Watson Institute for International & Public Affairs
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SAXENA CENTER FOR CONTEMPORARY SOUTH ASIA

Citizenship, Inequality, and Urban Governance in India: Findings from Vadodara

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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Acknowledgments: We are grateful to the citizens, elected representatives, and officials who responded to our survey, participated in focus groups, and granted us interviews. All interpretation and errors, if any, are our own.

Funding: We thank the Urban Governance Funds of the Saxena Center for supporting this project.

Suggested Citation: Arora, Tarun, Ashutosh Varshney, Connor Staggs, Bhanu Joshi, Patrick Heller and Siddharth Swaminathan. "Citizenship, Inequality, and Urban Governance in Vadodara," The Citizenship, Inequality and Urban Governance Project (CIUG), Saxena Center for Contemporary South Asia, Brown University, 2026.

Executive Summary

Vadodara, formerly known as Baroda, was the center of Baroda's princely state. It also had one of the first municipal governments in princely India. The Municipal Act of 1892 created the city's municipality. After British rule ended, Baroda joined Bombay province. Later in 1960, it became part of Gujarat state, when Bombay province was split into its two large linguistic units. But the 1949 Bombay Municipal Act, integrated into Gujarat state laws, remained the operating framework for Gujarat's municipal governments. In 1974, Baroda became Vadodara. According to the last census (2011), Vadodara had a population of 1.67 million.

While the history of Vadodara is viewed as one of great eminence, its recent past is marked by a widely noted decline. From being the second largest city of Gujarat, Vadodara is now the third largest, and a rapidly rising Rajkot might leave it further behind. Starting in the 1990s, the city's population growth rate started decelerating. The city underwent an educational and industrial decline. In contrast, the more globally connected cities – Ahmedabad and Surat – moved ahead, significantly shaping Gujarat's image as an industrially dynamic state. Ahmedabad also replaced Vadodara as a leading educational center of the state.

The educational and industrial decline notwithstanding, compared to the other cities researched in this project, Vadodara is among the among the most participatory and also among best governed, both in terms of services and how its citizens evaluate their local government.

Among the cities in our project, Vadodara has among the highest propensities to vote and its citizens also participate heavily in civic life, including participation in NGOs and in caste, religious or linguistic organizations, etc.

The city's civicness, however, is more about involvement in traditional caste and religious organizations than in what are normally called modern voluntary organizations (Unions, NGOs, Resident Welfare Associations, professional organizations). And in the civic sphere, Vadodara is very much dominated by its upper caste and upper class elites, the two being highly correlated. The dominance of the caste elites is also reflected in a very stark pattern of spatial segregation, one in which elite neighborhoods are more exclusively upper caste and relatively devoid of lower castes and Muslims than in any other city in our project.

The voting story is, however, different. Lower classes, lower castes, and Muslims vote in disproportionately high numbers, especially as compared to the upper castes.

Reviewing patterns of access to basic services, we find that, as elsewhere, class matters a lot, and, in most cases (e.g., water, sanitation), we find a linear decline in the quality of services as one moves down from the highest-class category to the lower classes. The correlation between upper

classes and upper castes is also very high. Upper castes have much better sanitation than the lower castes.

Adivasis are the most deprived community in Vadodara. They are heavily concentrated in the poorest category of housing, have the lowest rates of voting registration and election turnouts, and have the most inadequate supply of basic services.

Dalits, to whom Adivasis are often compared, are much better off in all respects. Dalits may not have presence in the elite neighborhoods, but they are also more or less absent in the informal shacks. They are widely distributed among the middle categories of housing. Most of all, Dalits voting rates are higher than those of any other community in the city.

As measured by our overall index of public services, we find that Muslims also do somewhat better than the Hindus. This appears to be a function of the very low concentration of Muslims in the lowest housing type in Vadodara, which primarily comprises Hindus, especially Adivasis, and has a much lower overall level of service delivery than other housing types in the city.

To address their problems with services, the citizens of Vadodara rely more on the government office (responsible for the relevant service) than on corporators and other state actors, but they do have a favorable view of corporators. Citizens of Vadodara also rely on "intermediaries" (persons of influence, unelected politicians or local leaders). However, compared to other cities in our project, the use of intermediaries in Vadodara is the lowest. Vadodara's heavy reliance on bureaucrats for public services departs from the patterns elsewhere in our project. Corporators have on the whole become the first port of call for solving service delivery problems.

Finally, compared to other cities in our project, Vadodara is socially among the most conservative. Friendships, let alone marriages, in Vadodara rarely cut across caste and religious boundaries. Vadodara's citizens develop friendships primarily within their communities, and also marry within. One of India's best governed cities is also among its most conservative.

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1. Overview of the Project

One of India's greatest challenges 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, centers of innovation, opportunity and growth. But 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 citizens exercise their rights. A self-aware citizenry is more likely to produce better outcomes than an inert one.

With this understanding in mind, Brown University along with academic partners in India 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 14 other cities, including Kochi. In this report, we provide a comprehensive overview of our findings from Vadodara. Where appropriate, we compare our findings for Vadodara to six other cities that were included in the first wave of the project. These include four megacities - Mumbai, Hyderabad, Ahmedabad, and Chennai - and two smaller cities - Bhavnagar and Kochi. The findings are based on the joint team's extensive research, which included focus groups, key respondent interviews, and a large and comprehensive household survey. A report on all 14 cities can be found at CIUG-14Cities.

1.1 Why Study Citizenship and Basic Services?

Citizenship rights are at the heart of 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 autonomous and legally equal individuals. But citizenship also empowers individuals to organize, to exert voice, to demand accountability, and to make substantive claims on the state. This ideal of citizenship is, however, contravened by social and institutional realities. Persistent material and status inequality mean 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. And institutional weaknesses mean that the law and government bureaucracies can treat citizens quite differently. A growing body of research has, moreover, 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* [1992 (1950)]. Marshall sought to divide citizenship into three components: civil, political, and social. The civil component referred to individual freedoms, such as the 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. The third, social, element of citizenship, was split by Marshall 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 1992: 8). 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 also tied to the rise of a welfare state.

It is noteworthy that Marshall conceptualized the problem of deprivation entirely in class terms. It was the economically poor, who 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 such rights and make allocations for them 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 who and what they prefer. Unlike Marshall, Somers (1993) has argued that the conventional treatment wrongly equates the status of citizenship (a *bundle of rights*) with the practice of citizenship (a *set of 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. But 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 (Scheduled Castes, or SCs), Adivasis (Scheduled

Tribes, or STs), Muslims and women are some of the obvious candidates for investigation. Also, relevant here is an Ambedkarite idea. 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 the social origin? Or do caste inequalities and discrimination (as well as other social markers) persist in urban India, compromising citizenship?[1] By definition, this question acquires significance in the study of citizenship in urban India.

We thus seek to go beyond Marshall and much of the contemporary literature on citizenship in two ways. First, Marshall's concentration is 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, more on the practices on the ground. Here we echo Somers (1993) and 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.[2] 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[3]. Social rights in the Marshallian sense – right to food and education, if not health - have only recently come into play as formal 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

[1] For discrimination against Dalits in general, see Ahuja (2019).

[2] See Heller (2013) and Baiocchi, Heller and Silva (2011) for an elaboration.

[3] Of course, even these classic liberal rights have often been contested in India. For the performance of India's democracy on two different dimensions of democracy – electoral and liberal – see Varshney (2022a and 2022b).

the freedom to engage in public activities, and mobilize and organize freely. We explore the participatory dimension of effective citizenship in the fifth section of this report. There we report our findings on both basic attitudes towards citizenship and a complex measure of the different dimensions of participation. 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 basic capabilities of citizens.[4] The participatory and the substantive dimensions of effective citizenship stand in a potentially mutually reinforcing relationship to each other. 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, Stephens and Stephens 1992; Esping-Anderson 1990; Putnam 1993, Baiocchi et al. 2011, Kruks-Wisner 2018).

In this report, we focus 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, compared to other social rights, basic services are relatively easy to measure. In earlier work on Bengaluru, we have established a statistical relationship between our measures of citizenship and service delivery (Bertorelli et al. 2017). This report provides a descriptive analysis of service delivery and how it varies across social categories in Vadodara. The next section provides an introduction to Vadodara's history and governance, followed by a detailed description of how our data was collected. Later, we begin reporting on our findings.

2. Vadodara: Historical Overview

Vadodara, formerly known as Baroda, has a distinguished history. During the British period, it was the center of Baroda's princely state. It was one of the one of the four biggest princely

[4] We borrow the concept of capabilities from Amartya Sen.

states of India, along with Hyderabad, Kashmir and Mysore. The city became Vadodara when the older names of some cities were changed to accord with how they were known in the vernacular languages (paralleling the switch from Bombay to Mumbai, Madras to Chennai, Calcutta to Kolkata, Bangalore to Bengaluru, etc).

The princely rulers – the Gaekwads – were Maratha in origin. Vadodara became, as a result, a Maratha/Marathi hub in Gujarat, attracting a large number of Marathi speakers, more than any other city in Gujarat.[5] It also had one of the first municipal governments in princely India. The Municipal Act of 1892 created the city's municipality, funded entirely by government grants. Later, the Municipal Act of 1905, by allowing municipal taxation, provided fiscal independence, reducing reliance on government grants. Though a certain proportion of councillors was elected right from the beginning, by 1938 the city was permitted to elect its own president. But, as was true of British India in general, franchise was restricted. In the 1940s, based on education, property and income, only 8.5% of the princely state had the right to vote.[6]

After British rule ended, Baroda chose to merge with India. It joined what was Bombay province at that time, and the Bombay Municipal Corporation Act (1949) became the guiding framework of Baroda's municipal governance. Later in 1960, it became part of Gujarat state, when Bombay province was split into its linguistic units. But the 1949 Bombay Municipal Act, integrated into Gujarat state laws, remained the operating framework for Gujarat's municipal governments. In 1974, Baroda became Vadodara.

After the passage of India's 74th Constitutional Amendment (1993), which made periodic elections mandatory for the third tier of government, the Vadodara Municipal Corporation (VMC) acquired a political wing and an administrative wing. The administrative wing is headed by a Municipal Commissioner, typically an IAS officer, appointed by the state government. The political wing consists of a General Body, which has 78 corporators, directly elected every five years, from 19 election wards. Women constitute half of all corporators due to reservations enacted by the Gujarat Local Authorities (Amendment) Act of 2009. The General Body selects a mayor and his/her deputy. The governing structure also includes 12 Standing Committees that have the power to approve major works involving substantial expenditure.

The budget is proposed by the Municipal Commissioner, and must be approved by the General Body. It is widely believed that even though the Mayor, indirectly elected, is the political head of the Municipal Corporation, Municipal Commissioners wield greater power primarily because of their control over budgets. Further, the taxation powers of the local government are minimal.

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[5] Surat, which is very close to Mumbai, is perhaps the other big city of substantial Marathi-speaking population. But Surat was part of British India and not ruled by Maratha princes.

[6] The information in this paragraph is based on B.L. Mitter (Dewan of Baroda), *Baroda Administration Report: 1944-45* (Baroda, Baroda State Press, 1946) https://hdl.handle.net/2027/mdp.39015073367453

Roughly 50-60% of the corporation budget typically comes from state grants.[7] As a senior government officer administratively heading the corporation, the Municipal Commissioner facilitates transactions and interaction with the state government.[8]

While the history of Vadodara is generally viewed as one of eminence and renown, its recent past is marked by a widely noted decline. A report of the Corporation puts the matter thus:

"At the time of the country's independence, Vadodara boasted of high quality urban infrastructure viz. good water supply, drainage and transport facilities; also, Vadodara was firmly entrenched as an educational and cultural center of Western India. Post-independence, the city witnessed quantum industrial and demographic growth with the city's infrastructure supporting this growth. However, macroeconomic developments and the growth of neighbouring urban centers like Surat and Ahmedabad have resulted in the economic slowdown of the … Vadodara city in the last two decades."[9]

From being the second largest city of Gujarat, Vadodara is now the third largest, and a rapidly rising Rajkot might leave it further behind. The decline became very noticeable in the 1990s as the population growth rate decelerated. In the period 1991-2001, the decadal population growth rate was 26.63%, as opposed to 40.42% during 1981-91. The downward trend has continued.

Two facets of the decline are especially worth noting. First, the city was "considered to be a cultural and educational center till the early 1960s and was synonymous with education".[10] The city's educational foundations were, in fact, laid under princely rule. In 1871, first government schools were opened and by 1944, primary education was both free and compulsory for pupils 7-12 years of age. The prince also established Baroda College in 1881. It later became a quite famous institution of higher education, known as MS University. But in recent decades, the standards declined, educational investments halted, and other cities, especially Ahmedabad, acquired many more institutions, some highly internationally connected. The overall result was "the outmigration of the educated class".[11]

Second, the city's industry also has gone through a decline. For long years, Vadodara was an important industrial center for chemicals, fertilisers, oil and natural gas. But by 2005, "about 40% of the industrial undertakings in the industrial areas (were) closed, partially due to economic reasons, like ageing workforce, lack of skilled manpower and lack of entrepreneurship in

[7] Interview, Ajay Bhadoo, Municipal Commissioner, in Vadodara, August 17, 2018.
[8] If the Mayor were directly elected, perhaps the powers of the mayoral office would be greater.
[9] City Development Plan (CDP) Report, 2005 Vadodara Municipal Corporation, p. 1.
[10] Ibid, p. 6-52.
[11] Ibid.

reinventing roles and businesses in the wake of the globalization of the Indian economy."[12] In contrast, the more globally connected cities – Ahmedabad and Surat – became a magnet for new investments. They went through a massive economic upsurge, significantly shaping Gujarat's image as an industrially dynamic state. Vadodara got left behind, while other cities moved ahead.

2.1 Summary of Findings

According to the last census (2011), Vadodara had a population of 1.67 million. We achieved a sample of 2012 citizens across 63 polling parts (including 5 booster polling parts). Given below are the highlights of our findings for the city of Vadodara.

Citizenship

In terms of electoral participation, the citizens of Vadodara are registered to vote at higher rates than all of our survey cities except Bhavnagar. They also report the highest propensity to vote at each level of elections among our surveyed cities. When it comes to larger political participation that goes beyond elections – for example, getting involved in party mobilisation and politics – we find that citizens of Vadodara are relatively more active compared to those in other cities we have studied, and are second only to Chennai. As far as getting involved in civic life – participation in NGOs, and in caste, religious or linguistic organizations, etc. – is concerned, the results also show higher participation than in other cities, though the profile of participation very strongly favors "traditional" over "modern" organizations[13]. Across all of our measures of citizen participation, especially non-electoral and civic, we did see a clear pattern in Vadodara. The scores increase in a linear fashion with citizens living in informal shacks showing the lowest and those from upper classes showing the highest levels of non-electoral and civic participation. This trend was also seen in the overall citizen participation index. Furthermore, the Forward Castes displayed higher levels of effective citizenship compared to lower castes.

Public Services

Sixteen percent of the city's population believes that education is the most important service to be provided by the government, followed by safety and personal security (15%). To address their problems with services, the citizens of Vadodara rely more on the government office (responsible for the relevant service) than on corporators and other state actors, but they do have a favorable view of corporators. Citizens of Vadodara also rely on "intermediaries".[14] By intermediaries, we mean persons of influence, unelected politicians or local leaders. However, compared to other

[12] Ibid., p. IV.

[13] By traditional we mean "identity-based" organizations like religious, cultural, and caste associations and by "modern" we mean more civic or professional organizations (i.e. unions, RWAs, NGOs and cooperative societies).

[14] These informal connections are critical in delivering services to urban residents, particularly to the urban poor.

cities in our project, the use of intermediaries in Vadodara is the lowest. Further, the view of the residents of informal shack settlements (HT1)[15] is quite different from those living in informal slum settlements (HT2). The former do not have as favorable a view of corporators as the latter and this pattern holds for five out of the seven cities in our project. The upper middle class (HT4) has the most favorable view of corporators while informal shack dwellers (HT1) hold the least favorable view. Overall, access to the state is highly uneven, especially across citizens living in different housing types.

Reviewing patterns of differentiation with respect to access to basic services, four broad findings can be highlighted. First, class matters a lot, and, in most cases (e.g., water, sanitation), we find a linear decline in the quality of services as one moves down from the highest-class category (upper class, HT5) to the lower classes. Though informal slums (HT2) do relatively well, shacks (HT1) in Vadodara are systematically deprived. Second, as far as access to basic services is concerned, adivasis are the worst-off, compared to other categories, with Forward Castes having the highest score. Third, as measured by our overall index of services described below, we find that Muslims in fact do somewhat better than the Hindus. This appears to be a function of the very low concentration of Muslims in the lowest housing type (HT1) in Vadodara, which primarily comprises Hindus, especially Adivasis, and has a much lower overall level of service delivery than other housing types in the city. Finally, sanitation does not correspond well to the pattern of other services. Here caste matters a lot and fits the classic caste hierarchy pattern with upper castes having better sanitation than the lower castes.

Discrimination, Networks and Social Ties

Our survey asks respondents about perceived discrimination along five dimensions: class, caste, religion, gender, and language. We ask about these forms of discrimination at both the neighborhood and city levels, as well as by the police and government offices in general. Compared to other cities, Vadodara is at the top of the pack when it comes to reported levels of discrimination in the city as a whole – scoring highest for all five indicators of discrimination, as described below – and at the neighborhood level – highest in three out of five. Thus, there is a strong sense that discriminatory behaviour in Vadodara frequently occurs both at the city level and in the individual neighborhoods. Those residing in informal shacks (HT1) are the most likely to report discrimination.

When we explored residents' personal networks, we found that a fairly large percentage of people in Vadodara know their elected officials. Indeed, the city ranks second from the top when it comes to knowing elected representatives (after Kochi). Residents also know informal leaders or other persons of influence, but the proportion who know elected representatives remains the largest in

[15] As explained in the next section, we categorised all respondents by five different housing types (HT).

Vadodara, alongside knowing a police officer. Furthermore, citizens from lower classes are more likely to indicate that they know unofficial local "influentials" as compared to elected representatives. For those in richer classes, this relationship is the other way round: they know elected officials a great deal more. Finally, when it comes to social ties, the citizens of Vadodara display greater in-group bonding than elsewhere, largely sticking to their own caste and religious groups. A large majority of respondents reported having no friends outside their own religion or caste. When it comes to marriage, marrying outside of one's caste or religion is a rarity.

3. Methods and Data Collection

Here we present, very broadly, the essential elements of our research design and sampling methodology. For an extensive step-by-step overall, as well as a city-specific, presentation of the methodology we direct the reader to Appendices 1 - 6.

For every city studied in this project we have followed the same nested research design and sampling strategy. In each city we began with field visits and interviewed key respondents including the city commissioner, police commissioner, corporators, heads of departments, academics, and civil society activists. We also conducted focus group discussions with multiple groups - SC/ST women, Muslim women, and other mixed groups of people, both male and female, typically from very low-income neighborhoods, especially in shack settlements and informal slums (as opposed to what are in government terminology called slums).[16] In each city, we conducted at least one focus group with Dalits and another with Muslims.[17] (Appendix 4). The goal of the focus groups was twofold. The first was to collect qualitative data on how citizens access services, how they engage with politicians and the state, how communities are organised 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.

In Vadodara, we held three focus group discussions (FGDs), especially concentrating on Dalit and Muslim communities living in slums. The participants were generally vendors of fruit and vegetables as well as those who wash pots and pans, sweep floors in richer households, and generally engage in informal work of various kinds.[18]

[16] See footnote 23 for differences in how "slums" are defined.
[17] Since it is mostly women who are responsible for running the household and who are generally more aware than their male counterparts of the quality of public service delivery in their neighborhoods, the team felt that it was important to take the views of women on the same.
[18] The FGDs were held in Vadodara between 17th and 18th August 2018. These were in (1) Kishan Wadia area with Dalit women, (2) Pani Gate area with Muslim women, and (3) Hira Panagar with a mixed group of slum dwellers.

We followed up on the field work with a large sample survey, which provides the bulk of the data reported here. Developing a representative sample in Indian cities is a major challenge.[19] 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.[20] Third, as with any sample, for groups that are only a small proportion of the total population (e.g. Adivasis) we run the risk of getting too few respondents for statistical analysis.

To address these challenges, we developed a multi-stage stratified systematic random sampling strategy that stratifies the sampling frame based on Muslims and SC/STs – to generate a representative sample of households in each city (See Appendix 4). We began with identifying all wards and assembly constituencies falling within the city municipal corporation area, followed by all polling parts within each of these political-administrative units. We stratified polling parts using SC/ST population data from Census 2011 and expert knowledge (i.e., revenue officials, and government officials in the city corporation offices) on Muslim-dominant regions within a city prior to randomly sampling polling parts. Following the stratification and random selection of polling parts (from the stratified list), we then undertook a classification, listing, and counting of residential buildings within the selected polling parts. We counted and classified every residential building in a polling part as falling into one of five housing type categories: HT-1 (Informal shacks), HT-2 (Informal slums), HT-3 (Lower middle class), HT-4 (Middle class) and HT-5 (Upper class housing). For further elaboration, see the note below and Appendix 4.

This listing and categorization were done by a field team which literally walked through the entire area identified in the base maps and drew the buildings onto the base maps and assigned the housing type. The listed data thus provided a full inventory of all the households located in the geographically delineated sections of our randomly selected polling parts giving us a complete distribution of residential structures by housing type classification, and formed the sampling frame from which we ultimately selected households. This 'census' of households classified by housing types within polling parts also allows us to generate weights that adjust for over or under-representation of particular groups in our sample (See Appendix 4 and 5).

Once the sampling frame was identified, we followed a systematic random selection method to select households. To capture sufficient numbers of informal shack households in our sample we generated a 'booster' sample of such households for every city using a spatial strategy and

[19] Urban voter lists which are most commonly used as sampling frames are riddled with errors of deletion and addition of urban constituents, which renders them unsuitable for sampling respondents directly. Janaagraha studies of the quality of voter lists confirm this. See: https://www.janaagraha.org/voter-list-management/

[20] This is confounded by erratic and unstructured planning generally across urban centers, with inconsistent door and road numbering, area demarcation, etc.

following the listing process noted earlier. Depending on the size of the city, the total sample size ranged from 1,000 to 3,000 households. In Vadodara we sampled 2,012 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 4.

Before we present the socio-demographic characteristics of our sample and the results from our survey, we outline our measure of class as defined by housing types.

3.1 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, we decided that our Housing Type (HT) measure is the most reliable measure of class (See also Appendix 4 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.[21] By contrast, access to housing in India, though in part driven by market forces, is highly regulated and sometimes directly supplied by the state, and shaped by social networks. As such, in addition to disposable income, housing type will also reflect one's location in both formal and informal networks of distribution, including access through state patronage, inherited position, strategic networks etc. In this sense, "housing type" is a much noisier proxy for class but is also more likely to capture the actual dynamics of class practices in an Indian city.

Another key advantage of our HT variable is that it was not self-reported. Instead, field surveyors, after receiving extensive field training, 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 settlement (shack)
HT 2: Informal settlement (slum)
HT 3: Lower middle-class housing
HT 4: Middle-class housing
HT 5: Upper-class housing

[21] Household assets may also be easily under or over-reported by respondents, leading to a biased measure of relative wealth. Using a non-self reported measure such as housing type helps to remove such concerns.

Detailed descriptions of each housing type and pictures showing examples of each classification are presented in Appendix 4. 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 and political, and they are also inevitably somewhat arbitrary.[22] This is because they depend on varying definitions and on how officials subjectively evaluate the overall nature of a neighborhood. Critics (Bhan and Jana 2013) have pointed out that the census definition suffers from two problems. First, many small shack settlements are often simply not counted in the census either because they don't meet a size threshold or simply 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 for 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 also created a booster sample of informal shack settlements (see above). We classify both HT1 (shacks) and HT2 (slums) as "informal" to underscore the precarious and degraded nature of such housing but, to simplify, deploy the term "shacks" for HT1 and the term "informal slums" for HT2. We use the term "informal slum" so as not to confuse 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 categorised as such *whether or not* they are located in what the census designates as a 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 are not captured in the census. 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 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 middle class (HT4).

[22] "Under Section-3 of the Slum Area Improvement and Clearance Act, 1956, slums have been defined as mainly those residential areas where dwellings are in any respect unfit for human habitation by reasons of dilapidation, overcrowding, faulty arrangements and designs of such buildings, narrowness or faulty arrangement of streets, lack of ventilation, light, sanitation facilities or any combination of these factors which are detrimental to safety, health and morals." (Office of the Registrar General & Census Commissioner, India, Primary Census Abstract for Slum, 2011). See also footnote 19.

3.2 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 under counting certain populations, most notably those who live in informal shack settlements or other impermanent settings. Third, as with any sample, for groups that are only a small proportion of the total population (e.g. Adivasis) we run the risk of getting too few respondents for statistical analysis. 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.

3.3 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 or a police 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. For SC/STs this was done by using 2011 census data to identify wards with high SC/ST proportions. Religion is not reported at the ward level in the census, so we identified high proportion Muslim wards from 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 to 350 households and around 1000 to 1400 constituents. In Vadodara, 63 polling parts were sampled this way.

3.4 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 this by identifying areas with larger proportions of informal settlements, particularly informal shacks, through local knowledge and by searching on Google Earth, particularly for visible blue tarp. The same process, as described below, was then applied except only informal shacks were sampled. An additional 5 polling parts were sampled in this way in Vadodara.

3.5 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 metre 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 a housing type (HT) category. Other buildings or landmarks were listed as they were, such as a temple or a mall but not assigned a 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). This listing and categorization were done by a field team which literally walked through the entire area identified in the base maps and drew the buildings onto the base maps and assigned the housing type. 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.

3.6 Sampling Buildings and Households

Once the total number of buildings were 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 skipping pattern -- to decide which building was to be selected -- was based on the skipping number, 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 achieve one interview from that building (i.e. one respondent from one household). If the building was a multi-story building or an apartment-like structure with multiple households, the interviewers had to follow the right-hand rule and select the block on their right side and to start from the top floor of that block or building. Once inside, the field team had to approach the apartment nearest to the place they entered and move clockwise.

3.7 Sampling Respondents

For each household, a single respondent who was 18 years or older and who 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 six languages: English, Hindi, Gujarati, Tamil, Telugu, and Malayalam. In all, the survey included 167 questions (though routing was applied where relevant so citizens would not necessarily answer all questions) and took on average 45-60 minutes. All interviews were conducted by enumerators with the appropriate language qualifications and were trained through workshops and pilots

conducted by our field team. 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, where the project team travelled 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 seven cities were trained to conduct the listing and survey work. The Vadodara survey was conducted during March -June of 2019.

4. Findings

4.1 Demography

Achieved Sample

In Vadodara, we surveyed 2,012 citizens across 63 polling parts, including 5 booster polling parts. The response rate to the survey was 88%[23]. A comparison of data from the 2011 Census with our samples (raw and weighted) is listed in Table 4.1.

Table 4.1: Census and Sample Compared - Vadodara

	Population			Religion			SC/ST		Slums
Variable	City	M	F	Hindu	Muslim	Others	SC	ST	Slum
Census 2011	1,670,806	52%	48%	85%	11%	4%	7%	5%	5%
Raw Sample	2,012	40%	60%	84%	14%	2%	19%	7%	42%
Weighted Sample	2,012	41%	59%	88%	10%	2%	17%	2%	13%

Our survey collected demographic information on gender, education, religion, and caste. In addition, the survey enumerators were tasked with identifying the housing type of each respondent's dwelling. As briefly reported above, dwellings were categorised 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 randomised sample. By oversampling the lower housing types, we have also increased the relative sample proportions for Dalits (SC), Adivasis (ST) and Muslims. The second row of data in Table 3.1 shows the raw proportions from our sample. Muslims represent 14% of our raw sample, compared to only 11% in the census. Similarly, Dalits comprise 19% of our raw Vadodara sample, while they are only

[23] This included 138 instances where the respondent either refused, or there was no one at home after multiple attempts to survey.

7% of the population in the census, and Adivasis are 7% in our sample compared to 5% in the census. The advantage of our over-sample is that it ensures sufficient representation for groups that in a purely random sample might be undercounted. For instance, had we sampled using the Census figures, we would have only interviewed about 140 Dalit households in Vadodara. Instead, we have 375 such households.

The 2011 census reports that only 5% of households in Vadodara live in slums. The National Sample Survey Office, another government agency that reports slum figures, puts the number of slum households in Vadodara at 11.7% in its 69th round (2012) and 0% in the 76th round (2018)[24]. By comparison, our household listing for the city found that about 13% of households qualified as slum-type dwellings.

One of the reasons for the different slum numbers is definitional. Fundamentally, the two national slum enumeration exercises by the Census of India and the National Sample Survey Office (NSSO) differ in their methods of identifying slum settlements. The Census of India enumerates three kinds of slums (1) *notified slums*, i.e. notified by a statute including Slum Acts, (2) *recognized slums*, i.e. which may not be notified by a statute or law but are otherwise recognized by state or local authorities, and (3) *identified slums*, which are compact areas with at least 300 residents or about 60-70 households in poorly built, congested tenements, in unhygienic environments, usually with inadequate infrastructure and lacking in proper sanitary and drinking water facilities. The last category of slums is "identified personally by the Charge Officer and inspected by an officer nominated by District Census Officer[25]". Unlike the Census, the NSSO's count is more generous - it counts both notified and non-notified slums but keeps the lower cut-off limit for non-notified slums[26] at 20 or more households. Our survey differs in that we are counting individual households that meet our definition of a slum and that as such we do not have a minimum threshold. Critically, the national surveys do not always count small clusters of households (below 60-70 for Census definition as mentioned above and below 20 for NSSO) as slums, nor do they count slum-like housing in areas not otherwise classified as slums. This makes

[24] The urban stratum (both million and non-million cities) in the 2018 survey did not have a sub-stratum that differentiated the UFS blocks containing slums and those not containing slums. The selection of slums in any city was purely by chance and was not pre-designed by the sampling frame of the 2018 survey. For more read "Note on sample design and estimation procedure of NSS 76th round" pages A3-A4. The sample size for NSSO 2018 was 192.

[25] 2011, C., 2010. *Formation and identification of Slum Enumeration Blocks for Slum Demography*. [online] Edudel.nic.in. Available at: <https://www.edudel.nic.in//new_circulars/124_dt_16.04.2010/Census_Circular_No.5_doc.pdf> [Accessed 10 May 2022].

[26] India - Urban Slums Survey, N. and National Sample Survey Office - M/o Statistics and Programme Implementation(MOSPI), G., 2012. *India - Urban Slums Survey, July 2012 - December 2012, NSS 69th Round - Data Dictionary*. [online] Microdata.gov.in. Available at: <http://microdata.gov.in/nada43/index.php/catalog/128/data_dictionary> [Accessed 10 May 2022].

us confident that our methodology captures households that the NSSO and the Census omit. It is also possible that our listing captures settlements that have cropped up since the last census date (2011). If that latter point is true, it would indicate that the overall percentage of shack areas has slightly increased since 2011.

A general comment on slum enumeration is also necessary. Since definitions of slums (particularly identified slums) are anchored in subjective criteria, like dilapidation, overcrowding, and lack of ventilation, the absence of clear protocols to stratify households can lead to severe undercounting. An NSSO official was quoted in the press saying, "The dividing line between 'narrow' and 'non-narrow' will be drawn differently by different survey officials, and the same is true for 'overcrowded', 'dilapidated', 'faulty', and so on".[27] Also, Census 2011 enumerated 40,309 identified slums, which formed 37% of the total slums in India. While the Census' household cluster threshold for slums is thrice that of NSSO for one part of its definition, the Census projection was higher than the NSSO's projection. This mismatch could be attributed to the differing methodology discussed above[28]. Still, it only goes on to our point about the careful interpretation of the official slum data[29].

We have, however, applied a weighting to our figures (See Appendix 1) for more details on how we construct and apply weights), which we use throughout this report. The third row in Table 1 reports the weighted sample figures. Here we see that the Muslim sample (10%) is now much closer to the census figure (11%). The weighted figure for SCs (17%) is much higher than the census (5%), but the weighted figure for STs (2%) is somewhat lower than the census figure (5%).[30]

When we look at the caste numbers (Table 3.2) across cities which are weighted, we see that the size of the OBC community in Vadodara is much smaller than in our other cities, except Bhavnagar. The size of the Forward Castes (FCs) is significantly larger than most other cities in our project, especially southern ones. SCs and STs constitute some 19% of the city, a figure that is slightly above average for our cities (17% for all our cities together). Also as Table 3.3 shows,

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[27] Verma, S., 2014. *slum population: Census, NSSO differ on slum population figures | India News - Times of India*. [online] The Times of India. Available at: <https://timesofindia.indiatimes.com/india/census-nsso-differ-on-slum-population-figures/articleshow/28415537.cms> [Accessed 10 May 2022].https://timesofindia.indiatimes.com/india/census-nsso-differ-on-slum-population-figures/articleshow/28415537.cms

[28] An important reason is that NSSO absolute numbers depend on weights which are derived from Census of different time-periods and projected population by RGI for different time periods.

[29]Bhan, G., & Jana, A. (2015). Reading spatial inequality in urban India. *Economic and Political Weekly*, 49-54.

[30] Most STs (>80%) in Vadodara live in either informal shack or slum settlements. Respondents living in these housing types in our Vadodara sample get substantially down-weighted because we obtained a large sample proportion of these HTs (combined 42%) relative to their listing proportions. So it is the case that STs appear to be less common in the weighted sample.

at 10%, Vadodara has the third lowest Muslim population in our cities, only higher than Bhavnagar (5%) and Chennai (7%).

Table 4.2: Caste proportions- All Cities

City	Forward Caste	OBC	SC	ST	Other
Vadodara	56%	25%	17%	2%	0%
Bhavnagar	71%	22%	6%	1%	1%
Ahmedabad	39%	38%	9%	5%	9%
Chennai	13%	52%	22%	4%	10%
Hyderabad	7%	44%	22%	10%	16%
Kochi	27%	60%	5%	2%	6%
Mumbai	68%	6%	12%	4%	9%

Table 4.3: Religion proportions - All cities

City	Hindu	Muslim	Other
Vadodara	88%	10%	2%
Bhavnagar	92%	5%	3%
Ahmedabad	77%	18%	5%
Chennai	87%	7%	7%
Hyderabad	68%	30%	2%
Kochi	49%	19%	32%
Mumbai	79%	15%	6%

When it comes to education (Table 3.4), the majority of our respondents in Vadodara are educated till the SSC/HSC level followed by college graduates and above, and those who did some college but did not graduate. Only 4% of Vadodara respondents have had no formal schooling.

Table 4.4: Vadodara by education

No Schooling	School: up to 4 years	School: 5-9 years	School: SSC/HSC	Some college but not graduated	College Graduate & Above	DK/Refused to answer
4%	5%	14%	36%	19%	22%	0%

4.2 Weighting

We have chosen to reweigh the sample data according to the respondents' housing type. From our previous work, we know that our housing type measure is the biggest predictor among all our socio-economic variables for levels of service delivery and citizenship. As a principle, weighting necessitates that there are reliable population margins for all categories of a variable upon which one seeks to adjust one's data. Since we lack reliable population counts for OBCs and General/Forward Castes (the census only reports SC/ST), we cannot adjust our data using Census data. Given the relatively poor economic conditions of many individuals belonging to SC/ST groups, we expect that weighting along the housing type will reduce bias and make our sample more representative.

While the key purpose of weighting the estimates is to adjust for oversampling from HT1 households, we also use the same weights to ensure that the sample proportions for Dalits, Adivasis, and Muslims match the population proportions for each city.

We expect the housing type weights to also adjust proportions of Dalits, Adivasis, and Muslims in the weighted sample, because we expect a larger share of Dalits, Adivasis, and Muslims to be located in informal housing. However, we need to be clear that the weights are expected to produce an accurate adjustment only if the difference between sample and population proportions of Dalits, Adivasis, and Muslims in our sample is entirely due to the HT1 oversampling (i.e., HT1 has a relatively higher concentration of Dalits, Adivasis, and Muslims). We expect the weights to be less precise if we cannot be certain if the differences in sample and population proportions of caste-community are from the other housing types in addition to HT1.

To develop the weights by housing type, we used our own listing data. The listing data (as explained above) are based on a full inventory of all the households located in our geographically delineated sections of our randomly selected polling parts. The listing data does not include the booster sample of informal settlements. As reflected by the raw sample proportions in Table 4.1, the inclusion of the booster significantly increased the share of shacks and informal slums (HT1 and HT2). A more detailed note on our weighting strategy can be found in Appendix 1.

Given the debate on slums that we note earlier, we create an additional set of weights that use city-level slum household counts from the Primary Census Abstract (Census 2011, see footnote 20). These alternate census based weights serve both as a comparison to our listing weights as well as a robustness check. We use the latter here (only for Table 4.5) to examine how our sample adjustments align with the Census 2011 results, and use the listing weights for all other reported results.

4.3 Housing Type

In order to be consistent with other city reports, Table 4.5 exceptionally uses weights based on the census. As Table 4.5 shows, 8% of households in Vadodara live in informal settlements, shacks and slums combined (HT1 and HT2). This, as noted above, is higher than the census figure of 5% for 2011. It is, however, lower than all other cities except Kochi and Ahmedabad (10.1%).

Table 4.5: Housing Type Distribution Across Cities – *Census Based Weights*

City	HT1 - Informal Settlements/ Shacks	HT2 - Informal Settlements/ Slums	HT3 - Lower Middle-Class	HT4 - Upper Middle-Class	HT5 - Upper-Class
Vadodara	2.3% (11.9%)	6.7% (30%)	40.8% (26.8%)	42.9% (27%)	8.3% (6.2%)
Ahmedabad	1.6% (9.3%)	6.0% (36.9%)	40.6% (24.1%)	46.4% (27.0%)	6.4% (3.8%)
Bhavnagar	3.2% (8.6%)	11.4% (30.5%)	39.5% (28.2%)	29.4% (21%)	16.5% (11.8%)
Chennai	9.4% (9.9%)	19.7% (20.8%)	41.6% (40.7%)	24.2% (23.7%)	6.1% (6.0%)
Hyderabad	7.9% (9.1%)	27.5% (31.6%)	41.6% (38.1%)	16.9% (14.5%)	7.3% (6.7%)
Kochi	0.2% (4%)	1.2% (25%)	52.5% (37.9%)	13.0% (9.4%)	33.1% (24.0%)
Mumbai	23.1%	39.5%	16.8%	17.9%	2.7%

Unweighted proportions in parentheses. Weights used in this table are derived from the census, not listing data. See 14 Cities Report for full details.

4.4 Sample Composition: Relationships between Class (Housing Type), Caste and Religion

As is true of many countries in the world, Indian cities are spatially segregated by class, caste and religion. There is emerging literature in India on spatial segregation, but the spatial analysis is often limited by the lack of local data. Our data was collected at the polling part level and we plan to conduct further research using this data on spatial inequality. Here we examine segregation based on housing type which, as we said above, is our measure of class. Throughout the report, we break down all of our findings by class (housing types), caste and religious community, and when relevant, by gender, education and migration status. In this section, we look at the relationship between class, caste and religion.

The distribution of caste and religious groups by class (i.e.,housing type) in Vadodara reflects significant inter-group disparities. ST households are heavily clustered in shacks and informal slums (47% of surveyed ST households), and have almost no presence in the highest housing type. SCs are also more or less excluded from the highest level, but cluster heavily in the second-highest housing type, HT4 (79%). Indeed, more OBCs reside in slums than SCs. Finally, Forward Caste households have the highest relative presence in the top two housing types (87%), and are the least likely to reside in shacks or slums. (Table 4.6)

In terms of religion, the picture is a bit more nuanced. Muslims are clustered in the middle three housing types, being most heavily concentrated in upper middle-class, HT4 (66%) and slum housing, HT2 (25%). Muslims are completely excluded from the highest housing type in Vadodara. Of course, this does not mean that in the population, too, Muslims are entirely absent in the HT5 housing type. All it means is that their numbers in HT5 are perhaps so small that the sample did not pick them up.

Table 4.6: Distribution of caste and religious groups across housing types (Vadodara)

Housing Type	Caste					Religion		
	ST	SC	OBC	Forward	Other	Hindu	Muslim	Other
HT1 - Shacks	8%	1%	0.3%	0.1%	3%	0.1%	0.5%	0%
HT2 - Slums	39%	13%	19%	9%	12%	12%	25%	9%
HT3 - Lower middle class	9%	5%	7%	3%	10%	4%	10%	2%
HT4 - Upper middle class	44%	79%	68%	77%	75%	75%	66%	85%
HT5 - Upper class	0%	2%	6%	10%	0%	9%	0%	3%

Compared to our other cities, ST households in Vadodara are the second most likely to live in informal housing, behind only Mumbai and (Table 4.7). The extreme marginalisation of STs in Vadodara is not matched by SCs, who are substantially less likely to be located in informal housing (14%).

Table 4.7: Proportion of SCs/STs in each city living in informal housing

City	Caste Group	HT1 - Shacks	HT 2 - Slums	Total (Informal)
Ahmedabad	SC	1%	48%	49%
	ST	6%	38%	44%
Bhavnagar	SC	0.3%	30%	31%
	ST	1%	5%	6%
Chennai	SC	8%	28%	36%
	ST	1%	9%	11%
Hyderabad	SC	2%	29%	31%
	ST	1%	22%	24%
Kochi	SC	0%	9%	9%
	ST	0%	10%	10%
Mumbai	SC	31%	38%	69%
	ST	40%	39%	79%
Vadodara	SC	1%	13%	14%
	ST	8%	39%	47%

In terms of religious breakdown of informal housing, as Table 4.8 indicates, the *gap between Hindus and Muslims* in Vadodara in informal housing is roughly the same as what was found in

Mumbai, Hyderabad and Ahmedabad. Chennai is the only city in our study where Muslims reside in informal housing at lower rates than Hindus. In Kochi, the proportions are equal.

Table 4.8: Proportion of Hindus/Muslims in each city living in informal housing

City	Religion	HT1 - Informal Shacks	HT2 - Informal Slums	Total (Informal)	Gap between Muslims and Hindus
Mumbai	Hindu	21%	39%	60%	
	Muslim	35%	38%	73%	13% (-Muslim)
Ahmedabad	Hindu	1%	25%	26%	
	Muslim	1%	38%	38%	12%(-Muslim)
Bhavnagar	Hindu	0%	8%	8%	
	Muslim	0%	45%	45%	37% (-Muslim)
Chennai	Hindu	2%	13%	15%	
	Muslim	1%	6%	8%	7% (-Hindu)
Hyderabad	Hindu	2%	27%	29%	
	Muslim	0%	41%	42%	13% (-Muslim)
Kochi	Hindu	0%	6%	6%	
	Muslim	0%	6%	6%	equal
Vadodara	Hindu	0.5%	12%	12%	
	Muslim	0.1%	25%	25%	13% (-Muslim)

We now present the same data, but this time we look at the caste and religious composition of different housing types. In other words, given that housing types are generally clustered together, just how diverse or homogenous are these settlements in terms of caste and religion? Conversely, how exclusionary might these types of settlements be?

In Table 4.9, we report the percentage of a caste or religious community present in that housing type. In parentheses we report how much that number deviates from that group's overall presence in the city. A negative number means they are under-represented in that housing type and a positive number means they are over-represented in that housing type.

In terms of caste, STs and SCs are both very substantially over-represented in informal shacks relative to their overall proportion in the sample, and Forwards castes (FCs) are heavily over-represented in upper middle class and upper class housing. As much as 75% of respondents in the most well-off housing type (HT5) belong to Forward Caste groups, and none of these respondents belong to Scheduled Tribes. OBCs are also somewhat under-represented in higher housing types,

and are most heavily clustered in slum dwellings (HT2) but not shacks (HT1). It is notable that lower middle class housing (HT3) is the most inclusive, with all caste groups except STs being close to their overall sample proportions.

In terms of religion, we find that Hindus are over-represented in both the lowest and highest housing types. On the other hand, we found that the highest housing type in Vadodara (HT5) contains zero Muslim households in our sample (Table 3.9). As explained above, this may not be because there are no Muslim households actually living in the HT5 category. It may simply be that their numbers are so miniscule that the sample could not catch them. Very small subgroups often remain uncaptured in samples.

Table 4.9: Composition of Housing Types by Religion and Caste in Vadodara

Housing type	HT 1 - Shacks	HT 2 - Slum	HT 3 - Lower Middle Class	HT 4 - Upper Middle Class	HT 5 - Upper Class	Group Sample Prop
Caste						
ST	35% (28%)	6% (-1%)	3% (-4%)	1% (-6%)	0% (-7%)	7%
SC	32% (13%)	17% (-2%)	18% (-1%)	18% (-1%)	4% (-15%)	19%
OBC	18% (-12%)	37% (7%)	36% (-1%)	23% (-7%)	21% (-9%)	30%
Forward	12% (-32%)	40% (-4%)	42% (-2%)	58% (14%)	75% (31%)	44%
Other	3% (2%)	0% (-1%)	1% (0%)	0% (-1%)	0% (-1%)	1%
Total	100%	100%	100%	100%	100%	100%
Religion						
Hindu	95% (11%)	79% (-5%)	78% (-6%)	88% (4%)	99% (15%)	84%
Muslim	3% (-11%)	19% (5%)	20% (6%)	9% (-5%)	0% (-14%)	14%
Other	2% (0%)	2% (0%)	1% (-1%)	3% (1%)	1% (-1%)	2%
Total	100%	100%	100%	100%	100%	100%

(Deviations from group sample proportions in parenthesis)

When comparing Vadodara to the other cities in our project, we see how the disparities reflected in Vadodara differ somewhat from the norm. Comparing Table 3.9 above for Vadodara and Table 4.10 below for the seven cities, we find that the greatest deviations are in terms of caste, where STs are much more excluded from middle and upper class housing (HT3,4 and 5) and FCs are far more dominant at the highest levels. Upper-class (HT5) housing in Vadodara, for all practical purposes, has become a Forward Caste Hindu enclave.

Table 4.10: Composition of Housing Types from all 7 Cities

Group	HT 1 - Informal Shack Settlements	HT 2 - Informal Slum Settlements	HT 3 - Lower Middle Class	HT 4 - Upper Middle Class	HT 5 - Upper Class	Group Sample Proportion
Caste						
ST	13% (7%)	5% (-1%)	5% (-1%)	4% (-2%)	5% (-1%)	6%
SC	28.% (11%)	19% (2%)	16% (-1%)	12% (-5%)	7% (-10%)	17%
OBC	18% (-18%)	38% (2%)	42% (6%)	34% (-2%)	39% (3%)	36%
Forward	27% (-5%)	29.% (-3%)	27% (-5%)	43% (11%)	42% (10%)	32%
Other	13% (4%)	9% (0%)	10% (1%)	6% (-3%)	7% (-2%)	9%
Total	100%	100%	100%	100%	100%	100%
Religion						
Hindu	81% (5%)	72% (-4%)	71% (-5%)	84% (8%)	75% (-1%)	76%
Muslim	12% (-5%)	22% (5%)	22% (5%)	10% (-7%)	9% (-8%)	17%
Other	6% (-1%)	6% (-1%)	7% (0%)	6% (-1%)	16% (9%)	7%
Total	100%	100%	100%	100%	100%	100%

(Deviation from group sample proportion in parenthesis)

4.5 Governance

4.5.1 Basic Issues in Governance

What do urban residents think municipal governments should be doing and how are they doing it? We began by asking our respondents what they believe are the most important services that municipal governments should be providing (Figure 4.1). For Vadodara, education is the most highly ranked service at 16%, followed by safety and personal security at 15%, Water (13%) and housing (14%). In other Gujarat cities in our project, water towers over all other needs. Not so in Vadodara. It is important, but not overwhelmingly so.

Most residents of Vadodara feel that the relevant government office is the most important entity in ensuring service delivery, rather than elected politicians or intermediaries. As Table 4.11 shows, 62% of the citizens of Vadodara city felt that the government office is the most important agency or institution to ensure that the services are delivered, followed by corporators (19%) and local intermediaries (11%). That nearly 2/3 of citizens rely directly on government offices rather than intermediaries or elected representatives (which is the norm in the other cities in our project) is noteworthy. Indeed, the proportion of citizens in Vadodara that go directly to the relevant government agency for service-related issues (and not through elected politicians or intermediaries) is twice as high as in Kochi, the next highest city. Conversely, only 11% of citizens reported going through an intermediary,[31] which is the lowest across our cities (it is as

[31] The category of intermediary includes unelected local political leaders, middlemen/intermediaries, and "other persons of influence." Local political leader is someone who is politically active but is currently not elected. This can

high as 48% for Chennai). Compared to other cities in our study, the proportion of respondents who believe that elected representatives (Corporator+MP+MLA) are the most important figures for ensuring services is the lowest.

Figure 4.1: What do you think is the most important service the government should provide?

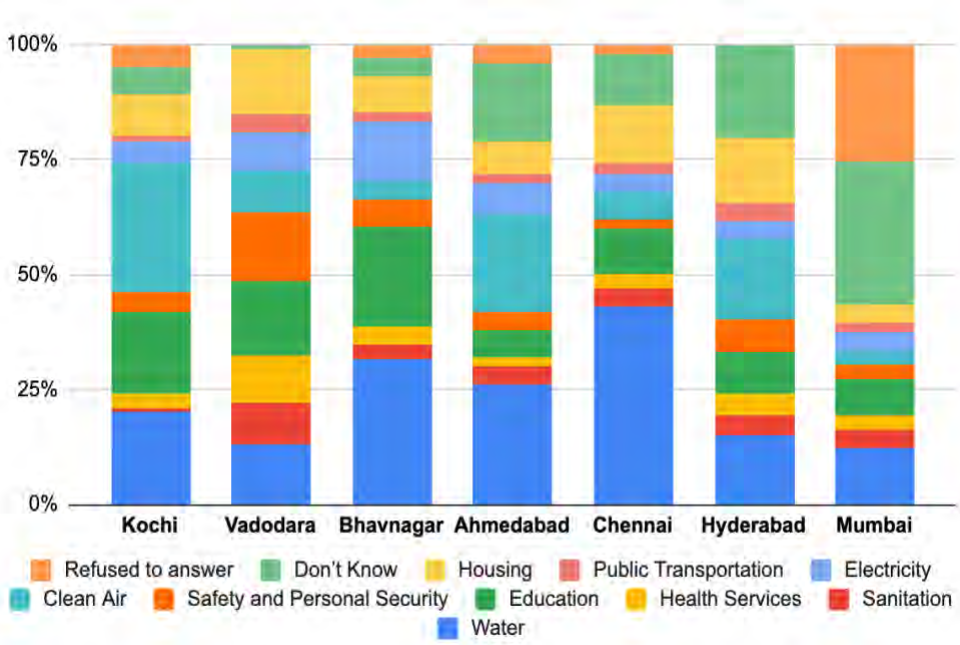


Table 4.11: Who do you think is most important in ensuring neighborhood access to public services?

	Vadodara	Bhavnagar	Ahmedabad	Chennai	Hyderabad	Kochi	Mumbai
Corporator	19%	49%	33%	21%	13%	48%	25%
Government Office	62%	26%	21%	13%	27%	28%	14%
MLA	5%	3%	9%	10%	12%	5%	17%
MP	3%	1%	7%	9%	16%	3%	15%
Intermediaries	11%	20%	30%	48%	32%	16%	29%

There is an ongoing debate about the role that India's elected officials actually play in representing their constituencies. Popular and academic views fall into roughly three camps: politicians are self-serving and provide goods in returns for votes (*clientelism*), they are parochial and only really care about their own communities (*group patronage*), or, as in the democratic ideal, they do what is best for all their constituents (*constituency service*). 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

also include people who were once elected but currently are not (Ex-MLA, Ex-MP, Ex-corporator etc.) as well as local party workers.

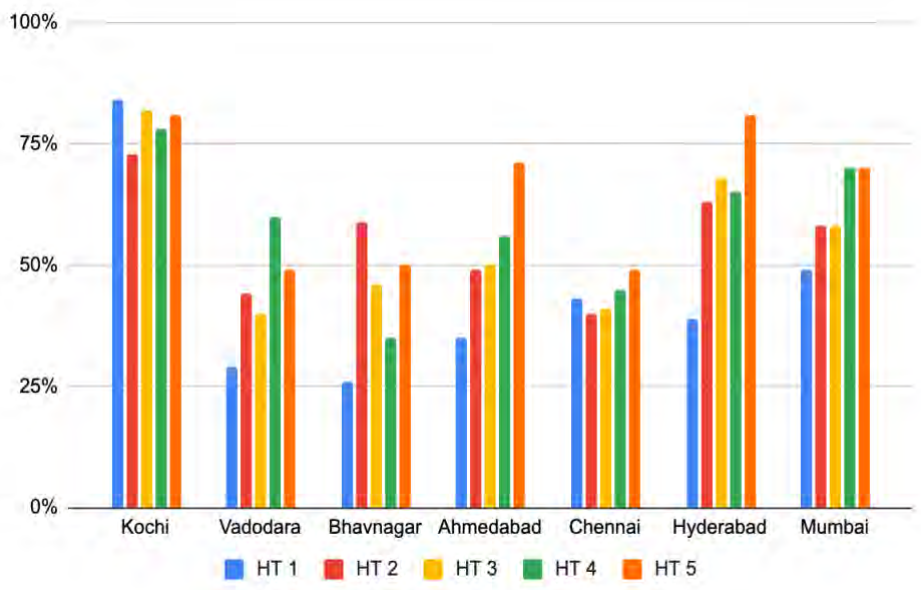
across our cities including Vadodara. In Vadodara (Table 4.12), a majority (56%) describe their corporator as caring about the wellbeing of all the citizens of their constituency.

Table 4.12: Which of these statements, in your opinion, describes your Municipal Corporator?

	Vadodara	Bhavnagar	Ahmedabad	Chennai	Hyderabad	Kochi	Mumbai
Cares about all the people of their constituency	56%	41%	54%	42%	66%	80%	58%
Cares only about the certain communities in their constituency	21%	30%	8%	16%	5%	10%	4%
Is mostly concerned with own interests	11%	22%	22%	34%	25%	5%	20%
Don't Know	11%	5%	14%	8%	4%	4%	15%
Refused to Answer	1%	1%	1%	1%	0%	1%	3%

When we break down these views on corporators, we find that the class differences were very pronounced (Figure 4.2). In informal shack settlements (HT1) only 29% had a favorable view of their corporator which jumped to 44% in informal slum settlements (HT2). We noticed this jump from HT1 to HT2 households in all of our cities except Kochi and Chennai.

Figure 4.2: Responses to corporators being concerned for all people of their constituency



The pattern of increasingly favorable views of corporators as one moves up the class hierarchy more or less holds across the cities, except in Vadodara, Bhavnagar, and Kochi (Figure 4.2). For Vadodara and Bhavnagar, there is no clear trend. As we move from HT1 to HT2, for example, there is a sudden and large increase in the proportion of respondents having a favorable view of the corporator but it drops again in HT3 households for both Vadodara and Bhavnagar. In Vadodara, this proportion then increases again, reaching the highest figure of 60% for HT4 and then dropping again for upper classes. In Kochi and Chennai there is little difference across classes.

Though citizens of Vadodara say their corporator is the second most important person after the government office itself, 75% report having not visited a corporator's office in the last 6 months, whereas 19% have visited once and 5% have visited twice (Table 4.13). When asked about visiting a government office, we get almost the same numbers for Vadodara. Given that, as we shall see later, citizens of Vadodara often have to deal with service delivery problems – including a very low level of daily water, flooded streets and homes, and sewer blockages – their engagement with representatives and government officials is low. This low engagement might be due to the unlikely resolution of complaints, or apathy on the part of representatives and bureaucrats. We can't be sure about the causes on the basis of our surveys.

Table 4.13: Number of visits to Councillor /corporator in the last 6 months- All cities

City	0	1	2	3
Vadodara	75%	19%	5%	0%
Bhavnagar	71%	15%	9%	4%
Ahmedabad	69%	15%	11%	3%
Chennai	74%	17%	5%	2%
Hyderabad	64%	23%	11%	1%
Kochi	62%	19%	15%	3%
Mumbai	91%	4%	3%	1%

There is, moreover, a large class effect at work here. As Table 4.14 shows, only 7% of informal shack settlement households (HT1) report having visited their corporator in the last 6 months. The upper classes (HT5), on the other hand, record the highest proportion of having visited their corporators. The other classes (HT2- HT4) each recorded roughly similar rates of visiting their corporator in the last six months. Caste, on the other hand, does not seem to have that big an impact on how often citizens engage corporators or government officials. Finally, religion does not have a significant impact with Hindus just slightly more likely to visit corporators (24%) than Muslims (21%).

Table 4.14: Number of visits to corporator in the last 6 months - Vadodara

Group	0 times	1 time	2 times	3 times
HT 1 - Informal Shack Settlements	93%	5%	2%	0%
HT 2 - Informal Slum Settlements	75%	20%	4%	0%
HT 3 - Lower Middle Class	76%	18%	5%	0%
HT 4 - Upper Middle Class	77%	18%	5%	0%
HT 5 - Upper Class	57%	28%	12%	2%
Hindu	74%	19%	5%	0%
Muslim	79%	17%	4%	0%
FC	78%	16%	5%	1%
OBC	77%	19%	4%	0%
SC	64%	28%	8%	0%
ST	73%	26%	1%	0%

4.6 Networks

In democracies where institutions are weak, citizens often have recourse to interpersonal networks to secure public goods. In more concrete terms, if one cannot have concerns and claims addressed through routine, rule-bound procedures, citizens will often have recourse to personal connections, be it a political representative, a government official they know or brokers of various kinds. As we have seen, government officials play an important role in Vadodara. But to what extent does this reflect the kinds of interpersonal networks that people have? As we have seen elsewhere, having networks can make a difference in how one engages the state (Bertorelli et al. 2017; Heller et al. 2023). These networks vary in their composition and density depending on one's social or economic position. Here we provide a description of such networks.

By comparison with the other cities in our project, the citizens of Vadodara are quite connected to the state in interpersonal terms. We asked all respondents if someone in their household knows a government official, a politician (elected or unelected), a police officer, or anyone else of influence (religious or community leader). As Table 4.15 shows, fully 62% of respondents reported knowing one of these key actors. This puts Vadodara in the middle of the pack. When this figure is broken down, an even more surprising finding emerges. In Vadodara, 28% of respondents know a police officer and 24% know an unelected politician, almost as many as those who know an elected politician (28%).

Table 4.15: Proportion of citizens/households who know each of the persons of influence

	Vadodara	Ahmedabad	Bhavnagar	Chennai	Hyderabad	Kochi	Mumbai
Bureaucrats /Government Officers	16%	14%	19%	11%	17%	15%	16%
Police officer	28%	7%	11%	12%	3%	15%	17%
MP/MLA/Corporator	28%	3%	26%	4%	19%	33%	16%
Unelected politician	24%	3%	8%	5%	3%	16%	6%
Other local leader	13%	5%	16%	5%	5%	19%	5%
Other person of influence (Religious\community leader)	11%	8%	17%	7%	3%	13%	1%
None of the Above	38%	60%	23%	43%	25%	25%	54%
Don't Know	7%	11%	19%	18%	31%	13%	8%
Refused to answer	0%	2%	3%	7%	2%	2%	4%

The figures for police officers and unelected politicians are the highest of any city. When we disaggregate networks by class (housing type), we get a picture of sharply uneven connections to the state (Table 4.16). In informal shack settlements (HT1), only 5% of residents know a government official. That number rises sharply for informal slum settlements (23%) and upper middle class before reaching a high of 66% for the upper class. Personal connections to elected representatives are also very linear as far as class categories are concerned. For HT1 households, only 6% claimed to know a politician, but the number more than doubled for slum dwellers (HT2) and the lower middle class (HT3,) with 16% in both groups reporting connections to elected representatives. This further increases for HT4 households (28%) and then peaks for the upper class (HT5) at 46% (Table 4.16).

Table 4.16: Proportion of citizens/households in Vadodara who know each of the persons of influence

Housing Type	Bureaucrat/Police	MP/MLA/Councillor	Intermediary	None of the Above	DK/Refused
HT1	5%	6%	11%	67%	19%
HT2	23%	16%	31%	52%	8%
HT3	21%	16%	34%	56%	8%
HT4	47%	28%	49%	36%	6%
HT5	66%	46%	82%	16%	7%

Table 4.17: Those in the most well-off housing (HT5) by city who know each of the persons of influence

City	Bureaucrat/Police	MP/MLA/Councillor	Intermediary	None of the Above	DK/Refused
Vadodara	66%	46%	82%	16%	7%
Ahmedabad	15%	3%	8%	76%	11%
Bhavnagar	51%	32%	45%	18%	19%
Chennai	37%	12%	14%	35%	22%
Hyderabad	14%	32%	11%	13%	41%
Kochi	35%	35%	52%	26%	12%
Mumbai	47%	25%	28%	49%	6%

While many in the lower classes do not know their elected representatives, they are more likely to know informal leaders/unofficial representatives, though the proportions are still not large. In informal shack settlements (HT1), 11% of households know an intermediary[32]. For informal slums (HT2) and lower middle class (HT3), more than 30% of the respondents know an intermediary. The scholarly literature has generally argued that slums rely heavily on informal leaders.[33] That may be generally true, but we note that in Vadodara the higher the class, the higher the percentage of those who personally know an intermediary. Forty nine percent of HT4 households know an intermediary, and that number rises to 82% of upper class (HT5) households. The fact that the upper class and upper middle class know many more persons of influence in every category compared to the lower classes points to much denser networks of influence for the former. It is worth noting that if we compare only the networks of the rich across cities, Vadodara's elites are most highly connected to bureaucracy/police, elected political representatives as well as intermediaries, ahead of Bhavnagar, Kochi and Mumbai (Table 4.17).

Summary

To summarise, the most notable feature of governance in Vadodara is that its citizens are much more likely, compared to our other cities in the project, to entrust government offices rather than elected representatives or intermediaries in addressing services-related issues. Though they do not depend much on corporators, they generally have a favorable view of the corporators, with the exception of those in the informal shacks. That households in informal shacks (HT1) do not have as favorable a view of corporators as informal slum dwellers (HT2) is a pattern that is replicated in five out of seven cities in our study. Overall, access to the state is highly uneven,

[32] In this case, "intermediary" combines the responses to the survey options of "other person of influence," "unelected politician," and "other local leader."

[33] Auerbach, A. (2019). *Demanding Development: The Politics of Public Goods Provision in India's Urban Slums* (Cambridge Studies in Comparative Politics). Cambridge: Cambridge University Press.

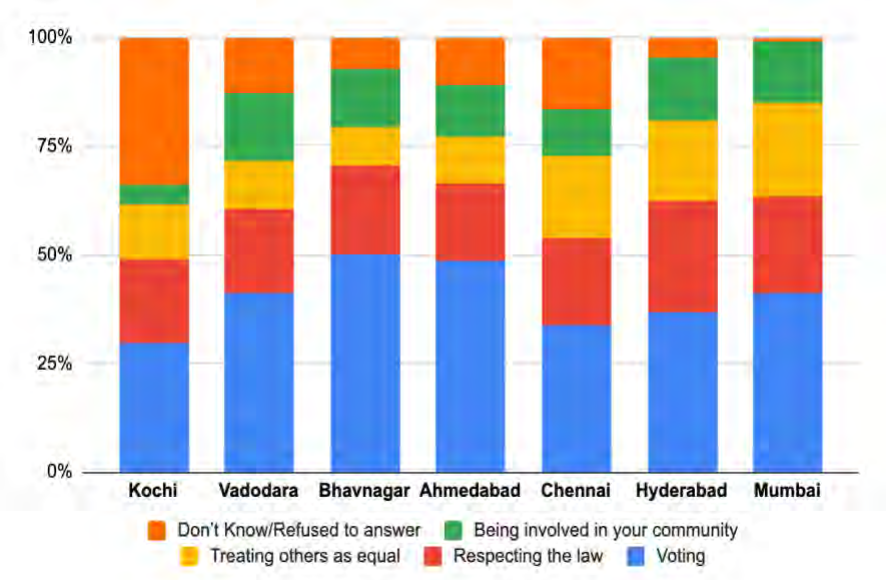
especially across housing types. When we examined interpersonal networks, what stood out were the high percentages of citizens who personally know an intermediary that is not an elected or government official. Finally, the upper classes are significantly more connected to the state through personal networks than the lower classes, a pattern which holds across our cities.

5. Citizenship

The idea of citizenship goes to the heart of democracy. How citizens understand their relation to the state, the so-called vertical citizenship, and how they understand their relationship to each other – the so-called horizontal citizenship – are important parts of democratic practice.

To develop a concrete understanding of this complex and dynamic phenomenon, we break citizenship down into two core dimensions. The first has to do with basic attributes and beliefs about citizenship. What do citizens actually think it means? Second, what actual ability do citizens have to use their rights as citizens? We capture the latter by measuring, as best we can, if and how citizens exercise their rights. This is represented in our citizen participation index (CPI). We begin with attitudes, and come to CPI and its components later.

Figure 5.1: What are the responsibilities of a citizen of a democratic country such as India?



To gain a general sense of what kinds of beliefs citizens hold about citizenship, we asked some direct and indirect questions. We asked all of our respondents what they believe to be the most important responsibilities of citizens. The most common answer across all cities is voting,

followed by respecting the law, treating others as equals, and being involved in your community (Figure 3). In Vadodara, 48% responded that voting was the most important, and this is the third highest in our cities (after Ahmedabad and Bhavnagar). Only 13% said "treating each other as equals" is the most important indicator of citizenship, which is the second lowest in the cities we are studying.

There is an interesting variation across classes on how Vadodara residents define the responsibilities of a citizen in a democratic country (Table 5.1). 10% of those living in informal shack settlements think 'respecting the law' is the most important responsibility of a citizen, but that number increases a bit for the middle classes (16-19%) and then further increases to 22% each for the upper classes (HT4 and HT5).

Interestingly, the lower the class, the greater the sense that citizenship is about 'being involved in your community'. For informal settlements (HT1s) the proportion is highest (22%) and then it more or less plateaus for the next three classes, suggesting that the poorest have a stronger sense of community involvement than the rich.

On this question, there is also some variation across castes. Adivasis were the most likely to indicate "respecting the law" (33%) and "being involved in your community" (28%) with Dalits recording the lowest levels of support for both of these dimensions of citizenship. As for religion, a higher percentage of Muslims (24%) than Hindus (16%) believe citizenship is mostly about "being involved in your community" (Table 5.1).

Table 5.1: What are the responsibilities of a citizen of a democratic country such as India? - Vadodara

	HT 1 - Informa l shack	HT 2 - Informa l slum	HT 3 - Lower Middle Class	HT 4 - Upper Middle Class	HT 5 - Upper Class	Hindu	Muslim	Forward Caste	OBC	SC	ST
Respecting the law	10%	19%	16%	22%	22%	21%	20%	23%	21%	15%	33%
Treating others as equals	17%	12%	15%	13%	14%	13%	10%	15%	10%	9%	4%
Being involved in your community	22%	16%	17%	18%	12%	16%	24%	18%	18%	13%	28%
Voting	39%	49%	47%	47%	51%	48%	45%	43%	50%	61%	31%

verall, voting remains the most important responsibility across all demographic subgroups, but across caste and class there was still interesting variation. It is well established in the literature that lower caste and marginalised groups have high levels of electoral participation in India. Our

findings, at least with respect to the value that citizens attach to voting, paint a slightly more complicated picture. In Vadodara, Adivasis, arguably the most marginalised category in urban India, have the lowest percentage (31%) calling voting the most important responsibility of citizens. On the other hand, Dalits recorded the highest such percentage at 61%, followed by OBCs (50%) and then Forward Castes (43%). The fact that Dalits are twice as likely as Adivasis to emphasise the significance of voting and are, conversely, much less likely to emphasise respecting the law or community involvement seems to indicate dramatically different attitudes towards citizenship between two groups that are often lumped together. Clearly, Dalits in Vadodara are much more "politicised" than Adivasis. The class picture also reveals a stark difference. While there is very little difference between HT2-HT5 with respect to the importance accorded to voting (ranging between 47% to 51%), those living in informal shacks (HT1) are much less likely to emphasise voting (39%).

We also measured attitudes about citizenship by asking key questions that capture how citizens feel about political and social liberties. On our first question on freedoms – whether the right to free speech includes the right to criticize India – the citizens of Vadodara were the most conservative of all our cities, alongside Ahmedabad and Bhavnagar (Table 5.2). A very high 76% say that their right to free speech should *not* include the right to criticise India. Ahmedabad and Bhavnagar, the two other Gujarat cities, are also among the only three other cities in our project where more than a two-thirds majority supported this view.

Table 5.2: Conservative or Liberal? Those saying "yes" to...

City Name	There should be laws against inter-caste marriage	There should be laws against inter-religion marriage	Not saying BMKJ should be punished	Right to Speech does not include Right to criticise India
Vadodara	46%	46%	41%	76%
Bhavnagar	9%	13%	47%	82%
Ahmedabad	16%	22%	21%	88%
Chennai	10%	11%	19%	46%
Hyderabad	13%	14%	62%	20%
Kochi	1%	1%	5%	22%
Mumbai	8%	9%	58%	56%

This view was roughly identical across the Hindus (82%) and Muslims (80%), if we disaggregate citizen attitudes towards freedoms within the city (Table 5.3). There were small differences across class, but notably those in upper class housing (HT5) were the most fervent (86%), while respondents from informal slums (HT2) were the lowest (at 67%). OBCs and Dalits recorded similar proportions on this question (76% and 77%, respectively), while the Forward Castes were found to be the most conservative (at 86%) followed by STs (at 81%).

Table 5.3: Vadodara: Conservative or Liberal? Those saying "yes" to...

Group	There should be laws against inter-caste marriage	There should be laws against inter-religious marriage	Not saying BMKJ should be punished	Right to Speech does not include Right to criticise India
HT1	32%	35%	38%	87%
HT2	42%	44%	52%	77%
HT3	41%	44%	51%	84%
HT4	47%	47%	38%	82%
HT5	43%	43%	41%	86%
Hindu	46%	46%	41%	82%
Muslim	48%	46%	42%	80%
FC	44%	43%	39%	86%
OBC	42%	44%	40%	76%
SC	56%	59%	46%	77%
ST	53%	50%	53%	81%

On our second question about political freedoms, fully 41% of citizens in Vadodara felt people should be punished for not saying "Bharat Mata Ki Jai" (BMKJ in the tables) at public gatherings. The most liberally-minded cities on this question are Kochi, Chennai, and Ahmedabad (Table 5.2). If we disaggregate the responses in Vadodara, we see greater support for such punishment among the informal slums and the lower middle classes (HT2 and HT3); virtually no difference between Hindus and Muslims; and the greatest support among the SCs and STs, compared to FCs and OBCs.

If Vadodara is politically conservative, it is also socially conservative. We asked our respondents if they were in favor of having laws against inter-caste and inter-religious marriage. Fully 46% of citizens in Vadodara, by far the highest proportion in any city, favored both such laws. A distant second in this case is Ahmedabad, where the proportions in favor of laws against inter-caste and inter-religious marriages stood at 16% and 22%, respectively. Disaggregation of the overall Vadodara data shows the lowest support for such laws among the informal shacks, no significant difference between Hindus and Muslims, and among the castes, the highest support among the SCs and STs.

Summary

In sum, attitudes about citizenship in Vadodara can be described as conservative. Citizens see their responsibilities largely in terms of voting (and less in terms of respecting others as equal citizens or community engagement). They believe people should not criticise the nation, and they

are largely opposed to inter-caste and inter-religious marriage. Among our three Gujarati cities, Vadodara is far and away the most conservative.

6. Participation

We now turn to our citizen participation index (CPI) and its component parts, which include voting, non-voting political participation and civic participation. Each component included several questions for a total of 10 (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. Vadodara's overall score of 0.422 places it at the top of our cities (Table 6.1). The difference between the least-engaged (Mumbai, Chennai, Ahmedabad) and the most active cities (Kochi, Bhavnagar and Vadodara) is significant. It is notable that the difference appears to be tied to city size, with the large cities having much lower levels of citizen participation. Vadodara scores highest among our cities in the aggregate as well as for two of our three subcomponents.

We now turn to each component of our citizen participation index: voting, non-voting political, and civic.

Table 6.1: Citizen Participation Index (CPI), including by Sub-components

City	CPI	Sub-components of CPI		
		Voting	Non-voting	Civic
Ahmedabad	0.319	0.660	0.087	0.195
Bhavnagar	0.397	0.764	0.098	0.318
Chennai	0.303	0.485	0.170	0.234
Hyderabad	0.350	0.581	0.135	0.316
Kochi	0.395	0.761	0.130	0.275
Mumbai	0.207	0.296	0.063	0.261
Vadodara	0.422	0.793	0.144	0.327

6.1 Voting

When it comes to overall voter registration (see Figure 6.1), Vadodara has the second highest self-reported registration rate of our seven cities (only slightly less than Bhavnagar). However, there are clear differences between different groups of citizens in Vadodara. As Table 6.2 shows, lower caste citizens are more likely to be registered to vote than the Forward Castes (FCs). Among the lower caste groups, it is the Dalits (SCs) who recorded the highest rate of registration (97%) followed by OBCs (93%). Vadodara, in fact, is one of the only two cities in our project where voter registration of all lower castes is higher than of Forward Castes, showing a dramatic

degree of electoral consciousness among the lower caste groups in Vadodara. In other cities, one or two lower caste groups may be higher, but not all.

Figure 6.1: Are you currently registered to vote in Union or State elections

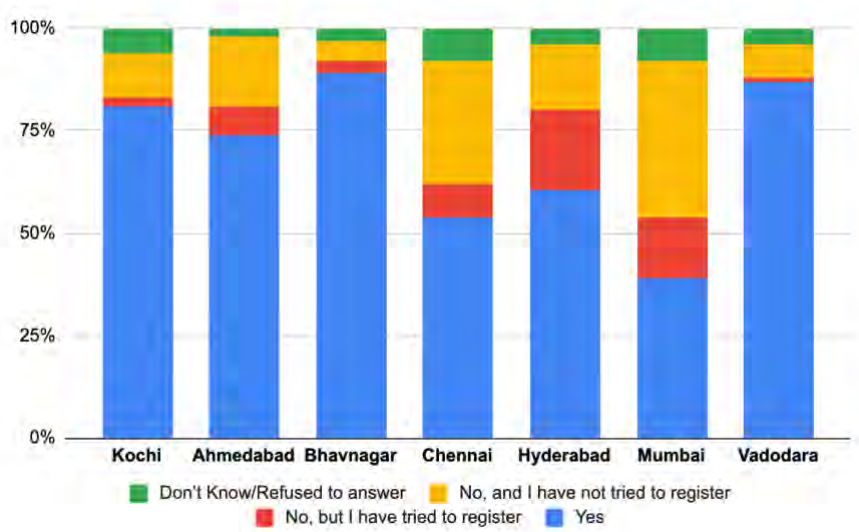


Table 6.2: Voter Registration (in state or Union elections) by Caste - All cities

City name	Vadodara	Bhavnagar	Ahmedabad	Chennai	Hyderabad	Kochi	Mumbai
Forward Caste	81%	90%	71%	50%	81%	85%	34%
OBC	93%	88%	80%	55%	57%	82%	55%
SC	97%	85%	57%	49%	61%	60%	44%
ST	86%	56%	75%	35%	87%	52%	19%

While we have examined overall voter registration for three levels of elections – national, state and local – it is important to ask a follow-up question: are respondents registered to vote at the address where they currently reside? This is because voter registration laws in India only allow a person to register to vote at one address. Those who have moved from one city or state to another (crossing constituency boundaries) would need to update their voter registration in order to vote in a new constituency. Those who had not previously updated their registration would have to physically travel back to their last-registered constituency in order to vote, given the lack of "absentee" or mail-in ballots for most categories of voters in India. The difficulties of either travelling back to one's previous constituency or updating one's voter registration in a new area may pose participation barriers to those from poorer backgrounds, although some do in fact travel back. Thus, a more accurate picture of electoral participation is given by the proportion of those who are actually registered at their current address.

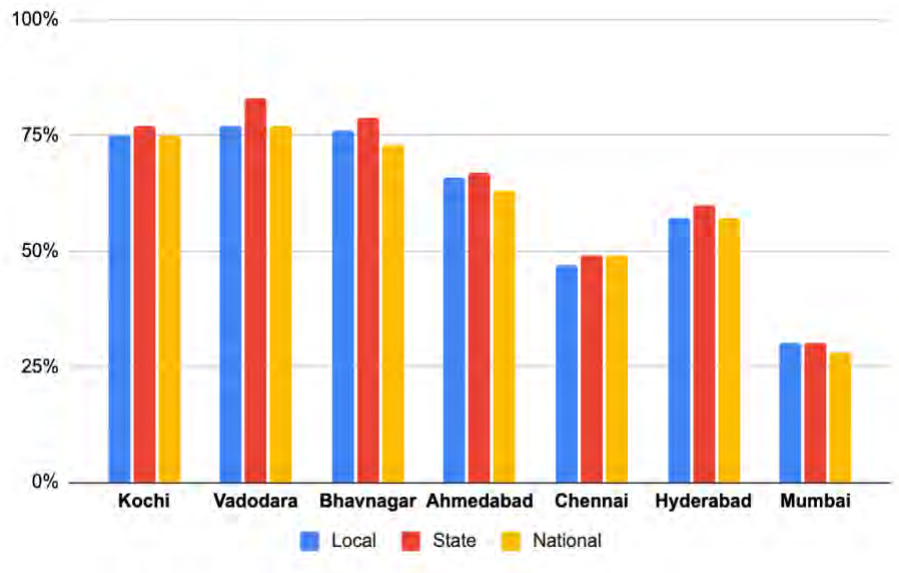
Table 6.3 shows the class-based differences for registration at the current address. The informal shack dwellers (HT1) recorded the lowest proportion, at 59%. For the rest of the class categories there is no substantive difference, as all of them recorded approximately 90% to 91% voter registration, except for a small drop for HT4 households to 83%. Our focus groups also underscored the high prevalence of voter registration in slums. Furthermore, we found that Muslims were substantially more likely to indicate they are registered at their current address (97%) than Hindus (83%). In terms of caste, OBCs and SCs record much higher proportions of registration at the current address than Forward Castes and STs.

Table 6.3: Voter registration (at current address) by caste, class, and religion in Vadodara

HT 1 - Informal shack	HT 2 - Informal slum	HT 3 - Lower Middle Class	HT 4 - Upper Middle Class	HT 5 - Upper Class	Forward Caste	OBC	SC	ST	Hindu	Muslim
59%	91%	90%	83%	90%	80%	90%	94%	77%	83%	97%

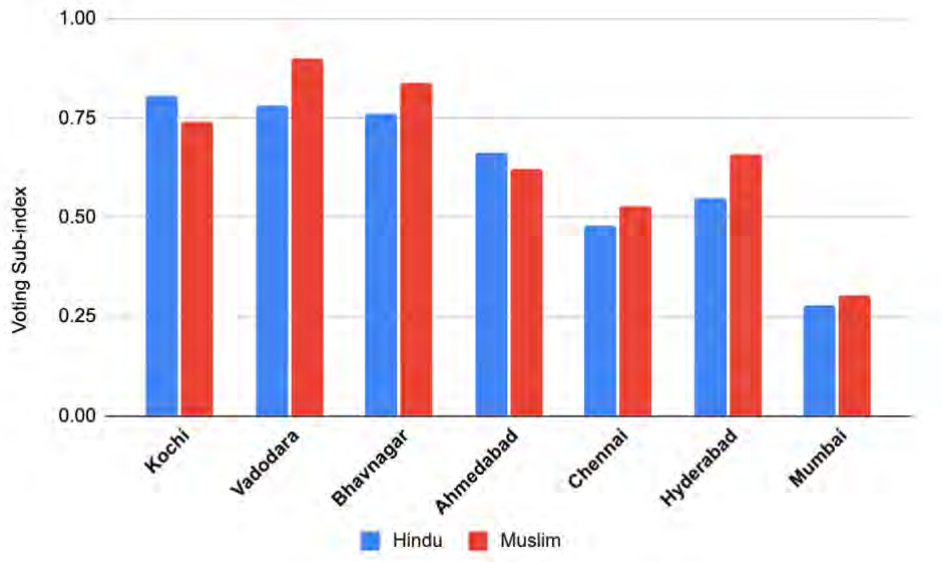
When it comes to electoral participation (Figure 6.2), as opposed to electoral registration, self-reported electoral participation in Vadodara is the highest among all cities: 77% in the most recent national elections, 83% in state elections and 77% in the last municipal elections.[34] The closest second is the city of Bhavnagar, which is also in Gujarat. Kochi is the only other city, which is roughly comparable for voting.

Figure 6.2: Self-reported Voting at three levels of Elections - most recent election



[34] What we are capturing here is self-reported voter participation, not voter turnout statistics, nor the percentage of those who are registered to vote.

Figure 6.3: Voting Sub-Index by Religion



If we combine voting at all levels, we get our voting sub-index (Table 6.1 above). Overall, Vadodara has the highest score among our seven cities (0.793). The lowest score is recorded for Mumbai (0.296). When disaggregated internally in Vadodara, religion has a substantive effect, with Hindus at 0.78 and Muslims at 0.90 (Figure 6.3). Earlier we saw that Muslims were more likely to be registered to vote. Taking both measures into account (registration and actual voting), Muslims report participating significantly more in electoral politics than the Hindus in Vadodara and this finding is replicated elsewhere, too, with the exception of Kochi and Ahmedabad.

Class also has a small effect on the electoral participation in Vadodara (Figure 6.4). Compared to other classes, citizens in HT1s in Vadodara recorded the lowest score in the voting sub-index. There is no great difference in the voting scores for the class categories of HT2, HT3 and HT6. This is not a pattern other cities have, with the partial exception of Hyderabad. In Ahmedabad and to some extent Chennai, voting goes up more or less linearly with class.

When we look at the voting sub-index scores by caste categories for Vadodara (Figure 6.5), the Forward Castes and STs have virtually identical scores. However, OBCs and SCs have much higher scores in the voting sub-index. The voting sub-index scores for SCs and OBCs in Vadodara are in fact the highest, compared to other cities.

Figure 6.4: Voting Sub-Index by Housing Type

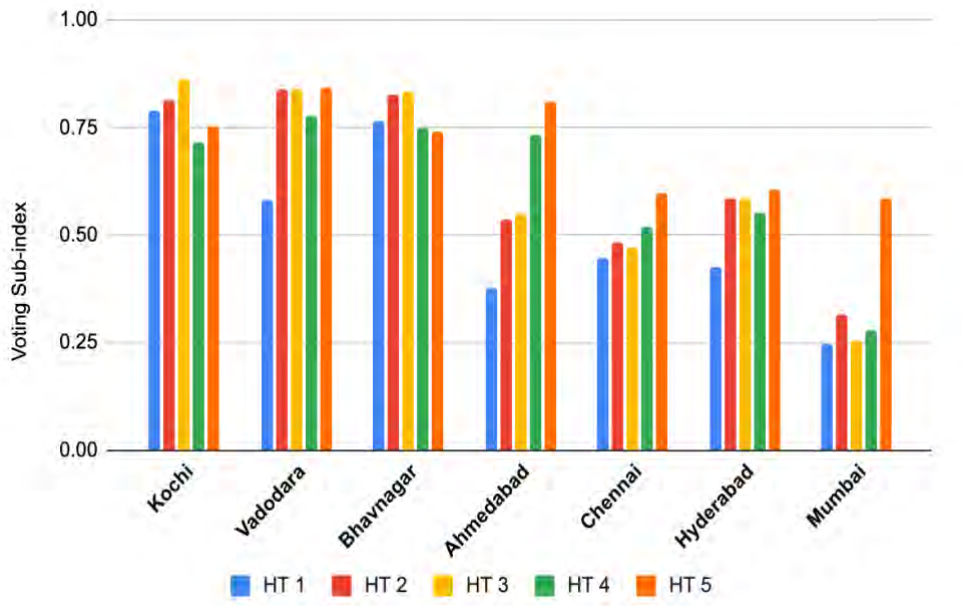
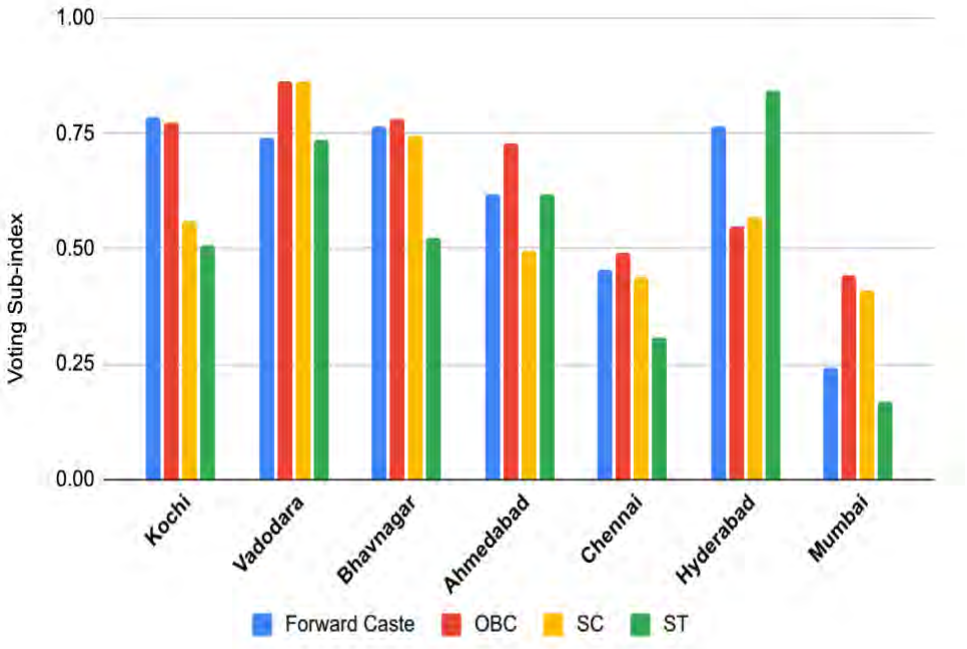


Figure 6.5: Voting Sub-Index by Caste



Finally, we look at education and gender in relation to the voting sub-index for Vadodara. We found significant variance in scores across different educational categories (Table 6.4) and note that there is an inverse correlation between educational level and propensity to vote. Thus, at a remarkable 0.9, the highest score for the voting sub-index was in the 'no-schooling' category, a score that declines with each educational category (except SSSC/HSC) and bottoms out at 0.7 for "college graduates and above". This pattern is more or less replicated in our other small cities - Kochi and Bhavngar - with the less educated on the whole voting more than the more educated. The pattern is different in our three larger cities - Ahmedabad, Hyderabad and Mumbai (the exception being Chennai). We found no relationship between gender and electoral participation, so we are not reporting fuller statistics below.

Table 6.4 Voting Sub-Index by Education

City Name	No Schooling	School: up to 4 years	School: 5-9 years	School: SSC/HSC	Some college but not graduated	College Graduate & Above	Don't Know/ Refused
Vadodara	0.904	0.828	0.818	0.859	0.732	0.693	0.703
Bhavnagar	0.870	0.713	0.858	0.821	0.527	0.789	0.000
Ahmedabad	0.550	0.715	0.619	0.676	0.536	0.794	0.303
Chennai	0.669	0.321	0.532	0.453	0.344	0.548	0.848
Hyderabad	0.276	0.444	0.679	0.771	0.433	0.657	0.411
Kochi	0.970	0.879	0.873	0.799	0.683	0.703	0.413
Mumbai	0.271	0.432	0.415	0.245	0.199	0.373	0.185

Summary

We can now summarise our findings on electoral participation. Vadodara'a propensity to vote, as measured by the voting sub-index, is the highest across all cities in our project. Furthermore, the patterns documented here provide mixed support for the common claim in the literature that the less privileged in India vote more than the privileged. In Vadodara it is indeed the case that Dalits (SCs) and OBCs have a much higher propensity to vote than Forward Castes. However, we do not find any clear evidence that the poor vote more than the rich in Vadodara. Across other cities the pattern is more varied, but there is no systematic evidence to support the conventional claim that electoral politics in urban areas is always dominated by the so-called slum vote banks. It depends on which cities we are talking about. Second, in Vadodara there is a discernible difference across religious communities, with Muslims registering and voting in greater proportions than the Hindus. It is also notable that those with no or less education in Vadodara are more likely to go to the polls than their higher-educated co-citizens.

6.2 Non-voting Political Participation

There is more to politics than voting. Between elections, people organise and support political parties in varied ways. A well-known problem of representation in democracies is the fact that the rich and the more socially privileged often play a more proactive role in politics and are more likely to dominate political parties.

Let us begin with party membership. In Vadodara, only 2% are party members which, along with Bahvnagar, is the lowest party membership score in our cities (Table 6.5). In Chennai, Hyderabad and Kochi, party membership is in double digits. When we examine party membership across social categories (Table 6.6), there is little variation across class categories. Barring informal shacks (HT1), for all other class categories, only between 1% to 2% were members of any political party. Across caste (Table 6.7), again, any variation is limited. Forward Castes are more likely to be party members (3%) compared to Dalits (0%),[35] Adivasis (1%) and OBCs (1%), but the differences are not huge. Whereas SCs report essentially no party membership in Vadodara and Bhavnagar, it is noteworthy that they have quite significant rates of party membership in some other cities, reaching a high of 14% in Kochi (Table 6.7). Similarly OBCs have low party membership (1%) in Vadodara and much higher in other cities, peaking at 20% in Hyderabad (Table 6.7). When it comes to religion, the percentage of both Hindu and Muslim respondents who are members of a political party is, at 2%, the same in Vadodara, but the proportions vary in other cities (Table 6.8). Muslim party membership is highest in Hyderabad.

Table 6.5: Are you a member of any political party?

Bhavnagar	Ahmedabad	Chennai	Hyderabad	Kochi	Mumbai	Vadodara
2%	5%	12%	11%	15%	6%	2%

Table 6.6: Membership of a political party by housing type

Housing Type	Vadodara	Ahmedabad	Bhavnagar	Chennai	Hyderabad	Kochi	Mumbai
HT1- informal shack	0%	2%	0%	18%	10%	3%	5%
HT2- informal slum	1%	4%	1%	12%	16%	13%	8%
HT3- lower middle class	2%	3%	1%	12%	9%	10%	3%
HT4- upper middle class	2%	6%	3%	11%	7%	13%	5%
HT5- upper class	1%	3%	1%	15%	2%	17%	5%

[35] O% does not mean no Dalits join political parties. Rather, their numbers are so small that the sample did not pick them up.

Table 6.7: Membership of a political party by caste

Caste	Vadodara	Ahmedabad	Bhavnagar	Chennai	Hyderabad	Kochi	Mumbai
ST	1%	4%	0%	32%	2%	7%	9%
SC	0%	5%	0%	10%	4%	14%	6%
OBC	1%	7%	1%	7%	20%	18%	10%
Forward Caste	3%	3%	3%	28%	8%	10%	5%

Table 6.8: Membership of a political party by religion

Religion	Vadodara	Ahmedabad	Bhavnagar	Chennai	Hyderabad	Kochi	Mumbai
Hindu	2%	4%	2%	13%	6%	14%	5%
Muslim	2%	7%	0%	4%	22%	12%	7%
Other	0%	3%	0%	8%	12%	18%	7%

We now turn to our index of non-electoral participation. It includes four questions covering political party membership, attendance at rallies, talking about politics with neighbours, and contributing time to a campaign. A score of "1" would mean that the respondent answered affirmatively to all 4 questions, with "0" indicating only negative responses. Our index (as reported in Table 6.1 above) reveals that Vadodara's citizens are relatively politically engaged compared to our other cities and have the second highest score (0.14), second only to Chennai (0.17). Recall that only 1.8% of respondents are party members. However, 16% contributed time to election campaigns during elections, 13% participated in meetings or rallies organised by political parties between elections and 27% discussed supporting a candidate with friends, neighbours, or community members.

If we look at the class variations in our index of non-voting political participation (Figure 6.6), in Vadodara we found a linear increase in the non-voting participation index with the level of class. Informal shacks (HT1) recorded the lowest non-voting participation, while the upper classes recorded the highest. There are no clear patterns in other cities, but in general those living in shacks are less politically engaged, except for Hyderabad and Chennai where, somewhat surprisingly, they are the most engaged. On the other end of the spectrum, non-voting political participation of the upper class (HT5) in Vadodara is by far the highest of any city. Further, it is also noteworthy that the scores are low across all class categories for all cities. This implies that political participation is still very much defined by voting in these cities and less so by activities which happen between elections.

Figure 6.6: Non-Voting Sub-Index by Housing Type

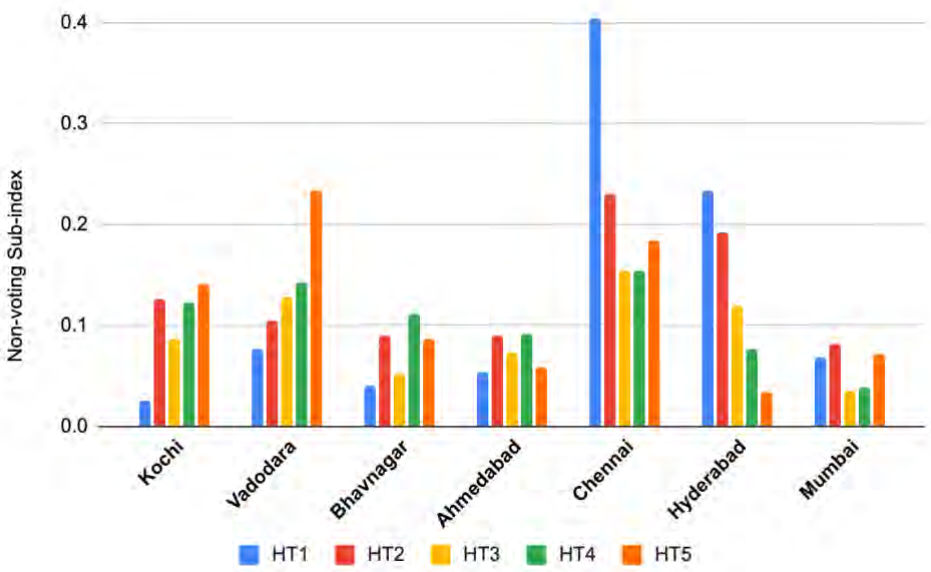
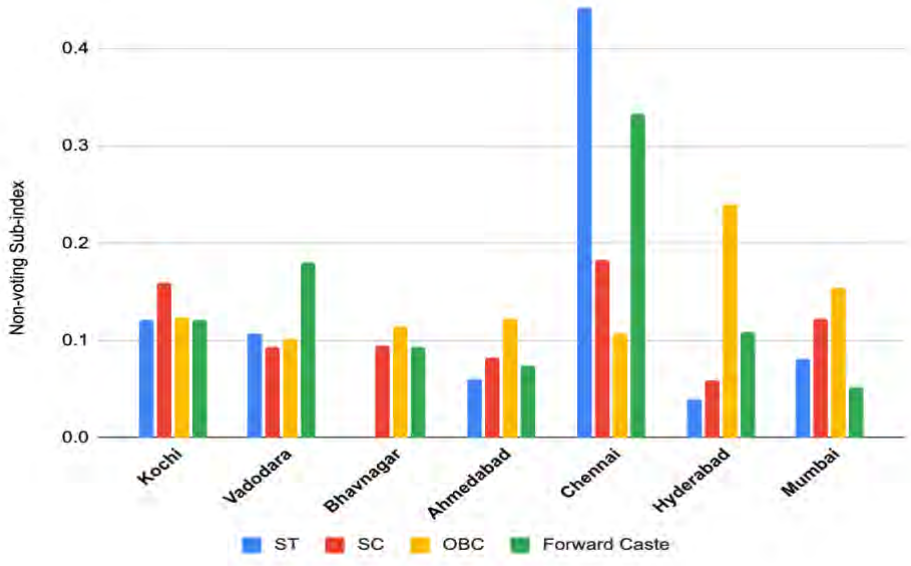


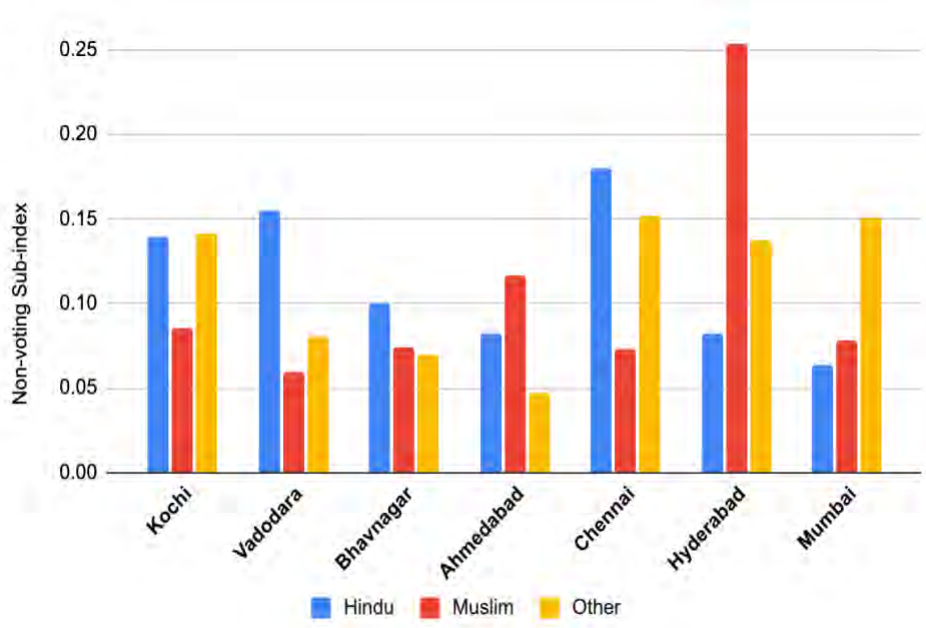
Figure 6.7: Non-Voting Sub-index by Caste



When we look at the index by caste, it is clear that in Vadodara (Figure 6.7), Forward Castes are the most politically active outside elections (0.180) with Adivasis the least active (0.093). The difference in non-voting sub-index scores between OBCs, Dalits, and Adivasis is not large. In other cities, the participation rate of Forward Castes is not so high, and certainly not the highest across all caste categories.

As for the non-voting political participation by religion (Figure 6.8), Hindus are more active (0.155) than Muslims (0.059) in Vadodara. This is also the case in Bhavnagar, Chennai, and Kochi. In Hyderabad, Mumbai and Ahmedabad, Muslim participation is higher relative to the Hindus.

Figure 6.8: Non-voting Sub-Index by Religion



6.3 Civic participation

We now turn to the last sub-component of our CPI, civic participation. We want to distinguish civic participation especially from voting (but also from non-electoral political participation, such as political rallies). Voting is a once-in-five-year participation exercise. Civic participation, on the other hand, is more frequent -– for example, participation in the activities of associations, identity-based (caste, religion) or professional (trade associations, ward committees) is typically not once in five years. Civic participation can also demand much more time and energy than electoral participation and can sometimes mean dealing with the recalcitrant or even hostile officials. Even participative forums under a legal statute like the area sabha and ward committee face hurdles. In some cities, they are not formed, and in others, the participation is limited, further impeding active civic citizenship.

We measured civic participation by asking respondents a series of questions about their engagement in the community and then created an index (see Appendix 2 for details). Among all

our cities, Vadodara has the highest score, 0.327 (Table 6.1 above). A score of "1" would mean that the respondent answered positively to all three measures of civic participation, with "0" indicating only negative responses. A score of 0.327, as in Vadodara, means that on average respondents had one positive answer. With this in mind, the difference then between the 'top' cities in this index (Vadodara, Bhavnagar, and Hyderabad) is not particularly stark. When we examine the civic participation index across social categories in Vadodara,, we find some small variations (Figure 6.9). A clear linear decline exists as we move from Forward Castes (0.352) to OBCs (0.309) and then to SCs (0.283) and STs (0.249). Similarly, in Mumbai, it is the Forward Caste citizens who scored the highest compared to other caste categories, and the Forward Castes are among the two highest in Kochi, Bhavnagar, Ahmedabad and Chennai.

The class pattern is also revealing (Figure 6.10). The informal shacks (HT1) in Vadodara have the lowest levels of civic participation when compared to other class categories. And again, an increase in the civic participation scores is apparent as we move up the social class ladder, peaking with the upper class. In fact, the upper middle class (HT4) and the upper class (HT5) in Vadodara have the highest civic participation scores, compared to these classes in other cities. Clearly, the elites in Vadodara are very active in civic life.

Finally, in Vadodara, Hindus participate civically only slightly more than Muslims (Figure 6.11). In other cities, the civic participation score does not vary much between Muslims and Hindus. The differences are small, except in Chennai (considerably greater for Hindus) and Hyderabad (significantly higher for Muslims).

Figure 6.9: Civic Participation Sub-Index by caste

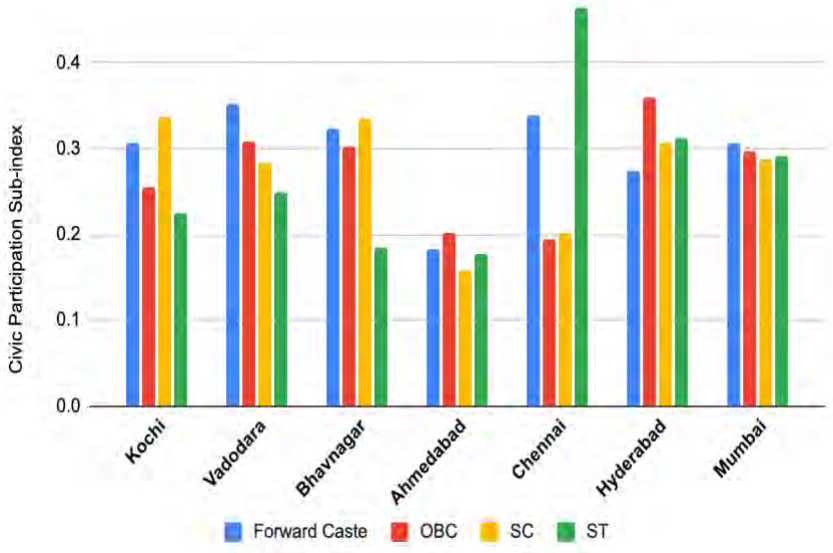


Figure 6.10: Civic Participation Sub-Index by Housing type

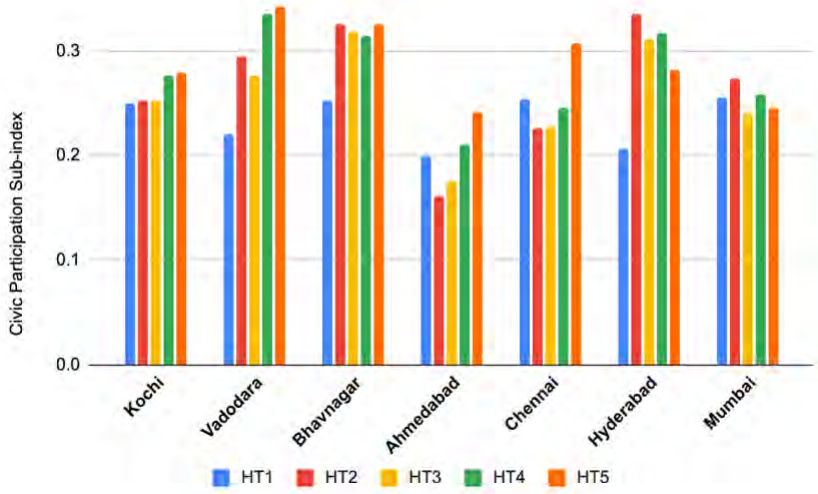
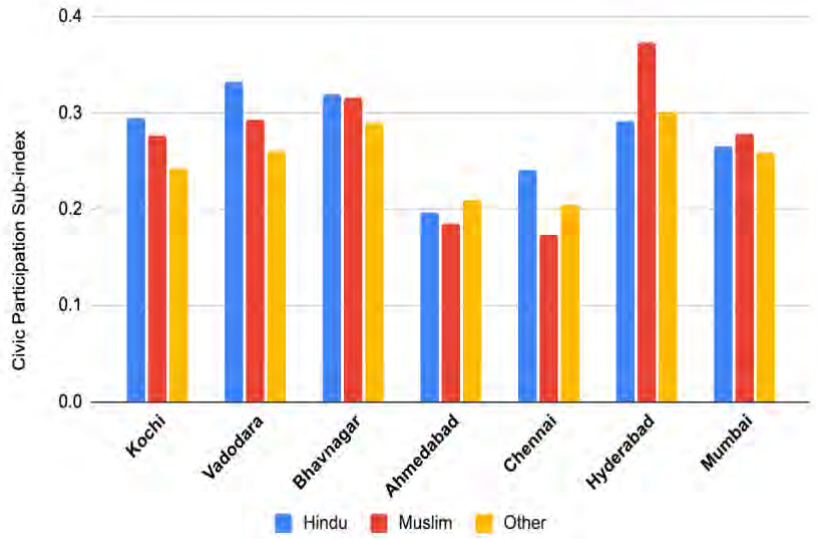


Figure 6.11: Civic Participation Sub-Index by Religion



To disentangle these findings about civic participation, we can look more closely at the question about belonging to civic organizations. Almost 68% of our respondents in Vadodara reported participating in a civil society organization, though it is important to note that the most common were the religious, cultural, and caste associations (51%) or what we call "traditional" or "identity-based" associations (Figure 6.12). In comparison, only 17% reported participation in "modern" organizations (i.e. unions, RWAs, NGOs and cooperative societies) or what we call "professional" associations. Also, participation in religious, cultural and caste-based civil society organizations for Vadodara is the highest compared to other cities. A distant second is Bhavnagar

at 35%. The comparison with other cities reveals a noticeably clear regional pattern. Not only do the three Gujarati cities have the highest absolute levels of participation in religious, caste or cultural organizations, but they are the only cities where residents participate more in these organizations than in professional ones.

Figure 6.12: Percent of people participating in organizations or associations

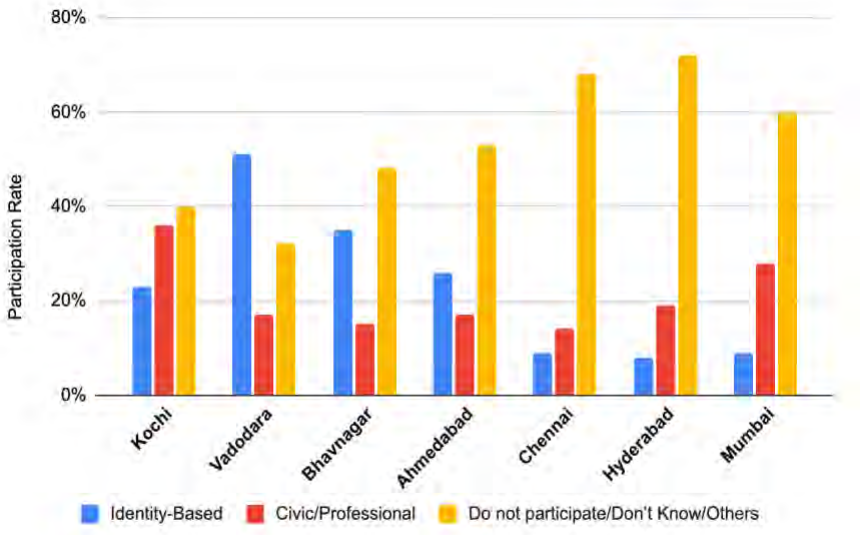
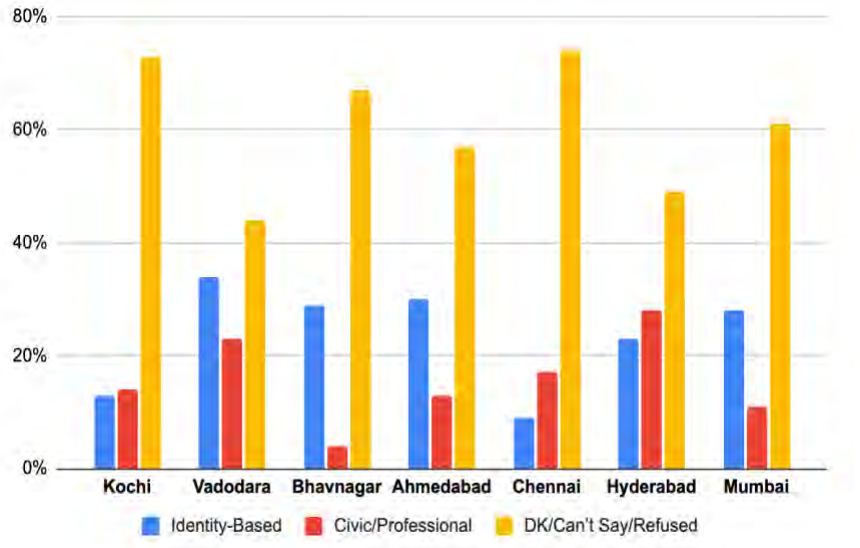


Figure 6.13: Which organization helps in providing public services?



This pattern generally finds confirmation in a second question we asked about associations. Going beyond membership of the organizations (both identity-based and professional), we also asked what type of organization provides the most help in accessing services in respondents' communities (Figure 6.13). In Vadodara, religious, caste or cultural organizations provide the most help to the citizens compared to professional organizations. At 34%, the proportion recorded for identity-based associations for Vadodara is also the highest in our cities (though Mumbai comes quite close). The opposite pattern prevails in Hyderabad, Chennai and, to some extent, Kochi. Clearly, religious, cultural and caste organizations play a much more significant role in the lives of urban Guajaratis.

6.4 The Citizen Participation Index (CPI)

Having discussed electoral, non-electoral political and civic participation, we can now draw the larger picture. As reported at the beginning of this section, the CPI combines all our measures of political participation (voting and non-voting) and civic participation into a single index. All told, this measure includes the 10 different questions discussed above that capture the multidimensionality of citizenship practices. To repeat, scaled from 0-1, a score of zero would mean that citizens responded negatively to all 10 questions (they did not vote, participate in political or any civic activities) and a score of one would mean they did all of these things.

Table 6.9 presents the overall index for all cities. Vadodara's score of 0.422 is the highest. The closest second is the city of Bhavnagar with an overall CPI score of 0.397. It is notable that the larger cities score lower than the smaller ones. CPI scores vary across different caste categories (Figure 6.14) . What we notice in Vadodara is a linear decline in the overall scores as we move from the Forward Castes to OBCs and then to SCs and STs . The same trend is seen in Kochi as well. Also, it is also worth noticing that with the exception of the STs, CPI scores are highest in Vadodara for each caste group compared to all other cities in our study.

Table 6.9: Citizen Participation Index

Vadodara	0.422
Bhavnagar	0.397
Ahmedabad	0.318
Chennai	0.303
Hyderabad	0.350
Kochi	0.394
Mumbai	0.207

Figure 6.14: Citizen Participation Index (CPI) by Caste

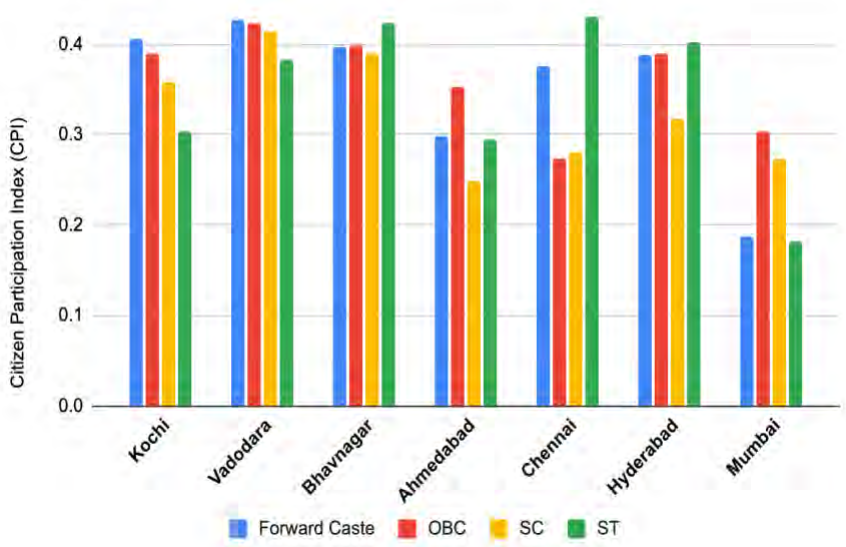
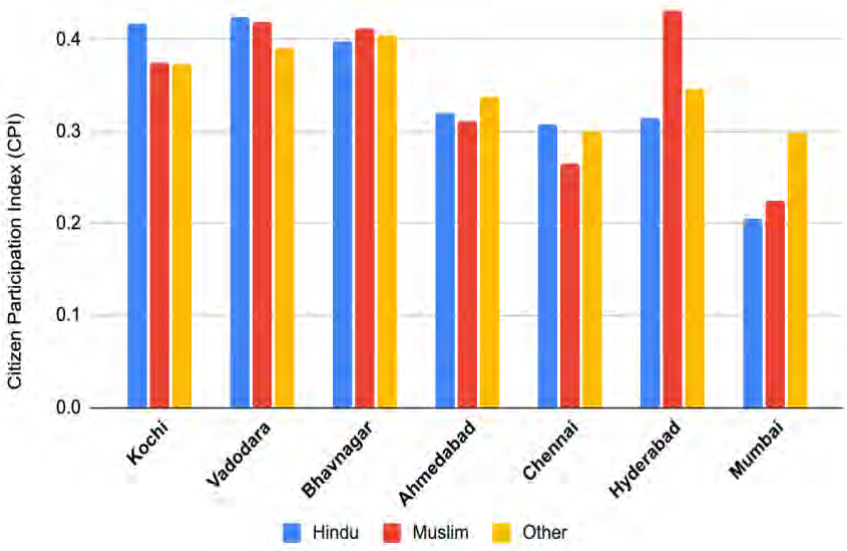


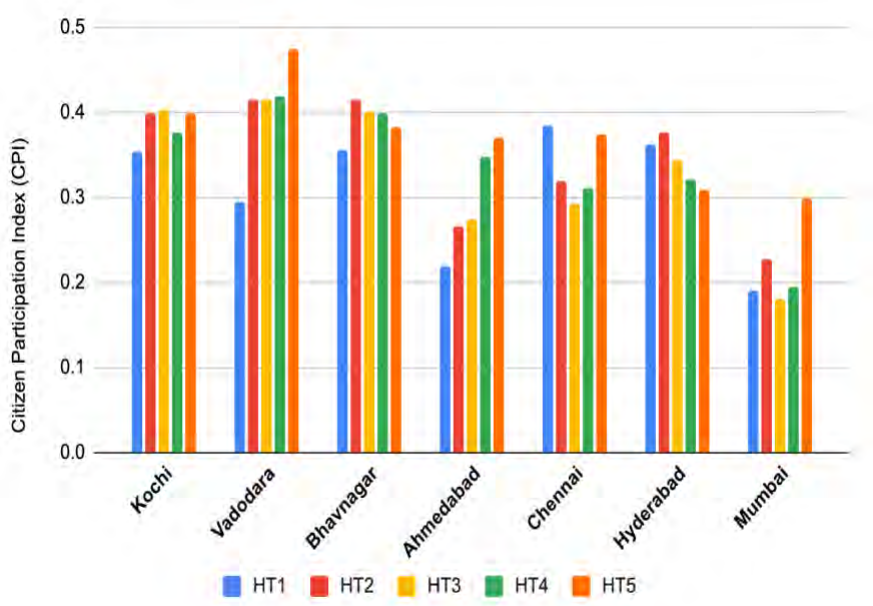
Figure 6.15: Citizen Participation Index by Religion



We have also examined the CPI across categories of religion (Figure 6.15). In Vadodara, Hindus have a slightly higher overall CPI score than Muslims, but the difference is not large. This pattern of no great difference between Hindus and Muslims holds more or less for all Gujarat cities (with a slight exception in Bhavnagar). It is also true of Mumbai. In Hyderabad, Muslims display a significantly higher level of citizen participation than Hindus, and in Chennai and Kochi Hindus

have a higher level of citizen participation than do Muslims. The class difference in CPI is quite sharp between informal shacks and informal slums in Vadodara (Figure 6.16). Also, very clearly, there is a linear increase in the overall participation scores, as we move up the class categories from the lowest category of informal shack dwellings (HT1) to the upper class (HT5). Ahmedabad is the other city in our study displaying this trend, and more prominently so.

Figure 6.16: Citizen Participation Index (CPI) by Housing Type



Summary

We can now summarise our findings about citizen participation in Vadodara. In terms of electoral registration, Vadodara has the second-highest score among our cities. Also, when it comes to non-electoral political participation, we find that citizens of Vadodara are relatively more active compared to those in most other cities in our study and in fact ranked second highest. We however note that in terms of political participation there is a paradox at work here. On one hand, lower classes, lower castes, the less educated and Muslims vote in significantly higher proportions than their counterparts. On the other hand, when it comes to non-electoral political participation, the rich, the upper castes and Hindus participate much more. In sum, the subaltern vote, but the Forward Castes and upper classes play a more active role in the larger politics than in any other city. Overall participation is high, but very much elite dominated. As far as getting involved in civic life is concerned, the results again point to greater participation compared to other cities, though the profile of participation very strongly favors identity-based organizations over

professional organizations. Across all of our measures of citizen participation, especially non-electoral and civic, we did see a clear class-based linear pattern in Vadodara. The scores move up in a linear fashion with the upper class showing the highest level of non-electoral and civic participation and the informal shacks the lowest. This trend was also seen in the overall index of participation. Furthermore, except for voting, the Forward Castes display higher levels of involvement across different measures of participation compared to lower castes. Finally, Hindu participation (all forms of participation beyond voting) is relatively higher than that of Muslims. Overall then, Vadodara displays high levels of citizenship, but participation beyond elections is very much driven by dominant groups.

7. Services

In this section we examine the distribution of basic services in Vadodara. These include the water, sanitation, electricity, 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 all the specific services, but we begin 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 3 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 roads and no flooding in the house or neighborhood. On the index, Vadodar's score is 0.907, which is the highest in our project cities (Tabel 7.1).

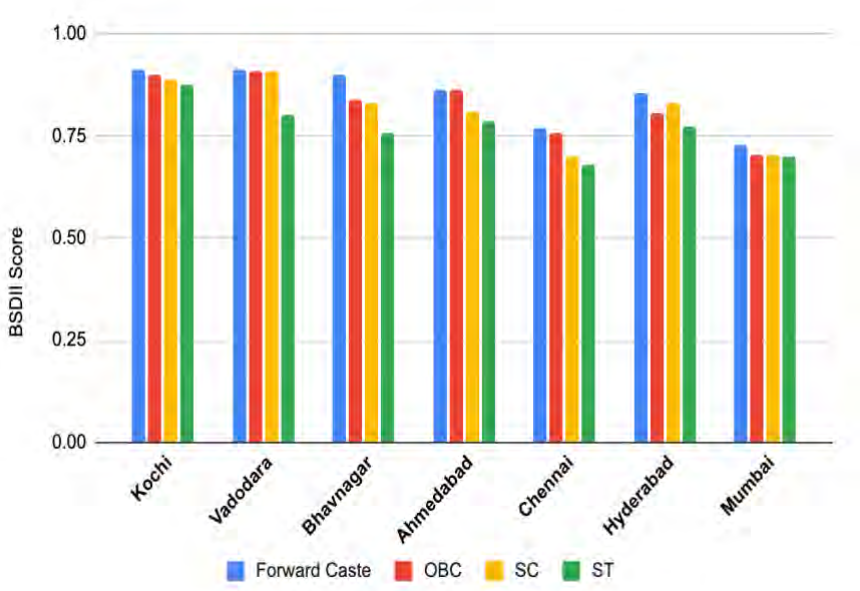
Table 7.1: Basic Serve Delivery and Infrastructure Index (BDSII)

Vadodara	0.907
Bhavnagar	0.880
Ahmedabad	0.855
Chennai	0.743
Hyderabad	0.814
Kochi	0.904
Mumbai	0.768

As can be seen in Figures 7.1-7.3, the distribution of services across social categories, however, varies. In Vadodara, it is the Forward Castes who do the best in terms of services followed very closely by OBCs and Dalits, but the differences are not substantial. Adivasis have the lowest

service scores, and the gap is significant.[36] Scores in Bhavnagar, another Gujarat city, also have roughly the same pattern across caste categories, whereas Ahmedabad, the third Gujarati city in the project, presents an unusual caste picture with OBCs doing marginally better in terms of services than even Forward castes (Figure 7.1). Overall, though, with the exception of STs who clearly receive significantly lower quality of services than all other castes, caste in and of itself does not seem to be a significant driver of service inequality in Vadodara.

Figure 7.1: BSDII by Caste



Class however, is significant. As is clear from Figure 7.2, shack dwellers (HT1) are the worst served by basic public services in Vadodara, as is true in all cities. And as expected, the service delivery score increases gradually as we move up the class categories. In comparative terms, those living in informal shack settlements (HT1) in Vadodara are also one of the worst off compared with those living in HT1s in other cities. They have the second lowest BSDII score (after Ahmedabad) indicating poor condition of basic services in the shack-dominated areas. Overall, service delivery is highly differentiated across classes in Vadodara, a pattern that is observed in all cities, though in different degrees. Since housing types are highly clustered, there is also clearly a spatial dynamic at work. In other words, where you live, and specifically what settlement type you live in (informal, designated slum, planned settlement, government housing etc.), has a huge impact on access to services. Speaking in terms of religion, Muslims in Vadodara have a marginally better BSDII as compared with Hindus, quite in contrast to other cities (Figure 7.3).

[36] Statistical significance tests show that the difference between FCs, OBCs and Dalits are not significant, but that the difference with STs is.

The gap between Muslims and Hindus in Vadodara is among the lowest in our cities (Kochi and Chennai come very close.)

Figure 7.2: BSDII by Housing Type

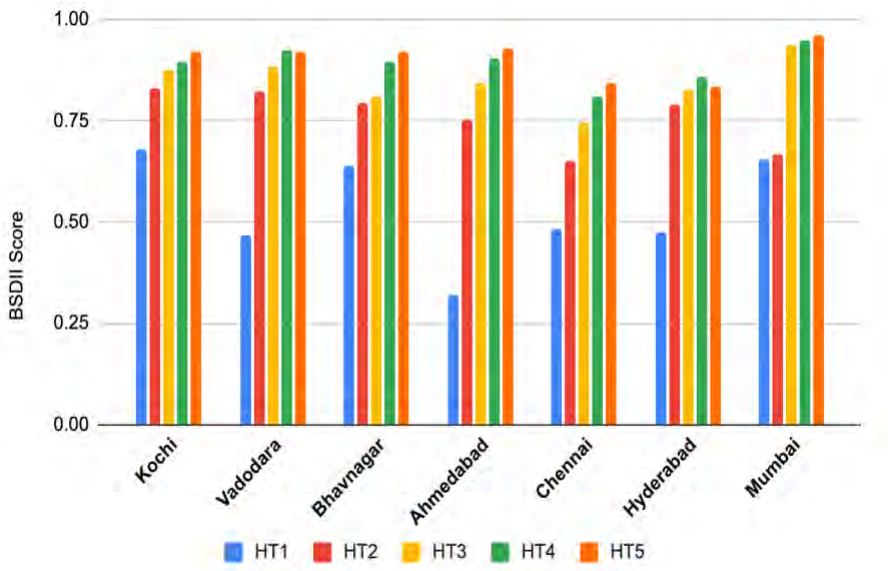
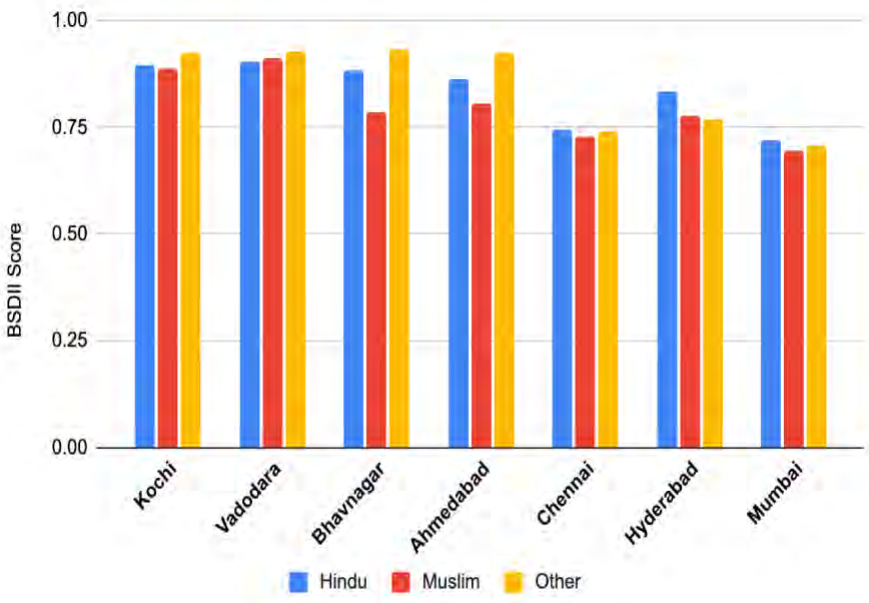


Figure 7.3: BSDII by Religion



The BSDII, as in the case with all indexes, lumps many indicators together and can flatten differences which lie beneath it. As such, it is important to look at the distribution of specific services which the following sections do.

7.1 Water

The delivery of water is most often reported as a simple binary - either you have access to piped water or you don't. But water delivery systems in Indian cities are complex and fragmented. They provide a highly variable quality of delivery. Moreover, from our focus groups in informal settlements, we found that many households spend a significant amount of 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), duration of supply and storage systems.

Ninety five percent of households in Vadodara have piped water, 87% of which are inside their premises and the balance being outside. In comparative terms, Vadodara has one of the highest proportions of households having access to piped water in our cities (Table 7.2). However, when it comes to having the source of water inside the premises, Vadodara ranks third lowest, along with Ahmedabad.

Table 7.2: Main source of water- All cities

	Vadodara	Bhavnagar	Ahmedabad	Chennai	Hyderabad	Kochi	Mumbai
Tap (Piped)	95%	90%	88%	40%	98%	67%	96%
Well	0%	0%	0%	4%	0%	3%	1%
Hand pump	0%	1%	0%	18%	0%	0%	1%
Borewell	2%	9%	10%	27%	1%	27%	1%
Other source	3%	0%	2%	12%	1%	3%	1%
Location of the source- All cities							
Inside Premises	87%	96%	87%	74%	96%	93%	76%
Outside Premises	13%	5%	13%	26%	4%	7%	24%

Though access is fairly comprehensive, the quality of water delivery is poor. Fully 90% of the city receives water for only 0-2 hours a day. Gujarat is considered a water scarce state and as reflected in Figure 6.4, in Gujarat cities, a vast majority of residents receive water only for a maximum of two hours. In Kochi, Chennai and Mumbai, a majority of households have many more service hours.

We can now look at how water services are distributed across social categories. With respect to water, class (housing type) is the category that has the most effect. Informal settlements in Vadodara (HT1) are particularly deprived when it comes to water. Only 61% of HT1 households get piped water and fully 80% get water from outside their premises (Table 7.3). Our FGDs in slums also revealed that the quality of water received is poor and the slum dwellers have had to face many health issues due to the poor quality of water.[37] In terms of piped water (Table 7.3), the percentage remains more or less the same at 95% for the middle classes (HT2 to HT4). However, the proportion, as expected, is the highest at 98% for upper classes (HT5)

Figure 7.4: Water availability (hours) -All cities

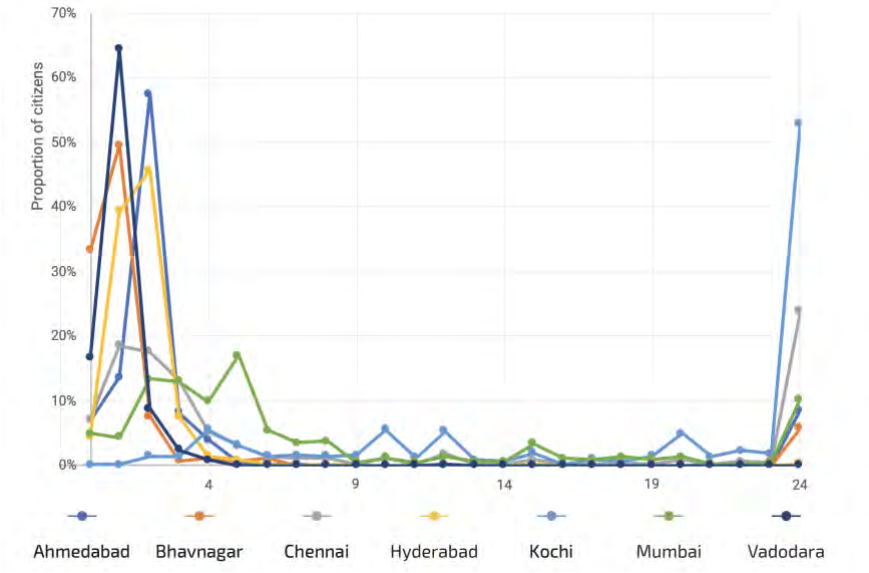


Table 7.3: Source of Water by Housing Type in Vadodara

Source of Water	HT 1 - Informal shack settlement	HT 2 - Informal slum settlement	HT 3 - Lower Middle Class	HT 4 - Upper Middle Class	HT 5 - Upper Class
Borewell	4%	1%	3%	2%	2%
Hand pump	12%	3%	0%	0%	0%
Tap (Piped)	61%	95%	95%	94%	98%
Well (Covered or Uncovered)	1%	0%	0%	0%	0%
Other source	22%	1%	1%	4%	0%
Location of water source					
Inside premises	20%	61%	77%	92%	99%
Outside premises	80%	39%	23%	8%	1%

[37] As one focus group respondent remarked, *"because the water is yellowish in colour, we at times get stomach problems, vomiting and some people were even hospitalised."*

What is most striking is the gap between these informal shack settlements (HT1) and informal slum settlements (HT2). The latter, in 95% of cases, receive water from the tap and 39% have an outside source of water. Most of the other cities in our project witnessed a similar kind of jump from HT1 households to HT2 households (Table 7.4), with the highest jump witnessed in Ahmedabad – from 28% with piped tap water in HT1s to 92% in HT2s. Our FGDs in HT2 areas also confirm that access to piped tap water has been present for quite some time in Vadodara. However, it is important to note that in many cases such access might be precarious. In two of the three focus groups in slum neighborhoods, respondents revealed that citizens made illegal connections to the government pipelines, so they could get access to piped water in their homes. As one participant said, "there is a big pipeline of water here … we fill our water from there."

Table 7.4: Proportion of HT1 and HT2 citizens with tap (piped) water source by City

City Name	Source of Water	HT1	HT 2
Vadodara	Tap (Piped)	61%	95%
Bhavnagar	Tap (Piped)	57%	95%
Ahmedabad	Tap (Piped)	28%	92%
Chennai	Tap (Piped)	33%	45%
Hyderabad	Tap (Piped)	54%	99%
Kochi	Tap (Piped)	95%	71%
Mumbai	Tap (Piped)	90%	98%

Where the quality of water supply really declines in Vadodara is in terms of hours of availability. In *every* class category, a majority of residents report having one hour or less a day of running water. In four housing types (HT2- HT5) that proportion is above 75%. Our focus groups in slum areas painted an even more precarious situation. In some cases, the water supply is only for 20 minutes: **"**We get water for only 20 minutes in a day, sometimes for only 5 minutes.*"*[38]

Table 7.5: Hours of water per day by Housing Type-Vadodara

Hours	HT 1 - Informal shack settlement	HT 2 - Informal slum settlement	HT 3 - Lower Middle Class	HT 4 - Upper Middle Class	HT 5 - Upper Class
0-1	58%	83%	77%	81%	80%
2-6	11%	12%	20%	11%	19%
7-12	5%	0%	0%	0%	0%
24	26%	4%	3%	8%	1%

A clear anomaly is revealed in Table 7.6. HT1 settlements had the lowest percentage of the receiving water for an hour or less a day (58%) and the highest receiving water 24 hours a day (26%). It could possibly be because of the question being misunderstood and in fact they have

[38] Focus Group Discussion with Dalit women (17 Aug. 2018), Kishan Wadia, Vadodara.

access to *stored* water 24 hours in a day. Or this could be the result of these households having much higher rates of water access through borewells and hand pumps, as opposed to piped systems. For those with limited daily access, storage becomes essential. When water services are generally measured in India, as for example in the census, questions are limited to the type of delivery and whether it is in or outside the premises. Yet, water storage is key to ensuring easy access to water when delivery is so limited. So, as part of our survey, we also measured the quality of storage. Ninety six percent of households in Vadodara have storage, and of those about 46% have a system that requires minimal labour, namely a large drum (often placed on the roof of the house) with a motorised pump (Table 7.6). All others depend on manual storage, including 18% who rely on small, movable containers. Having to use buckets for water storage is a clear and tangible measure of poverty and precarity. It is notable that the range is from a high of 51% of households in Mumbai to a low of 6% in Kochi.

Table 7.6: Water Storage

	Vadodara	Bhavnagar	Ahmedabad	Chennai	Hyderabad	Kochi	Mumbai
Yes, we do have secondary water storage	96%	97%	79%	90%	93%	91%	66%
Movable containers (small sized)	18%	50%	22%	24%	26%	6%	51%
Drum (medium sized)	26%	10%	45%	43%	37%	10%	49%
Large Tank/Drum non-motorised pump	39%	42%	21%	17%	30%	30%	8%
Large Tank/Drum with motorised pump	46%	67%	24%	23%	26%	51%	8%
Other	0%	0%	0%	1%	0%	0%	0%

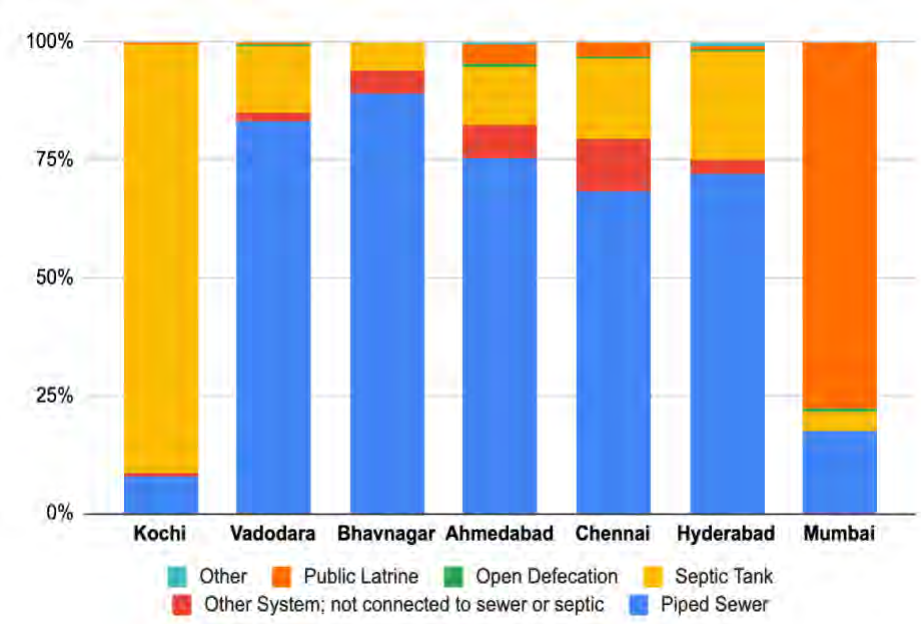
To summarise, Vadodara, along with Bhavnagar, has the highest percentage (90%) of citizens who receive water for less than two hours a day. To add to this, Vadodara has the second-highest proportion of respondents (17%) receiving water for less than one hour per day. Additionally, Vadodara has the second-highest percentage of respondents depending on secondary water storage (96%), a need which arises for almost all citizens due to the poor provision of household water supply in the city. It is a well-known fact that Gujarat is one of the most water-scarce states in the country, and the state's topographical, hydrological, climatic and soil conditions result in large regional variations in the availability of water, leaving most of Gujarat's districts with water deficits.[39] Along with distributional inequalities between different housing types, these factors help to explain the irregular water supply across the cities of Gujarat.

[39] See Tortajada (2014) for more on Gujarat's water supply issues.

7.2 Sanitation

Vadodara, in terms of sanitation, definitely fares better compared to most other cities in our project. Eighty four percent of Vadodara citizens have flush toilets connected to a piped sewer which is the second highest among all the seven cities that we surveyed (Figure 7.5). Another 14% have it connected to a septic tank. Only 2% rely on a flush toilet which leads to an open drain and those without any in-house sanitation were less than 0.5%. In sum, only 2% of households rely on highly inconvenient or open drainage, which we lump together in the category of "compromised sanitation" systems[40].

Figure 7.5: Toilet Facility in Sampled Cities



[40] By compromised sanitation, we mean (open defecation, public latrines, open pit latrines, flush/pour latrines not connected to a sewer line i.e. waste flowing into ground or into water bodies through covered drain or uncovered drain. We make use of the WHO-UNICEF Joint Monitoring Programme guidelines for Water and Sanitation for Sustainable Development Goals in defining compromised and good sanitation. Good sanitation are those facilities which can be serviced (de-sludged like septic tanks or covered or ventilated pit latrines) for proper treatment of wastewater. Improved sanitation facilities are those designed to hygienically separate excreta from human contact which makes open defecation, public latrine, open pit latrine, flush/pour latrine not connected to a sewer line i.e. waste flowing into ground or into water body through covered drain or uncovered drain all - unimproved or compromised sanitation. For more read (Page 8, 16) Progress on drinking water, sanitation and hygiene: 2017 update and SDG baselines. Geneva: World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), 2017. Licence: CC BY-NC-SA 3.0 IGO.

On this overall measure of good sanitation, Vadodara ranks second from top with 98% of citizens having good sanitation with only Kochi reporting higher proportions for good sanitation at 99% (Figure 7.6).

Figure 7.6: Quality of Sanitation by City[41]

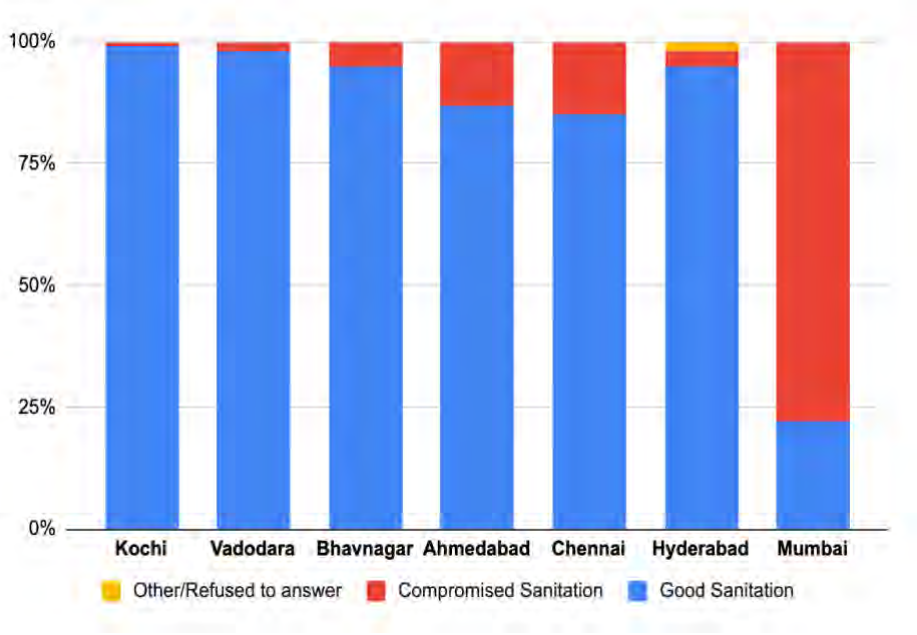


Table 7.7: Toilet Facility by Housing Type - Vadodara

	HT 1 - Informal shack settlement	HT 2 - Informal slum settlement	HT 3 - Lower Middle Class	HT 4 - Upper Middle Class	HT 5 - Upper Class
Piped Sewer	17%	71%	73%	86%	95%
Septic Tank	10%	23%	25%	13%	5%
Other System not connected to sewer or septic so open	4%	3%	2%	2%	0%
Public Latrine	3%	1%	0%	0%	0%
Open Defecation	66%	1%	0%	0%	0%

A pattern of uneven delivery of sanitation across classes is, however, clearly visible (Table 7.7). In Vadodara's informal shacks (H1), only 17% of households have a flush toilet connected to a piped sewer, and two thirds of residents depend on open defecation. A small percentage rely on

[41] Good Sanitation: (1) Flush/Pour Flush Latrine within premises connected to a Piped Sewer System within premises or (2) connected to Septic Tank or (3) Pit Latrine (Ventilated or Covered); Compromised Sanitation: (1) No Latrine within Premises: Open Defecation (2) Public Latrine (3) Pit Latrine (Open) (4) not connected to any Other System (not connected to a sewer line): Open drainage into ground or into water body through covered drain or uncovered drain.

public toilets, the use of which is anything but convenient. As one focus group reported, "we go to the public washroom on a cross road by paying 5 rupees".

As bad as the sanitary conditions are for HT1s in Vadodara, they are much worse in big cities with 98% of households in Mumbai, 94% Chennai and 85% in Ahmedabad having compromised sanitation facilities, compared to only 72% of HT1s in Vadodara (Table 7.8). In fact, this proportion for HT1s is the third best in our cities (after Kochi at 41% and Bhavnagar at 50%). As was the pattern with water, access to sanitation improves dramatically when you move from informal shacks (HT1s) to informal slum dwellings (HT2). In Vadodara, the level of compromised sanitation drops remarkably to 6% for HT2 households from 72% for those in HT1. Informal slum settlements (HT2) in other cities also do better in accessing sanitation, with the dramatic exceptions of Mumbai and Chennai, where 94% and 60% of HT2s still have compromised sanitation respectively.

Table 7.8: Quality of sanitation by Housing Type (lowest 3 HTs only)

City Name	Housing Type	Good Sanitation	Compromised Sanitation	DK/RTA
Vadodara	HT 1	28%	72%	0%
Vadodara	HT 2	94%	6%	0%
Vadodara	HT 3	98%	2%	0%
Bhavnagar	HT 1	51%	50%	0%
Bhavnagar	HT 2	81%	19%	0%
Bhavnagar	HT 3	82%	18%	0%
Ahmedabad	HT 1	6%	85%	9%
Ahmedabad	HT 2	57%	43%	0%
Ahmedabad	HT 3	97%	3%	0%
Chennai	HT 1	6%	94%	0%
Chennai	HT 2	39%	60%	0%
Chennai	HT 3	94%	6%	0%
Hyderabad	HT 1	2%	82%	15%
Hyderabad	HT 2	91%	7%	2%
Hyderabad	HT 3	99%	0%	1%
Kochi	HT 1	59%	41%	0%
Kochi	HT 2	89%	11%	0%
Kochi	HT 3	99%	1%	0%
Mumbai	HT 1	1%	98%	1%
Mumbai	HT 2	5%	94%	0%
Mumbai	HT 3	99%	1%	0%

If *access* to sanitation improves as we move from HT1 to HT2 in Vadodara, so does the quality of sanitation. But, overall, the proportion of respondents in Vadodara reporting blockages is the second lowest (15%) among our cities (Table 7.9). Furthermore, the chronic blockage (if the reported blockage is more than once a month) is the lowest in Vadodara relative to our cities.

Table 7.9: Sewer Blockage by City

City Name	Does the sewer line get blocked?	Percent of chronic blockage at least once per month
Vadodara	15%	7%
Bhavnagar	29%	18%
Ahmedabad	39%	45%
Chennai	37%	36%
Hyderabad	43%	29%
Kochi	4%	8%
Mumbai	20%	30%

With the exception of STs, the quality of sanitation varies only slightly across caste categories in Vadodara. Only 2% of Forward Castes in Vadodara reported compromised sanitation, compared to 2% for OBCs, 4% for SC and 10% for Adivasis (Table 7.10).

Table 7.10: Sanitation by Caste - Vadodara

City Name	Social Group	Good Sanitation	Compromised Sanitation
Vadodara	General Caste	98%	2%
Vadodara	OBC	98%	2%
Vadodara	SC	96%	4%
Vadodara	ST	90%	10%

We wanted to know the difference between Forward Castes and Dalits in terms of sanitation quality, as measured by the percentage who have good sanitation. As reported in Table 7.11, we found the difference in Vadodara to be relatively small. In other cities, the difference is slightly greater, such as in Chennai and Ahmedabad.

Table 7.11: Difference between Forward Castes and Dalits in sanitation quality (percentage points)

City Name	Difference
Vadodara	0.032
Ahmedabad	0.063
Bhavnagar	0.025
Chennai	0.070
Hyderabad	0.025
Kochi	0.037
Mumbai	-0.16

As shown in Table 7.12, we find that Hindus and Muslims report the same levels of good sanitation. Religion does not seem to affect sanitation in Vadodara. It is interesting to note that this varies across our cities, with Muslims faring better in Chennai but much worse in Mumbai and Bhavnagar.

Table 7.12: Sanitation by Religion

City Name	Religion	Good Sanitation	Compromised Sanitation	Other/DK/Refused
Vadodara	Hindu	98%	2%	0%
Vadodara	Muslim	99%	1%	-
Bhavnagar	Hindu	95%	5%	-
Bhavnagar	Muslim	81%	19%	-
Ahmedabad	Hindu	88%	12%	0%
Ahmedabad	Muslim	82%	18%	-
Chennai	Hindu	85%	15%	0%
Chennai	Muslim	93%	7%	
Hyderabad	Hindu	95%	4%	1%
Hyderabad	Muslim	96%	3%	2%
Kochi	Hindu	99%	1%	-
Kochi	Muslim	99%	1%	-
Mumbai	Hindu	42%	58%	0%
Mumbai	Muslim	28%	72%	0%

Finally, we turn to the problem of flooding. Poor drainage infrastructure, housing built in flood plains and poorly constructed houses means that rains often translate into flooding of streets and households. Not surprisingly, informal settlement households in Vadodara are very vulnerable to flooding. Seventy three percent of informal shack settlements (H1) report that the road outside their home gets flooded during monsoon, and 65% report that their house gets flooded (Table 7.13 and Figure 7.7). There is again a marked improvement as one moves from informal shack settlements (HT1) to informal slums (HT2). In the latter, 47% report flooded streets and only 3% report flooded homes.

Table 7.13: Flooding during Monsoon - Road and Ground floor in Vadodara

Water Logging during monsoon		HT 1 - Informal shack settlement	HT 2 - Informal slum settlement	HT 3 - Lower Middle Class	HT 4 - Upper Middle Class	HT 5 - Upper Class
Road	Yes	73%	47%	33%	17%	36%
Road	No	26%	51%	65%	80%	61%
Ground Floor	Yes	65%	32%	23%	11%	6%
Ground Floor	Never	33%	67%	75%	88%	90%

When we compare these numbers to other cities, we find that except for Kochi, the road flooding situation for informal shack settlements (HT1) in Vadodara and the other two Gujarat cities is the worst (Table 7.13). The differences by caste in Vadodara are also noteworthy. When it comes to water logging of the roads during monsoon, OBCs (29%) are actually slightly worse off than Dalits (24%) and as expected, the highest proportion is reported by Adivasis (Table 7.14). It is the Forward Castes who reported the lowest percentage of roads getting blocked during the monsoon in Vadodara. The difference between Hindus and Muslims is not very stark.

Figure 7.7: Flooding of Roads – all cities by Housing type

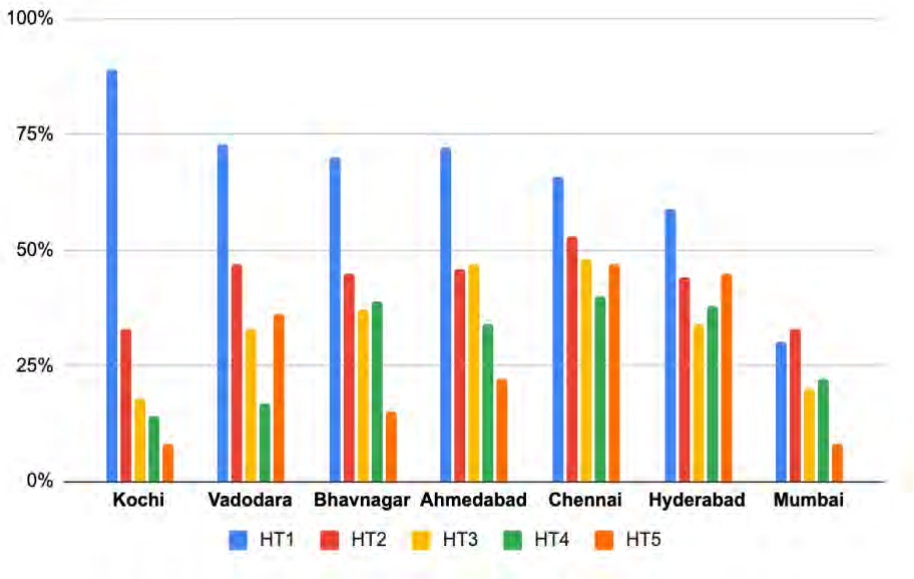


Table 7.14: Does the road in front of your house get water-logged during monsoon? (Vadodara)

	Hindus	Muslims	Forward/General caste	OBC	SC	ST
Yes	24%	21%	20%	29%	24%	40%
No	73%	75%	77%	70%	73%	45%
DK	3%	4%	4%	2%	2%	16%

In Vadodara, across most caste groups, a negligible number of households reported the ground floor of their house 'always' getting flooded during monsoon (Table 7.15). However, for Adivasis (STs), the proportion is much higher (10%). Similarly, 25% of Adivasis reported their house gets flooded 'sometimes' compared to 12% for Forward Castes, 11% for OBCs and 11% for SCs. In Vadodara, there is little difference between Muslims (86%) and Hindus (85%) on this indicator.

Table 7.15: Does the ground floor of your house get flooded during monsoon? (Vadodara)

	Hindus	Muslims	General caste	OBC	SC	ST
Never	85%	86%	85%	87%	85%	64%
Sometimes	12%	12%	12%	11%	11%	25%
Always	2%	1%	2%	1%	3%	10%
DK	1%	1%	1%	1%	1%	0%

Summary

Reviewing these patterns of differentiation across social categories of access to basic services, four broad findings can be highlighted. First, class matters a lot, and, in most cases, we find a

linear decline in the quality of services moving from the highest-class category (Upper class, HT5) to the lower classes. Though informal slums (HT2) do relatively well, informal shack settlements (HT1) in Vadodara are systematically deprived. Second, Adivasis are the worst off, compared to other caste categories, with Forward Castes doing best. Third, as measured by our overall index of services, there is a marginal gap between Muslims and Hindus, with Muslims in fact scoring slightly higher than Hindus at the aggregate level. Finally, sanitation does not quite fit the pattern of other services. Unlike in some of our other cities, where both SCs and STs collectively suffer from shortcomings in basic service delivery, in Vadodara, it is the STs in particular who are acutely deprived.

8. Mechanisms of Social Imequality

We know that there is a lot of inequality in Indian cities, including pronounced patterns of spatial exclusion. As we have seen in the previous section, the level of services that households get varies across social categories. To try and get a better sense of what might be driving such outcomes, this final section explores issues of discrimination, how citizens might use personal networks to access the state and the degree to which social ties might reproduce social categories.

8.1 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 and government officials treated people based on income, caste, religion, gender and language. We then asked if respondents felt that any of these categories got better treatment in their neighborhoods or at the level of the city.

Though the absolute numbers are not high (something that is true of much of the survey literature on discrimination), the range is significant. The questions that solicited the highest reports of discrimination were those about the police. In Vadodara, 25% believe a rich person will be treated better by the police, which is not very different from other Gujarati cities, but higher than Kochi and Hyderabad and lower than Mumbai and Chennai (Table 8.1). The highest was 38% in Chennai and the lowest, 8% in Kochi. Seventeen percent in Vadodara believe an upper caste person would be treated better by the police, compared to a high of 33% in Mumbai and a low of 2% in Kochi. Ten percent in Vadodara said a Hindu would be treated better than a Muslim, compared to 0% in Kochi and 23% in Mumbai. Fourteen percent also said that the police would treat a local language speaker better, which is the third highest after 36% for Mumbai and the lowest was 3% in Kochi. Overall, for Vadodara, compared to other cities, the proportions stay somewhere in the middle for all the indicators of discrimination considered in our survey regarding police treatment of citizens.

Table 8.1: Citizen perception of discrimination by the police in their city

Options	Vadodara	Bhavnagar	Ahmedabad	Chennai	Hyderabad	Kochi	Mumbai
Rich Treated Better Than Poor	25%	29%	23%	38%	10%	8%	34%
Upper caste person treated better than Dalit	17%	17%	16%	24%	5%	2%	33%
Hindu treated better than Muslim	10%	10%	6%	10%	3%	0%	23%
Person who speaks local language Treated better than non-native	14%	17%	10%	13%	6%	3%	36%

We also asked, more generally, if the citizens of Vadodara believed there was discrimination against class, religion, caste, language and gender *at the neighborhood level*. As can be seen from Figure 8.1, the proportion of those who said there was neighborhood level discrimination, was quite high in Vadodara compared to other cities: 11% for income, 15% for caste, 18% for religion, 21% for language, and 13% for gender. Vadodara, in fact, reported the highest proportions for discrimination at the neighborhood level across 3 out 5 indicators. In the other cities, the figures on caste and religious discrimination at the neighborhood level also did rise to 13-16% in Chennai and Hyderabad. Hyderabad (16%), and Chennai (14%) along with Vadodara, reported the greatest neighborhood-level discrimination based on caste.

When we asked the same question but asked citizens to reflect on this at the *city,* rather than the *neighborhood,* level (Figure 8.1), the extent of reported discrimination along some categories rose, but only slightly. In Vadodara, once again, the proportion of discrimination across all indicators was highest when compared to other cities. It is interesting to note that citizens are less likely to feel there is discrimination in their neighborhood than in the city with Kochi and Hyderabad being exceptions to the case (Figures 8.1 and 8.2)

When we look at discrimination as reported by different categories, it is clear that perceptions of discrimination vary considerably. Here we report on the response to the question about how the police treat different groups, but the pattern is broadly replicated in our other questions about discrimination.

Figure 8.1: Respondents reporting “yes” to Neighborhood level discrimination by type

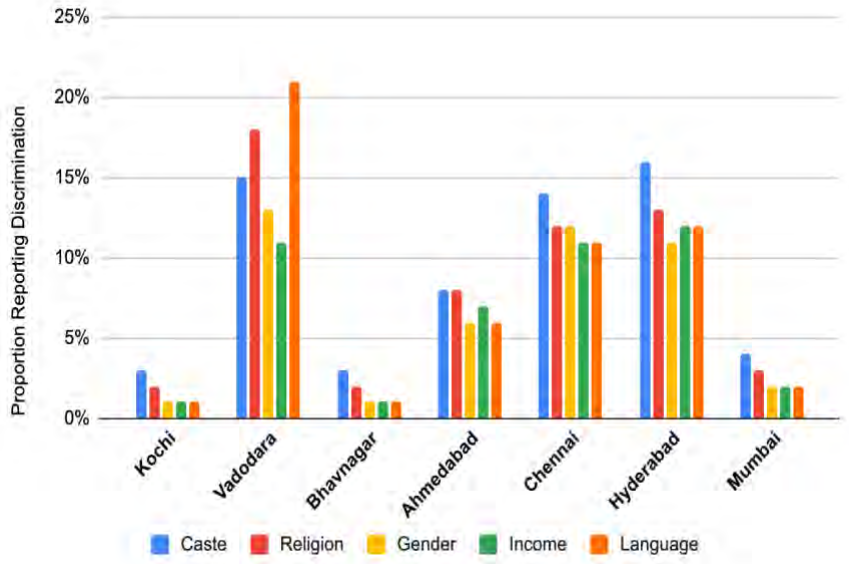
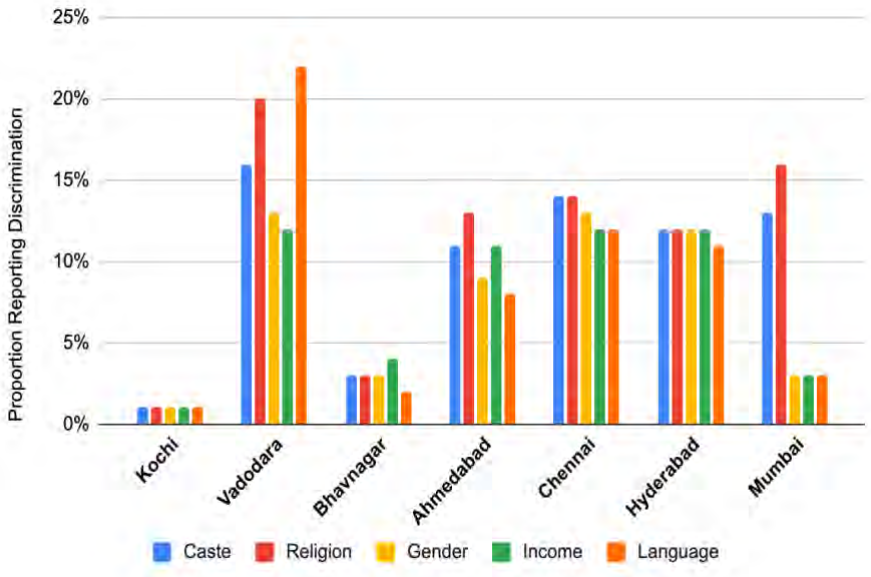


Figure 8.2: Respondents reporting ‘Yes’ to City level discrimination by type



In Vadodara, class (housing type) plays an important role as far as reported police discrimination is concerned (Table 8.2). There is one class category that stands out, namely informal shacks (H1), where those saying the police treat the rich and upper castes better were substantially higher than the average. Compared to an overall figure of 24% (all cities), more than half (51%) of shack dwellers in Vadodara report the rich get better treatment from the police. Respondents in the

wealthiest neighborhoods (HT4 and HT5) were much less likely to believe that the rich get better treatment (22% and 32% respectively). Similarly, 31% of informal shack dwellers say upper castes get better treatment, compared to 17% (average for all cities). Again, the rich (HT4 and HT5) were relatively less likely to identify upper castes as getting better treatment (16%) than the rest. This pattern however changes with religion, with only 6% of shack dwellers (HT1) reporting that Hindus get better treatment from the police, compared to 16% for upper class (HT5). When it comes to gender, the highest discrimination based on gender is reported by upper classes (HT5). As far as discrimination on the basis of local language is concerned, it is the upper classes who are more likely to indicate that people speaking the local language get preferential treatment.

Table 8.2: Reported Police Discrimination

	HT 1 - Informal shack settlement	HT 2 - Informal slum settlement	HT 3 - Lower Middle Class	HT 4 - Upper Middle Class	HT 5 - Upper Class
Rich Treated Better	51%	32%	29%	22%	32%
Upper Caste Treated Better	31%	19%	19%	16%	16%
Hindu Treated Better	6%	10%	8%	10%	14%
Men treated better	9%	9%	13%	7%	16%
Person who speaks local language is treated better	10%	14%	11%	15%	15%

Only 7% of Muslims report that the police treat Hindus better compared to 10% Hindus reporting that Hindus are treated better (Table 8.3). Indeed, Muslims are more likely than Hindus to indicate that both groups of citizens are treated the same by the police. Furthermore, Hindus report significantly higher levels of discrimination based on religion at the city level (21%) than Muslims (13%). It is hard to interpret these findings. Did we get truthful responses? We can't be sure.

Table 8.3: Who do you think the police will treat better: Hindu or a Non-Hindu? (Vadodara)

	Hindu	Muslim
Both treated the same	82%	88%
Hindu treated better	10%	7%
Non-Hindu treated better	2%	0%
Don't know	6%	5%
Refused to answer	0%	0%

8.2 Social ties

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)?[42] It is generally assumed that cities nurture a plurality of associational ties, giving individual opportunities to engage, and develop social ties, with those beyond their immediate identity group. We tried to gauge these questions by asking our respondents about their social ties, and specifically how many friends they had outside their caste/community and how often someone in their family had married outside their caste/community.

By these measures, Vadodara is not very pluralistic either in terms of caste or religion. More than half (57%) of our respondents report not having any close friends from a different caste (Table 8.4) which is the second highest compared to other cities (only lower than Ahmedabad). Similarly, 57% in Vadodara report that they do not have any friend outside their religion (Table 8.5) which is again only lower than Ahmedabad. This suggests that both caste and religious differences are quite prominent and, in their social lives, people in Vadodara are relatively less connected to people from other religions and castes.

Table 8.4: How many of your friends are from a different caste?

City Name	0	1	2	3	4	5	Don't know	Refused to answer
Vadodara	57%	23%	8%	1%	0%	0%	6%	0%
Bhavnagar	47%	29%	12%	2%	0%	0%	6%	2%
Ahmedabad	67%	14%	8%	2%	0%	0%	6%	1%
Chennai	25%	21%	21%	4%	0%	0%	20%	10%
Hyderabad	43%	5%	11%	4%	0%	0%	27%	11%
Kochi	35%	24%	20%	6%	2%	2%	2%	8%
Mumbai	40%	7%	7%	5%	1%	1%	21%	19%

Table 8.5: How many of your friends are from a different religion?

City Name	0	1	2	3	4	5	Don't know	Refused to answer
Vadodara	57%	29%	10%	3%	0%	0%	2%	0%
Bhavnagar	31%	21%	29%	7%	1%	0%	7%	3%
Ahmedabad	64%	13%	10%	4%	1%	0%	5%	1%
Chennai	20%	14%	15%	2%	0%	0%	31%	17%
Hyderabad	41%	6%	11%	4%	0%	0%	25%	12%
Kochi	44%	22%	12%	3%	2%	2%	2%	13%
Mumbai	36%	10%	9%	8%	1%	3%	16%	18%

When we break down these findings by class, we do not find too much variation. However, it is notable that those living in HT5s are the most likely to have no friends from different castes. Compare this, for example, to those in HT3 households, where only 55% do not have a friend outside their caste (Table 7.6). This is perhaps not surprising, given how exclusive HT5 neighborhoods can be and how relatively inclusive HT3 areas are. The variation across caste is

[42] The concept of strong and weak ties is associated with Mark Grannovetter (1973).

more pronounced. As per Table 7.6, it is the Dalits (51%) and Adivasis (49%) who have the most friends outside their own caste, while the numbers are lowest for the Forward Castes, with as many as 61% of Forward Caste respondents reporting not having any friend outside their own caste..

Table 8.6: How many of your friends are from a different caste? - Vadodara

	0	1	2	3	4	5	Don't know	Refused to Answer
HT1	60%	15%	6%	0%	0%	0%	17%	1%
HT2	61%	25%	8%	1%	0%	0%	3%	1%
HT3	55%	21%	10%	1%	0%	0%	11%	1%
HT4	56%	30%	10%	3%	0%	0%	1%	0%
HT5	63%	29%	7%	2%	0%	0%	0%	0%
Forward Caste	61%	26%	9%	2%	0%	0%	2%	0%
OBC	55%	31%	10%	3%	0%	0%	1%	0%
SC	47%	35%	11%	5%	0%	0%	2%	0%
ST	48%	35%	14%	0%	0%	0%	3%	0%

In Vadodara, across different classes, the range for residents not having a friend outside of their own religion varies from 55% to 66% (Table 8.7). However, if we look closely, we notice that the exposure to other religious categories increases in a linear fashion as one moves from the lowest class to the upper classes. In other words, upper classes are somewhat more likely to be exposed to someone outside their religion. Furthermore, the Hindus in Vadodara are much less exposed to other religions than Muslims: fully 58% of Hindus reported not having any friend outside their religion compared to only 47% for Muslims.

Table 8.7: How many of your friends are from a different religion? - Vadodara

	0	1	2	3	4	5	Don't know	Refused to Answer
HT1	66%	11%	4%	1%	0%	0%	18%	0%
HT2	64%	24%	6%	2%	0%	0%	3%	1%
HT3	61%	20%	7%	1%	0%	0%	11%	1%
HT4	55%	30%	13%	2%	1%	0%	0%	0%
HT5	58%	26%	15%	1%	0%	0%	0%	0%
Hindu	58%	27%	11%	2%	0%	0%	1%	0%
Muslim	47%	32%	19%	2%	0%	0%	1%	0%

In Vadodara, marriage outside caste or religion is a rarity. Only 4% of the total respondents in Vadodara reported that within their family someone married outside their caste or religion (Table 8.8). Our focus group discussions made it clear that even among the poorer communities, marriage outside of one's caste is frowned upon. As some respondents said about their children getting married outside caste, **"**if they get married, they have to live on their own, not in my house"**.** Similar disapproval is shown for inter-religious marriage. The general opinion is vehemently against it. "In our religion it is not allowed to marry someone from other religions."

On this measure, Vadodara is no different than other cities. Indeed, outside of Chennai, we find very little evidence for inter-caste or inter-religion marriages.

Table 8.8: Within your family has anyone married outside caste/Religion?

City Name	Outside Caste	Outside Religion
Vadodara	4%	4%
Bhavnagar	0%	0%
Ahmedabad	4%	2%
Chennai	13%	10%
Hyderabad	7%	6%
Kochi	3%	1%
Mumbai	5%	4%

Summary

To summarize this section, we find that overall levels of reported discrimination are one of the highest for Vadodara compared to other cities. Also, there are some clear patterns. To the extent that there is a sense of discrimination, it is seen as largely benefitting those having higher incomes and less those of higher caste. Compared to other cities, Vadodara is at the top when it comes to reported discrimination in cities and also reported the highest level of discrimination when it comes to neighborhoods on a majority of indicators. Those in the informal shacks (HT1) are the most likely to report discrimination. Finally, when it comes to social ties, citizens of Vadodara are quite conservative, largely sticking to their caste and religion. A large majority of respondents did not have friends outside their own religion or caste. When it comes to marriage, marrying both outside of caste or religion is a rare occurrence.

9. Conclusion

Compared to the other cities researched in this project, Vadodara is among the best governed, both in terms of services and how its citizens evaluate their local government. Its citizens have the highest propensity to vote, the second highest inclination to participate in non-voting activities (next to Chennai) and the highest civic participation rate. Their civicness is more about involvement in traditional caste and religious organizations than in what are normally called modern professional organizations (Unions, NGOs, Resident Welfare Associations, professional organizations).

But there is another side to this story of relative success. While lower classes, lower castes, and Muslims vote in disproportionately high numbers, especially as compared to upper castes, Vadodara is also a city very much dominated by its upper caste and upper class elites. The city's

non-electoral and civic participation is skewed in favor of the upper classes and Forward Castes, the two being highly correlated. The dominance of the caste elites is also reflected in a very stark pattern of spatial segregation, one in which elite neighborhoods are more exclusively Forward Caste and relatively devoid of lower castes and Muslims than in any other city in our project.

Some other aspects of Vadodara's urban life are noteworthy. The Hindu-Muslim gap, both in exercise of citizenship and service delivery, is among the lowest, compared to other cities in the project. It is possible that some older historical patterns have persisted. Only greater research can establish what the Hindu-Muslim pattern of governance in the city has historically been. Local differences in Hindu-Muslim relationships in some other parts of the country are also known to have persevered, despite changes in the overall political atmosphere.[43]

Adivasis are the most deprived community in Vadodara. They are heavily concentrated in the poorest category of housing, have the lowest rates of voting registration and election turnouts, and have the most inadequate supply of basic services. Dalits, to whom Adivasis are often compared, are much better off in all respects. Dalits may not have presence in the elite neighborhoods, but they are also more or less absent in the informal shacks. They are widely distributed among the middle categories of housing. Most of all, Dalits voting rates are higher than those of any other community in the city.

Finally, compared to other cities in our project, Vadodara is both politically highly conservative and socially among the most conservative. Its citizens not only want restrictions on freedom of expression, but friendships, let alone marriages, in Vadodara rarely cut across caste and religious boundaries. A very large proportion of citizens in Vadodara do not want India to be criticised at all by its citizens and would want to punish those who don't overtly express nationalism. They develop friendships primarily within their communities and also marry within. One of India's best governed cities is also among its most conservative.

[43] See the account of Lucknow in Varshney (2002).

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