the city, which can

consist of a mix of housing types but nonetheless constitute a de facto ghetto. Juhapura in Ahmedabad and Shaheenbagh in Delhi would be good examples.

Figure 3.16: Distribution of Religious Communities across Housing Types
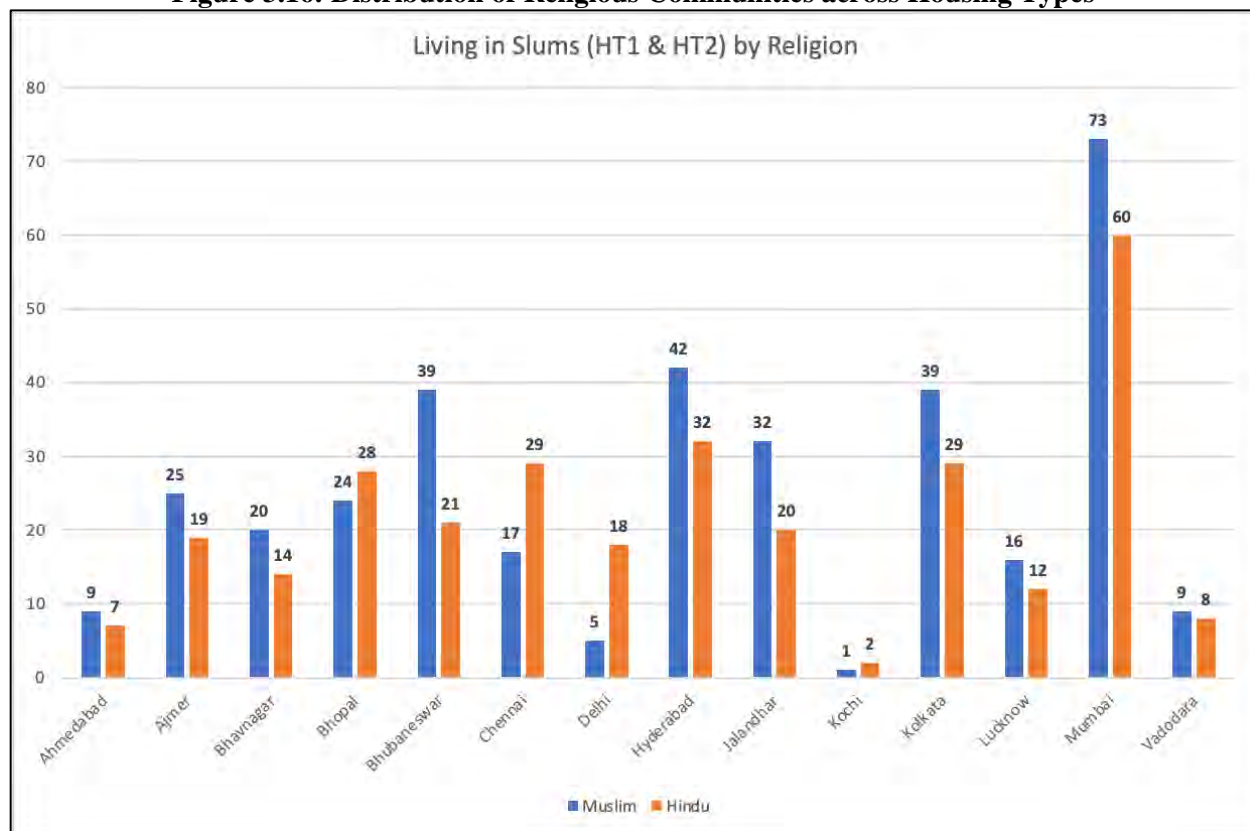
We now present the same data but with the caste and religious composition of different housing types. In other words, *how diverse or homogenous are these settlements regarding caste and religion? Conversely, how exclusionary might these types of settlements be?*

In Table 3.9, we report the ratio of a caste or religious community's representation in a housing type in relation to its overall representation in the city. Using the same formula first presented in Table 3.5, we find if a group constitutes 10% of a housing type and is also 10% of the city-wide population, then the ratio is 1. Any number above one means that the group is overrepresented in that type of housing (green shading). Any number below 1 means that it is under-represented (red shading). The findings here are striking and underscore the high degree of caste segregation in Indian cities. Thus, ST and SC are over-represented in HT1 by a ratio of over 2, meaning that the percentage of SCs and STs in HT1 is twice as high as their representation in the city. At the other end of the distribution, SCs and STs are significantly underrepresented in HT4 and HT5, though the pattern is more pronounced for SCs. The inverse pattern holds for GCs, whose ratio climbs steadily as we move up the housing hierarchy. Though OBCs are significantly underrepresented in HT1, they are almost perfectly represented (values near 1) in all other housing types. However,

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if the extremes of settlement types (HT1 and HT5) are caste-segregated, established slums (HT2) and lower middle-class housing (HT3) are quite mixed. Though SCs are overrepresented at 1.26 in HT2 and STs are underrepresented at 0.69 in HT3, all other values hover near 1.

Table 3.9: Group Ratios of Housing Representation

Housing type	HT1	HT2	HT3	HT4	HT5
ST	2.49	1.08	0.69	0.80	0.77
SC	2.09	1.26	0.85	0.56	0.49
OBC	0.67	1.10	1.05	0.95	1.05
GC	0.55	0.78	1.07	1.30	1.21
Hindu	1.05	0.95	0.97	1.09	1.00
Muslim	0.76	1.29	1.20	0.53	0.46
Other	0.89	0.86	0.91	0.96	2.54

Note: Green highlighted cells indicate the intensity of over-representation of each group. Red highlighted cells indicate the intensity of under-representation. Both are expressed as likelihood ratios.

With respect to religion, we find a pattern that is more complicated than for caste but still presents a discernible pattern of segregation. As Table 3.9 shows, in HT1, Muslims are underrepresented, and this is in sharp contrast to SCs/STs. In HT2, they are overrepresented at the same ratio as SCs. Moreover, they are just as underrepresented in HT4 and HT5 as SCs, being at only 50% of what their level could be. Muslims, in sum, are clustered in HT2 and HT3. Those who fell into the "other" category (mostly Christians and Sikhs) are just slightly underrepresented in all housing types, except in HT5, where they are significantly overrepresented at a ratio of 2.54.

4. Services and Infrastructure

This section examines the distribution of basic services in our 14 cities. These include the quality of water, sanitation, electricity, and roads and the extent to which households are subject to flooding. All these services were carefully measured to capture the full range of conditions under which they are delivered. In the case of water, for example, we went well beyond the standard census measures to ask detailed questions about daily supply and storage. Below, we report on all the specific services, beginning with our overall Basic Service Delivery and Infrastructure Index (BSDII). The index was constructed to provide a comprehensive measure of access to services (see Appendix 5 for full details). The index goes from 0 to 1, with a "0" meaning that a household gets no services and is often subject to flooding, to a perfect score of "1," which would mean 13 hours or more of water availability and 24 hours of electricity, a flush toilet that is connected to a sewer line (or septic tank) and does not get clogged, and good neighborhood roads and no flooding in the house or neighborhood. The index can, as such, be interpreted as the percentage score for having a complete set of services.

Figure 4.1: Distribution of BSDII by City
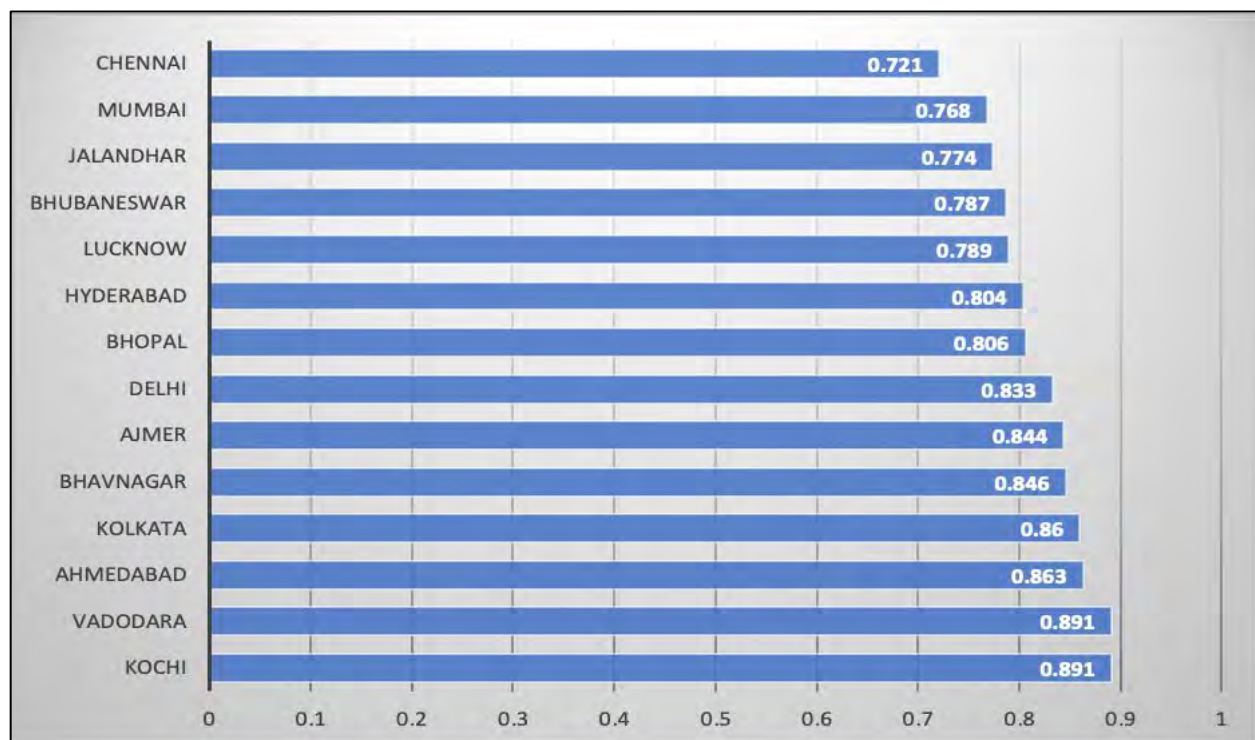
Based on our index (Figure 4.1), Kochi and Vadodara have the best services of any of our cities, with identical scores of 0.89, meaning that the average household receives 89% of complete services. Mumbai and Chennai have the lowest at 77% and 72% respectively.

When we examine the index by social categories, it becomes clear that access to services is unevenly distributed across social categories. The gap across housing types is very pronounced, with service quality declining dramatically as one moves down the housing hierarchy. Thus, while HT5 has 90% of full services (reliable and continuous water supply, effective sanitation, good roads, reliable electricity, no danger of flooding), HT2 has 73%, and HT1 has only 56%. Both HT1 and HT2, in other words, receive very inadequate services (Table 4.1).

Table 4.1: Distribution of BSDII by Housing Type, Caste, and Religion

HT1	HT2	HT3	HT4	HT5	OBC	SC	ST	GC	Hindu	Muslim	Others
0.56	0.73	0.84	0.88	0.90	0.82	0.75	0.74	0.85	0.81	0.79	0.83

The pattern is also held for castes, though it is not as steep. The fact that SC and ST households are only at 75% of complete services, on average, is especially striking, given that not all SCs and STs live in informal housing. Finally, there is a slight difference between Hindus and Muslims.

As we later demonstrate in this report's statistical analysis (section 8), all these findings are consistent and statistically significant across cities, including in models where we control for a range of other variables. For the rest of this section, we report some basic descriptive findings about the distribution of water and sanitation across social categories and cities. We do not discuss electricity because it is almost universally available in our cities.

4.1 Water

Water delivery is often reported as a simple binary - either one has access to piped water or doesn't. However, water delivery systems in Indian cities are complex and fragmented and provide highly variable quality of delivery. Moreover, from our focus groups in informal settlements, we found that many households spend significant time securing water, either waiting for pipes to flow, collecting and carrying water from public sources (community borewells, tanker trucks), and storing water. Much of this work, it should be noted, falls on women and often young girls. To develop an accurate picture of the differentiated quality of access to water, we measured water delivery by type of access (piped, borewell, etc.), location (in or outside of premises), and duration of supply and storage systems.

Figure 4.2 identifies the sources from which households get water. The vast majority of households get their water from taps, but there is variation across cities. In several cities, as many as a quarter of households depend on borewells. Borewells, it should be noted, are generally quite reliable and used where groundwater is readily accessible. In almost every city where borewells are common,

higher-class houses use them most. Other ways of accessing water are much more problematic. Households in Chennai face the biggest challenges in accessing water, with 17% depending on hand pumps and 14% depending on other sources, such as tanker trucks, which are by far the highest numbers in any city.

Figure 4.2: Source of Water Supply by City

If basic water access is generally not a problem in most cities, the quality of access clearly is. As seen in Figure 4.3, most cities have a nearly U-shaped distribution, with most households either getting less than 2 hours a day or more than 23 hours a day. Overall, 43.4 % of households only get water for up to 2 hours daily, and 23% get more than 23 hours daily. There is, moreover, huge variation across cities. Kochi households have the best water service of all our cities. Less than 2% of households have water for 2 hours or less daily, whereas in most cities, more than one-third of households fall into that category. Indeed, in six cities, more than half of all households - as represented by the spikes on the left in Figure 4.3 - are below this very low bar.

When water services are generally measured in India, such as in the census, questions are limited to the type of delivery. Yet, given the low daily supply levels we have just seen, water storage is key to ensuring easy access to water. So, as part of our survey, we also measured the quality of

storage. A total of 65% of households report having storage systems. That number is close to or above 90% in half of our cities, whereas in Bhopal and Ajmer, it falls to below 20%.

Figure 4.3: Hours of Daily Water Supply by City
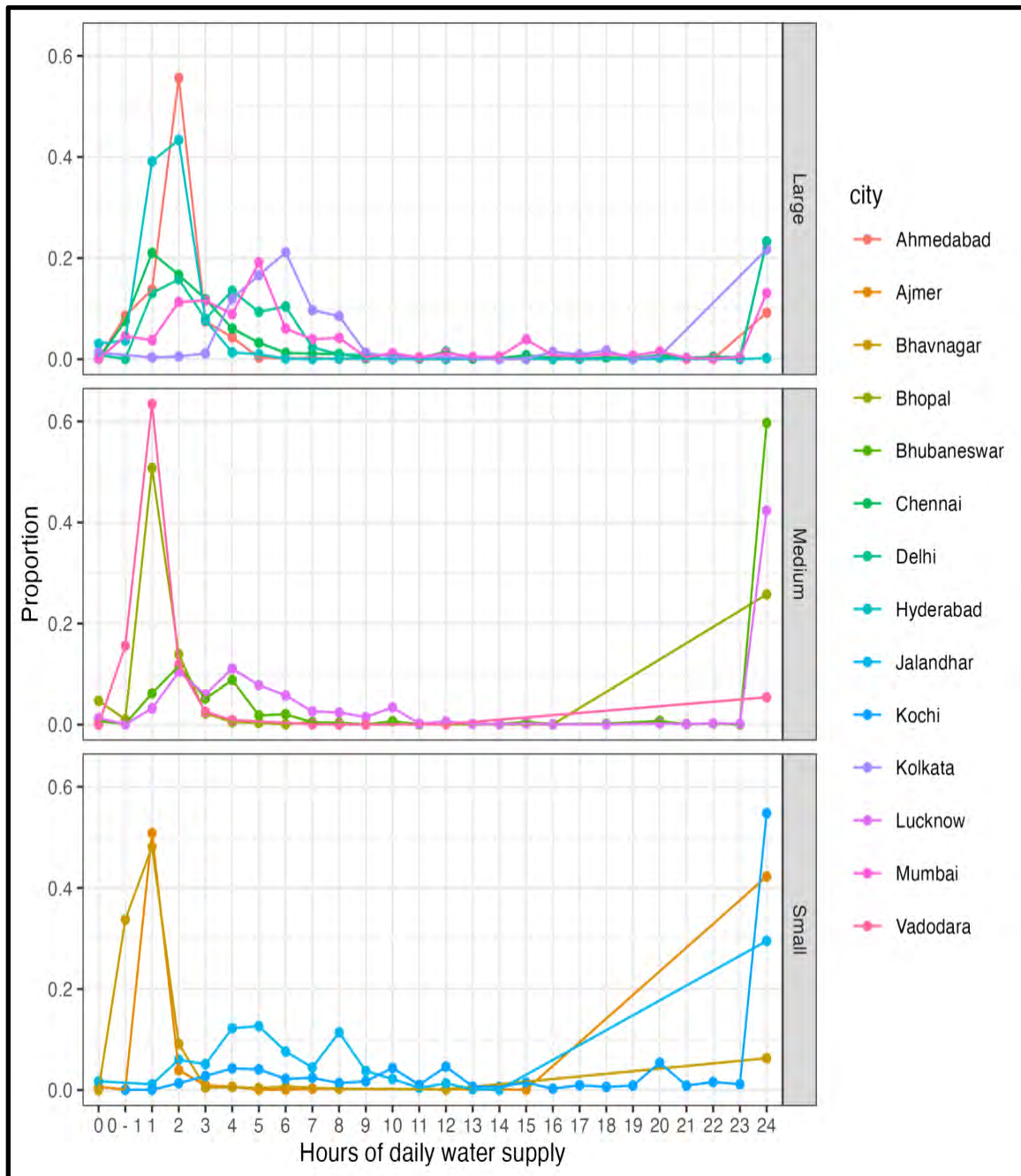
Of those with storage systems, 21% have a large tank with a motorized pump (the ideal), and 19% depend on movable containers, as seen in Table 4.2. This latter group is the most deprived since

this means that households are constantly collecting water. Table 4.3 shows that there is a dramatic variation in this measure of water precarity across our cities. Ajmer is the highest, with 82% depending on movable containers, but it is out of a low of only 11%, which requires storage systems. Mumbai clearly has the greatest water precarity: 66% require storage, and of those, almost three-fourths depend on movable containers. Bhavnagar is not far behind. Almost all households have storage, and over half depend on movable containers. Of other cities with high levels of storage, Delhi and Jalandhar fare best, with single digits depending on movable containers.

Table 4.2: Water Storage Types

Small Movable Containers	Medium Drums	Non-Motorized Large Storage	Motorized Large Storage	Other
0.19	0.17	0.12	0.20	0.31

Table 4.3: Water storage type by city

City	Requiring Storage	Small Movable Containers	Medium Drums	Non-Motorized Large	Motorized Large Storage	Other
Ahmedabad	82%	30%	38%	12%	20%	0%
Ajmer	11%	81%	4%	8%	8%	0%
Bhavnagar	96%	53%	5%	21%	22%	0%
Bhopal	14%	21%	41%	30%	8%	0%
Bhubaneswar	63%	27%	12%	21%	39%	0%
Chennai	90%	27%	42%	13%	17%	1%
Delhi	86%	3%	15%	12%	69%	0%
Hyderabad	91%	29%	23%	26%	23%	0%
Jalandhar	59%	2%	34%	18%	45%	0%
Kochi	92%	11%	13%	28%	48%	0%
Kolkata	27%	33%	26%	18%	23%	0%
Lucknow	36%	13%	34%	21%	31%	1%
Mumbai	66%	73%	17%	6%	5%	0%
Vadodara	96%	26%	25%	28%	21%	0%

Figure 4.4 presents the same data in different formats. In a different format, different types of non-motorized storages are clubbed together highlighting tremendous differences across cities.

Figure 4.4: Share of Households with Non-Motorized Storages
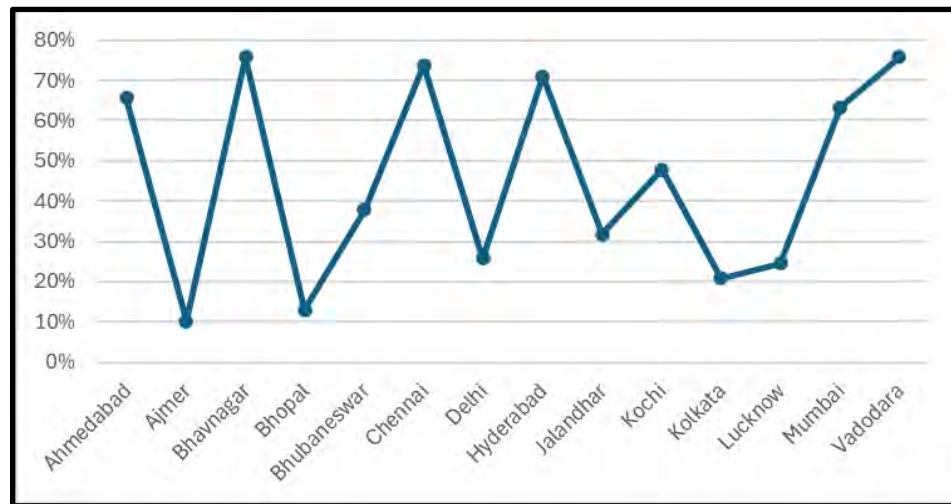
* Non-Motorized Storages={(Small Movable Containers + Medium Drums + Non-Motorized Large) x 100}/
Percent Needing Water Storage

4.2 Sanitation

The quality of sanitation varies substantially by city.[11] In the aggregate (Figure 4.5), Kochi leads the way, with over 99% of households accessing good sanitation. Vadodara, Ahmedabad, and Delhi are similarly high, with over 90%. At the low end, Mumbai is the worst, with only about 40% of households having good-quality sanitation. Household sanitation is also poor in Bhubaneswar, where only 55% of households have good sanitation infrastructure.

Much of the variation in sanitation quality is attributed to city-level differences among housing types (Figure 4.6). Informal shacks (HT1) are the worst in every city, with over 90% of these households having compromised sanitation in Ahmedabad, Ajmer, Jalandhar, and Mumbai (figure 17.1). Nearly 40% of Bhopal's shacks still need better household sanitation access. Slums (HT2) have widely variable access to good sanitation across cities, ranging from a high of compromised sanitation of 94% in Mumbai to a low of 6% in Vadodara and Ajmer (Figure 4.7). In contrast, in the middle and upper classes (HT3-5), nearly all have good sanitation facilities. One striking exception to this trend is Bhubaneswar. There, even among the richest households (HT5), 29% rely on open drainage for their household sewage.

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[11] We collect data on a variety of sanitation sources and aggregate them by type into one of two categories: "good" or "compromised." Good sanitation refers to flush toilets that are connected to either (1) public sewers or (2) private septic tanks. It also includes (3) ventilated/covered pit latrines. Compromised sanitation includes all other sanitation types, including (1) toilets with open drainage, (2) public latrines, (3) open pit latrines, (4) open defecation, and (5) any other sanitation type. We include public latrines in the compromised category because, while these facilities may be relatively sanitary, they indicate that there is no ready access to good sanitation *within* one's own household.

Figure 4.5: Quality of Sanitation by City
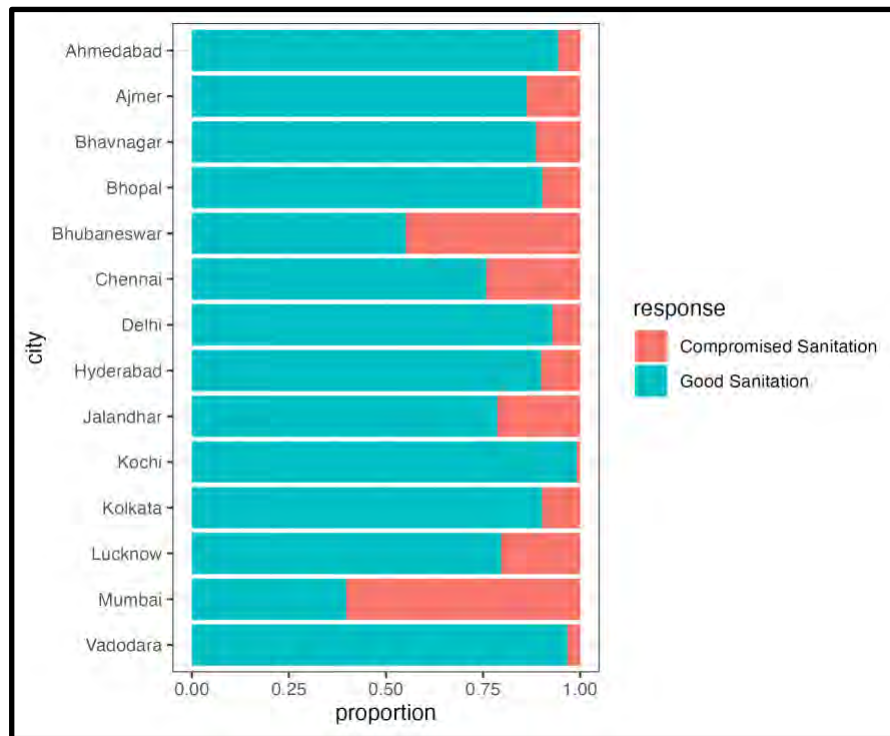
Figure 4.6: Distribution of Sanitation Condition for Shacks by City
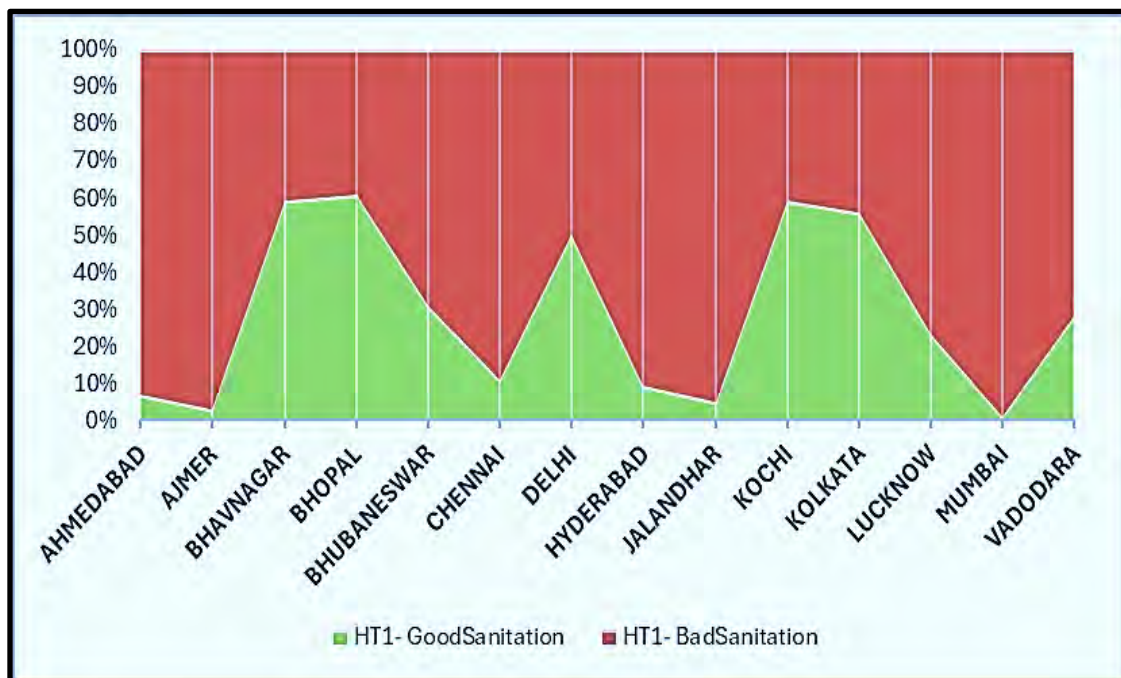
Figure 4.7: Distribution of Sanitation Conditions for Slums by City
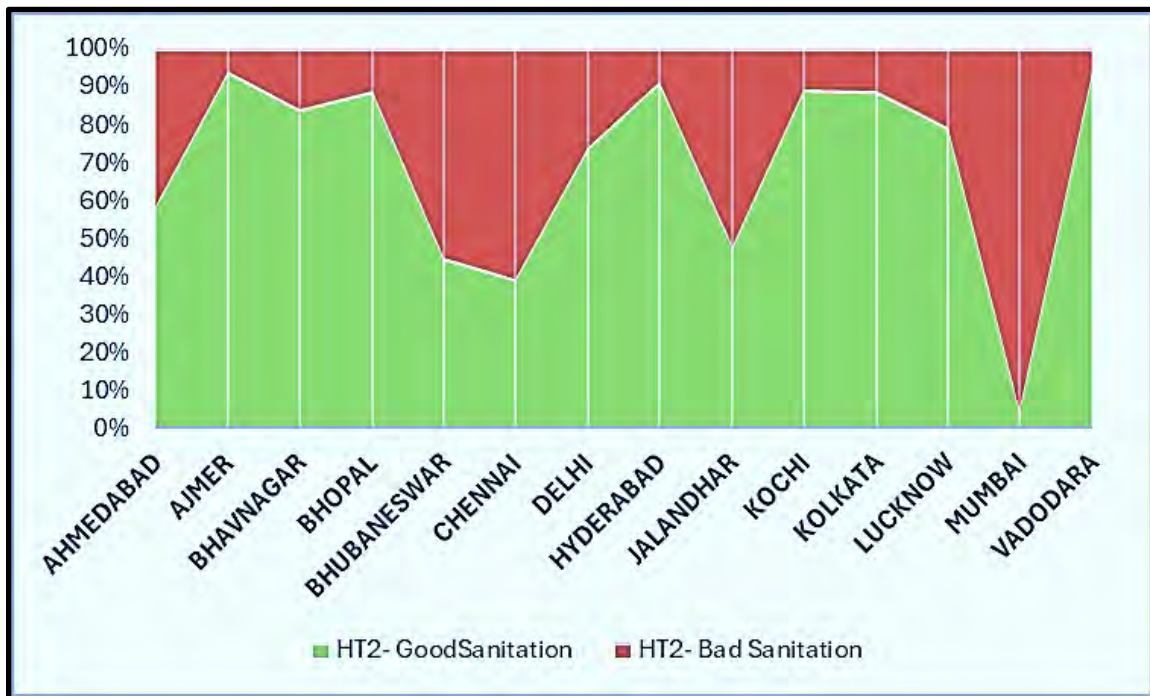
When we break down this data by caste (Figure 4.8), it is clear that there are stark differences in access to sanitation by caste. If only 12% of OBCs have compromised sanitation, that figure rises to 30% for SC and 33% for STs.

Figure 4.8: Compromised Sanitation Share by Caste Categories
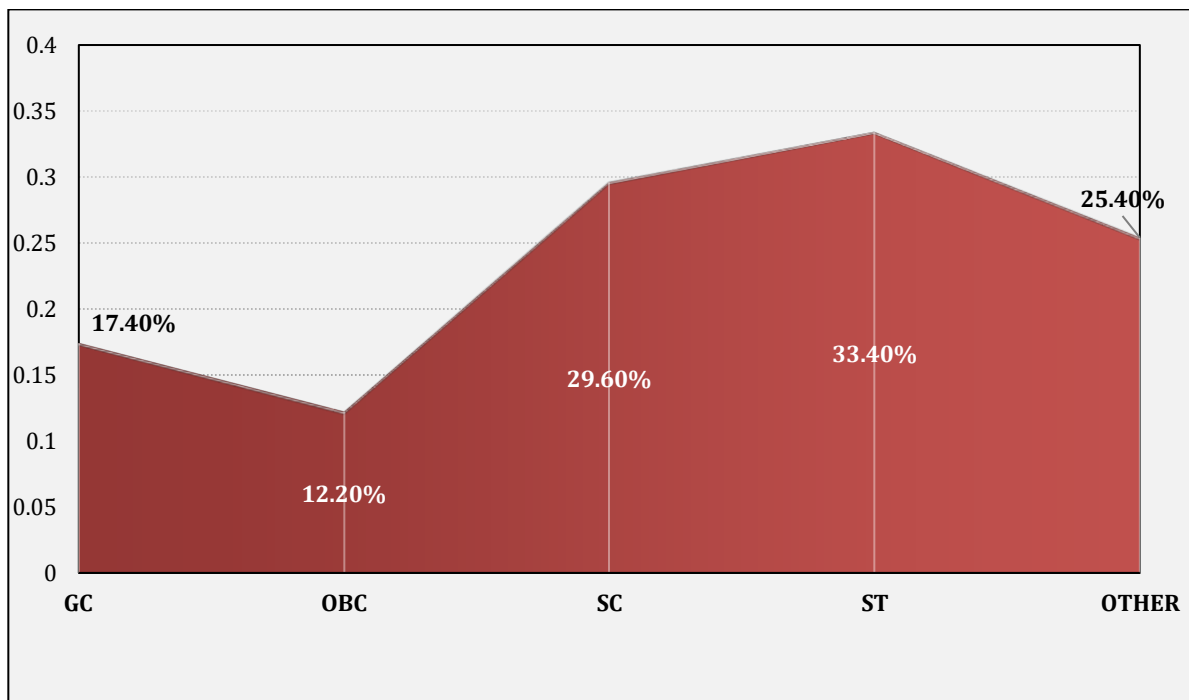
5. Governance

In this section, we examine how citizens view their government and how they engage with it. A large amount of literature on urban India points to the important roles that intermediaries play in helping citizens access services. As such, we began by asking which government actors are the most important in getting services.[12] The options were councilors (corporators), MLAs (members of state legislative assemblies), MPs (Members of Parliament), government officials, local unelected politicians (meant to capture party workers), and other intermediaries.

Table 5.1: The most important person to receive help from in accessing public services

Most Important Person	Percent
Government Officials	13%
Corporator	40%
Unelected Leader	6%
Intermediary	7%
MLA	8%
MP	3%
Don't Know	18%

In 10 cities (Figure 5.1), councilors (or corporators) are identified as the most important, significantly more so than officials, intermediaries, and higher-level representatives (MLA or MP). The highest level of dependency on corporators is in Ajmer, where an astonishing 86% of citizens identify corporators as most important, followed by 75% in Bhubaneswar and 74% in Kolkata. The lowest reliance was in Hyderabad (10%) and Mumbai at 9%, which is depressed because many respondents in both cities could or did not answer the question. Given the vast literature on the role of intermediaries in securing services in urban India, it is also surprising that the intermediaries and local unelected political leaders are playing little of a role. Finally, given that, in principle, services are delivered by officials, it is also surprising that they generally also don't seem to play an important role in most cities. Vadodara stands out as the city where officials are identified as most important.

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[12] The exact question was: "Who do you think is most important in ensuring that your neighbourhood receives public services from the provider?"

Figure 5.1: The Most Important Government Actors for Getting Services

Legend: Corporator, Government Officials, Unelected Leader, Intermediary, MLA, MP, DK
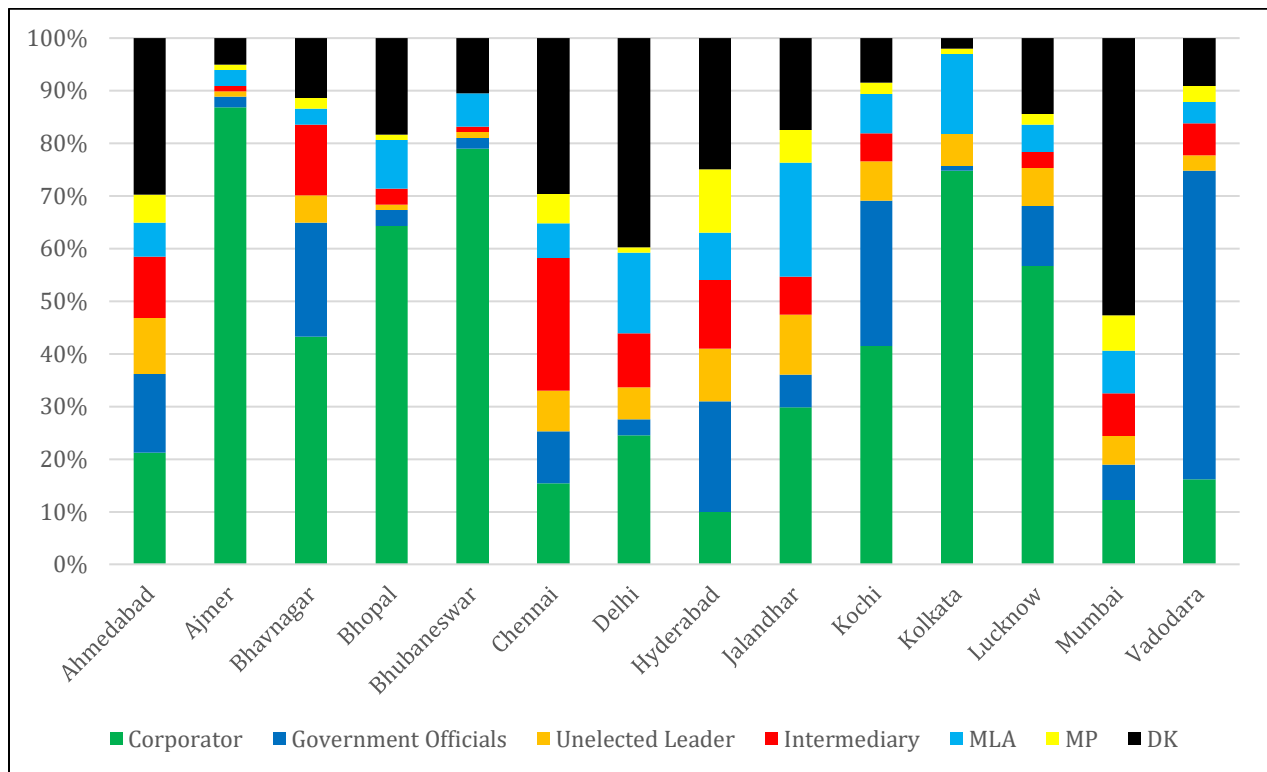
There is an ongoing debate about the role that India's elected officials actually play in representing their constituencies. Academic views fall into roughly three camps: politicians are self-serving (clientelism), they are parochial and only really care about their communities (group patronage), or, as in the democratic ideal, they do what is best for all their constituents (constituency service). Accordingly, we asked our respondents to describe their representatives by categorizing them as caring about all the people in their constituency, only caring about a certain community within the constituency, or only being self-interested. Somewhat surprisingly, given the thrust of the academic literature and popular views about corrupt politicians, we found that citizens have a positive view of their elected representatives, especially municipal corporators.

Table 5.2 shows that while those with a favorable view ("caring about all the people in their constituency") of MPs were 53%, MLAs 34%, and government officials 23%, it is the councilors/corporators who had the most favorable opinion at 60%. Concerning councilors, only 13% said they cared for a certain community, and 18% felt self-interested. City size matters in this question. As Table 5.3 shows, the favorable view of councilors decreases as the city size grows. In small cities, 81% have a favorable view compared to 65% in medium-sized cities and 60% in large cities.

Table 5.2: Views on Elected, Unelected, and Government Officials

	Cares About All	**Cares for Certain Communities**	**Self-Interested**
Corporator	60.29	13.20	18.22
MLA	34.53	36.23	20.04
MP	53.26	14.86	21.60
Government Officer	21.61	55.68	13.50

Table 5.3: Views on Corporator by City Size

City Size Group	**Cares About All**	**Cares for Certain Communities**	**Self-Interested**
Large	59.69	13.63	26.69
Medium	65.04	19.50	15.46
Small	80.93	11.95	7.12

Across cities, however, there is tremendous variation in how citizens view their local representatives (Figure 5.2). In Ajmer, Bhubaneswar, and Kochi, over 80% had a favorable view of their councilors as doing constituency service. In three cities, however, that number falls below 50%. Delhi has the lowest opinion of its councilors, with only 37% reporting that their councilors do constituency service and 60% saying they only serve certain communities or their self-interest. How citizens view their councilors also varies significantly by class (HT) and caste but very little by religion.

Figure 5.2: Views on the Corporator by City[13]

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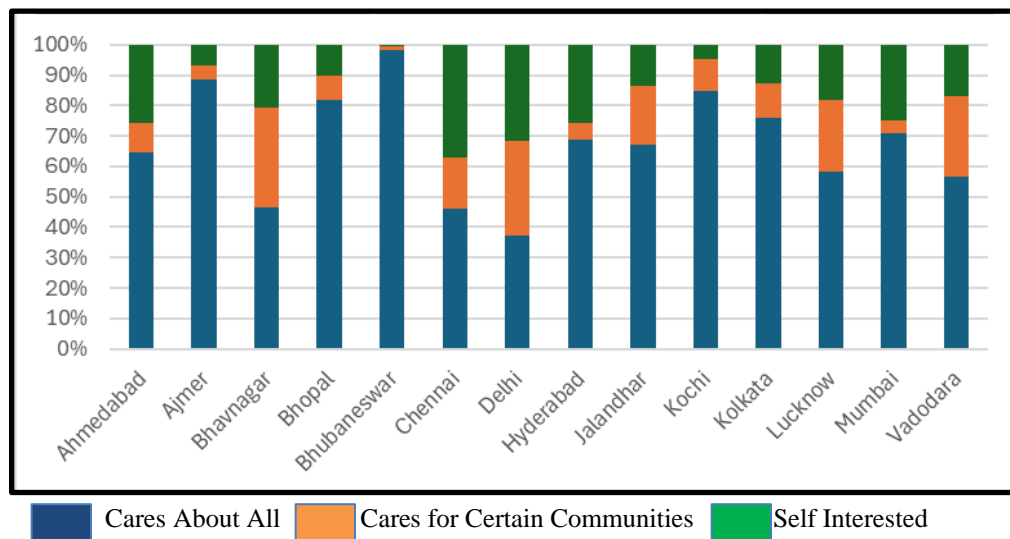
[13] This figure differs from Table 14, which asks "who is most important for securing public services." Here, we report what proportion thinks the corporators engage in (i) constituency service, (ii) group patronage, and (iii) self-interested behavior.

How much do citizens rely on their representatives? To answer this question, we asked respondents how often someone in their household had visited or contacted their counselor. Considering that a ward in larger cities can be well above 100,000, it is notable that 37% reported visiting their councilor at least once in the last six months (Figure 5.3). This number ranged from a high of 35% in Hyderabad and Ajmer to a low of 6% and 7% in Delhi and Mumbai, respectively. The size of the city matters here. The figure for small cities is 38%, for medium-sized cities 22%, and for large cities 21%. Nonetheless some larger cities such as Hyderabad and Chennai have high contact rates with councilors. Size may not always be decisive.

Figure 5.3: Number of visits to corporator in the last 6 months by city
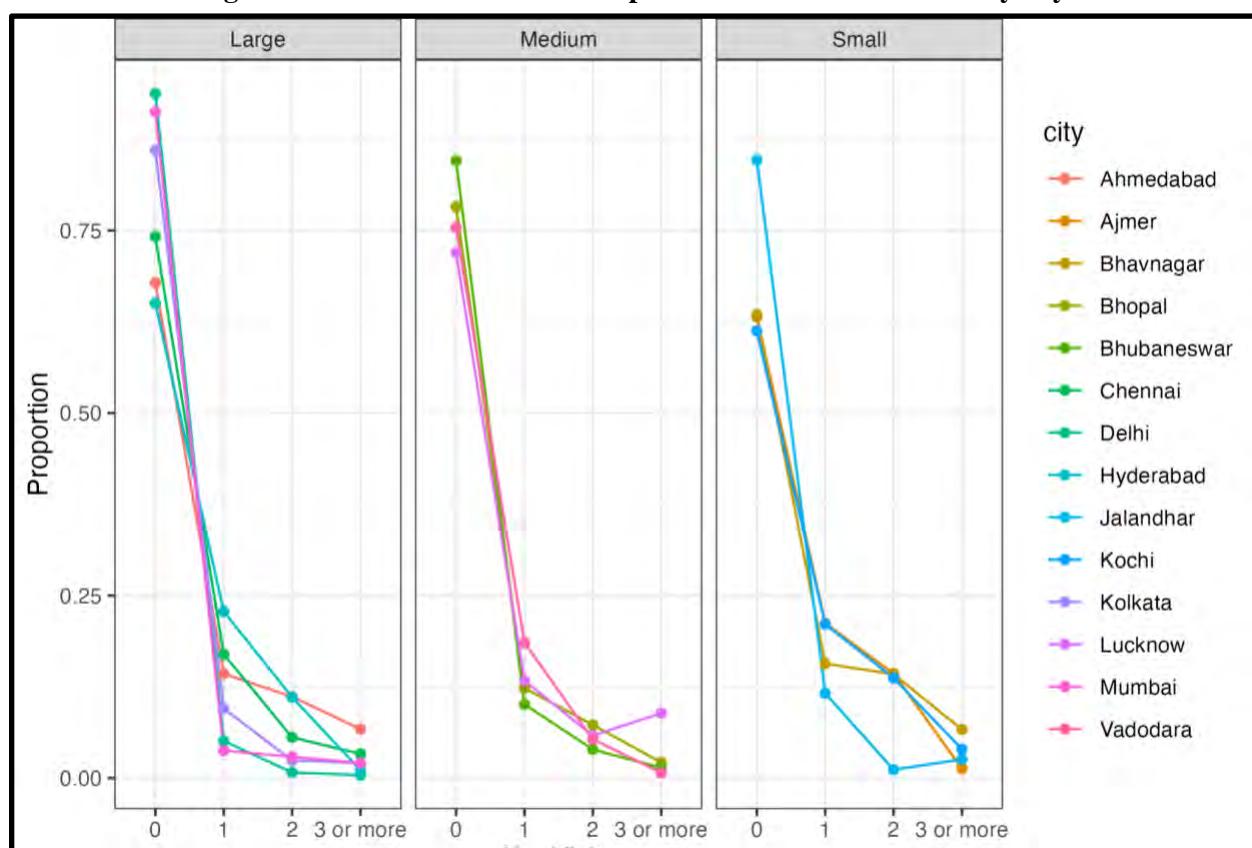
As is clear from Figure 5.4, the favorable view of councilors ("cares about the well-being of all people in the constituency") increases in a secular fashion as one moves through the class hierarchy from 50% in HT1 to 69% in HT5. Caste presents a more complicated picture. Only 53% of SCs have a favorable view of councilors compared to 63% of OBCs and GCs. Somewhat surprisingly, STs have the most favorable view at 70%. There is very little difference between Hindus and Muslims on this question.

Figure 5.4: Views on the Corporator by Housing Type, Religion, and Caste Category

View on Corporator by Housing Type

HT1 ■ HT2 ■ HT3 ■ HT4 ■ HT5

View on Corporator by Religion

Hindu ■ Muslim

View on Corporator by Caste Category

SC ■ ST ■ OBC ■ GC
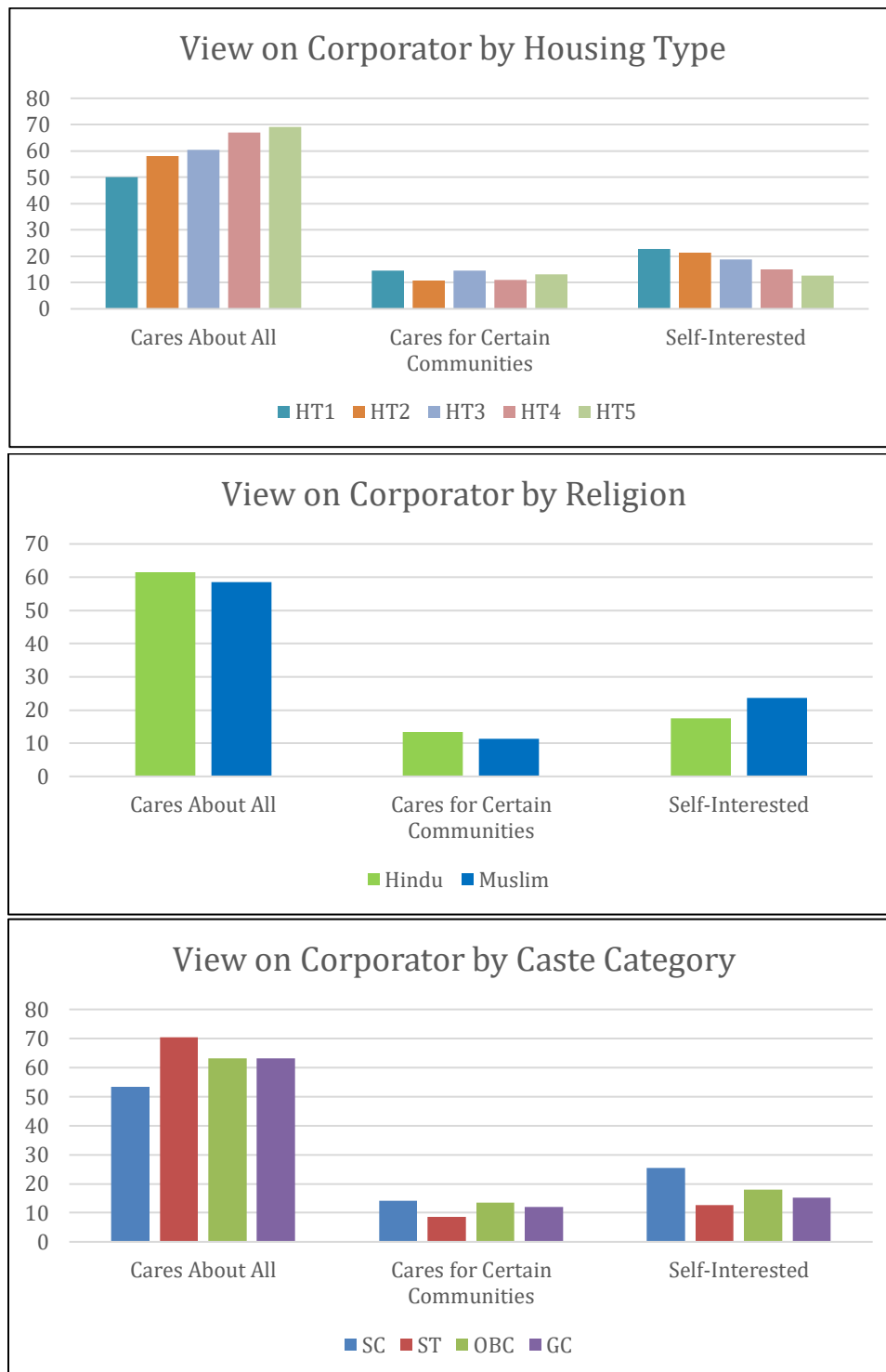
6. Citizenship

The idea of citizenship goes to the heart of democracy. How citizens understand their relation to the state and their relationship with each other and use their citizenship rights - civil, political, and social - are essential parts of democratic practice. To develop a concrete understanding of this complex and dynamic phenomenon, we break citizenship down into two dimensions. The first has to do with basic attributes and beliefs about citizenship. What do citizens think it means? Second, what actual ability do citizens have to use their rights as citizens? We capture this by measuring, as best we can, if and how citizens exercise their rights. This is captured through the citizen participation index (CPI), which covers various aspects of participation.

To gain a general sense of citizens' beliefs about citizenship, we asked some direct and some less direct questions. We asked all of our respondents what they believe are the most important responsibilities of citizens. The most common answer across all cities is voting, respecting the law, treating others as equals, and being involved in your community. There are some important variations across cities. For instance, in Mumbai, voting is less important than respecting the law or treating others as equals when combined. Indeed, it is the only city where voting isn't the predominant view. This no doubt reflects the low level of voting in Mumbai. It also tells us that three cities in the Hindi belt emphasize voting the most - namely Lucknow, Ajmer, and Bhopal, which are all above 70%. Chennai and Kochi have the highest proportion of respondents who say that treating others as equal is the most important citizen responsibility (21%), while Vadodara records the highest proportion who say being involved in one's community is the most important (17%), followed by Hyderabad (12%).

Figure 6.1: Most Important Responsibilities of Citizens
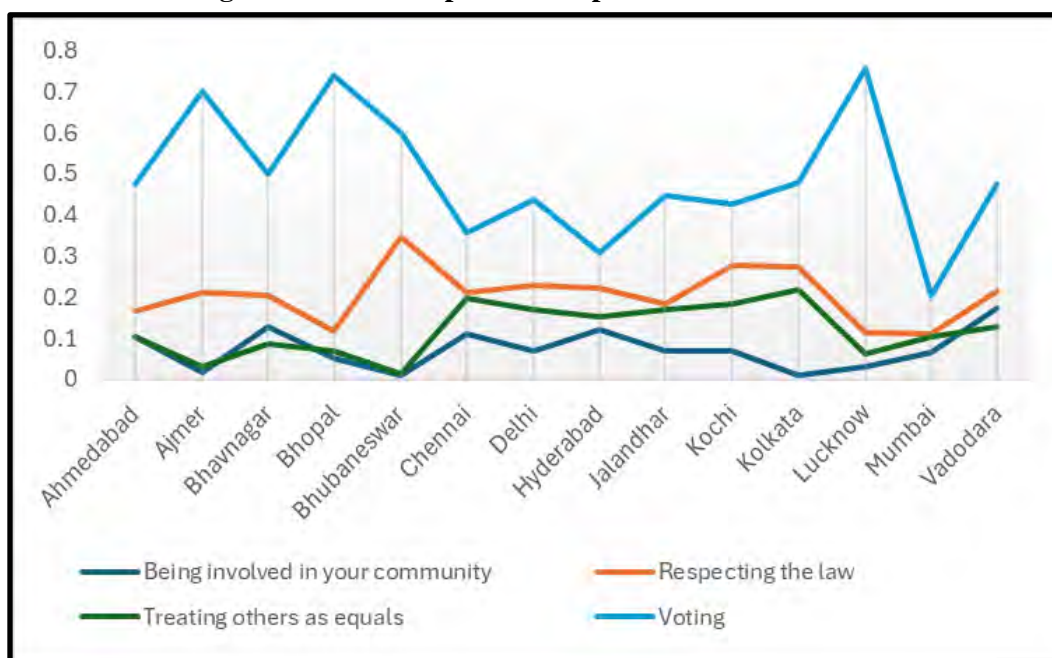
6.1 Civic Knowledge

In the survey's final phase covering seven cities, we introduced a series of knowledge-based questions to gauge citizens' awareness of civic, legal, and political matters. Table 18 shows the percentage of respondents who correctly answered questions relating to political representation, including knowledge of their ward's name or number. We see a marked variation between cities and across questions. Nearly all respondents knew the name or number of their local ward except for Delhi and Jalandhar, which were much lower. Indeed, less than half of Delhi respondents knew this information.

Unsurprisingly, most respondents correctly identified the current prime minister, Narendra Modi. Nearly the same proportion of respondents in all cities also knew their state's current chief minister, although Jalandhar was appreciably lower on both questions. We then see a drop-off in the knowledge of local elected officials, including mayors and municipal corporators. This was especially true in Bhopal, Delhi, and Jalandhar. Less than a quarter of respondents knew either their local corporator or mayor in Delhi, with Jalandhar faring only slightly better on these questions.

Table 6.1: Knowledge of political representation[14]

Entity	Ajmer	Bhopal	Bhubaneswar	Delhi	Jalandhar	Kolkata	Lucknow
Name/number of your ward	96%	98%	98%	38%	61%	97%	89%
Name of India's Prime Minister	95%	99%	100%	97%	81%	98%	97%
Name of state's Chief Minister	92%	98%	100%	96%	82%	99%	97%
Name of current Mayor	88%	51%	93%	14%	26%	87%	71%
Name of current local corporator	85%	59%	84%	23%	27%	93%	77%

(% of respondents who correctly answered each question)

We also tested respondents on their knowledge of basic rights guaranteed by India's Constitution and other prominent laws, including those in education, health, police, information, and marriage. Again, we see substantial variation by question and by city (Table 6.2). Most respondents in all seven cities were aware of their right to basic primary education from the government. Respondents were also largely aware that they were entitled to medical treatment regardless of

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[14] This table along with the following two only contain responses for seven cities. This is because additional knowledge questions were added to the questionnaire prior to the final phase of survey cities.

religion, caste, or tribal status. On both of these questions, Jalandhar scored noticeably lower than other cities, with Bhubaneswar residents the most aware.

On the issue of legal recourse, respondents in most cities were less aware of their rights. In particular, we asked who is allowed to file a first information report (FIR) with the police. Only 25% of those in Bhubaneswar correctly answered this question, with Jalandhar at 40% and Lucknow at 53%. Other cities were substantially better informed on this issue.

With regard to marriage rights, most respondents in all cities were aware of the prohibition of dowry, although Kolkata, Ajmer, and Jalandhar were somewhat lower than the rest. Most were also aware that there were no laws prohibiting inter-caste marriages, though Kolkata, Lucknow, and Jalandhar show a relatively low proportion of respondents. Awareness of laws against domestic violence is also high - with Kolkata and Jalandhar recording relatively lower proportions. Similarly, most were aware of the Right to Information Act - though Kolkata and Jalandhar again have lower proportions.

Table 6.2: Knowledge of Rights

Right	Ajmer	Bhopal	Bhubaneswar	Delhi	Jalandhar	Kolkata	Lucknow
Free Public Primary Education	82%	81%	89%	81%	67%	92%	88%
Can Public Hospitals refuse to Treat based on religion, caste, or tribal affiliation?	78%	86%	93%	92%	77%	89%	87%
Who can file an FIR of a Crime with the Police?	88%	75%	25%	76%	40%	67%	53%
Is There a Law Against Dowry?	80%	96%	98%	97%	81%	78%	91%
Is There a law prohibiting inter-caste marriage?	81%	79%	78%	85%	64%	42%	44%
Is There a law against domestic violence?	84%	96%	87%	94%	78%	76%	89%
Is There a Right to Information Act?	83%	93%	94%	90%	63%	60%	84%

(% of respondents who correctly answered each question)

When it comes to the issue of service provision, we see an even more mixed bag. Table 6.3 shows the proportion of correct responses when we asked which level of government (city, state, or center) is responsible for a given service *in that city*. For example, while water is a city-level service in Bhopal, Lucknow, Jalandhar, and Kolkata, it is provided by state-level entities in Ajmer,

Delhi, and Bhubaneswar. Similarly, policing is a state-level responsibility in all cities except for Delhi, where it is managed directly by the center.

Most respondents correctly know that garbage is a city-level responsibility. Most are also aware of who is responsible for their water, though there is some confusion in Bhubaneswar, Ajmer, and Delhi on this issue. In general, Ajmer, Bhubaneswar, and Delhi residents were the least aware of their service providers, whereas those in Kolkata, Bhopal, and Lucknow were relatively more knowledgeable.

Table 6.3: Knowledge of service providers

Service	Ajmer	Bhopal	Bhubaneswar	Delhi	Jalandhar	Kolkata	Lucknow
Garbage	66%	80%	56%	62%	74%	81%	82%
Water	55%	81%	52%	55%	73%	79%	79%
Roads	51%	70%	39%	50%	64%	73%	68%
Streetlights	54%	68%	51%	48%	60%	71%	61%
Local/city buses	52%	24%	29%	39%	55%	56%	42%
Police/law and order	34%	48%	39%	47%	31%	69%	44%

(% of respondents who correctly answered each question)

6.2 Social and Political Liberties

We also measured attitudes about citizenship by asking key questions that capture how citizens feel about social and political liberties. These are reported in Table 6.4, and the percentages should be read on a liberal-to-conservative scale, with lower scores being more liberal and higher being more conservative. On social liberties, we asked if the government should pass laws against inter-caste or inter-communal marriage, with "yes" in both cases meaning support for state-enforced bans on inter-group marriage. To measure political attitudes, we asked if the right to free speech does not include the right to criticize India ("yes" meaning limits on free speech) and whether not saying "Bharat Mata Ki Jai" (BMKJ) at public gatherings should be punished ("yes" meaning state can enforce patriotism).[15] For all 4 questions, a "yes" response is coded as conservative.

There is significant variation across cities on the marriage question. In Kochi, just about no one (only 1%) believes that there should be laws against inter-caste or inter-religious marriage. At the other end of the spectrum, in Vadodara, 45% support bans on inter-religious marriage and 46% on inter-caste marriages. Lucknow and Bhopal are also quite conservative on these questions, with significant numbers supporting bans.

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[15] The symbol of "Bharat Mata" (Mother India), right since the freedom movement, has represented Indian patriotism. Sometimes, it is presented as a Hindu nationalist symbol. That is inaccurate. Even Jawaharlal Nehru, in *The Discovery of India*, mentions how Indian masses, regardless of community, related respectfully and affectionately to "Bharat Mata" in the 1920s. For further discussion, see Varshney, Ashutosh, Srikrishna Ayyangar, and Siddarth Swaminathan, 2021, "Populism and Hindu Nationalism in India," *Studies in Comparative International Development*, June. Section 3.

On the two political questions - (i) does freedom of speech not include the freedom to criticize India? and (ii) should those who don't say "Bharat Mata ki Jai" (BMKJ) be punished? - there is tremendous variation across cities in the degree of liberalism (Table 21). Kochi is the most liberal city, with only 5% supporting punishing" and only 22% who think you should not criticize India. Notably, the three Gujarat cities - Ahmedabad, Bhavnagar, and Vadodara - have among the highest percentages of citizens who do not think the right to free speech includes the right to criticize India.

Table 6.4: The Urban Indian - Conservative or Liberal? Higher Score = More Conservative

	The law should prohibit inter-caste marriage	The law should prohibit inter-religion marriage	Not saying BMKJ* should be punished	The right to free speech excludes the Right to criticize India
Ahmedabad	14%	19%	21%	90%
Ajmer	15%	25%	35%	88%
Bhavnagar	7%	9%	48%	84%
Bhopal	26%	38%	30%	70%
Bhubaneswar	5%	10%	5%	41%
Chennai	10%	11%	19%	49%
Delhi	8%	8%	17%	80%
Hyderabad	13%	14%	62%	21%
Jalandhar	8%	18%	23%	68%
Kochi	1%	1%	5%	22%
Kolkata	14%	18%	13%	30%
Lucknow	19%	29%	34%	72%
Mumbai	8%	9%	57%	42%
Vadodara	46%	45%	45%	76%

In Figure 6.2, we combine the questions to create a composite score. Those who answered all 4 questions in the liberal sense are labeled "liberal," with those answering 3 as "moderate liberal," those with 2 as "centrist," and those with 1 or 0 as "conservative." The most liberal city is Kochi (with almost 70% being "liberal"), followed by Bhubaneswar and Kolkata. The most conservative city is Vadodara. The most centrist-conservative cities are Ahmedabad, Ajmer, Bhavnagar, Bhopal, Lucknow and Vadodara. The dramatic variation across all our cities speaks to how localized (or, at best, regional) basic value systems are. It is also very clear that, except for Mumbai, cities that are by or near the ocean are much more liberal (Bhubaneswar, Kochi, Kolkata, Chennai) than interior cities.[16] A similar pattern can be observed in the US. Some have argued that this is due to long-term exposure to globalization (Heller, 2020).

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[16] It has also been argued that multi-ethnic coastal cities are more prone to ethnic peace. See Jha, Saumitra "Trade, Institutions and Ethnic Tolerance: Evidence from South Asia," *American Political Science Review*, Vol. 107, No. 4, November 2013.

Figure 6.2: Liberal-Conservative Opinions by City
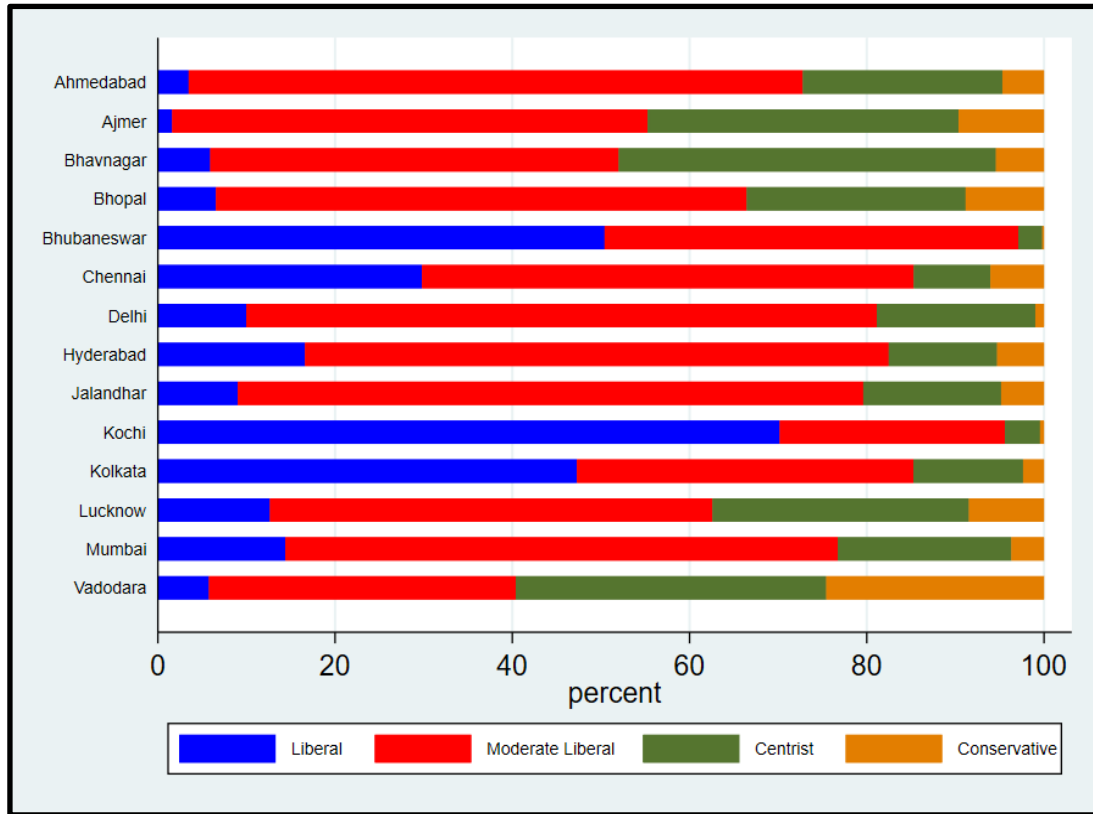
6.3 Citizen Participation Index

We now turn to our citizen participation index (CPI) and its component parts, which include (i) voting, (ii) non-voting political participation, and (iii) civic participation. Each component included questions for a total of 10 (see Appendix 2 for questions and how the index was constructed). Each score is reported on a scale of 0-1, with 0 indicating no participation and 1 indicating that the respondent participated in all 10 activities. Table 6.5 includes the overall index for each city and the sub-component scores. We begin by noting that the index of citizenship varies significantly across cities. Bhubaneshwar, Lucknow, Vadodara, Kochi, and Bhavnagar are at the top of the index. At the bottom are Delhi, Jalandhar and Mumbai, with Mumbai having by far the lowest score. Mumbai's aggregate score is driven by its low voting performance, which is the lowest among our cities. Its non-voting participation is also among the lowest.

Table 6.5: Citizen Participation Index (CPI) with Sub-components

City	CPI	Sub-components of CPI		
		Voting	Non-voting	Civic
Kochi	0.398	0.761	0.13	0.275
Ahmedabad	0.312	0.644	0.081	0.194
Bhavnagar	0.397	0.790	0.079	0.307
Chennai	0.314	0.489	0.193	0.238
Hyderabad	0.347	0.569	0.132	0.308
Mumbai	0.207	0.290	0.063	0.260
Vadodara	0.419	0.807	0.139	0.307
Kolkata	0.362	0.745	0.061	0.281
Delhi	0.289	0.634	0.056	0.168
Lucknow	0.443	0.720	0.228	0.351
Bhopal	0.353	0.673	0.099	0.293
Bhubaneswar	0.449	0.841	0.138	0.359
Ajmer	0.301	0.594	0.057	0.276
Jalandhar	0.267	0.422	0.122	0.223

6.4 Voting - Registration

In order to vote, Indian citizens must be registered. Many who migrate to the city do not always change their registration. 67% of citizens in our 14 cities report having registered to vote. There is, however, very sharp variation across cities (Figure 6.3). The highest is Bhavnagar at 91%; the lowest is Mumbai at 38%. We note that all large cities tend to have comparatively lower voter registration rates. Most of those who have not registered did not try to register. However, in three cities - Hyderabad, Jalandhar, and Mumbai - significant proportions of citizens tried to register but could not.

When we break these responses down by HT (Figure 6.4), it becomes clear that the higher the class, the greater the proportion of those registered to vote. Less than 50% of those in HT1 are registered to vote, whereas 74% of those in HT5 are registered. Those in lower class housing are also much more likely to have encountered problems in trying to register. When it comes to voting citizens, there are thus clear class-based barriers at work.

Figure 6.3: Voter Registration by City
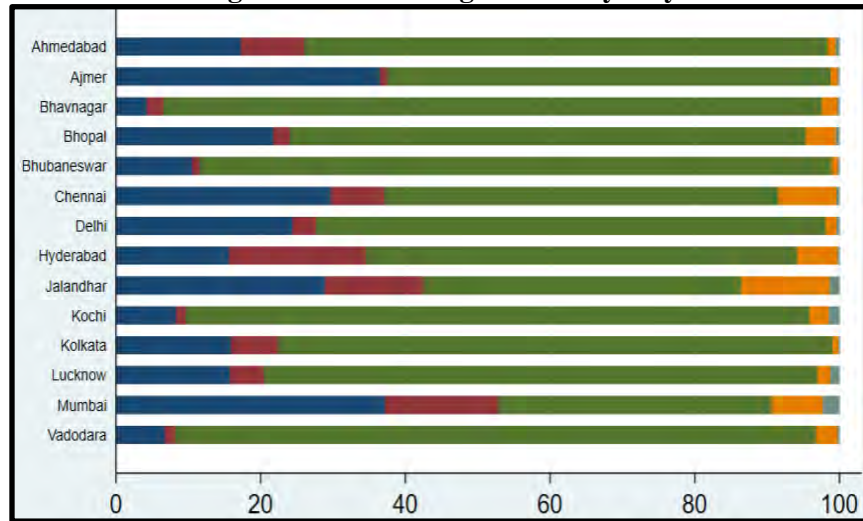
Figure 6.4: Voter Registration by Housing Type
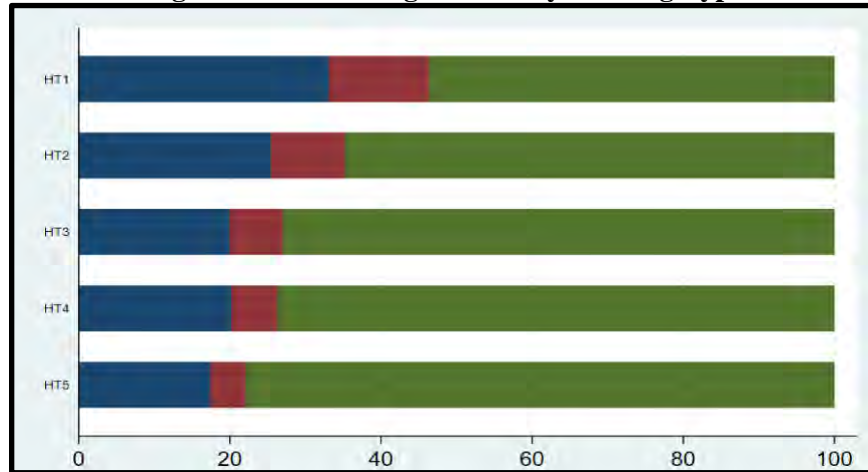
Figure 6.5: Voter Registration by Caste

No, but haven't tried to register   No, but tried to register   Yes
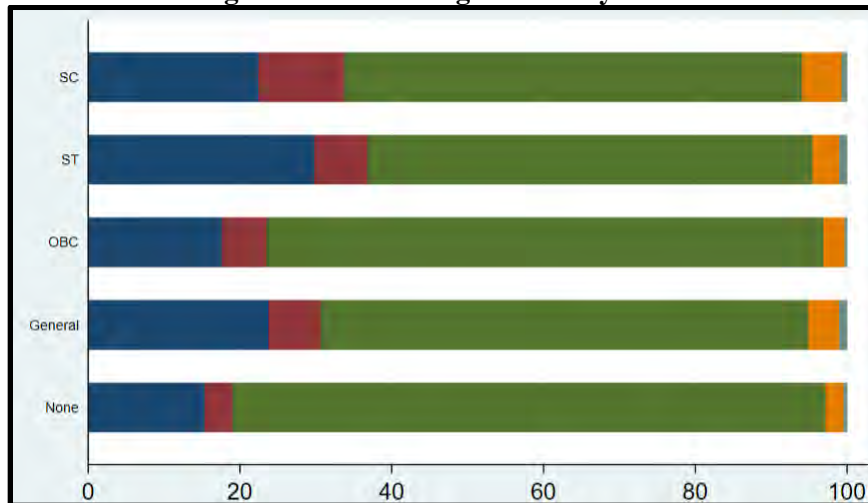
It is also clear that SCs and STs are less likely to be registered to vote than OBCs and GCs, though the differences are not as great as with HT (Figure 6.5).

6.5 Voting- Municipal, State, and National

What stands out from Table 6.6 is that levels of self-reported voting are generally high (overall: 61% in the municipality, 63% in the state, and 62% in a national election) and are quite similar across municipality, state, and national elections. However, there is significant variation across cities. In Bhubaneshwar and Kochi, voting across all three elections is above 80%, with Bhavnagar and Vadodara close behind. In contrast, Mumbai, Chennai, and Jalandhar have voting levels below 50%.

Focusing on voting in municipal elections, we find interesting variance across social categories. To begin with, we see in Table 6.6 that HT1 and HT2 are significantly less likely to vote in municipal elections than those in HT3, HT4, and HT5. Only 41% of HT1 votes were compared to a high of 69% in HT5. In contrast to the common assumption that slums are vote banks, only 55% of those in HT2 vote. However, the pattern across cities varies very dramatically (Figure 6.7). Delhi and Ahmedabad have a more or less rising slope, with the voting percentages moving up with the housing type. Others do not have similar rising slopes. Kochi and Bhavnagar have relatively flat lines compared to other cities, indicating that the voting differences across classes are small. Kolkata stands out as the only city where slums (HT2) vote the most of any housing type, much as the traditional slum vote bank argument might have anticipated.

Figure 6.6: Voter Trends by City

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Table 6.6 Voting in 3 levels of elections by housing type

Housing Type	Municipal	State	National
HT1	41%	43%	42%
HT2	55%	57%	55%
HT3	64%	66%	65%
HT4	67%	68%	66%
HT5	69%	71%	69%

Figure 6.7: Voting in Municipal Elections by City and Housing Type
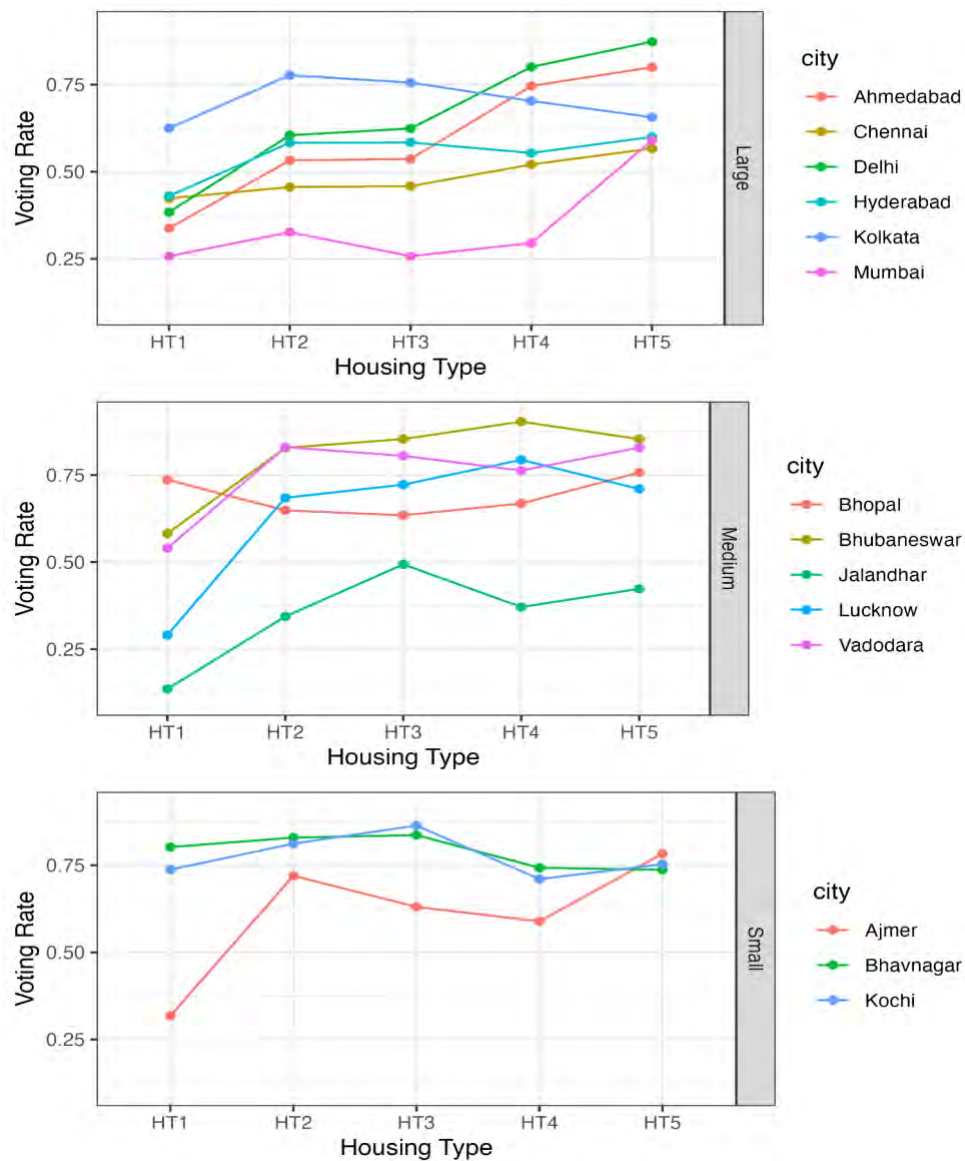
When voting in municipal elections is broken down by religion, there is basically no difference between Muslims and Hindus at the aggregate level (Figure 6.8). But there is interesting variation at the city level. In Figure 6.9, we find that in seven cities, Muslims vote more than Hindus, but in five, the pattern is reversed, and in two, it is roughly the same. The largest gap is in Jalandhar, where Hindus outvote Muslims by 10%.

Figure 6.8: Voting by Religion
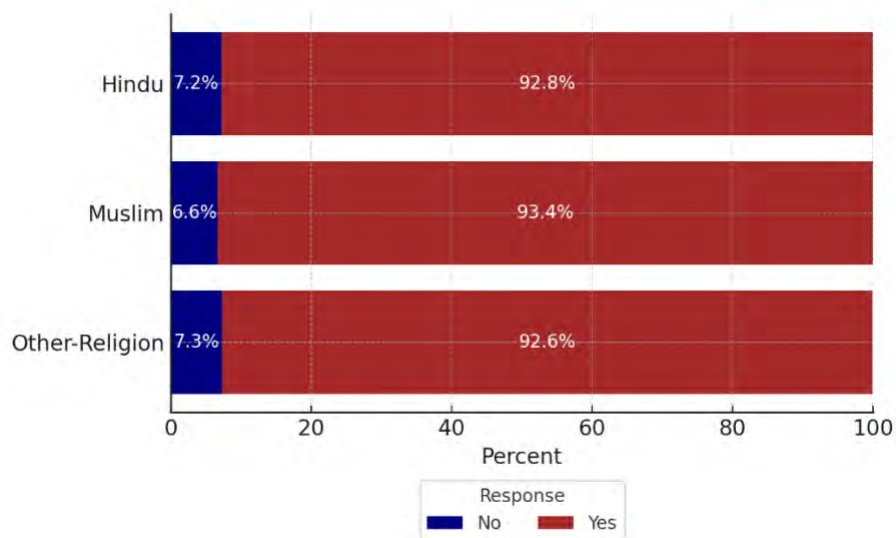
Figure 6.9: Voting by Religion and City
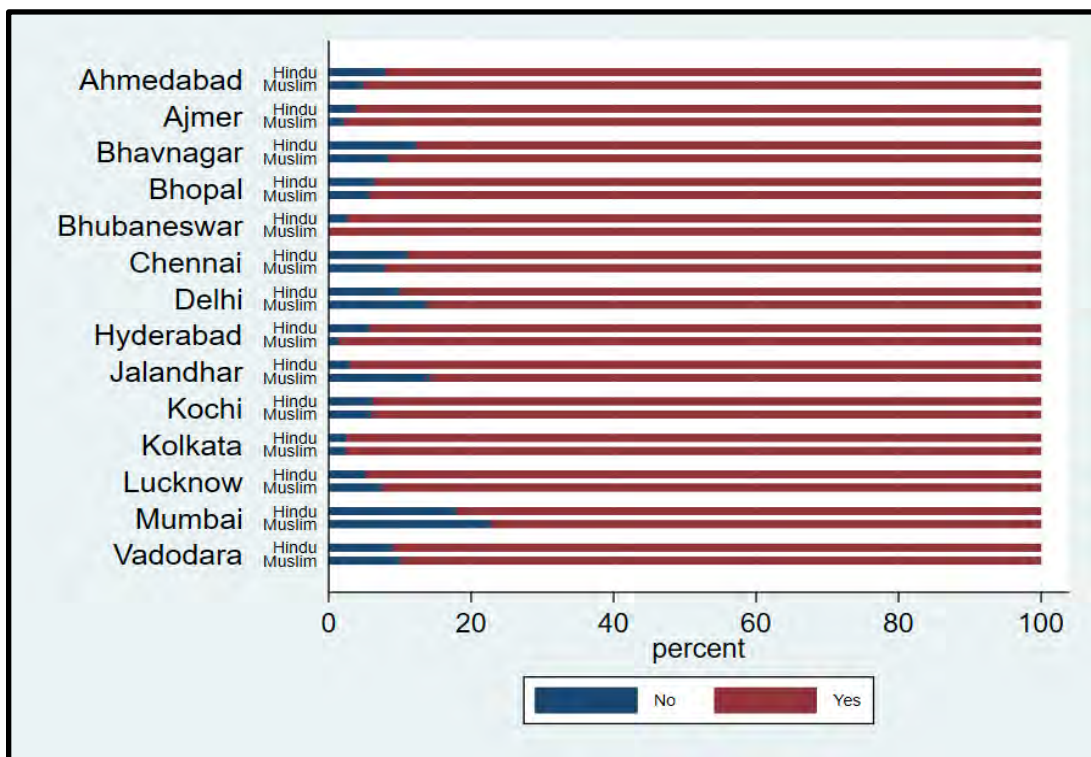
6.6 Non-electoral Political Participation

We now turn to our index of non-voting participation. It includes four questions covering political party membership, attendance at rallies, talking about politics with neighbors, and contributing time to a campaign. A score of "1" would mean that the respondent answered affirmatively to all four questions, with "0" indicating only negative responses. Urban citizens in Indian cities are not very politically active, with an average score of 0.11. This means that, on average, across all cities citizens participate in less than one form of activity, though participation in number of activities varies for each city. Further, the data reveals that approximately 80% of respondents do not participate in non-electoral political participation. About 10% participate in one form (and the remaining 10% in two through all four forms). Across cities, however, there is significant variance. The high is in Lucknow at 0.23, meaning that, on average, respondents engage in one of the forms of non-electoral participation. No other city is above 0.2, making Lucknow a clear outlier. The low is in Ajmer, which at 0.56 is almost 4 times lower than Lucknow.

One of the component questions is worth reporting. On party membership (Figure 6.10), numbers are predictably low, with most cities in single digits. But in Lucknow, 17% belong to a political party, with only Bhubaneswar coming close at 15%. Interestingly, party membership is the lowest in our three Gujarati cities and Delhi, below 5%.

Figure 6.10: Party Membership by City
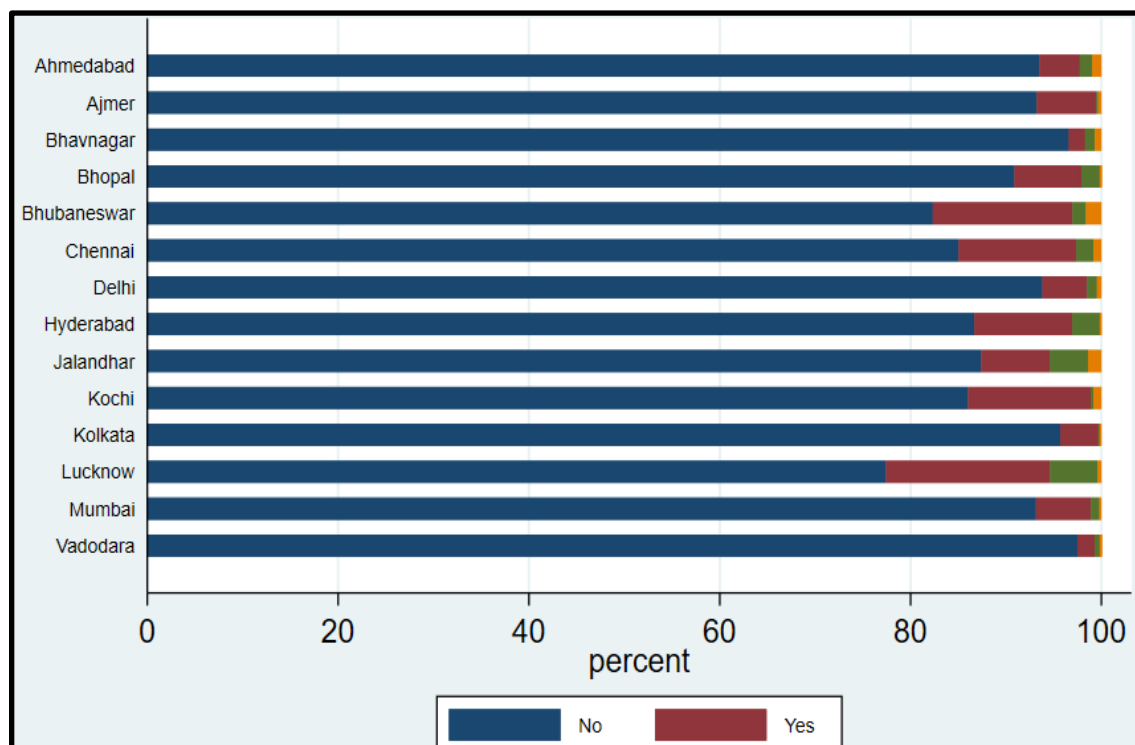
In section 8 of this report, we examine the variation in non-electoral political participation across the social categories of housing types, caste, and religion and find no significant difference. It would appear that all social groups have an equal stake in it.

6.7 Civic Participation

The last sub-component of our CPI is civic participation. We measured this by asking respondents questions about their community engagement and then creating an index (see Appendix 2 for details). The questions include whether a respondent attends ward committee meetings, holds membership in non-political, non-government organizations and associations (such as resident welfare/neighborhood associations, caste, religious and linguistic organizations, sports clubs, non-government organizations, and so on), and perceptions of community participation in preventing harassment of women in the neighborhood. A score of "1" would mean that the respondent answered positively to all indicators of civic participation, with "0" indicating only negative responses. The aggregate score was 0.27 across all cities, meaning the average citizen engaged in one civic activity. The variance across cities is significant. The highest was in Bhubaneswar at 0.359, with Delhi having the lowest at 0.168, closely followed by Ahmedabad at 0.194. In other words, citizens in Bhubaneswar are twice as active in civic life as in Delhi. As with non-electoral political participation (see Table 6.5 above), we find that social variables such as class, caste, and community identity have very limited power in explaining variation in civic participation (see models in section 8).

To disentangle the findings about civic participation, we can look more closely at our question about belonging to civic organizations. Since not all associations are the same, we classified them into two bundles, one that we label "civic" (civic or professional associations such as unions, RWAs, NGOs, and cooperative societies) and the other that we label "identity-based" associations (religious, cultural, caste-based). Based on our collected data, we note a significant variation across cities. At one extreme is Kochi, which has the highest percentage of citizens belonging to civic associations, and at another is Vadodara, with the highest percentage of citizens belonging to identity-based associations and the fewest belonging to civic associations. Our data also shows regional differences. In the three southern cities (Kochi, Chennai, and Hyderabad), membership in civic associations prevails (see Figure 6.11) over membership in identity associations (as is also the case in Bhubaneshwar). In contrast, the pattern is reversed in the three Gujarati cities.

We find some differences when we look at the pattern of civic vs identity organizations across cities and HTs (Figure 6.12). Most notably, in most cities, those living in informal housing (HT1 and 2) are less likely to belong to associations than middle to upper classes (HT 3, 4, and 5). In Jalandhar and Chennai, the gap is extreme. In contrast, the pattern is reversed in Bhavnagar, Hyderabad, Bhopal, Delhi, and Kolkata, with more associationalism in HT1 and HT2.

Figure 6.11: Associational Membership by City (Percentage)
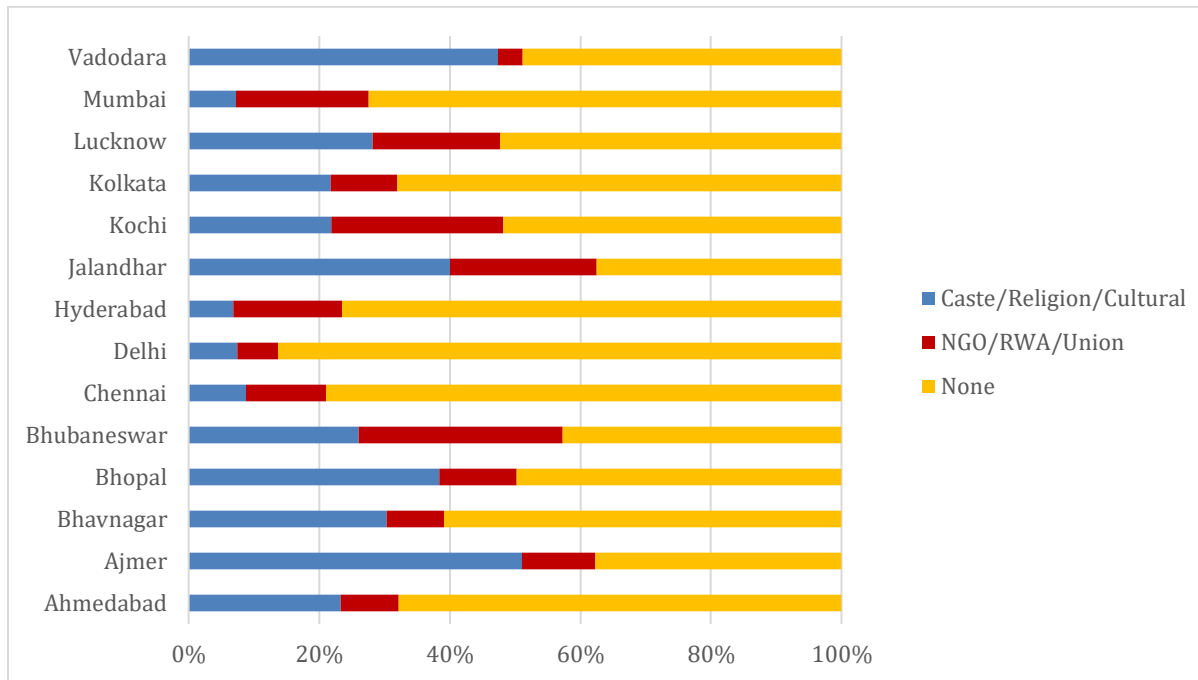
Figure 6.12: Associational Membership by Housing Type (Percentage)
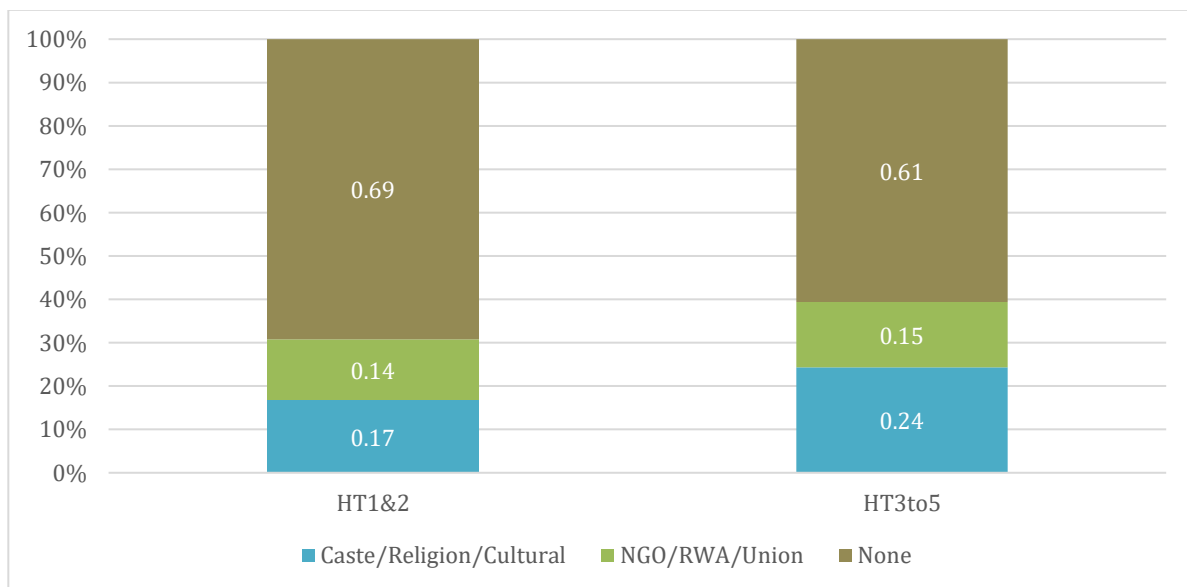
7. Reproduction of Social Inequality

We know that there is a lot of inequality in Indian cities, including pronounced patterns of spatial exclusion.[17]. As we have seen in the previous section, the level of services that households get varies across social categories in all Indian cities, though the pattern is much less pronounced in some cities, such as Kochi and Vadodara. So far, we have only shown that there are correlations: if you live in an HT1 or HT2 settlement, you are less likely to get quality services or that if you are Dalit/Adivasi, you are less likely to get quality sanitation. In this section, we are interested in how societal inequalities are reproduced. We specifically look at discrimination between groups and by state actors and the degree to which social ties might be an example of bonding, as opposed to bridging, meaning ties are mostly internal to the groups.

7.1 Discrimination

We asked a series of questions designed to measure discrimination or preferential treatment. Specifically, we asked respondents to tell us how they thought the police treated people based on income, caste, religion, gender, and language. We focused on the police because their activities are more visible and coercive than other branches of government.

Overall, 23% report that police treat the rich better than the poor. There was some important variation across cities on this issue (Figure 7.1). In Jalandhar, 40% responded that the police treated the rich better, with Chennai close behind. In Ajmer, Bhubaneswar, Hyderabad, and Kochi are 10% or less, though the police treat the rich better.

Figure 7.2 captures caste discrimination by the police. It is not as sharp as the data in class, but it is still significant. In Mumbai and Jalandhar, citizens reported that the police treat upper caste people better at 32%. Remarkably, in Kochi, less than 2% felt that the police treat upper castes better, followed closely by Bhubaneswar at 3.5%.

Finally, we report how the police are viewed as treating Hindus and non-Hindus. As we see in Figure 7.3, some cities, such as Kochi and Bhopal, report no such discrimination (below 2%). All cities, except two, are in single digits when it comes to the police treating Hindus better. But Chennai, Jalandhar, and Vadodara rose to 10-15%, and Mumbai has the highest reported discrimination by police at 22%.

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[17] For more details, see Bharathi, Naveen, Deepak V. Malghan, and Andaleeb Rahman. "Isolated by Caste: Neighbourhood-scale Residential Segregation in Indian Metros." *IIM Bangalore Research Paper* 572 (2018). Also, Heller, Patrick, and Partha Mukhopadhyay. "State-produced Inequality in an Indian City." *Seminar, Issue*. No. 672. 2015 and Singh, Gayatri, Trina Vithayathil, and Kanhu Charan Pradhan. "Recasting inequality: Residential Segregation by Caste over time in Urban India." *Environment and Urbanisation* 31.2 (2019): 615-634.

Figure 7.1: Views on Class-based Treatment by Police in City

Rich Treated Better ▮ Both Treated Equal ▮ Poor Treated Better
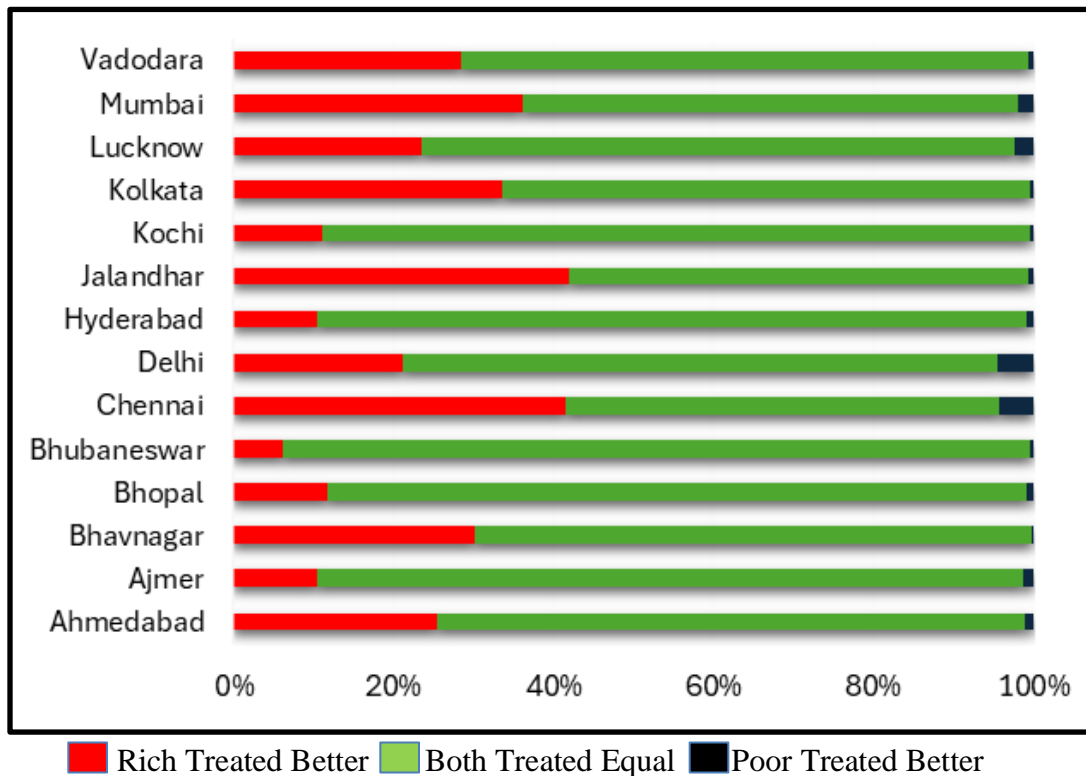
Figure 7.2: Views on Caste-based Treatment by Police in City

Both Treated Equal ▮ GC Treated Better ▮ SC Treated Better

Figure 7.3: Views on Religion-based Treatment by Police in City

Legend: ■ Both Treated Equal ■ Non-Hindu Treated Better ■ Hindu Treated Better
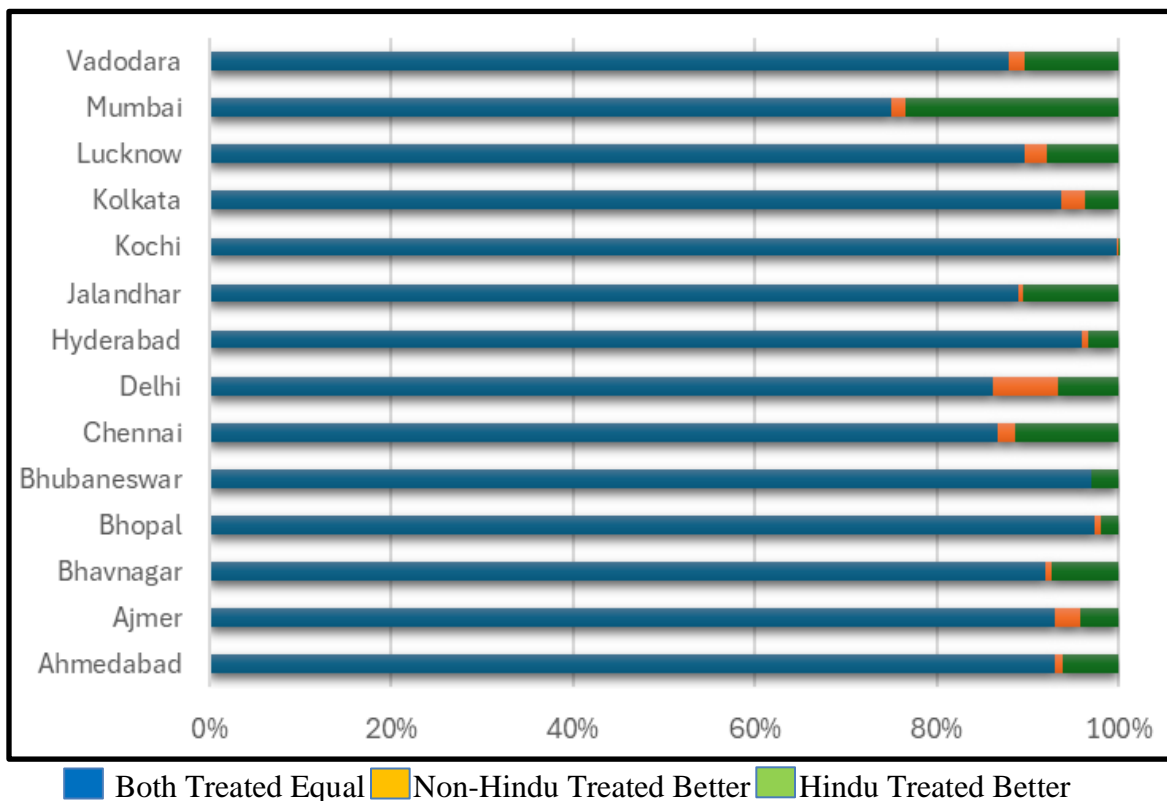
7.2 Social Ties

To what degree are social categories simply being reproduced by social interactions? To what extent are the lives of urban Indians marked by "strong ties" (that is, ties defined by primary identities), and to what extent are they defined by "weak ties" (social connections that go beyond one's community)?[18] It is generally assumed that cities nurture a plurality of associational ties, giving individuals opportunities to engage with and develop social ties to those beyond their immediate identity group. We tried to gauge these questions by asking our respondents about their social ties, specifically how many friends they had outside their caste/community and how often someone in their family had married outside their caste/community.

Our data shows that 47% percent of respondents reported having a close friend outside of their own caste. In Figure 7.4, we present the variation across cities, which is notable. The highest degree of social insularity was in Delhi, where an astonishing 96% did not have a single friend from outside their caste. The second closest city was Jalandhar, at 75%. The city with the greatest degree of inter-caste interaction is Bhavnagar, where only 36% reported *not having* a friend outside their caste. Chennai was the only other city where less than 50% of the respondents did not have a friend outside their caste. There is a clear pattern here. Except Chennai, the mega-cities all have

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[18] The concept of strong and weak ties is associated with Mark Grannovetter , 1976, "The Strength of Weak Ties." *American Journal of Sociology.*

high levels of caste insulation. This contradicts the common assumption that larger cities are more cosmopolitan - that is, less rooted in traditional or primary social ties. Our data in fact clearly show that it is the small cities (Kochi, Ajmer, and Bhavnagar) where there are the most inter-caste ties.

When we asked the same question about friends outside one's own religion, we found that 54% have no friends outside their religion. Once again, Delhi is the most insular city, with 93% reporting not having a close friend from another religion (Figure 7.5). The next most insular city was Kolkata, at 73%. Bhavnagar and Chennai had the most open relations, with almost two-thirds of citizens in Bhavnagar having a friend or more outside their religion. Here again, in smaller cities (Ajmer, Bhavnagar, and Kochi), people tend to have more social ties outside their religious community.

Figure 7.4: Friends from another Caste by City
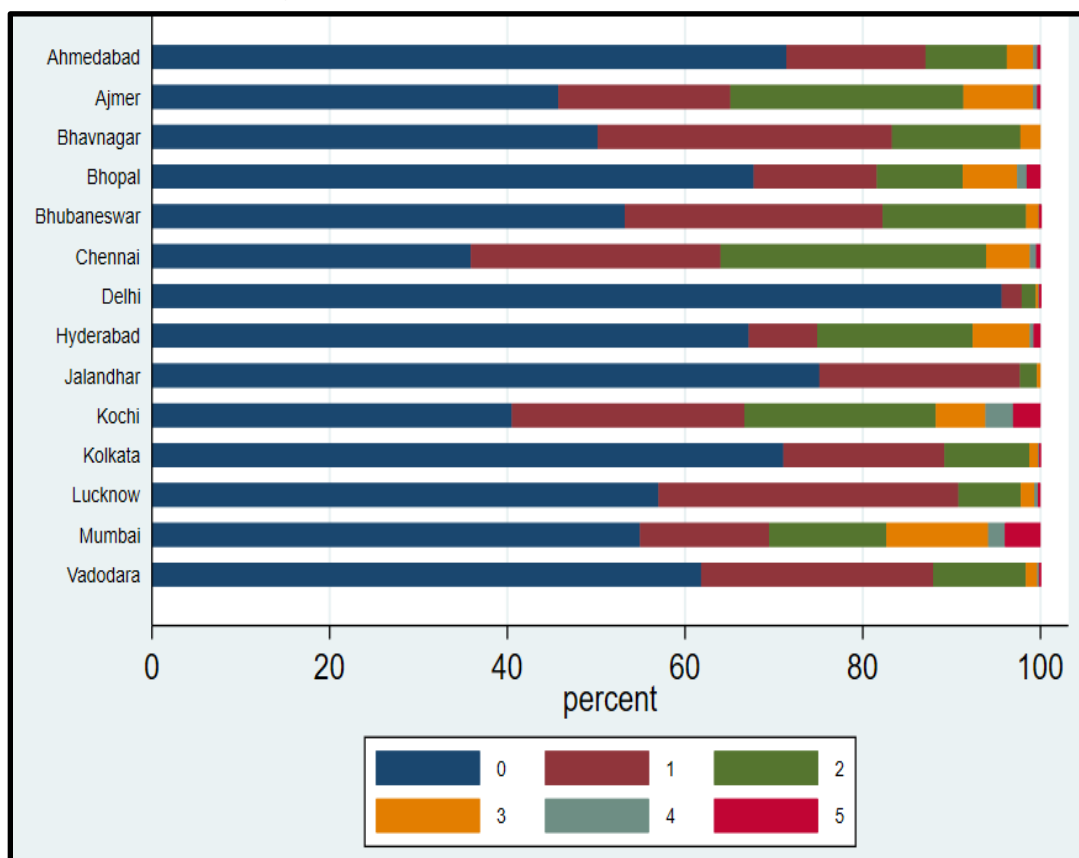
Figure 7.5: Friends from another Religion by City
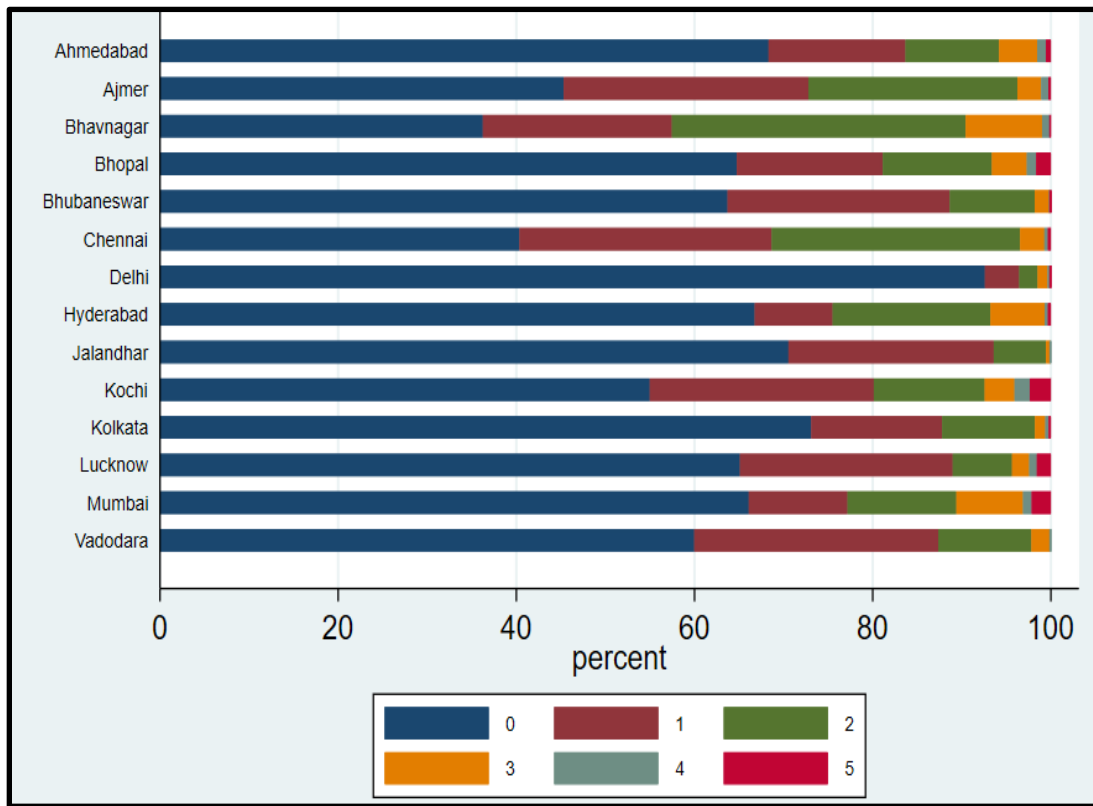
8: Statistical Models

8.1 Basic Service Delivery and Infrastructure

We begin by first presenting the associations between the dependent variable (Basic Service Delivery and Infrastructure index or BSDII) and a set of independent variables for the sample that includes all cities. We then present the results for the cities by city size (large, medium and small). Finally, we present the results for each city individually.

The first set of models we present considers only socio-structural variables (caste identity, religious identity, class, and migrant status) as the set of independent variables. These models are estimated using ordinary least squares (OLS) with robust standard errors.

Given that our household level (level-1) data is nested within cities (level-2), we also estimate multilevel maximum likelihood models that take into account cross-city variation (Gelman and Hill 2006). Multilevel models explain variation in the dependent variable by using all of the available information across levels, i.e., combine data from multiple levels of analysis in a single comprehensive framework. Pooling all cities in the presence of cross-city effects produces incorrect standard errors and inflated Type 1 errors, and standard estimation techniques violate the assumption of error independence (Steenbergen and Jones 2002). Therefore, we also estimate a multilevel model with households comprising level-1 and city as level-2 with random intercepts and fixed slope. We present these results alongside the OLS model.[19]

The OLS estimation model takes the following form:

(1) $BSDII_i = \beta_0 + \beta_1 Class_i + \beta_2 Caste_i + \beta_3 Religion_i + \beta_4 Non\text{-}Migrant_i + e_i$

The multilevel model takes the following form:[20]

(2) $BSDII_{ij} = \beta_{0j} + \beta_{1j} Class_{ij} + \beta_{2j} Caste_{ij} + \beta_{3j} Religion_{ij} + \beta_{4j} Non\text{-}Migrant_{ij} + e_{ij}$

where,

$\beta_{0j} = \eta_{00} + \delta_{0j}$

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[19] We also estimate bivariate models for each city using housing type, caste and religion as independent variables (in separate models). We do not report the results here but are available upon request.

[20] BSDII is the level-1 dependent variable for a level-1 unit (household) i $(1,….,N_j)$ nested in a level-2 unit (city) j $(1,...J)$.

8.2 Variables

The independent variables include caste identity, religious identity, class, household assets, and household migrant status.

Caste follows the standard self-identification categories of SC (officially Scheduled Castes, consisting of Dalits), ST (officially Scheduled Tribes, consisting of adivasis), Other Backward Classes (OBCs), and the GC (typically upper caste groups). The caste variable takes the form of dummy variables coded 1 for (a) SC and ST and (b) OBC, and 0 otherwise. The reference group is the GC (GC).

For religion we create 3 dummy variables for Hindu, Muslim, and other religious minority households. Hindus form the reference group.

The class variable, as noted earlier and explained in detail in the Appendix, is measured using five housing types: (a) Informal housing (HT 1); (b) Slum housing (HT 2); (c) Lower Middle-class housing (HT 3); (d) Middle class housing (HT 4); (e) Upper class housing (HT 5). In our statistical analysis we create 4 dummy variables - informal (HT1) households, slum housing (HT2), and middle- and upper-class housing combined (HT4 & HT5). HT3 - lower middle-class housing - forms the reference category.

Non-migrants are respondents who say they have lived in the city their entire life.

Finally, note that in all the multivariate models the intercept represents a Hindu, GC respondent, who lives in HT 3 and is a migrant - and the results should be interpreted accordingly.

We present the statistical results from our modelling first, and then provide interpretations based on them.

8.3 Results

(in three tables below)

Table 8.1: BSDII Regressions (OLS) - By City Size

	All Cities	City 1 (4 Mill +) (Ahmedabad, Chennai, Hyderabad, Mumbai, Kolkata, Delhi)	City 2 (Vadodara, Lucknow, Bhopal)	City 3 (Ajmer, Jalandhar, Bhavnagar, Kochi, Bhubaneswar)
Informal Shack (HT1)	-0.27 (0.004)***	-0.212 (0.004)***	-0.347 (0.010)***	-0.444 (0.009)***
Slum (HT2)	-0.10 (0.002)***	-0.109 (0.002)***	-0.046 (0.005)***	-0.100 (0.006)***
Upper Class Housing (HT 4 & 5)	0.03 (0.001)***	0.038 (0.002)***	0.049 (0.003)***	0.022 (0.002)***
Caste: SC & ST	-0.05 (0.002)***	-0.05 (0.002)***	-0.033 (0.004)***	-0.025 (0.005)***
Caste: OBC	-0.02 (0.001)***	-0.039 (0.002)***	-0.010 (0.003)	0.014 (0.002)***
Religion: Muslim	-0.02 (0.002)***	-0.014 (0.003)***	-0.022 (0.004)***	-0.003 (0.004)
Religion: Other Minority	0.002 (0.003)	-0.020 (0.005)***	-0.050 (0.009)***	0.029 (0.003)***
Non-Migrant	0.008 (0.001)***	0.001 (0.002)	0.011 (0.003)***	0.003 (0.002)
Constant	0.86 (0.001)***	0.869 (0.001)***	0.845 (0.003)***	0.847 (0.002)***
N	28945	16195	5824	6926
F	1054.43	732.80	253.13	415.221
RMSE	0.123	0.123	0.113	0.112

Table 8.2: Multilevel Models - By City Size

	All Cities	City 1 (4 Mill +) (Ahmedabad, Chennai, Hyderabad, Mumbai, Kolkata, Delhi)	City 2 & 3 (Vadodara, Lucknow, Bhopal, Bhubaneswar, Ajmer, Kochi Jalandhar, Bhavnagar)
Informal Shack (HT1)	-0.27 (0.002)***	-0.24 (0.003)***	-0.36 (0.004)***
Slum (HT2)	-0.10 (0.002)***	-0.10 (0.002)***	-0.06 (0.002)***
Upper Class Housing (HT 4 & 5)	0.04 (0.001)***	0.05 (0.002)***	0.03 (0.002)***
Caste: SC & ST	-0.03 (0.001)***	-0.02 (0.002)***	-0.04 (0.003)***
Caste: OBC	-0.001 (0.001)	0.01 (0.002)***	-0.005 (0.002)**
Religion: Muslim	-0.02 (0.002)***	-0.03 (0.002)***	-0.02 (0.003)***
Religion: Other Minority	0.009 (0.003)***	0.003 (0.005)	0.01 (0.004)***
Non-Migrant	0.002 (0.001)	0.0009 (0.001)	0.001 (0.002)
Constant	0.85 (0.010)***	0.84 (0.020)***	0.86 (0.014)***
Random Effects Var(City)	0.001	0.002	0.001
Var(Residuals)	0.012	0.015	0.013
N	28945	16195	12750
Groups	14	6	8

Table 8.3: BSDII Regressions (OLS) - Individual Cities

	Ahmedabad	Chennai	Hyderabad	Mumbai	Kolkata	Delhi
Informal Shack (HT1)	-0.478 (0.016)***	-0.249 (0.009)***	-0.292 (0.013)***	-0.272 (0.006)***	-0.141 (0.009)***	-0.237 (0.014)***
Slum (HT2)	-0.083 (0.006)***	-0.088 (0.006)***	-0.029 (0.005)***	-0.262 (0.004)***	-0.038 (0.004)***	-0.069 (0.012)***
Upper Class Housing (HT 4 & 5)	0.063 (0.005)***	0.066 (0.004)***	0.026 (0.005)***	0.018 (0.004)***	0.012 (0.004)***	0.049 (0.005)***
Caste: SC & ST	-0.003 (0.007)	-0.031 (0.008)***	-0.070 (0.008)***	0.011 (0.005)**	-0.028 (0.006)***	-0.049 (0.006)***
Caste: OBC	0.032 (0.005)***	-0.001 (0.007)	-0.035 (0.007)***	-0.001 (0.008)	-0.010 (0.007)	-0.009 (0.005)*
Religion: Muslim	-0.063 (0.007)***	-0.015 (0.010)	-0.090 (0.005)***	0.013 (0.007)**	-0.036 (0.007)***	-0.007 (0.006)
Religion: Other Minority	0.031 (0.012)**	0.001 (0.008)	-0.035 (0.020)*	-0.011 (0.008)	-0.026 (0.017)	-0.038 (0.010)***
Non-Migrant	0.013 (0.005)***	-0.025 (0.004)***	0.022 (0.004)***	0.006 (0.004)*	0.013 (0.003)***	-0.021 (0.005)***
Constant	0.837 (0.006)***	0.767 (0.007)***	0.882 (0.007)***	0.927 (0.004)***	0.883 (0.003)***	0.879 (0.003)***
N	2569	2665	2363	2730	2829	3039
F	249.73	218.56	133.01	815.15	59.73	76.53
RMSE	0.104	0.115	0.104	0.100	0.093	0.127

	Vadodara	**Lucknow**	**Bhopal**	**Bhubaneswar**
Informal Shack (HT1)	-0.413 (0.018)***	-0.450 (0.015)***	-0.233 (0.012)***	-0.349 (0.011)***
Slum (HT2)	-0.062 (0.006)***	-0.047 (0.010)***	-0.040 (0.008)***	-0.061 (0.006)***
Upper Class Housing (HT 4 & 5)	0.040 (0.004)***	0.035 (0.005)***	0.030 (0.006)***	0.003 (0.004)
Caste: SC & ST	-0.003 (0.006)	-0.060 (0.009)***	-0.045 (0.008)***	-0.041 (0.006)***
Caste: OBC	0.009 (0.005)*	-0.013 (0.005)**	-0.025 (0.005)***	-0.001 (0.005)
Religion: Muslim	-0.005 (0.007)	-0.005 (0.005)	-0.033 (0.007)***	0.013 (0.012)
Religion: Other Minority	0.014 (0.012)	-0.032 (0.011)***	-0.055 (0.018)***	0.022 (0.015)
Non-Migrant	0.006 (0.004)	-0.0002 (0.005)	-0.011 (0.005)**	-0.019 (0.005)***
Constant	0.879 (0.005)***	0.833 (0.004)***	0.862 (0.005)***	0.827 (0.004)***
N	1919	2023	1882	2034
F	116.88	227.30	81.08	192.79
RMSE	0.086	0.108	0.116	0.093

	Ajmer	**Jalandhar**	**Bhavnagar**	**Kochi**
Informal Shack (HT1)	-0.590 (0.015)***	-0.477 (0.021)***	-0.163 (0.020)***	-0.185 (0.011)***
Slum (HT2)	-0.024 (0.012)**	-0.277 (0.027)***	-0.012 (0.009)	-0.043 (0.006)***
Upper Class Housing (HT 4 & 5)	0.014 (0.005)***	0.026 (0.007)***	0.055 (0.008)***	0.035 (0.004)***
Caste: SC & ST	-0.016 (0.007)**	-0.0004 (0.009)	-0.044 (0.014)***	-0.025 (0.009)***
Caste: OBC	0.002 (0.006)	0.028 (0.010)**	-0.035 (0.008)***	-0.007 (0.004)
Religion: Muslim	-0.012 (0.011)	-0.014 (0.023)	-0.040 (0.011)***	-0.020 (0.005)***
Religion: Other Minority	0.024 (0.008)***	0.037 (0.008)***	0.034 (0.018)*	0.019 (0.005)***
Non-Migrant	0.008 (0.005)	-0.048 (0.008)***	-0.038 (0.006)	0.025 (0.004)***
Constant	0.920 (0.005)***	0.835 (0.008)***	0.864 (0.008)***	0.867 (0.008)***
N	1011	1095	976	1810
F	206.47	107.87	66.58	78.56
RMSE	0.084	0.138	0.093	0.078

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8.4 Interpretation

We first present results in statistical language and end with a summary of substantive conclusions.

In the OLS model for all cities (Table 8.1), we find that the level of basic service delivery and infrastructure in informal shacks and slums (HT1 & 2) is lower relative to the lower middle households (HT3). In terms of magnitude, informal shacks are, on average, characterized by an index score that is 0.27 units less than that for HT3. Similarly, slum housing has an index score that is 0.10 units less than that of HT3. Basic service delivery and infrastructure in upper-class housing (HT4&5), however, is greater than that of lower-middle households by 0.03 units. These results are statistically significant at the 99 percent confidence level.

With the multilevel model (Table 8.2), we find that the city level (level-2) accounts for approximately 7.5 percent of the variation in household BSDII. This suggests that a multilevel model is more appropriate in this context. The multilevel model also yields similar results in terms of sign and magnitude. HT1 & 2 are, on average, 0.27 units and 0.10 units less than HT 3, respectively. Similarly, HT4 & 5 are about 0.04 units greater than HT 3. These results are statistically significant at the 99 percent confidence level.

SC & ST households have lower levels of basic service delivery and infrastructure than GC households in both OLS and multilevel specifications. Their score is, on average, 0.05 units less than that of GC households. The magnitude reduces to 0.03 in the multilevel model. These results are statistically significant at the 99 percent confidence level. In the OLS model, OBC households are lower than GC households by 0.02 units. However, the multilevel model shows that basic services and infrastructure in OBC households are not different from those in GC households (the coefficient on OBC households is not statistically significant). Muslim households have a level of basic service delivery and infrastructure that is lower than that of Hindu households in both OLS and multilevel specifications. Compared to a Hindu household, Muslim households have a BSDII score which is, on average, 0.02 units less. This result is statistically significant at the 99 percent confidence level. Other minority religion households are not different from Hindu households in the OLS model but are statistically significant in the multilevel model and are, on average, 0.01 units greater than BSDII in Hindu households. The association between the non-migrant household and basic service delivery and infrastructure is positive and significant (at the 99 percent confidence level) in the OLS model but loses significance in the multilevel specification.

Substantively, this implies that the basic service and infrastructure score for an HT1-Hindu-GC (meaning the poorest Hindu upper caste) household is only 0.58- i.e. 58 percent—of the full set of services, compared to an HT3-Hindu-GC (Lower middle class) household, which is about 0.85. That means there is close to a 30 percentage point difference between the HT1 and HT3 categories among Hindus. Similarly, the BSDII score for an HT2-Hindu-GC (meaning a poor, if not the poorest, Hindu upper caste) household is 0.75. The score for HT4&5 increases to 0.89, close to 90 percent of the full set of basic services. An HT3-Hindu-SC/ST household has a BSDII score of 0.82 - or about 82 percent of the full set of services. Given that SC and ST populations tend to be located in HT1 and HT2, these households - HT1-HT2 SC/ST - receive only between 55 and 65

percent of services. A Muslim-HT3-GC receives about 83 percent of the services. These associations are presented in the following figures with predicted BSDII for the different social categories used in the analysis.

Figure 8.1: Predicted BSDII by Housing Type
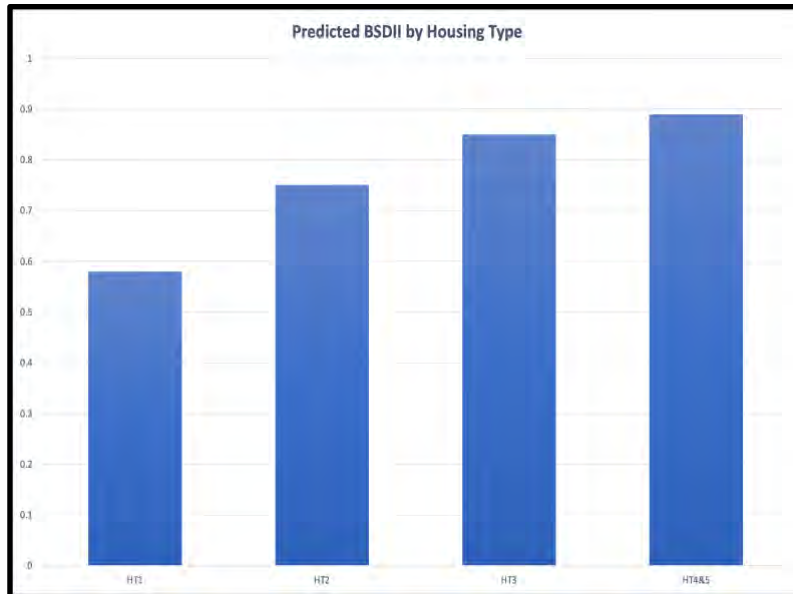
Figure 8.2: Predicted BSDII by Caste
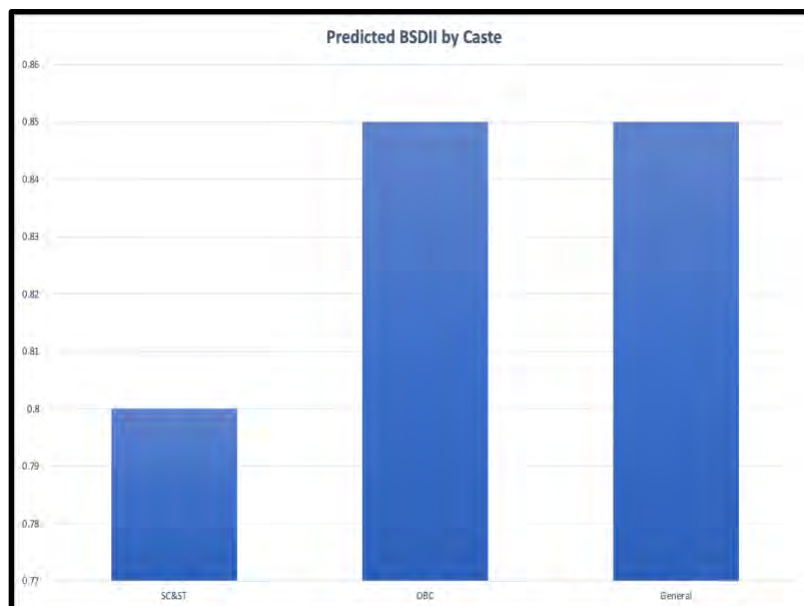
Figure 8.3: Predicted BSDII by Religion
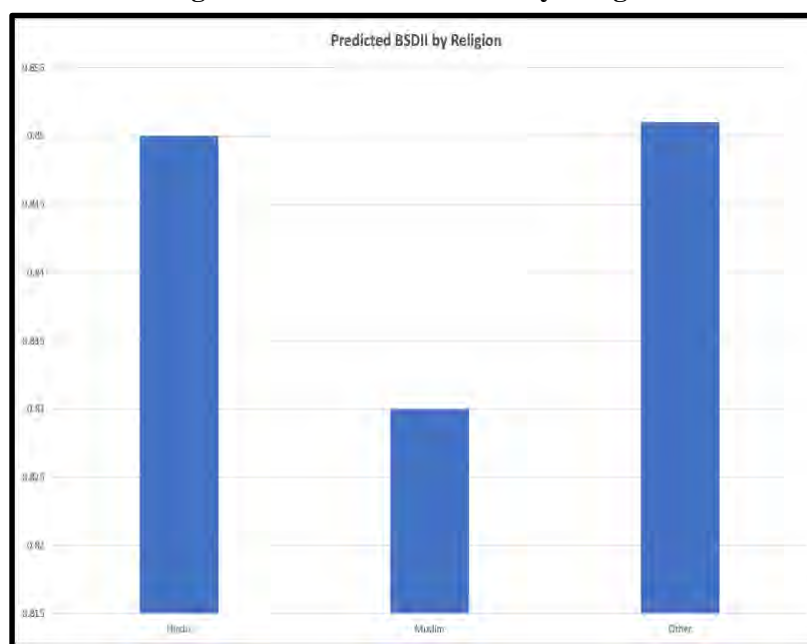
Conclusions: The models indicate that the housing type is the strongest correlate of basic services and infrastructure across various specifications (in models that include housing type on its own or along with other variables). Lower class position is strongly associated with lower BSDII. SC and ST households are also likely to have lower levels of BSDII compared to GC households. Our results, however, show that OBC households are, on average, similar to GC households. Finally, we also find that, on average, Muslim households are characterized by lower levels of BSDII compared to Hindu households, though the difference is not very large.

8.5 Interpretation (2) - City Size Models

City 1 (4.5 million +): Mumbai, Delhi, Kolkata, Chennai, Hyderabad, Ahmedabad

Here, we estimate the above models by city size. First, we consider cities with a population of 4.5 million or more. This includes the six metros: Mumbai, Delhi, Kolkata, Chennai, Hyderabad, and Ahmedabad.

In this set of cities, we find results similar to the ones in Section 8.4, but the magnitudes vary. The level of basic service delivery and infrastructure in informal shacks and slums (HT1 & 2) is lower relative to the lower middle households (HT3). The OLS model indicates that in terms of magnitude, informal shacks are, on average, characterized by an index score of 0.21 units less than that for HT3. Similarly, slum housing has an index score, which is 0.10 less than that of HT3. Basic service delivery and infrastructure in upper-class housing (HT5) is greater than that of lower-middle households by 0.03 units on average. These results are significant at the 99 percent confidence level.

The multilevel model yields similar results (Table 8.2). BSDII for HT 1 & 2 are about 0.24 and 0.10 units lower than of HT3 respectively, and 0.05 units above HT3 for HT4 & 5.

SC & ST households in the OLS model have levels of basic service delivery and infrastructure that are lower than those of the GC households. SC & ST households have, on average, 0.05 units less than GC households. Similarly, OBC households register on average 0.04 units less than GC households. These results are significant at the 99 percent confidence level. While the sign for SC & ST households in the multilevel model is the same as in the OLS model, the sign on OBC households becomes positive, suggesting that OBC households in cities with more than 4.5 million residents have a BSDII score greater than GC households (by about 0.01 units).

Muslim households have a level of basic service delivery and infrastructure which is lower than that of Hindu households. Compared to a Hindu household, Muslim households have, on average, 0.02 units less. Similarly, other religious minority households tend to have lower scores compared to Hindu households, by 0.03 units. These results are significant at the 99 percent confidence level in the OLS model. The multilevel model indicates that while the sign on the coefficient of Muslim households is the same (i.e., negative), the magnitude increases to 0.03 units. Other minority religious households are not significantly different from Hindu households.

The level of basic service delivery and infrastructure in informal shacks and slums (HT1 & HT2) is lower than that of HT3. The BSDII for HT4 and HT5 is greater than that of HT3.   However, it is worth noticing that the SC, ST, and Muslim households in Mumbai have a higher BSDII than GC and Hindu households, respectively. Moreover, OBC households are no different from GC households. Since SCs are numerically the overwhelming proportion of the SC-ST category, it is safe to say that their BSDII is driving the overall SC-ST result. Compared to the reference groups, SC and Muslim BSDI scores are higher, which makes Mumbai quite distinctive. In other words, as far as public services and infrastructure are concerned, Mumbai, in class terms, is similar to many other cities, but not in terms of how SCs and Muslims have fared. This result is worth pondering in detail. That said, the correlation coefficient between SC/ST households and BSDII is negative and significant, as is the slope coefficient for SC/ST households in a bivariate regression that includes only the caste variable indicating that SC/ST households are characterised by a lower level of BSDII relative to general category. In the multivariate model, housing types are the main driver of BSDII, and the caste variable accounts for only about 2 percent of the variation. We also identify 5 SC/ST & HT1 and HT2 households that report a perfect score (1.00) on BSDII (which is likely if infrastructure in these structures have improved over time). However, when we drop these 5 observations we find that the slope coefficient on SC/ST households loses significance suggesting that the SC/ST variable is on the cusp.

The association between non-migrant households and basic service delivery and infrastructure is not statistically significant in either model.

City 2 (Vadodara, Bhopal, Lucknow)

We now turn to examining BSDII in cities with a population greater than a million but less than 5 million including Bhopal, Lucknow, and Vadodara.

The OLS model shows that the level of basic service delivery and infrastructure in informal shacks and slums (HT1 & 2) is lower relative to the lower middle households (HT3). In terms of magnitude, informal shacks are on average characterised by an index score, which is 0.35 less than that for HT3. Similarly, slum housing has an index score, which is 0.05 less than that of HT3. Basic service delivery and infrastructure in upper class housing (HT5) is significantly greater than that of lower middle households by 0.05 units on average. These results are significant at the 99 percent confidence level.

SC & ST households have levels of basic service delivery and infrastructure, which is lower than the GC households. SC & ST households have a score which is on average 0.03 units less than GC households. OBC households also have a score 0.01 units less than GC households. These results are significant at the 99 percent confidence level. Muslim households have a level of basic service delivery and infrastructure which is lower than that of Hindu households. Compared to a Hindu household, Muslim households have a score which is on average 0.02 units less. Similarly, other religious minority households tend to have lower scores compared to Hindu households, by 0.05 units. These results are significant at the 99 percent confidence level. The association between non-migrant households and basic service delivery and infrastructure is positive and significant (at the 99 percent confidence level).

City 3 (Bhavnagar, Bhubaneswar, Kochi, Ajmer, Jalandhar)

Finally, among the set of cities that have a population of less than a million (Ajmer, Bhavnagar, Jalandhar, Bhubaneswar, and Kochi), the level of basic service delivery and infrastructure in informal shacks and slums (HT1 & 2) is significantly lower relative to the lower middle households (HT3). In terms of magnitude, informal shacks are on average characterised by an index score which is 0.4 units less than that for HT3. Similarly, slum housing has an index score which is 0.1 less than that of HT3. Basic service delivery and infrastructure in upper class housing (HT5) is significantly greater than that of lower middle households by 0.02 units on average. These results are significant at the 99 percent confidence level.

SC & ST households have levels of basic service delivery and infrastructure, which is lower than the GC households. SC & ST households have a score which is on average 0.02 units less than GC households. OBC households indicate slightly higher levels than GC households, by 0.01 units. These results are significant at the 99 percent confidence level.

Muslim households have a level of basic service delivery and infrastructure which is no different from that of Hindu households. Other religious minority households are better served than Hindu households by about 0.03 units.

The association between non-migrant households and basic service delivery and infrastructure is not significant.

8.6 Citizen Participation Index (CPI)

In the previous section, we examined the variation in BSDII across key social-structural variables. In this section, we undertake a similar exercise to understand variation in the citizen participation index (CPI) across the same social-structural variables: class (housing type), caste and community identity, and migrant status. In the following set of models that we present (OLS and multilevel), CPI is the dependent variable, and the independent variables include housing type, caste identity (SC, ST, and OBC), religion (Muslims and other minority religions), and non-migrant. The reference category is Hindu, a GC respondent who lives in HT3 and is a migrant.

Table 8.4: CPI & Components Regressions- OLS

	CPI	Electoral	Non-Electoral	Civic
Informal Shack (HT1)	-0.07 (0.002)***	-0.20 (0.010)***	-0.002 (0.005)	-0.007 (0.004)
Slum (HT2)	-0.02 (0.003)***	-0.09 (0.008)***	0.02 (0.004)***	0.01 (0.003)***
Upper Class Housing (HT 4 & 5)	0.02 (0.003)***	0.03 (0.006)***	0.001 (0.003)	0.02 (0.003)***
Caste: SC & ST	-0.005 (0.003)*	-0.04 (0.007)***	0.02 (0.004)***	-0.01 (0.003)***
Caste: OBC	0.03 (0.002)***	0.02 (0.006)***	0.04 (0.003)***	0.003 (0.003)
Religion: Muslim	0.03 (0.003)***	0.03 (0.008)***	0.03 (0.005)***	0.02 (0.004)***
Religion: Other Minority	0.0003 (0.005)	0.009 (0.012)	0.01 (0.007)	-0.03 (0.005)***
Non-Migrant	0.02 (0.002)***	0.08 (0.005)***	0.010 (0.003)	-0.01 (0.002)***
Constant	0.32 (0.002)***	0.61 (0.006)***	0.08 (0.003)***	0.26 (0.002)***
N	28299	29810	28308	29810
F	77.71	127.59	23.48	20.63
RMSE	0.215	0.461	0.261	0.224

Table 8.5: CPI & Components Regressions- Maximum Likelihood Multilevel Models

	CPI	Electoral	Non-Electoral	Civic
Informal Shack (HT1)	-0.04 (0.004)***	-0.13 (0.009)***	0.003 (0.005)	-0.02 (0.004)
Slum (HT2)	0.005 (0.003)	-0.003 (0.007)	0.02 (0.004)***	-0.001 (0.003)
Upper Class Housing (HT 4 & 5)	0.01 (0.003)***	0.03 (0.006)***	-0.004 (0.004)	0.012 (0.003)***
Caste: SC & ST	-0.01 (0.003)***	-0.02 (0.007)***	-0.006 (0.004)	-0.01 (0.003)***
Caste: OBC	0.007 (0.003)**	0.02 (0.006)***	0.008 (0.003)**	-0.0003 (0.003)
Religion: Muslim	0.02 (0.003)***	0.02 (0.007)***	0.03 (0.004)***	0.01 (0.003)***
Religion: Other Minority	0.009 (0.002)	0.03 (0.012)***	0.008 (0.007)	-0.02 (0.005)***
Non-Migrant	0.03 (0.002)***	0.10 (0.005)***	0.019 (0.003)***	-0.004 (0.002)
Constant	0.32 (0.018)***	0.59 (0.041)***	0.10 (0.014)***	0.27 (0.015)***
Random Effects				
Var(City)	0.004	0.023	0.002	0.003
Var(Residuals)	0.041	0.187	0.064	0.046
N	28308	29810	28308	29810
Groups		14	14	14

8.7 Citizen Participation Index

In the OLS model for all cities (Table 8.4 above) we find that the citizen participation index for informal shacks and slums (HT1 & 2) is lower relative to the lower middle households (HT3).[21] The citizen participation index for upper class housing (HT4 & 5) however is greater than that of lower middle households.[22]

The CPI for SC & ST households is also lower than the GC households.[23] However, OBC households have an index score that is greater than GC households.[24] Muslim households have a higher level of citizen participation.[25] Other minority religion households are not different from Hindu households. The association between the non-migrant household and citizen participation is positive and significant.[26]

To summarise the substantive results reported above, these results imply that if an HT3-Hindu-GC respondent participates in three activities, an HT1-Hindu-GC respondent is only likely to participate in two activities. An HT5-Hindu-GC respondent however is closer to participating in 4 activities. According to the OLS model, the substantive difference between an HT3-Hindu-GC household and an HT3-Hindu-SC/ST household is very small. Finally, Muslim households participate more - about one activity - compared to Hindu households.

The multilevel model for all cities (Table 8.5 above) shows very similar results. Only the magnitudes change. There is one exception, however. HT2 households lose their statistical significance, meaning that HT2 and HT3 are similar when it comes to participation.[27]

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[21] In terms of magnitude, informal shacks are on average characterised by an index score, which is 0.07 units less than that for HT3, meaning that an HT1 household participates in one activity less than an HT3 household out of the total of ten activities (see Appendix for details). Similarly, slum housing has a lower index score, which is 0.02 units less than that of HT3, meaning participation in roughly half an activity less than that of an HT3 household. These results are statistically significant at the 99 percent confidence level.

[22] By 0.03 units, meaning half an activity more than HT3.

[23] SC & ST households have a score which is on average 0.005 units less than GC households. This result is statistically significant at the 90 percent confidence level.

[24] This result is statistically significant at the 99 percent confidence level.

[25] On average 0.03 units greater compared to Hindu households. This result is statistically significant at the 99 percent confidence level.

[26] At the 99 percent confidence level.

[27] While citizen participation in HT1 households is statistically lower than HT3 households, the magnitude of the association drops to 0.05. However, citizen participation in HT2 is not different from HT3 households. HT4 & 5 have higher levels of citizen participation relative to HT3, but the magnitude falls to 0.01 units (and is statistically significant at the 99 percent confidence level). SC & ST households are negatively associated with citizen participation, and the magnitude increases to 0.01. OBC households are positively associated with the CPI but the coefficient decreases to 0.007. Similarly, Muslims households also show higher levels of CPI compared to Hindu households while other minority religion households are not different from Hindu households. The association between the non-migrant household and citizen participation is positive and significant (at the 99 percent confidence level). The coefficient however increases from 0.02 to 0.03.

Overall, we find that some patterns emerge across cities, but social categories matter in different ways in different cities. We also note that *the explanatory power of the citizen participation models is weak.*[28] Together, the set of social-structural variables account for approximately only two percent of the variation in CPI suggesting that the effects of these variables is limited. We do not summarise the detailed results of the CPI models (by city size and individual cities) here, given the low explained variation. We present the detailed regression results in the Appendix.

We also estimate the same models for the component parts of the CPI - (a) Electoral Participation, (b) Non-Electoral Political Participation, and (c) Civic Participation. Let us see what emerges.

8.8 Electoral Participation

In the OLS model for all cities (Table 8.4 above), we find that the electoral participation - i.e., voting component of the citizen participation index - of informal shacks and slums (HT1 & 2) is lower relative to the lower middle class households (HT3).[29] The electoral participation component for upper class households (HT4 & 5) is greater than that of lower middle households.

As for castes, electoral participation for SC & ST households is lower than the GC households, while OBC households have an index score that is greater than GC households, indicating higher OBC participation in voting.[30] Turning to religion, Muslim households have a higher level of citizen participation, while other minority religion households are not different from Hindu households.[31] Finally, the association between the non-migrant household and electoral participation is positive and significant.

The multilevel model for all cities (Table 8.5 above) shows very similar results. Only the magnitudes change.[32]

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[28] As seen in low F-statistic values and low proportions of explained variation.

[29] In terms of magnitude, informal shacks are on average characterised by an index score which is 0.2 units less than that for HT3. Similarly, slum housing has an index score which is 0.03 units less than that of HT3. These results are statistically significant at the 99 percent confidence level.

[30] SC & ST households have a score which is on average 0.04 units less than GC households. OBC households have an index score that is greater than GC households by 0.02 units. These results are statistically significant at the 99 percent confidence level.

[31] On average 0.03 units greater compared to Hindu households. This result is statistically significant at the 99 percent confidence level.

[32] Electoral participation in HT1 households is statistically lower than HT3 households, but the magnitude of the association drops to 0.13. However, citizen participation in HT2 is not different from HT3 households. HT4 & 5 have higher levels of citizen participation relative to HT3, and the magnitude increases to 0.03 units (and is statistically significant at the 99 percent confidence level). SC & ST households are negatively associated with electoral participation, and the magnitude decreases to 0.02. OBC households are positively associated with the electoral participation and there is no change in the magnitude. Similarly, both Muslim and other minority religion households also show higher levels of CPI compared to Hindu households. The association between the non-migrant household and electoral participation is positive and significant (at the 99 percent confidence level). The coefficient increases from 0.08 to 0.10.

8.9 Non-Electoral Participation

In the OLS model for all cities (Table 8.4 above), we find that the non-electoral political participation component of the citizen participation index for informal shacks is not different from HT3. Slum households however show higher levels of non-electoral participation relative to the lower middle households (HT3).[33] The non-electoral political participation component for upper class housing (HT4 & 5) is not different from that of HT3.

Non-electoral political participation for SC & ST households is lower than the GC households, and OBC households have an index score that is greater than GC households.[34] Muslim households have a higher level of non-electoral political participation, and other minority religion households are not different from Hindu households.[35] The association between the non-migrant household and non-electoral political participation is not statistically significant.

The multilevel model for all cities (Table 8.5 above) is similar to the OLS results.[36]

8.10 Civic Participation

In the OLS model for all cities (Table 8.4 above) we find that the civic participation for informal shacks (HT1) is not different from HT3. Slum households, however, show higher levels of participation relative to the lower middle households (HT3), as do HT4 & 5.[37] Civic participation for SC & ST households is lower than that of the GC households, while OBC households are not different from the latter. Muslim households have a higher level of civic participation, and other minority religion households have a lower level of civic participation relative to Hindu households. The association between the non-migrant household and citizen participation is also negative and significant.

The multilevel model for all cities (Table 8.5 above) also shows results similar to the OLS specification.[38]

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[33] In terms of magnitude, slum households are on average characterised by an index score which is 0.02 units greater than that for HT3.

[34] SC & ST households have a score which is on average 0.02 units less than GC households while OBC households have an index score that is greater than GC households by 0.04 units. These results are statistically significant at the 99 percent confidence level.

[35] On average 0.03 units greater compared to Hindu households. This result is statistically significant at the 99 percent confidence level.

[36] Non-electoral political participation for H1 and HT4 & 5 is not different from HT3, and HT2 households are positively associated with non-electoral political participation. SC & ST households are also not different from GC households while OBC households are positively associated with the non-electoral political participation. Muslim households show higher levels of non-electoral political participation compared to Hindu households, while other minority religion households are not different from Hindu households. The association between the non-migrant household and non-electoral political participation is positive and significant in the multilevel model.

[37] In terms of magnitude, slum households are on average characterised by an index score which is 0.01 units greater than that for HT3, and HT4 & 5 by an index score 0.02 units greater (at the 99 percent confidence level).

[38] Civic participation for HT1 and HT2 is not different from HT3. HT4 & 5 households are positively associated with civic participation. SC & ST households have lower levels of civic participation while OBC households are not

As with CPI models, the component models also fit weakly.[39] The varying signs of the coefficients across the models also suggest that these variables have different effects on the component parts of citizen participation.

What can we say about our citizen participation results on the whole? The weak fit in the model would appear to suggest that participation is a behavioural activity, unlike the basic services and infrastructure. The former does not have a strong relationship with socio-structural variables (class, caste, religion), whereas the latter does, suggesting that city- specific contextual factors are perhaps complicating the participation results. And these factors may vary in different cities. What these contextual factors might be requires further city-level probes.

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different from GC households. Muslim households show higher levels of non-electoral political participation compared to Hindu households, while other minority religion households show lower levels of civic participation. The association between the non-migrant household and civic participation is not significant in the multilevel model.

[39] As seen in the low F-statistic values and low levels of explained variation

9. Conclusions

In this study, we construct a new index of basic service delivery for Indian cities, covering water, sanitation, electricity and roads. These services have an undeniable impact on the quality of life for urban citizens, and they are measurable. The first noteworthy conclusion is that the basic service delivery is highly uneven across our cities. Kochi and Vadodara have the best services, and Mumbai and Chennai the worst. Moving beyond city-level averages, we can also disaggregate our conclusions about how India's urban citizens receive basic public services and how they live their routine lives in the company of fellow citizens into five parts: class, caste, religion, participation, and the rising importance of municipal corporators/councillors.

Class: Our biggest conclusion about provision of public services is that class, as opposed to caste and religion, plays the biggest role. Since we have measured class by housing type, this effectively means that those who live in informal settlements - shacks and slums - have the lowest access to basic services, especially water and sanitation. This may not come as a surprise to observers of urban India, but it is good to use solid measurement techniques to back up the claim in multiple cities. Scheduled Castes (SCs) and Scheduled Tribes (STs) on average receive lower levels of basic services than Other Backward Caste (OBCs) and Upper or General Castes (GCs), but the effect has more to do with their class position than their caste or tribal status. Patterns of housing segregation are highly pronounced for SCs and STs. In a majority of cities, they are dramatically over-represented in informal shacks and significantly under-represented in middle class and higher-class housing. What happens to the availability of basic services to SCs and STs has a great deal to do with where they primarily end up living. Only three cities - Bhavnagar, Mumbai, and Kochi[40] - are exceptions to this, partially or fully, meaning there is far less caste-based housing segregation there. But the delivery of public services is still class determined. Class also seems to determine how urban citizens perceive police discrimination. In our cities, the citizens believe that compared to the richer citizens, the police treat the poor worse. It is important to emphasize that we did not study police discrimination per se, only its perception among citizens.

Caste: On caste, three points can be made by way of conclusion. First, SCs and STs are systematically underserved by public services, but as we point out above, this is substantially because of the class position in which they find themselves, meaning where they live. Second, at the middle level of caste hierarchy, the situation with respect to public services is quite different. In several cities, though not all, the OBCs do as well as the GCs, and sometimes even better. Third, social life in urban India is still heavily governed by caste. Social ties, as seen at least via friendships, are marked by strong bonding (intra-caste) togetherness, as opposed to bridging (inter-caste) networks. Since this project does not compare urban and rural India, we are unable to say whether urban bonding is weaker than rural bonding. Urban intra-caste bonding may well be comparatively weaker. However, it is clear that so long we are confined to urban India, the prevalence of bonding ties outweighs bridging ties. In our project, only Chennai and Kochi are partial exceptions to this.

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[40] Kochi also stands out in another way. If we speak specifically of secure and decent housing as an important policy or welfare goal, it has, comparatively speaking, the lowest share of population (1.5%) living in informal housing, whereas Mumbai has the highest (62%). At 33%, Kochi also has the highest share of population living in upper class housing whereas, at 73%, Delhi has the largest middle class.

Religion: As for religion, our focus is largely on Hindus and Muslims, and we have four conclusions. First, as far as Muslims are concerned, we find evidence in our aggregate models that they are generally underserved by public services and infrastructure. However, if we disaggregate this overall result by city, we find that in some cities (for example, Mumbai, Lucknow, Bhubaneswar, Jalandhar and Ajmer), this is not true. In other words, the remaining nine cities in the project overpower the effects of these five, giving us the larger aggregate result of Muslims being underserved. Second, if we ask in what kinds of neighborhoods Muslims live, we find that compared to the Hindus, Muslims are more likely to live in slums in ten out of our fourteen cities, and they are also significantly under-represented in upper-middle- and upper-class housing. The pattern is reversed in Chennai, Kochi, Bhopal and quite dramatically so in Delhi, where Hindus are more likely to live in slums than the Muslims. Third, as far as Muslim participation in political and civic life is concerned, we observe that compared to the Hindus, their participation is systematically greater. Contrary to the literature that says Muslims participate less than the Hindus in the polity and civil society, we find that not be true. Finally, on the whole, as in the case of caste-based relationships, very few citizens have friends outside their religious community. Most friendships are of a bonding (intra-religious), not bridging (inter-religious), nature. Smaller cities do tend to deviate from this trend, but among the larger cities, only Chennai does. Remarkably, Delhi, the nation's capital, is among the most insular cities for friendships - in religious (as well as caste) terms.

Political and Civic Participation: While the socio-structural variables - caste, religion and especially class - have a strong relationship with the provision of public services, we find that they do not matter much for citizen participation. Perhaps the reason is that unlike the basic services and infrastructure, participation is action-based and highly contingent. Such actions may well be linked to some city-specific contextual factors, which vary from one place to another and are likely to have affected our participation results in complex ways. These contextual factors might require deeper probes into a few cities, as opposed to a comparative survey of many cities.

Municipal Corporator or Councillor: Finally, we want to draw attention to a relatively new and important political phenomenon in Indian cities - namely, the role of the municipal corporator or councillor. In eleven out of fourteen cities, the municipal corporator is viewed as the most important person for facilitating public service provision in the neighbourhoods[41]. Across our cities, the municipal councillors/corporators are mostly viewed as serving the interests of all communities ("constituency service") as opposed serving their own community ("group patronage") or serving their personal interests through quid pro quos ("clientelism"). We also find that with one exception (Bhavnagar), as the city size decreases, the favourable view of the corporator increases. Another point is worth registering. Perceptions of the corporator tend to be linked to class position. Even though the overall view of the corporators suggests greater prevalence of constituency service in their day-to-day conduct, the poorer households have a less favourable view, compared to the economically better off sections of the population.

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[41] The exceptions are Vadodara and Hyderabad (where the concerned government office is viewed as more important). In Chennai, too, the corporator is not important. But this may well be because the municipal government was in a state of suspension during the time of our survey.

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