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 Kochi

About the Project

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

About the Saxena Center for Contemporary South Asia

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

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Executive Summary

In Kochi, we surveyed 2,023 households across 64 polling parts, including 10 booster polling parts, conducted focus groups and interviewed a wide range of key respondents.

Kochi is a very prosperous city compared to the six other cities in our sample (Vadodara, Bhavnagar, Ahmedabad, Chennai, Hyderabad and Mumbai). Fully 33% of the households live in upper class housing, significantly more than any other city. Kochi also has by far the lowest percentage of informal households (slums and informal settlements) at 1.4%.

In relative terms, STs/SCs are more likely to live in shacks and slums than OBCs/Forward castes as is the case in other cities, but the likelihood of SC/ST living in informal housing compared to other castes is the lower of any city. Differences between the type of housing in which different religious communities live is very slight, and significantly lower than any other city. Overall, there is very little caste or religious based housing segregation in Kochi.

The most notable feature of governance in Kochi is that its citizens are much more likely, compared to other cities in our study, to entrust elected representatives and, to a lesser degree, government officials in addressing service-related issues. Kochi citizens have very favorable opinions of their representatives and government officials.

Basic attitudes about citizenship in Kochi on the one hand are quite conventional by Indian urban standards, with most citizens believing that their most important duty is to vote followed by respecting the law and far fewer think it is about community involvement or respecting the rights of others. On the other hand, Kochi citizens are the most socially liberal in our sample in that they are the least likely to believe that the government should ban inter-caste and inter-religious marriage and the most politically liberal in terms of supporting basic rights of free speech.

In terms of electoral participation, citizens of Kochi are more likely to register to vote than in other cities and have a high propensity to vote. When it comes to participation in non-electoral party politics, Kochi citizens are about average, but do have the highest level of reported party membership. In terms of civic participation, Kochi is about average. But more so in than in other city, Kochi citizens are more likely to belong to civic or professional associations (i.e. unions, RWAs, NGOs and cooperative societies) than to "identity-based" associations (religious, cultural, caste-based). We found variation in participation across social categories (class, caste and religion) but no clear patterns.

With respect to service delivery we report two major findings. First, as indicated by our overall index of services (BSDII), Kochi, along with Vadodara, has the highest overall score in our cities. When we break this down we find that in terms of water and sanitation overall coverage and quality is excellent, probably the best in any of our cities. Second, what really makes Kochi exceptional in our study is that services are distributed on a very inclusive basis with only minor differences across classes (housing types), castes and religions.

The inclusiveness of Kochi is also captured in our various measures of the mechanisms of social inequality. We found that Kochi's citizens do not report any significant discrimination and that they are much more likely to have friends outside of their own caste or religious group than in any other city.

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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 Kochi. Where appropriate, we compare our findings for Kochi 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 Vadodara. 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.

1.2 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?

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[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 (2013, Ch. 1; 2019).

We argue that effective citizenship means essentially two things. First, it means being able to effectively participate in public life. This cannot merely be confined to voting but means enjoying the freedom to engage in public activities, and mobilize and organize freely. 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 Kochi. The next section provides an introduction to Kochi's history and governance, followed by a detailed description of how our data was collected. We begin reporting on our findings on page 18.

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

2. Kochi: Brief Historical Overview

Kochi is the second largest city in Kerala with a population of 633,000 in 2011. The larger metropolitan area of the Kochi City Region (KCR) had a population of 1,223,000 in 2011.

The Portuguese established trading ports in Cochin in 1505, and the city became a major vector for the global spice trade. The city subsequently came under Dutch and then British influence and was part of the princely state of Cochin until 1949. The modern corporation of Kochi was created in 1967 by the Kerala legislature, combining Fort Cochin, Ernakulam, Willingdon Island and four panchayats. Because of its coastal location, natural harbour and access to in-land waterways, Kochi developed into a leading commercial and industrial centre of Kerala. In the past three decades, as the growth rate in Kerala has picked up, Kochi has benefitted from large scale investments and today boasts a diversified economy that includes IT, tourism, ship-making, spice exports, health services and banking.

Urbanisation in Kerala accelerated significantly in the 2001-2011 decade, with the urban population growing from 26% to 47.7%, compared to 27.8% and 31.1% for India as a whole. Most of the urban growth in Kerala however happened in peri urban areas, and cities themselves grew at a slower pace. Kochi's population increased from 564,000 in 1991 to 625,000 in 2001 and to 633,000 in 2011, the last decade seeing only minimal population growth.

The city of Kochi is divided into 74 administrative wards from which the members of the city council are elected for a period of 5 years. Each ward has its own ward committee. The governance of the city falls under the Kerala Municipality Act, 1994. In the wake of the 73rd and 74th constitutional amendments, Kerala's governance structures were fundamentally transformed by the People's Planning Campaign (1996-97). These reforms are widely viewed as being the most successful effort to decentralize resources and authority to local self-government (LSG) in India. But if the impact of decentralization in rural areas (Panchayats) in Kerala is well documented, the reforms in urban areas have been much more limited. Though there is little published research on governance in Kochi, one important review has found that though the 1994 Act aimed to widen the scope of urban local bodies in taxation, and self-governance, the status of municipalities in Kerala has not changed much since 1994. As Mathew and Dhanuraj note,

> "Even though the Kerala Municipality Act, 1994 entrusts the municipalities and corporations in the state with a list of functions, the institutions are not able to execute them efficiently. The Act, while laying down the provisions, gives the State Government overriding powers over LSG institutions. The operations of parastatal agencies in the

> domains of work parallel to LSG institutions lead to overlapping of powers, weakening the decentralization process in the state." (2017:2).[5]

Similarly, a report by the Kerala State Planning Board on urban issues found that:

> "it is now felt that the institutionalisation of these reforms have fallen behind and 'creeping centralisation' has happened, with line departments and parastatal entities gaining much more command and control over the activities of local governments (LGs) than in the past, through a plethora of guidelines and directives. Thus, the untied funds given to the local governments are not really as untied as before. Long standing bans on the local governments from raising their property taxes has also severely hampered their independence and puts a serious question mark over the State's commitment to promote devolution to LGs." (KSPB, 2017:2). These institutional problems of governance are compounded by the weak planning capacity of municipalities in Kerala. Various planning mandates are poorly, if at all, coordinated, and urban bodies do not have town planning cadres (KSPB, 2017:10-11).

If institutional problems of urban governance in Kerala reflect a broader, national pattern of weak urban governance, the political and social equation in Kerala is far more favourable. On the social front, decades of social movements have produced citizens with a strong sense of rights and a high-density civil society. A large literature has linked the dynamism of social movements to Kerala's unparalleled track record in improving social indicators (Heller 2001).[6]

Similarly, party politics in general in Kerala are highly competitive, and cities are no exceptions. Local government elections in Kerala are highly contested and as we report from our findings, local councilors are extremely active in representing their constituencies. Political participation by citizens in elections and between elections is robust, and the level of party loyalty is high with 50% of voters saying that their vote was based on party identification in the 2021 assembly elections (CPPR 2021).

3. Methods and Data Collection

For every city studied in this project, we have followed the same nested research strategy. In each city we began with field visits by the team to conduct interviews with key respondents (city

[5] In a study of Trivandrum and Surat, Jacob and Jacob (2021) also speak of how the state government's control over the local municipal corporation is extensive in Trivandrum (but not in Surat).
[6] Jacob and Jacob (2021) also note that while in Surat, compared to Trivandrum, the local government has greater autonomy vis-a-vis the state government, but citizen participation is greater in Trivandrum.

commissioners, corporators, heads of departments, civil society activists). These primary materials were supplemented with secondary works dealing with the historical and contemporary accounts of urban governance in the selected cities. We also conducted 2-5 focus group discussions (FGDs) in each city, especially in shack settlements (shacks hereafter) and informal slums (as opposed to what are in government terminology called slums).[7] We focused on shacks and informal slums because these are where the practice of citizenship and access to services are most compromised. Focus Group Discussions (FGDs) were conducted in each city with different target groups. The group size in each FGD varied from 10 to 15 members. The FGDs were conducted with SC/ST women, Muslim women, and a mixed group of people, both male and female, typically from very low-income neighborhoods. We also felt it was important to hear directly from those who are the most marginalized in urban India. In each city, we conducted at least one focus group with Dalits and another with Muslims.[8]

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 organized and how subaltern communities in particular understand their rights. The second was to use focus group responses to adapt and fine tune our survey instrument to actual conditions and practices in these communities. In Kochi, we held two focus group discussions (FGDs)[9], one with Muslim women in an exclusively Muslim neighbourhood. The second was with Dalit women in an area that is home to many migrant workers from Tamil Nadu. The third stage of research was a survey, which provides the bulk of the data reported here. Depending on the size of the city, the sample ranged from 1,000 to 3,000 households. In Kochi, we sampled 2,023 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 how the sample was drawn, 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).

[7] See footnote 22 for differences in how "slums" are defined.
[8] 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 neighbourhoods, the team felt that it was important to take the views of women on the same.
[9] The FGDs were held in Kochi on 9/1/2017 in the area of Mattancherry and Vathuruthy.

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.[10] By contrast, access to housing in India is driven by market forces, 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

Detailed descriptions of each housing type and pictures showing examples of each classification are presented in Appendix 5. It is important to comment here on HT1 and HT2. The census definition of slums is dis-aggregated into three types: designated, recognized and identified. These designations are bureaucratic and political, and they are also inevitably somewhat arbitrary.[11] This is because they depend on varying definitions and on how officials subjectively evaluate the overall nature of a neighbourhood. 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 neighbourhood in which it is located (slum or other). Also, because of the problem of unseen or unnotified settlements, we also created

[10] 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.
[11] "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.

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 categorized 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 neighbourhood 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).

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.[12] 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.[13] 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

[12] 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. The urban NGO Janaagraha's studies of the quality of voter lists confirms this. See: https://www.janaagraha.org/voter-list-management/.

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

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 Kochi, 64 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 10 polling parts were sampled in this way in Kochi.

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.

In the case of Kochi, the desired total sample size was 2,000 households/respondents across 60 polling parts/areas (not including the booster sample). This came to around 33 households per area map. With an average of around 130 households per polling part, the skipping number in each polling part was around 4 households. The achieved sample comprised 2,023 households across 64 polling parts.

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 Kochi survey was conducted during March -June of 2019.

4. Findings

4.1 Demography

In Kochi, we surveyed 2,023 households across 64 polling parts, including 10 booster polling parts. The response rate to the survey was 93%[14]. A comparison of data from the 2011 Census with our samples (raw and weighted) is listed in Table 4.1.

Our survey collected demographic information on gender, education, religion, and caste groups. In addition, the survey enumerators were tasked with identifying the housing type of each respondent's dwelling. As briefly reported above, dwellings were categorized as one of five types: informal shacks, (HT1), informal slums (HT2), lower middle class (HT3), middle class (HT4), and upper class (HT5). Shacks and slums were deliberately over sampled. Also, as reported above, this was done by including a "booster" sample which was executed in addition to the original randomized 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 4.1 shows the raw proportions from our sample. Muslims represent 22% of our raw sample, compared to only 18% in the census. Similarly, Dalits comprise 8% of our raw Kochi sample, while they are only 6% of the population in the census, whereas Adivasis are about 2% in our sample compared to 0.3% in the census. The advantage of over-sampling these groups is that it ensures us sufficient representation for groups that might be under counted in a purely random sample. For instance, had we sampled using the Census figures, we would have only interviewed about 6 Adivasi households in Kochi. Instead, we have 43 such households. Similarly, we would have only sampled 128 Dalit households relying on census proportions, instead of 164 in our actual sample.

The 2011 census reports that less than 1% of households in Kochi lived in slums. The National Building Organisation, another government agency that reports slum figures, puts the number of slums in Kochi at 1.3%. By contrast, our weighted sample based on listing data for the city found that 5.5% of households qualified as slum-type dwellings, that is HT1 or HT2. Taken together, these data suggest that the census and other sources slightly under count slums in Kochi, an issue we also find in our other sample cities. One of the reasons we are confident in our measure is definitional – since the census does not count small clusters of shack households as slums, nor does it count slum-like housing in areas not otherwise classified as slums.[15] But we also speculate

[14] This included 142 instances where the respondent either refused, or there was no one at home after multiple attempts to survey.

[15] There is a definitional inconsistency with what is regarded as a slum. Census 2011 enumerates slums as *Notified Slums* – i.e., notified by a statute including Slum Acts or a *Recognised Slum* which may not be notified by a statute but recognised by state or local authorities and *Identified slum*. The Census enumeration defines a slum "of at least 300 residents or about 60-70 households of poorly built congested tenements, in-hygienic environments usually with inadequate infrastructure and lacking in proper sanitary and drinking facilities". These aspects of a house are

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

We have, however, applied weights to our figures (explained in the next section), which we use throughout this report. The third row in Table 4.1 reports the weighted sample figures. Here we see that the Muslim sample (19%) is now much closer to the census figure (17%). The weighted figure for SCs (5%) is also closer to the census one (6%), and the weighted figure for STs (1.8%) is also somewhat closer to the census figure (0.3%). When we look at the caste numbers (Table 4.2) across cities, we see that 60% of Kochi is OBC, by far the highest proportion of any city in our study. The size of the Forward Caste community is also significant at 27%, higher than in our other southern cities (Hyderabad and Chennai) but much lower than in Gujarati cities and Mumbai. SCs and STs constitute some 7% of the city, the lowest of any city except Bhavnagar.

Table 4.1: Census and Sample Compared

	Population			**Religion**				**SC/ST**		**Slum**
Variable	**City**	**M**	**F**	**Hindu**	**Muslim**	**Christian**	**Other**	**SC**	**ST**	**Slum**
Census 2011	602,046	49%	51%	44%	18%	38%	0.5%	6%	0.3%	0.8%
Raw Sample	2,023	35%	65%	48%	22%	30%	0.3%	8%	2%	29%[16]
Weighted Sample	2,023	35%	65%	49%	19%	32%	0.4%	5%	2%	5.5%

When it comes to education (Table 4.3), only 0.5% of Kochi respondents have had no formal schooling. The majority of our respondents in Kochi are educated at or above the SSC/HSC level, with many having also attended college. At 19%, Kochi's Muslim community is quite sizable, but its "other" religious population (which in Kerala is Christian) is much larger at 32% (Table 4.4). It is notable that Kochi is the only city in our project which does not have a Hindu majority.

not specifically determined, so the slum identification is in part left to the enumerator's discretion. The National Sample Survey, however, defined the slum as a cluster of 20 or more households which is different from the Census. Scholars have argued these thresholds are "of course, a matter of concern not just for exclusions of households within cities but also of the exclusion of entire cities and towns that report having no slums" (Bhan and Jana 2013:16).

[16] Two points to note: First, our housing type listing did not produce any HT1s and second, we oversampled HT2s from the selected polling parts. Our final sample, (including the booster sample) yielded about 4 percent HT1s (about 80 HT1 households) and about 25 percent HT2s - a total of approximately 29 percent reported in Table 4.1. In order to address this difference between the listing and sample proportions, we follow a weighting scheme - explained in the following section. Once the data is weighted we see that the total proportion of informal housing types reduces to 5.5% – closer (though not equal) to the proportion of informal settlements (slums) reported by the Census. Also see Appendix 1 for a more detailed explanation of weighting.

Table 4.2: Caste Proportions

City	Forward Caste	OBC	SC	ST	Other
Kochi	27%	60%	5%	2%	6%
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%
Mumbai	68%	6%	12%	4%	9%

Table 4.3: Kochi by Education

No Schooling	School: < 4 years	School: 5-9 years	School: SSC/HSC	College, but not graduated	College Graduate & Above
0.5%	2.2%	15.1%	38.0%	28.3%	14.8%

Table 4.4: Religion proportions

City	Hindu	Muslim	Other
Kochi	49%	19%	32%[17]
Vadodara	88%	10%	3%
Bhavnagar	92%	5%	3%
Ahmedabad	77%	18%	5%
Chennai	87%	7%	7%
Hyderabad	68%	30%	2%
Kochi	49%	19%	32%
Mumbai	79%	15%	6%

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

[17] In our Kochi sample, 99% of those belonging to "Other" religious groups were Christians.

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.[18] 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.

For Adivasis in Kochi, the sample proportion does not change when weighted (2%), but is still higher than the census figure (0.3%). Our raw sample produced a slightly higher percentage of SCs than the census (8% vs. 6%), though the proportion falls just below the census figure (5%) after weighting. For Muslims, the sample proportion reduces to about 19% after weighting, which is also closer to the population proportions reported by the census. Altogether, these figures suggest that the housing type weights worked quite well in adjusting our sub-samples of marginalized caste and religious groups in Kochi closer to their "true" proportions.[19]

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 3.

[18] Solon, Gary; Steven J. Haider, and Jeffrey M. Wooldridge. 2015. "What Are We Weighting For?," *Journal of Human Resources*, 50(2): 301-316.

[19] We did not weight by gender because the primary focus of the survey is the household, not the individual.

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 Types in Kochi

When used comparatively, our housing data is, in effect, a good measure of how poor or prosperous a city is. In order to be consistent with other city reports, Table 4.5 exceptionally uses weights based on the census.[20] By this measure, Kochi is a very prosperous city compared to our sample. Fully 33.1% of the households in our weighted sample are classified as upper class (HT5), which is 2 times higher than the next highest city, Bhavnagar. This is undoubtedly an effect of the construction boom that has been fed by Middle Eastern remittances. Though we added a booster sample for which we selected areas that local officials had identified as "slums", we picked up only a handful of shacks, and HT2 also remained at 1.4%, the lowest by far of any city.[21] Finally, it should be noted that Kochi has the largest lower middle class of any city, with 52.5% living in HT3.

Table 4.5: Housing Type Distribution Across Cities – *Census Weighted Sample Data*

City	HT1 Shacks	HT2 Slums	HT3 - Lower Middle-Class	HT4 - Upper Middle-Class	HT5 - Upper-Class
Kochi	0.2% (4%)	1.2% (25%)	52.5% (37.9%)	13.0% (9.4%)	33.1% (24.0%)
Vadodara	2.3% (11.9%)	5.7% (30%)	40.8% (25.8%)	42.9% (27%)	8.3% (5.2%)
Ahmedabad	1.6% (9.3%)	6.0% (35.9%)	40.6% (24.1%)	45.4% (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%)	5.1% (5.0%)
Hyderabad	7.9% (9.1%)	27.5% (31.6%)	41.6% (38.1%)	15.9% (14.5%)	7.3% (6.7%)
Mumbai	23.1%	39.5%	16.8%	17.9%	2.7%

Unweighted proportions in parentheses.

[20] For details of the use of census data for weighting in this table, see the report "Citizenship, Urban Governance and Inequality: A Study of Indian Cities," The Citizenship, Inequality and Urban Governance Project(CIUG), Saxena Center for Contemporary South Asia, Brown University, 2025, available at CIUG14Cities.

[21] The local city official who helped us identify slum areas noted that he had a list because the city had to produce such a list to qualify for certain central government schemes targeted at "slums". The implication was clear, and we do not identify the official for obvious reasons.

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 data at the local level. Our data was collected at the polling part 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.

As reported in Table 4.6, the distribution of caste and religious groups by class shows that Kochi is the most inclusive city in our study. This is true in an absolute sense because as already noted, only a small absolute percentage live HT1 and HT2 (1.4% using census weights and 5.4% using our listing sample weights). But even the caste distributions in higher level households are relatively even. At 43 households, our ST sample is small and any interpretation must be qualified, most STs live in HT4 and HT5.

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

Housing Type	ST	SC	OBC	Forward	Other	Hindu	Muslim	Christian
HT1	0.0%	0.04%	0.01%	0.0%	0.0%	0.01%	0.01%	0.01%
HT2	10.4%	9.0%	5.7%	4.3%	4.0%	5.9%	6.4%	4.4%
HT3	14.8%	21.3%	11.8%	7.7%	9.3%	9.3%	16.9%	10.3%
HT4	21.9%	25.8%	23.9%	21.9%	16.4%	24.9%	20.8%	20.5%
HT5	52.9%	43.8%	58.6%	66.2%	70.2%	59.9%	55.9%	64.7%

The picture with SC is also instructive. In most cities, SCs generally have a disproportionately large presence in HT1 and HT2. Yet in Kochi, only 9% of SCs live in slums (HT 1 and HT2) and 69% live in HT4 and HT5[22]. OBCs and Forward castes are more likely to live in HT4 and HT5, but not by much. Table 4.7 presents the comparative data. In absolute terms, SCs and STs have the lowest proportion living (9%) in informal housing of any city except for Bhavnagar (where SC and ST proportions are extremely low). In relative terms, STs/SCs are more likely to live in HT1 or HT2 than OBCs/Forward castes – 9% to 5% – as is the case in other cities. Overall, though, there is very little caste-based segregation in Kochi.

[22] The proportions for OBC and SC in HT1 are 0.01% and 0.04% respectively.

In terms of religion, Hindus, Muslims, and Christians are distributed relatively evenly across housing types. This feature makes Kochi quite unique. In every other city except Hyderabad, we find that Muslims are significantly more likely to live in informal settlements (HT1 and HT2) than Hindus. However, in Kochi they live in these housing types in similar percentages (Tables 4.6 and 4.8). Of the three groups, we can see that Christian are marginally better-off than Muslims or Hindus, insofar as they occupy HT5 at the highest rate and informal housing at the lowest rate.

Table 4.7: Proportion of Dalits/Adivasis in each city living in informal (HT1+HT2) housing

City	Caste Group	Total (Informal)
Kochi	OBC/Forward	5%
	Dalit/Adivasi	9%
Ahmedabad	OBC/Forward	23%
	Dalit/Adivasi	47%
Bhavnagar	OBC/Forward	9%
	Adivasi	6%
Chennai	OBC/Forward	10%
	Dalit/Adivasi	32%
Hyderabad	OBC/Forward	37%
	Dalit/Adivasi	29%
Mumbai	OBC/Forward	58%
	Dalit/Adivasi	73%
Vadodara	OBC/Forward	12%
	Dalit/Adivasi	17%

We now present the same data, but with the caste and religious composition of different housing types. In other words, given that housing types are generally clustered together, just how diverse or homogeneous 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 ratio of a caste or religious community's percent representation in a housing type to its percent representation in the city overall. That is, if a group constitutes 10% of a housing type and is also 10% of the city-wide population, then the ratio is 1. Any number above one means that the group is over represented in that housing type (green shading). Any number below 1 means that it is under-represented (red shading).

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

City	Religion	HT1	HT2	Total (Informal)	Difference
Kochi	Hindu	0.01%	6%	6%	
	Muslim	0.01%	6%	6%	equal
	Christian	0.01%	4%	4%	
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
Vadodara	Hindu	0.5%	12%	12%	
	Muslim	0.1%	25%	25%	+ 13 Muslim

We find that Kochi has *some* housing segregation when examining the actual composition of each housing type. In terms of caste, SCs are significantly over-represented – by a factor of 2.47 – in HT1, though it is important to bear in mind that HT1 shacks are few and far between and were only picked up in our booster sample. We also found that STs are over-represented in HT2. SCs/STs are also under-represented in HT4 and HT5, with – most notably – SCs only present in HT5 at a rate of 0.43 times their proportion in the city. In contrast, OBCs, the largest caste category in Kochi, are very evenly represented in all housing categories, as are forward castes. What is perhaps most striking is just how integrated HT2 and HT3 housing is. Thus, aside from STs in HT2, no single caste group is under/over represented in either housing type by more than a factor of 0.25.

In terms of religion, we find that Hindus are most over represented in HT1, again with the caveat of a very small sample size, and somewhat over represented in HT2. Muslims are slightly over represented in HT3 and slightly underrepresented in HT 4 and HT5. Christians are very close to being perfectly distributed across housing types, with more or less their share of the overall population in each type, except for HT2 where they are underrepresented. In sum (and in contrast to most Indian cities in our project), we find that with the exception of HT1, all housing types are quite inclusive in their religious composition.

Table 4.9: Group Ratios of Housing Representation in Kochi

Housing type	HT1	HT2	HT3	HT4	HT5
	Caste				
ST	0.00	1.49	1.05	0.74	0.68
SC	2.47	1.05	1.23	0.71	0.46
OBC	1.10	1.00	1.03	1.00	0.93
Forward	0.28	0.96	0.85	1.16	1.34
Other	0.96	0.84	0.96	0.81	1.32
	Religion				
Hindu	1.23	1.10	0.87	1.12	1.02
Muslim	0.50	0.97	1.28	0.75	0.77
Christian	1.00	0.86	1.01	1.00	1.14

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

When comparing Kochi to the other cities in our project, we find that patterns of integration are quite similar when it comes to caste. Here, we compare Table 4.9 above for Kochi and Table 4.10 below, which examines the ratios of representation across our full sample. The first observation is that SCs are more over-represented in HT1 in Kochi than in the full sample (but again, with a very small N). They are, however, slightly less under-represented in HT4 and HT5. But the patterns for other castes are quite similar.

Table 4.10: Group Ratios of Housing Representation (All cities)

Housing type	HT1	HT2	HT3	HT4	HT5
	Caste				
ST	2.32	0.87	0.82	0.75	0.93
SC	1.68	1.14	0.95	0.68	0.42
OBC	0.49	1.05	1.16	0.95	1.08
Forward	0.85	0.90	0.84	1.35	1.31
Other	1.48	0.96	1.12	0.69	0.73
	Religion				
Hindu	1.08	0.96	0.94	1.11	1.00
Muslim	0.71	1.26	1.26	0.57	0.50
Christian	0.89	0.84	1.02	0.84	2.21

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

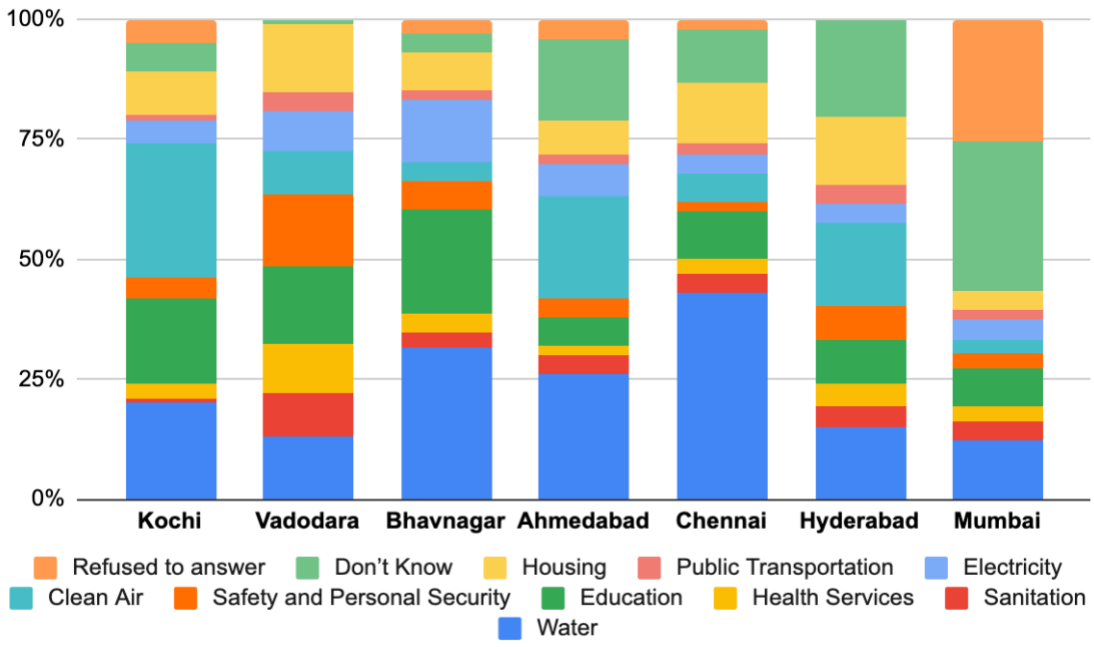
When it comes to religion, however, there is a clear difference between Kochi and other cities. If Muslims are somewhat under-represented in HT4 and HT5 in Kochi, the pattern is much more pronounced in other cities. Also, whereas Christians in Kochi are perfectly represented in all housing types (close to 1), they are massively over represented in HT5 in other cities. This may simply reflect the small size of the Christian population outside of Kerala.

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 Kochi, clean air is the most demanded service at 28% followed by water at 20% and education at 18%.

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



Nearly half (48%) of residents of Kochi feel that the elected corporator is the most important actor in ensuring service delivery, well above government offices (28%) and intermediaries (16%) (Table 4.11) Bhavnagar is the only other city where citizens rely so heavily on their local elected representatives. Along with Bhavnagar, it is clear that citizens in Kochi rely the most on institutional channels (government offices and elected officials) to secure their services.

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

	Kochi	Vadodara	Bhavnagar	Ahmedabad	Chennai	Hyderabad	Mumbai
Corporator	48%	19%	49%	33%	21%	13%	25%
Government Officials	28%	62%	26%	21%	13%	27%	14%
MLA	5%	5%	3%	9%	10%	12%	18%
MP	3%	3%	1%	7%	9%	16%	16%
Intermediaries	16%	11%	20%	30%	48%	32%	27%

There is an ongoing debate about the role that India's elected officials actually play in representing their constituencies. Academic views fall into roughly three camps: politicians are self-serving (clientelism), they are parochial and only really care about their communities (group patronage), or, as in the democratic ideal, they do what is best for all their constituents (constituency service). Somewhat surprisingly given the thrust of the academic literature as well as popular views about corrupt politicians, we found that citizens have a positive view of their elected representatives, especially municipal corporators across our cities, but that this is especially the case in Kochi where an astonishing 80% describe their corporator as caring about the well being of all the citizens of his/her constituency. This is much higher than in any other city. And it is notable that only 66% had such a favourable opinion of their MLA (Table 4.12).

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

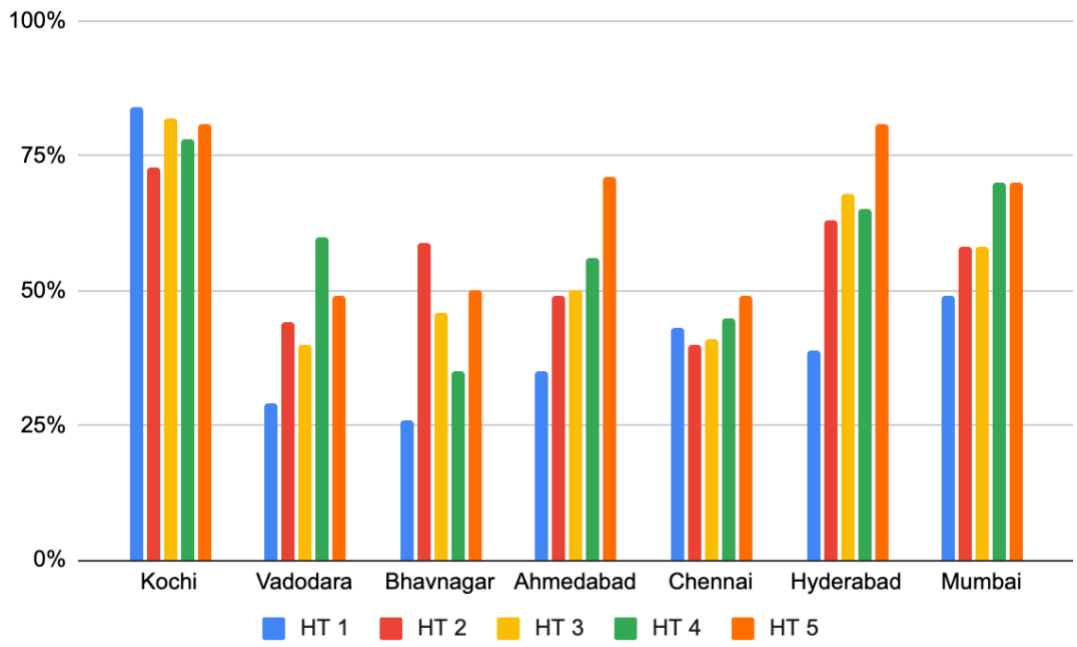
	Kochi	Vadodara	Bhavnagar	Ahmedabad	Chennai	Hyderabad	Mumbai
Cares about the well being of all the people of constituency	80%	56%	41%	54%	42%	66%	58%
Cares only about the well-being of certain communities of constituency	10%	21%	30%	8%	16%	5%	4%
Is mostly concerned with own interests	5%	11%	22%	22%	34%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

This trend held up across castes, with similarly favorable views of municipal corporators across SCs and Forward Castes but less so across religion. If 83% of Hindus had a favorable view, only

72% of Muslims shared that view. That said, this is the highest positive rating of corporators by Muslims of any city in our study.

There is also a bit of a class difference, with HT2s having a less favorable view of corporators at 73% than the average of 80% for HT3,4 and 5s. However, as Figure 4.2 reveals, in comparative terms, the key point is that overall positive ratings are the highest in any city and that the difference across classes is slight and not nearly as uneven as in other cities. In other words, coporators would appear to be doing a good job in all neighborhoods in Kochi.

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



The extent to which Kochi citizens depend on their corporators is reinforced by the fact that they visit their corporators more often than in any other city. Fully a third report visiting their councillor at least once in the past 6 months (Table 4.13). When asked about visiting a government office, we find that 43% of Kochi citizens have visited a government office in the last 6 months, more than in any other city except Bhavnagar (51%). If we combine visits to corporators and visits to government offices, we find that Kochi citizens are more likely to contact the local state than any other citizens in our study. This could, of course, reflect the fact that they have more problems to deal with. However, as we shall see later, the level of services in Kochi is quite high, so this high level of contact is more likely to be associated with getting problems addressed rather than just having problems. This finding is amplified by what we learned in our focus groups. In a group of Muslims, the consensus view, as expressed by one respondent, was that “we approach

the corporator for all government-related issues … the thing is that if we go through the elected person, then the government department will listen to our problems and get it solved easily."[23]

Table 4.13: Number of visits to corporator in the last 6 months

City	0	1	2	3
Kochi	62%	19%	15%	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%
Mumbai	91%	4%	3%	1%

Tables 4.14 and 4.15 also suggest a clear division of labor between elected representatives and government offices. When dealing with water or sanitation problems, Kochi citizens are far more likely to go to their coproators than in any other city. In other cities, citizens generally rely much more on intermediaries. When Kochi citizens need to get a basic voter card, a BPL card, a caste certificate, or an Aadhar card, they rarely go through their corporators, especially compared to other cities, and instead go directly to government offices. The central role of corporator in providing public goods such as water and sanitation points to "constituency service." The fact that they don't play a role in providing more discretionary goods such as cards, which in principle are distributed according to official criteria but often require inter mediation from a person on influence, suggests a relative absence of clientelism.

Table 4.14: Respondents or households contacted MLA or Corporator to address a problem.

City	Electricity Supply	Water Supply	Sanitation
Kochi	0%	29%	26%
Ahmedabad	1%	2%	2%
Bhavnagar	0%	4%	8%
Chennai	2%	2%	2%
Hyderabad	2%	2%	3%
Mumbai	1%	8%	10%
Vadodara	0	4%	2%

[23] Focus group in the area of Mattencherry on August 1, 2017.

Table 4.15: Corporator helped in getting the following

City	BPL Card	Voter Card	Caste Certificate	Aadhar Card
Kochi	8%	10%	5%	13%
Ahmedabad	29%	16%	22%	14%
Bhavnagar	9%	3%	5%	4%
Chennai	15%	25%	15%	25%
Hyderabad	42%	39%	43%	38%
Mumbai	71%	28%	41%	34%
Vadodara	16%	4%	18%	3%

When we look at the findings on visiting corporators, we find that informal settlements (shacks and slums) are somewhat less engaged than HT3s and HT4s. We do, however, find that Muslims and STs are more likely to visit their corporators. But when we look at the relevant findings on government office visits, we find that HT2 and HT3, STs, SCs, Christians, and Muslims are all much more likely to visit government offices than other subgroups. When it comes to actually engaging the state, not only do Kochi citizens do so quite often and more so than in any other city, but it is the least privileged class, caste, and religious groups that are most likely to visit government offices.

Table 4.16: Number of visits to corporator in the last 6 months (Kochi)

Group	0	1	2	3	4
HT1	73%	25%	3%	0%	0%
HT2	66%	20%	10%	2%	1%
HT3	61%	23%	13%	3%	0%
HT4	55%	26%	15%	2%	1%
HT5	64%	16%	15%	3%	0%
Christian	63%	21%	14%	2%	1%
Hindu	64%	18%	14%	2%	1%
Muslim	54%	21%	19%	5%	0%

Table 4.17: Percentage of households that have visited government office in last six months (Kochi)

Housing Type		Religion		Caste	
HT1	33%	Hindu	38%	Forward	38%
HT2	50%	Muslim	50%	OBC	44%
HT3	51%	Christian	46%	SC	46%
HT4	45%			ST	73%
HT5	39%				

When we dis-aggregate networks by class, the picture emerges of uneven connections to the state. In informal shack settlements (HT1), no residents reported knowing a government official (bureaucrat or police). That number rises sharply as one moves up housing types, culminating with 35% of residents of HT5 knowing a government official (Table 4.16). However, what the lower classes lack in ties to officials is that they gain back in part through ties to elected officials. Thus, 46% of shack dwellers know a representative, the highest of any HT, and 31% of slum dwellers also know a representative. The upper classes, in contrast, are much more likely to know "intermediaries," a finding also supported by our earlier analysis of Bangalore in which we concluded the the poor depend on politicians and that the rich depend on peers, that is personal contacts who have influence (Heller, Swaminathan and Varshney, 2023).

4.6 Networks

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

Table 4.18: Proportion of households, by city, who know each of the persons of influence personally

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

By comparison with the other cities in our project, the citizens of Kochi are no more or no less personally connected to persons of influence. 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). Fully 60% of respondents reported knowing one of these key actors. This puts Kochi at the top of the pack. When this figure is broken down, an even more surprising finding emerges (Table 4.18). In Kochi, exactly ⅓ of citizens know an elected representative, by far the highest percentage in our study.

Table 4.19: Proportion of citizens/households who know each of the persons of influence

Housing Type	Bureaucrat/Police	MP/MLA/Councillor	Intermediary
HT1	0%	46%	0%
HT2	13%	31%	34%
HT3	19%	35%	30%
HT4	26%	25%	46%
HT5	35%	35%	52%

4.7 Summary

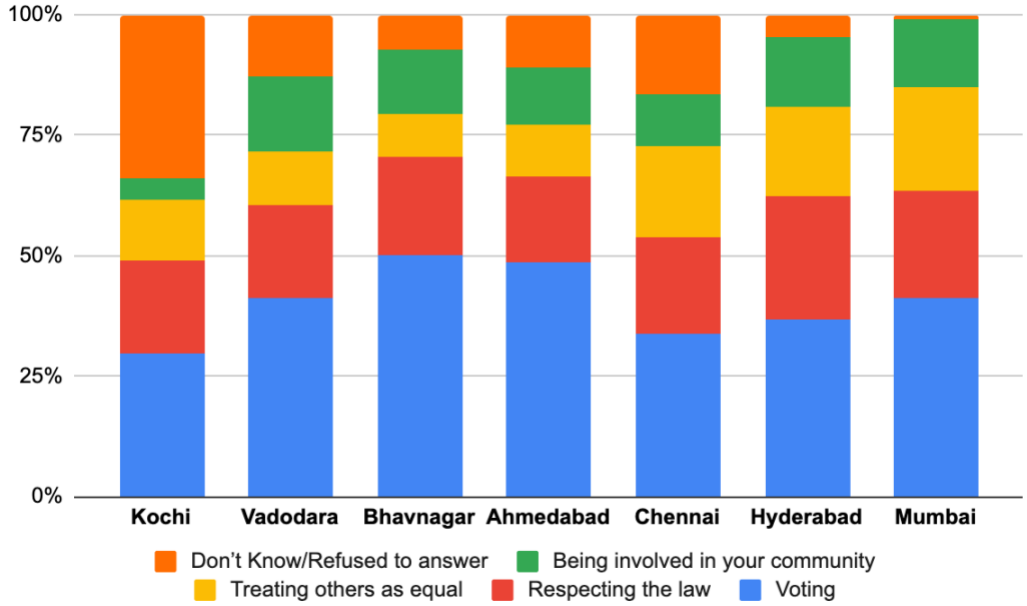
To summarize, the most notable feature of governance in Kochi is that its citizens are much more likely, compared to other cities in our study, to entrust elected representatives and, to a lesser degree, government officials in addressing service-related issues. Kochi citizens have very favorable opinions of their representatives and government officials. We found some variation across social categories in the degree and ways in which they engage the state. Still, overall, the pattern is quite even and even slightly favors lower classes, lower castes, and minority communities. There is also evidence that compared to other cities, constituency service prevails over clientelism.

5. Citizenship

The idea of citizenship goes to the heart of democracy. How citizens understand their relationship to the state and, in our case, to the local municipal government, how they understand their relationship to each other, and how they use their rights of citizenship - civil, political, and social - are important parts of democratic practice. We break citizenship into two dimensions to develop a concrete understanding of this complex and dynamic phenomenon. 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 this by measuring, as best we can, if and how citizens exercise their rights. This is captured through the citizen participation index (CPI), which covers various aspects of participation. We begin with the attitudes.

We asked some direct and less direct questions to gain a general sense of citizens' beliefs about citizenship. We asked all of our respondents what they believe are the most important responsibilities of citizens. The most common answer across all cities is voting, respecting the law, treating others as equals, and being involved in your community (Figure 5.1). In Kochi, 45% responded that voting was the most important, putting Kochi in the pack. Only 19% said “treating each other as equals” indicates citizenship, which is about average. Kochi only stands out in terms of the comparatively high percentage (29) who chose “respecting the law.” While this is the highest of our cities, it is only slightly higher than others. Overall, then, as is the case for all our cities, the citizens of Kochi are more likely to see citizenship in terms of their relation to the state (voting and respecting the law) than in terms of their horizontal relations to other citizens (treating each other as equals or being involved in the community).

Figure 5.1: What is the most important responsibility of a citizen of a democratic country such as India?



If in other cities we often found significant variation across classes and castes in terms of how they think of citizenship, this was generally not the case in Kochi. That said, as Table 5.1 shows, we did find that 21% of SCs felt that being involved in community life is what defines citizenship, a figure that was three times higher than for forward castes (5%) and OBCs (7%).

Table 5.1: What is the most important responsibility of a citizen of a democratic country such as India?

	Hindu	**Muslim**	**Forward Caste**	**OBC**	**SC**	**ST**
Respecting the law	28%	29%	26%	30%	16%	14%
Treating others as equals	14%	21%	18%	20%	15%	9%
Being involved in your community	6%	7%	5%	7%	21%	25%
Voting	49%	41%	47%	40%	45%	52%

We also measured attitudes about citizenship by asking key questions that capture how citizens feel about political and social liberties. Table 5.2 shows that Kochi is the most socially liberal city in our study across all four questions. Most dramatically, just about no one (only 1%) believes that there should be laws against inter-caste or inter-communal marriage. Aside from Vadodara, where 46% support such a ban, only small minorities, ranging from 9% to 16%, think a ban is good in other cities. But the fact that state-based enforcement of caste or communal differences is basically unthinkable in Kochi perhaps speaks to just how transformative Kerala's social movements have been.

Table 5.2: The Urban Indian - Conservative or Liberal? Those saying "yes" to...

	There should be laws against inter-caste marriage	There should be laws against inter-religion marriage	Not saying BMKJ should be punished	The right to free speech does not include the Right to criticize India
Kochi	1%	1%	5%	22%
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%
Mumbai	10%	9%	54%	42%

On our two questions about political freedoms, Kochi also stands out as very liberal. Only 5% support punishing citizens for not saying "Bharat Mata Ki Jai" at public gatherings, the lowest for any city, and only 20% believe that the right to free speech should not include the right to criticize India, lower than any other city except Hyderabad. The dramatic variation across all our cities on these two questions reminds us of the old adage that all politics are local.

5.1 Summary

In sum, basic attitudes about citizenship in Kochi on the one hand are quite conventional by Indian urban standards, with most citizens believing that their most important duty is to vote followed by respecting the law and far fewer think it is about community involvement or respecting the rights of others. On the other hand, Kochi citizens are socially liberal in that they do not believe that the government should ban inter-caste and inter-religious marriage and politically liberal in terms of supporting basic rights of free speech. To a large degree this reflects Kerala state's history of rights-based social movements that have actively struggled against caste and communal discrimination and long supported a vibrant civil and political society.

6. Participation

We now turn to our citizen participation index (CPI) and its component parts, which include (i) voting, (ii) non-voting political participation and (iii) civic participation. Each component included several questions for a total of 10 (see Appendix 2 for questions and how the index was constructed). Each score is reported on a scale of 0-1, with 0 indicating no participation and 1 indicating that the respondent participated in all 10 activities.

Kochi's overall score of 0.395 places it among the top of our surveyed cities (Table 6.1), equal to Bhavnagar but below Vadodara, which has the highest score. The difference between the least-engaged and the most active cities (Kochi, Bhavnagar, and Vadodara being at the top) is

significant. Notably, the difference is tied to city size, with all the large cities having much lower levels of citizen participation. As we will explain in more detail below, Kochi scores relatively high on the voting and non-voting subcomponents of the index but is quite average on the civic subcomponent.

Table 6.1: Citizen Participation Index (CPI) by Sub-component

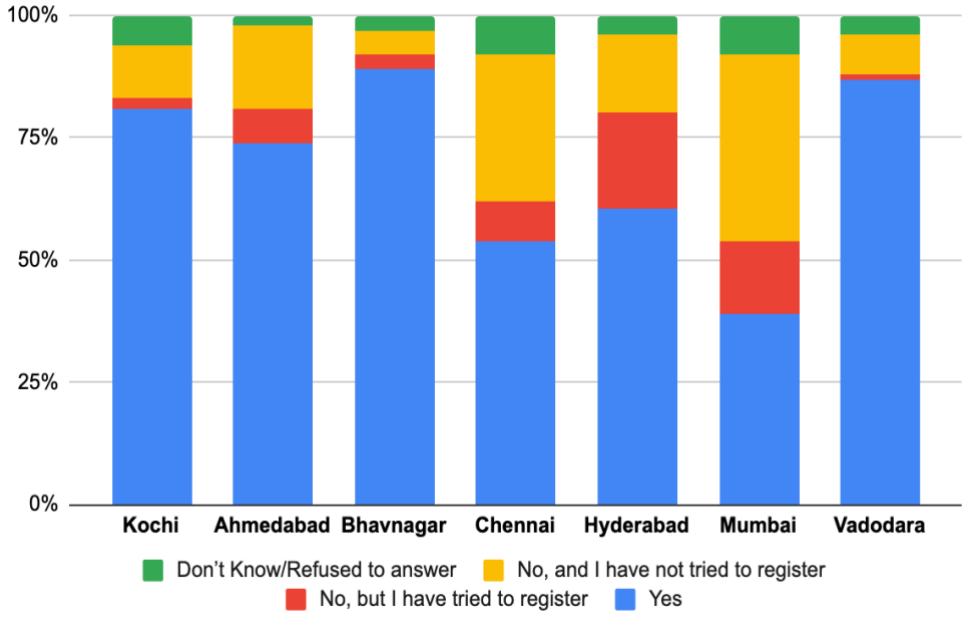
City	CPI	Sub-components of CPI		
		Voting	Non-voting	Civic
Kochi	0.395	0.761	0.13	0.275
Ahmedabad	0.319	0.660	0.087	0.195
Bhavnagar	0.397	0.764	0.098	0.318
Chennai	0.303	0.485	0.17	0.234
Hyderabad	0.35	0.581	0.135	0.316
Mumbai	0.214	0.296	0.071	0.266
Vadodara	0.422	0.793	0.144	0.327

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

6.1 Voting

Regarding overall voter registration (see Figure 6.1), Kochi has the third highest self-reported registration rate of our seven cities, behind Vadodara and Bhavnagar. However, there are clear differences between different groups of citizens in Kochi. Lower caste citizens are less likely to be registered to vote than the forward castes. Among the lower caste groups, registration for Adivasis is 52% and for Dalits 60%, compared to OBCs (82%) and Forward Castes (85%). This pattern follows most cities where Dalits and Adivasis are less likely to be registered, but it is notable that the pattern is reversed in Vadodara.

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



While we have examined overall voter registration in three levels of elections, it is important to ask a follow-up question: whether respondents are registered to vote at the address where they currently reside. This is because India's voter registration laws 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 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 to vote, given the lack of "absentee" or mail-in ballots for most categories of voters in India. The difficulties of either traveling 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. However, some do, in fact, travel back. In this case, perhaps a more accurate picture of electoral participation is given by the proportion of those who are actually registered at their current address, at least in Kochi. Comparing Figure 6.1 with Figure 6.2, it becomes clear that lower castes' registration pattern reflects that they are less likely to be registered at their current address.

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

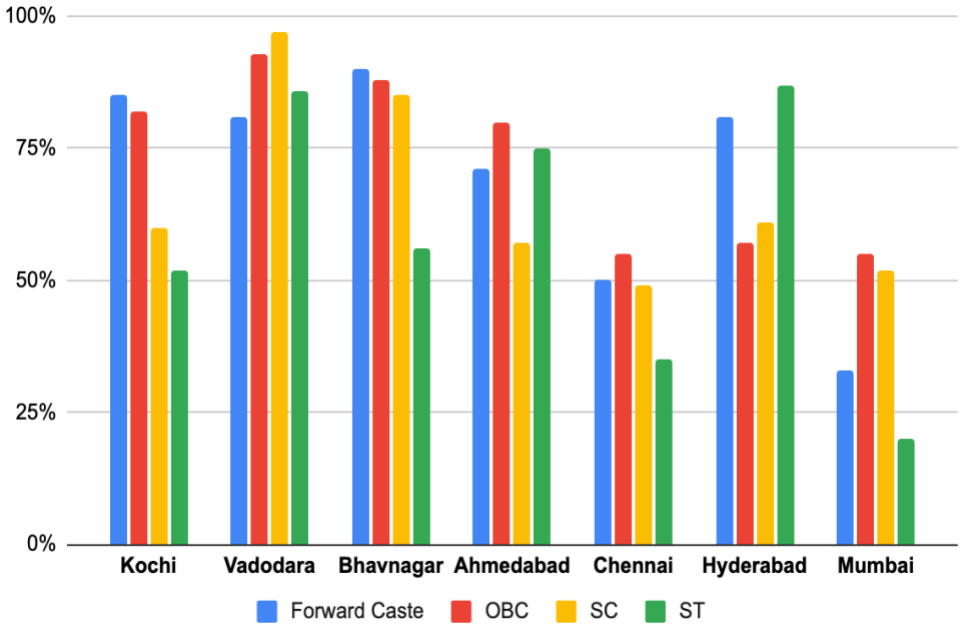
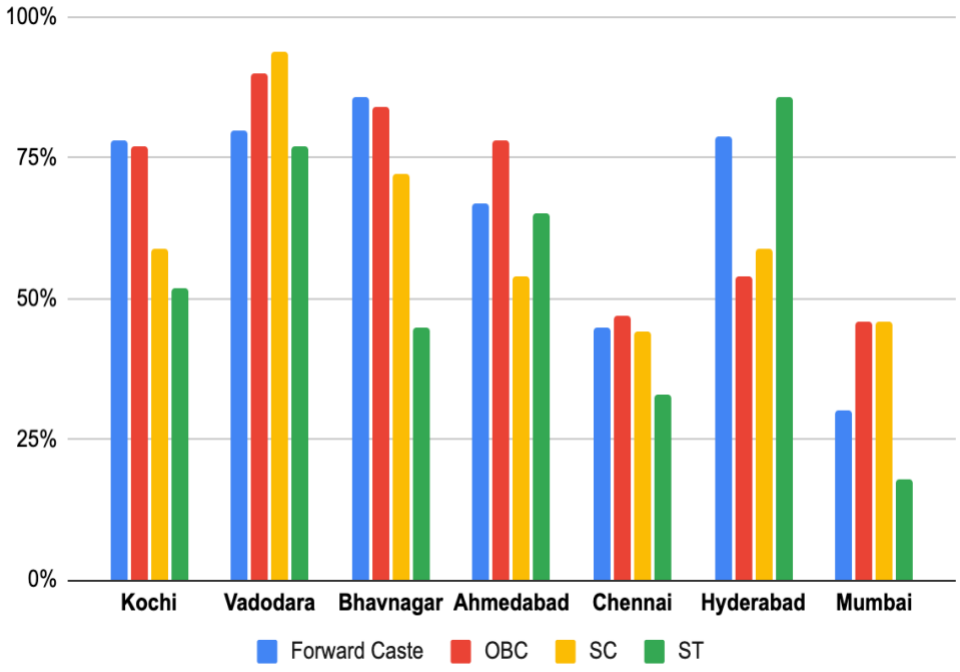


Figure 6.3: Are you registered to vote at your current address? (caste wise)



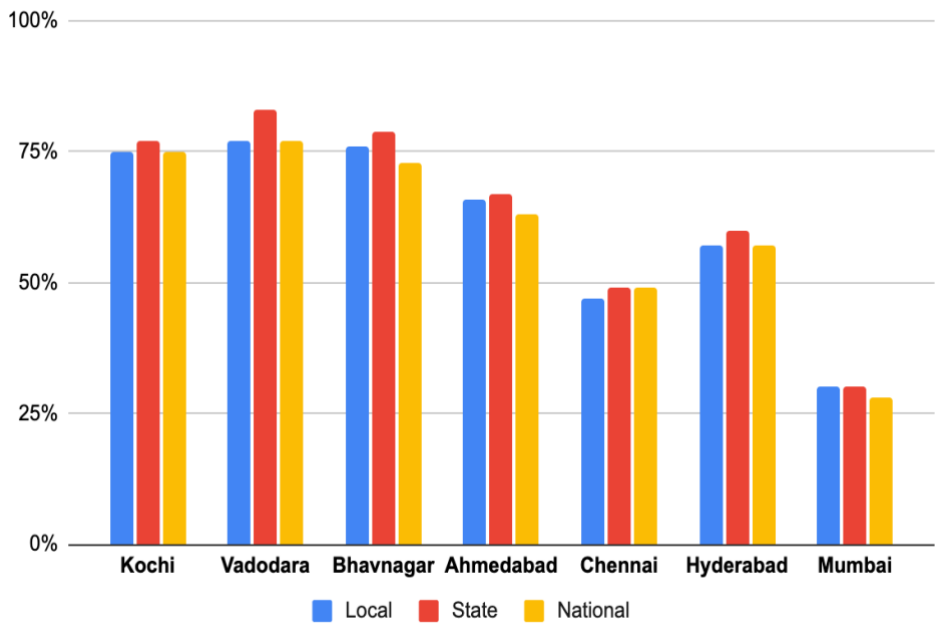
As far as class-based differences for registration *at the current address* are concerned, class does not have much of an impact in Kochi with shack dwellers registering in almost the same percentages (72) as HT5 (75). Caste, as already noted, does have an impact and Muslims and Christians are somewhat less likely to be registered to vote at their current address.

Table 6.2: Voter registration (at current address) by caste, class, and religion in Kochi

	HT 1	**HT 2**	**HT 3**	**HT 4**	**HT 5**	**Forward Caste**	**OBC**	**SC**	**ST**	**Hindu**	**Christian**	**Muslim**
Registration Rate	72%	79%	85%	74%	75%	78%	77%	59%	52%	81%	72%	70%

As we reported in Table 6.2, the voting sub-index for Kochi is the 3rd highest in our sample at 0.761, behind only Vadodara and Bhavnagar. Participation in elections by Kochi citizens was roughly equal across the three levels of elections[24]. When we look at the voting sub-index by religion, some interesting findings emerge. First, as was true with registration, there is a gap between Hindus (.805) and Muslims (.741), though this gap is less than the registration gap. In contrast, in most cities in our study, Muslims are more likely to vote than Hindus.

Figure 6.4: Self-reported voting in three levels of elections



[24] 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 6.5: Voting Sub-Index by Religion

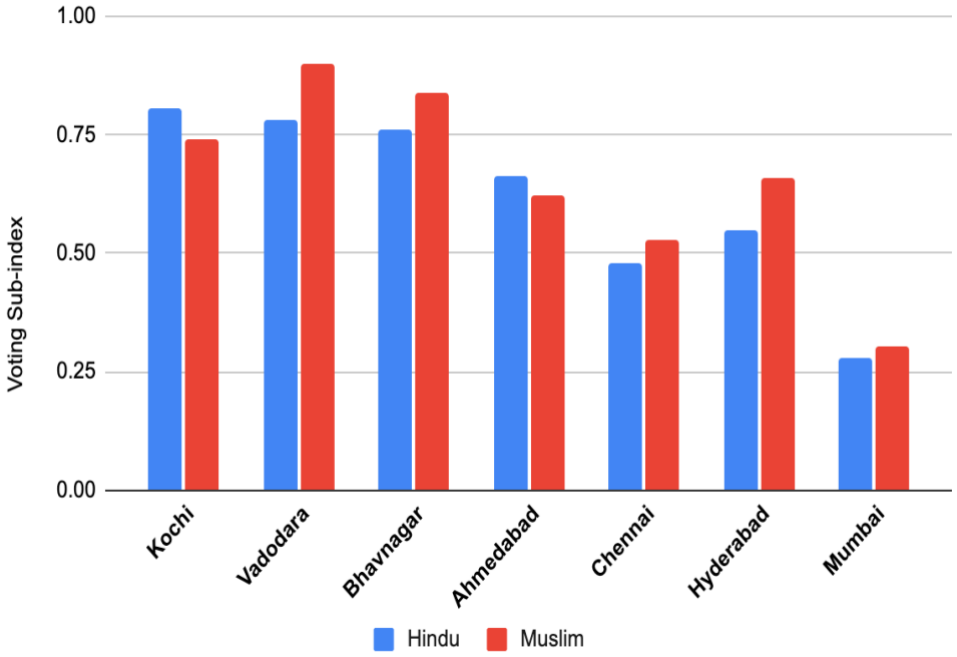


Figure 6.6: Voting Sub-Index by Housing Type

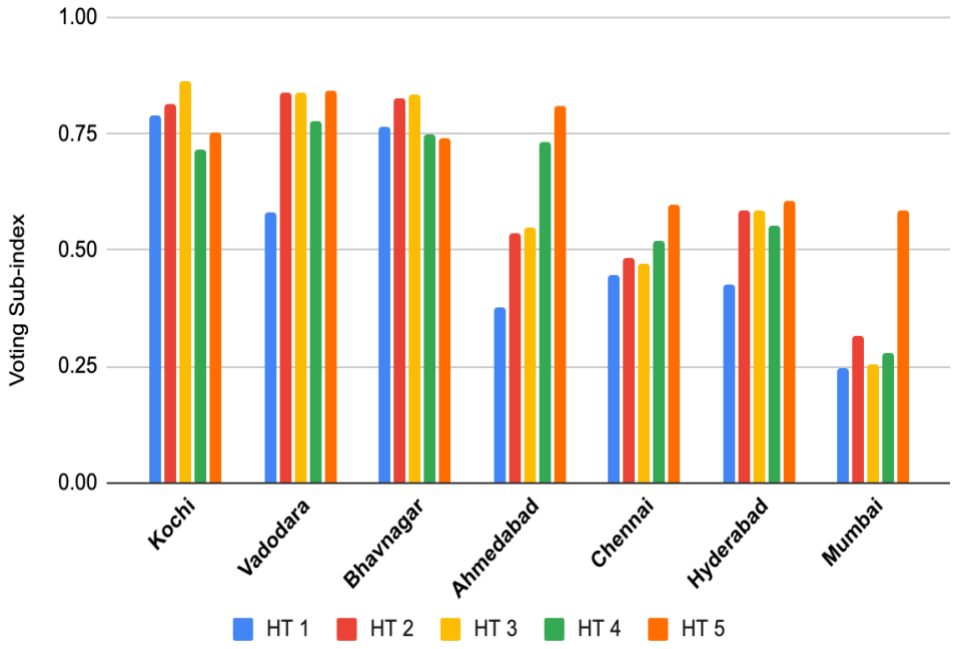
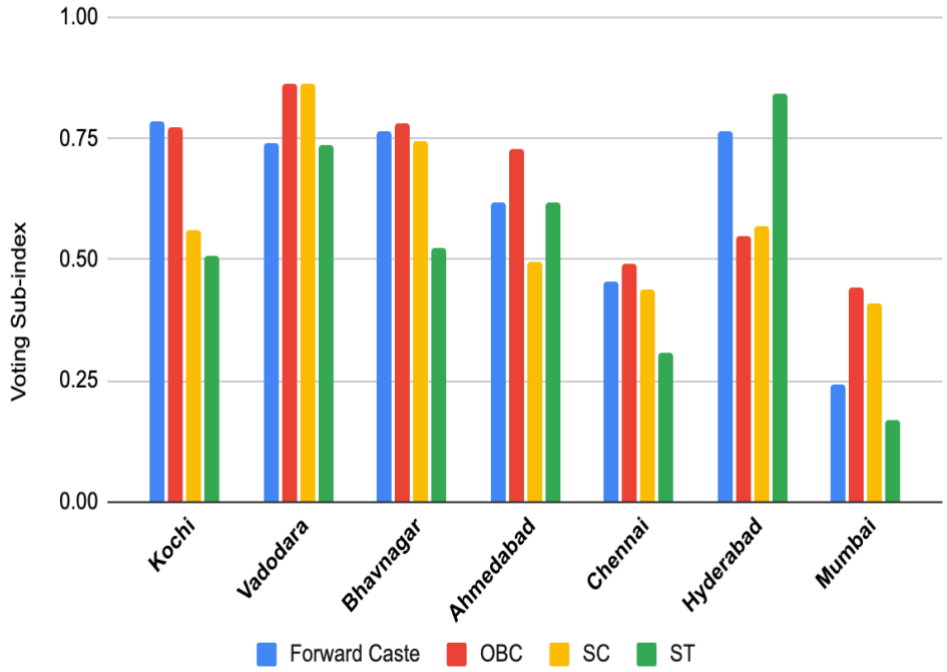


Figure 6.7: Voting Sub-Index by Caste

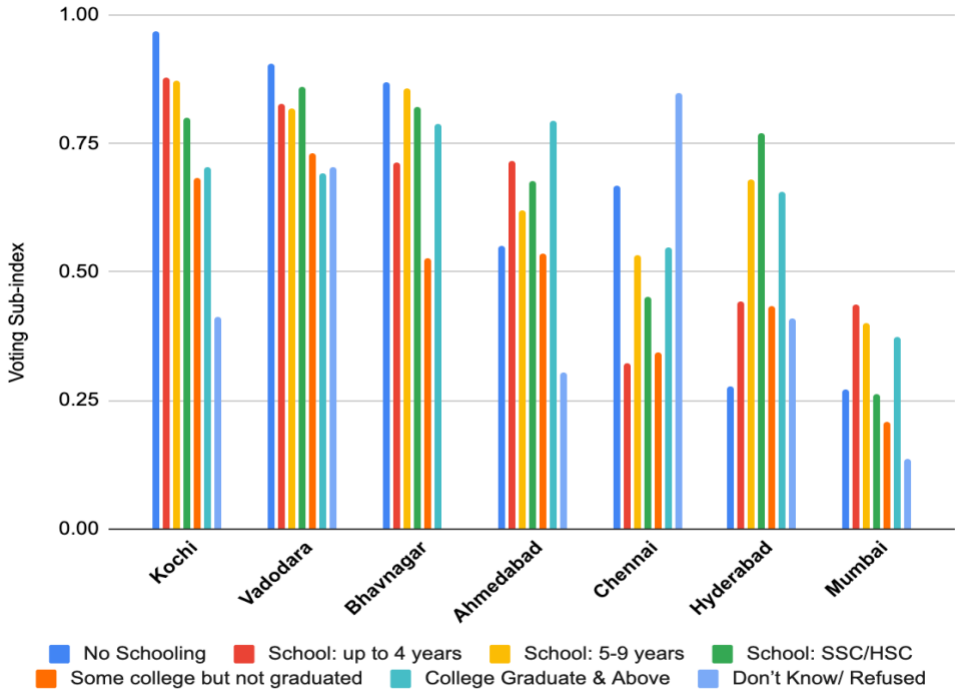


Class also has an effect on electoral participation in Kochi (Figure 6.6) with the lower and lower middle classes (HT1, HT2 and HT3) voting in higher proportions than the upper classes (HT4 and HT5). Bhavnagar is the only other city where lower classes are more likely to vote, but the pattern is more pronounced in Kochi. When we look at the voting sub-index scores by caste categories for Kochi, a paradox emerges (Figure 6.7). As structural positions in society, class and caste tend to be highly correlated. Yet whereas lower *classes* vote more in Kochi, lower *castes* vote less. However, we find that correlations between class (housing type) and caste identity are very weak (or non-existent) in Kochi compared to other cities (especially in Gujarat).

Finally, we look at education and gender in relation to the voting sub-index for Kochi. We found significant variance in scores across different educational categories (Figure 6.8) and indeed note that there is a very sharp inverse correlation between educational level and propensity to vote. Setting aside the “no-schooling” category that had only 12 respondents, the next least educated groups (up to 4 years) had an index of 0.879, the highest in any city. The index score then declines steadily with each educational category (except SSSC/HSC) and bottoms out at 0.683 for “some college". This pattern is more or less replicated in our other small cities - Vadodara and Bhavnagar - with the less educated voting more than the more educated. The pattern is reversed in our three larger cities - Ahmedabad, Hyderabad and Mumbai - where the less educated vote significantly less than the more educated (the exception being Chennai). In these three cities, those with no schooling have voting indexes that fall below 0.6.

We found no relationship between gender and electoral participation. We can now summarise our findings on electoral participation. In Kochi, the propensity to vote, as measured by the voting sub-index, is robust, though not as high as some other cities. 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. As we have seen, in Kochi Dalits (SCs) vote significantly less than higher castes and Muslims somewhat less than Hindus. On the other hand, lower classes and the less educated vote more than higher classes and the more educated.

Figure 6.8: Voting Sub-Index by Education



6.2 Non-Voting 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 Kochi, 15% of our respondents report being members of a party. This is the highest party membership score of any of our cities. Chennai comes in second with 12% and Hyderabad at 11%, but no other city is in double digits.When we examine party membership across social categories (Table 6.4), there is some variation across class categories. Aside from informal shacks (HT1), for all other class categories party membership is at least 10%

with slums (HT2) and upper classes (HT5) having the highest membership levels. Across religions, we find that Hindus are slightly more likely than Muslims to be party members (14 vs. 12%), but that Christians are especially active (18%). Across caste, OBCs are the most likely to be party members (18%) followed by Dalits (14%) and Forward Castes (10%). If there is a pattern here it is that membership in parties is spread across the social spectrum.

Table 6.3: Membership of a political party by caste

Caste	Vadodara	Ahmedabad	Bhavnagar	Chennai	Hyderabad	Kochi	Mumbai
ST	1%	4%	0%	32%	2%	7%	10%
SC	0%	5%	0%	10%	4%	14%	6%
OBC	1%	7%	1%	7%	20%	18%	12%
Forward Caste	3%	3%	3%	28%	8%	10%	7%

Table 6.4: Membership of a political party by housing type

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

Table 6.5: Membership of a political party by religion

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

We now turn to our index of non-voting participation. It includes four questions covering political party membership, attendance at rallies, talking about politics with neighbors, and contributing time to a campaign. A score of "1" would mean that the respondent answered affirmatively to all

4 questions, with "0" indicating only negative responses. Our index reveals that Kochi's citizens have a non-voting participation level of 0.13, which is about average for our cities, well above the low of 0.071 in Mumbai, but also below the high of 0.17 for Chennai. Breaking this down, on average, 16% of respondents are party members but only 13% contributed time to election campaigns during elections, 11% participated in meetings or rallies organized by political parties between elections and 12% discussed supporting a candidate with friends, neighbors, or community members.

If we look at the class variations in our index of non-voting political participation (Figure 6.9), we find that HT1 has the lowest level of non-electoral participation, followed by HT3, and that the highest level is in HT5, though HT2 and HT4 are close behind. There are no clear patterns in other cities either, but in general those living in shacks are less politically engaged, except for Hyderabad and Chennai where they are the most engaged. When we look at the index by caste, it is relatively flat with all castes being equally engaged in non-voting politics, though SCs are slightly more engaged. In comparative terms this is notable, with Kochi and Chennai as the only two cities where SCs are more politically active than OBCs. When we look at non-voting political participation by religion (Figure 6.11), Hindus and Christians are more active (0.14) than Muslims (0.085) in Kochi. It is also the case that Hindus are more active in non-voting political participation than Muslims in Bhavnagar, Chennai, and Vadodara.

Figure 6.9: Non-Voting Sub-Index by Housing Type

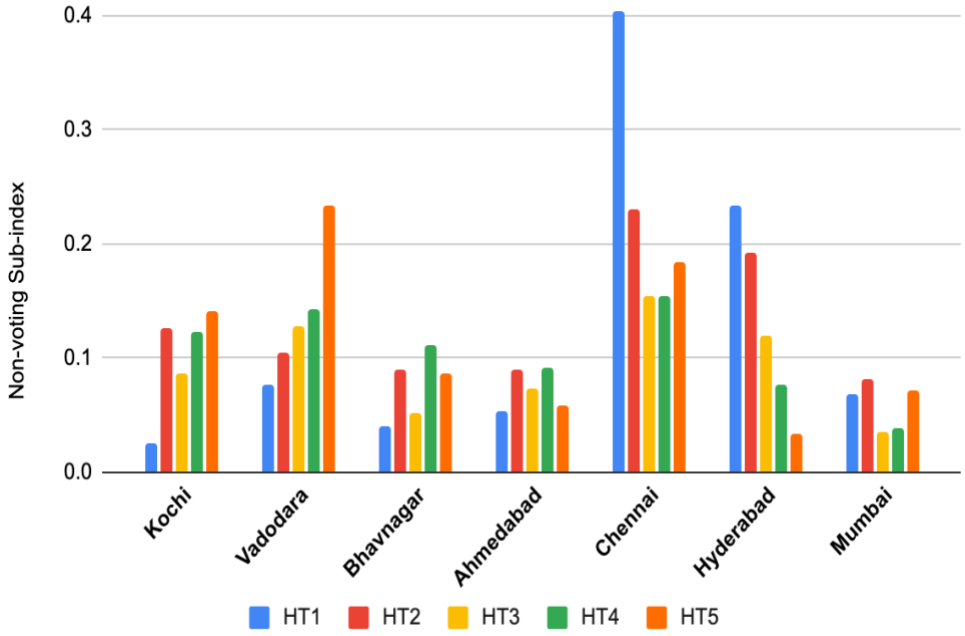


Figure 6.10: Non-voting Participation (NVP) Sub-Index by Caste

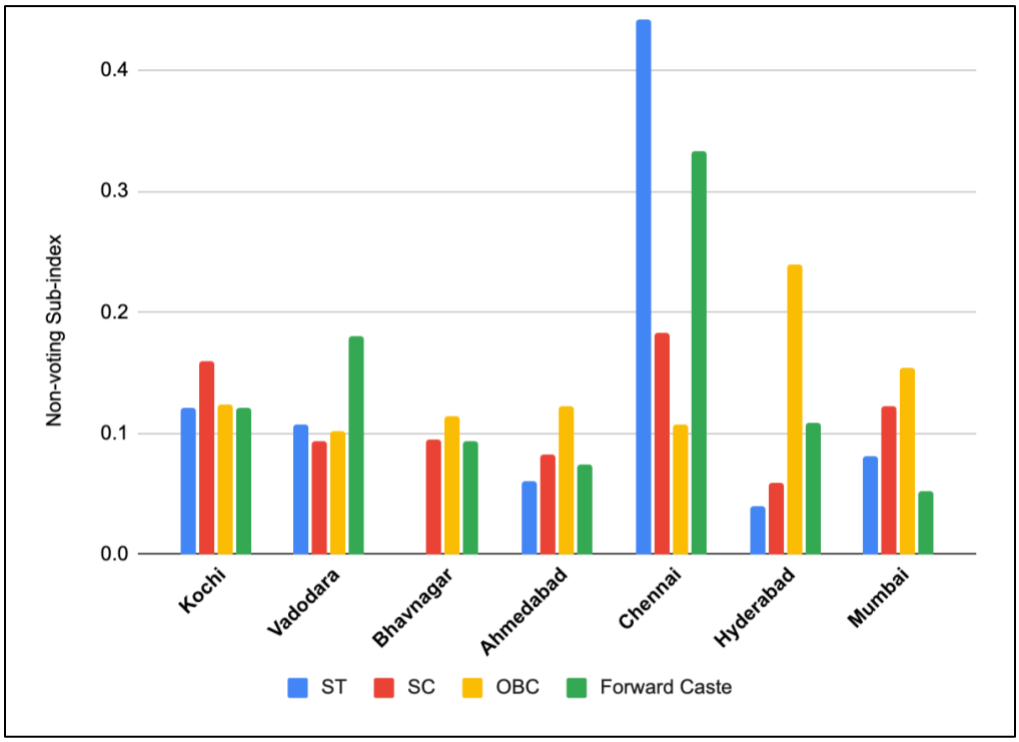
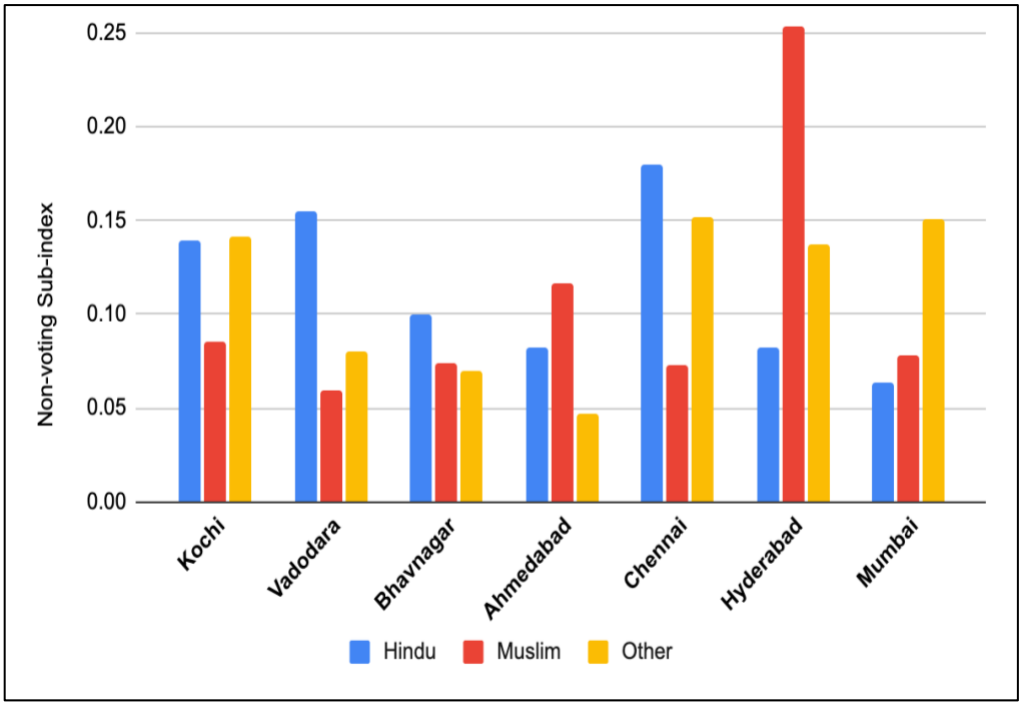


Figure 6.11: Non-voting Participation (NVP) Sub-Index by Religion

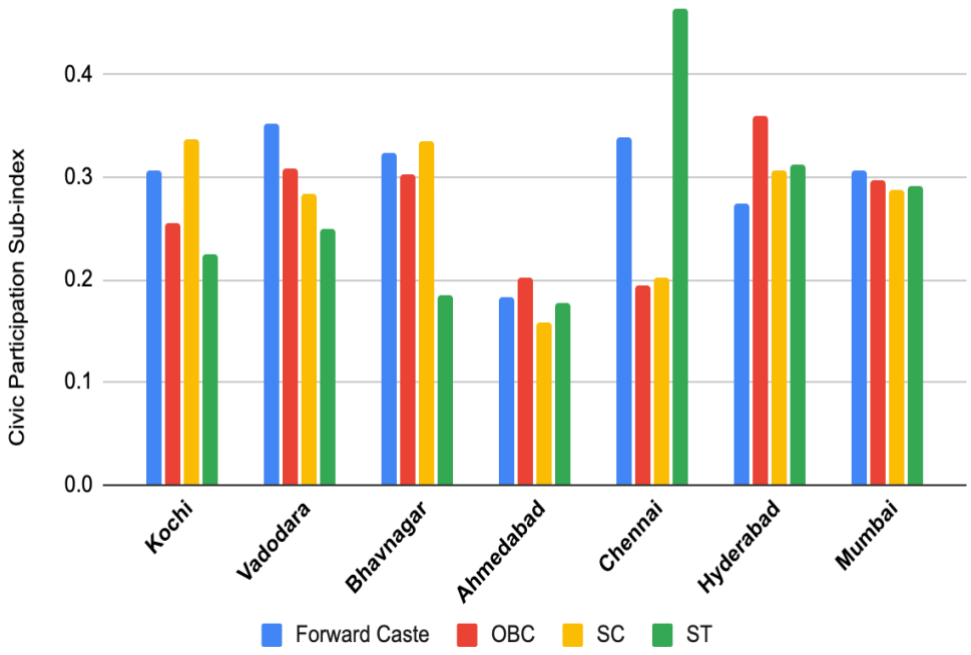


6.3 Civic participation

We now turn to the last sub-component of our CPI, civic participation. We measured this by asking respondents a series of questions about their engagement in the community and then created an index (see Appendix 2 for details). Among our 7 cities, Kochi is in the middle of the pack at 0.275 (Figure 6.12). 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 0.275, as in Kochi, means that on average respondents had a bit less than one positive answer.

When we examine the civic participation index across social categories in Kochi, we find an uneven pattern in which that forward castes and SCs are more civically active than OBCs and STs (Figure 6.12). In comparative terms, it is notable that it is only in Kochi and Chennai that SCs are clearly more civically active than forward castes.

Figure 6.12: Civic Participation Sub-Index by Caste



The class pattern on civic participation presents a clear gradient (Figure 6.13). The lower classes in Kochi are less active than the higher classes, but the gap is not great, certainly not when compared to Bhavnagar, Vadodara and Hyderabab. Finally, in Kochi, Hindus (0.29) and Muslims (0.27) are roughly equally active in civic affairs (Figure 6.14). In other cities, the civic participation score does not vary much between Muslims and Hindus, though it is slightly greater for Hindus in Chennai and for Muslims in Hyderabad.

Figure 6.13: Civic Participation Sub-Index by Housing type

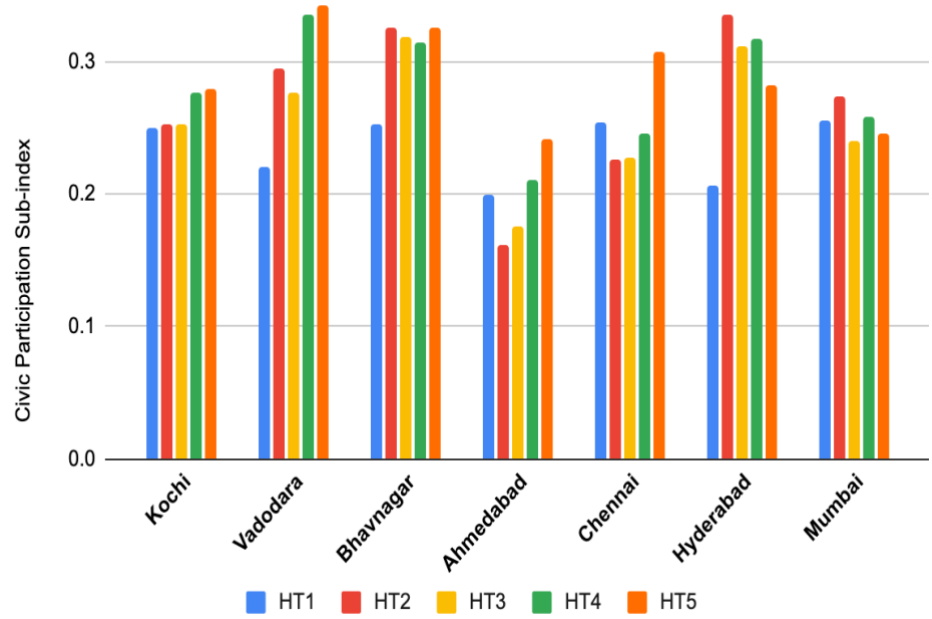
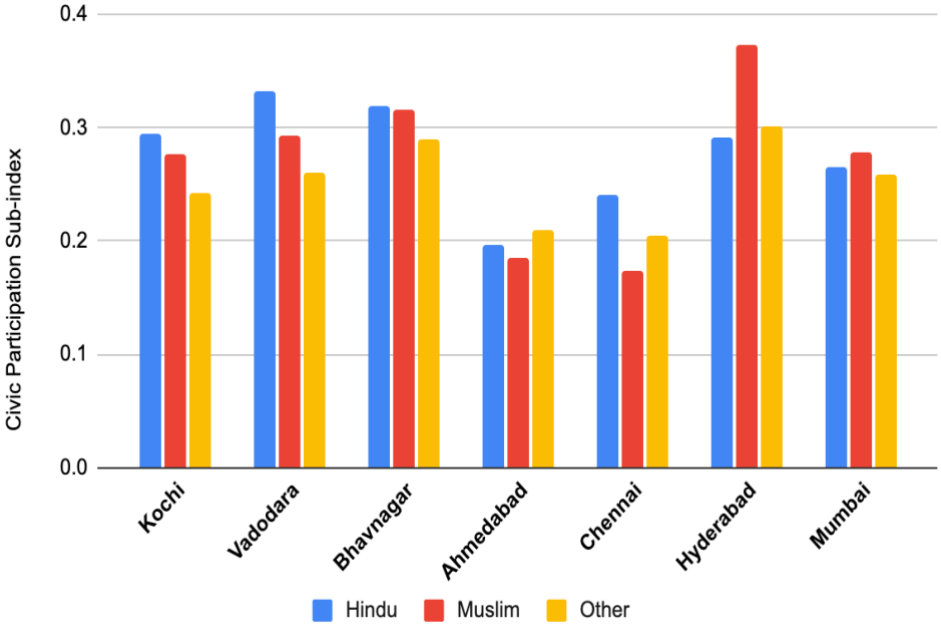
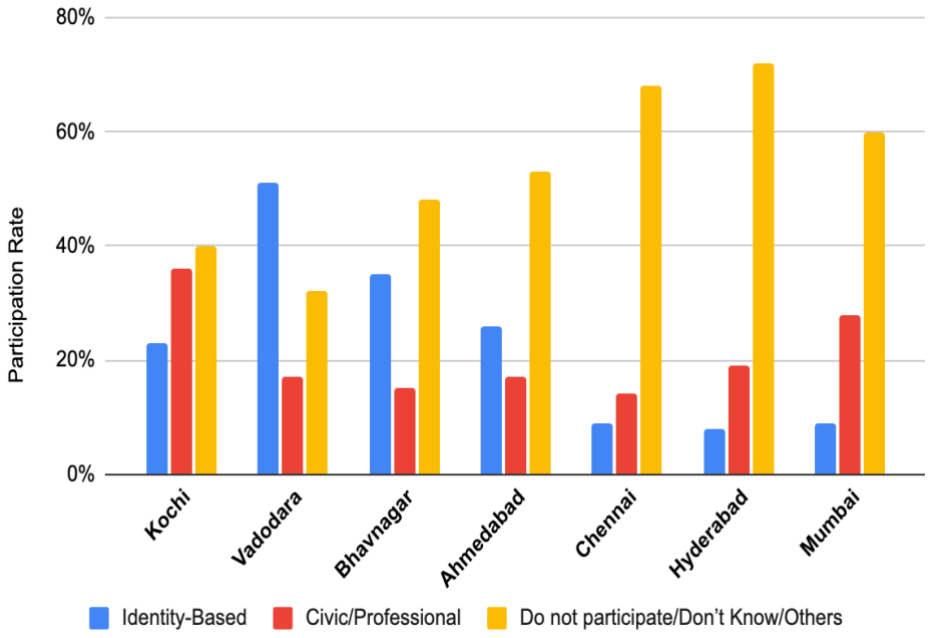


Figure 6.14: Civic Participation Sub-Index by Religion



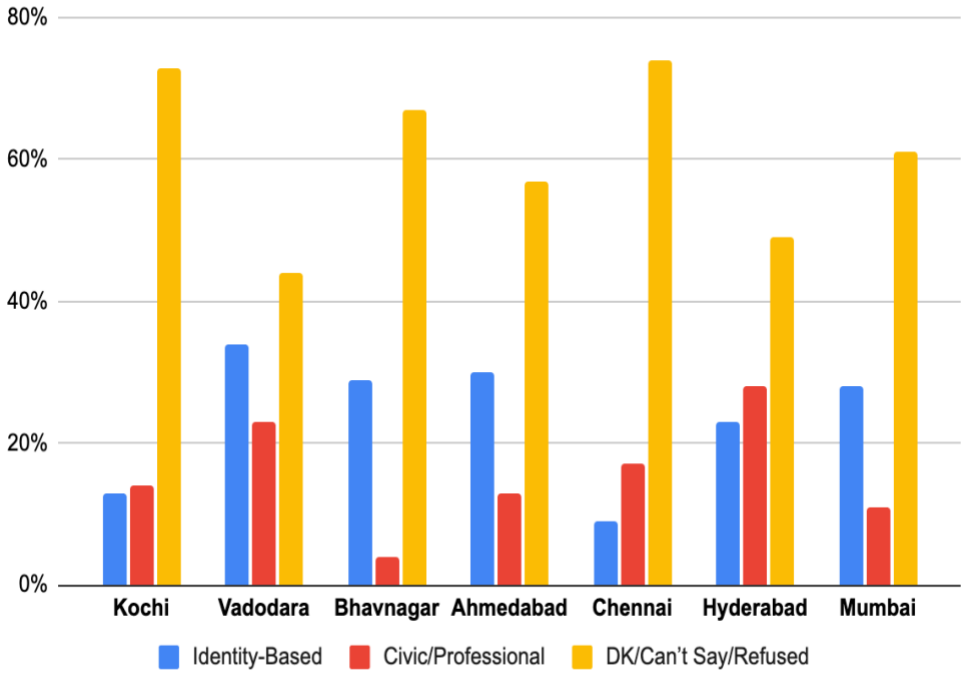
To disentangle these findings about civic participation, we can look more closely at our question about belonging to civic organizations. The first observation is that 59% of our respondents in Kochi reported participating in a civil society organization, which is very high compared to other cities and surpassed only by Vadodara at 68%. When we break this down, we find however that 36% belong to associations that we classify as civic or professional associations (i.e. unions, RWAs, NGOs and cooperative societies) – the highest by far for any city – compared to 23% that belong to "identity-based" associations (religious, cultural, caste-based). Regional differences here are quite stark. In the four southern cities membership in civic associations prevails over membership in identity associations, whereas the pattern is reversed in the three Gujarati cities.

Figure 6.15: Participation in Organisations and Associations



If the citizens of Kochi are more likely to belong to civic organizations, they are less likely to rely on them for accessing basic services. Thus, when we asked which organizations provide the most help in providing public services, only 14% reported relying on civic or professional organizations and only 13% relied on identity-based organizations (the lowest in any city). This probably reflects the fact that, as we already reported, citizens in Kochi are much more likely to go to their councillors when they need help. Comparatively, it is interesting to note that in Gujarat, the reliance on identity-based civic organizations is much greater than on civic/professional organizations.

Figure 6.16: Which type of organization helps in providing public services?



6.4 The Citizen Participation Index (CPI)

Having discussed 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 (Figure 6.17). 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. On the overall index, Kochi scores 0.395 which ranks 3rd behind Vadodara (0.422) and Bhavnagar (0.397). It is notable that the larger cities score lower than the smaller ones.

CPI scores vary across different caste categories and decline as one moves the Forward Castes (0.406) to OBCs (0.390) and then to lower castes – SCs (0.358) and STs (0.373) (Figure 6.18). This same trend is seen in Vadodara as well. When we examine the CPI across religion, we find that Hindus in Kochi have a higher CPI score than Muslims. With the exception of Chennai that also has such a Hindu-Muslim gap, the difference in other cities is not very pronounced and actually favors Muslims in Hyderabad (Figure 6.19). Aside from HT1, the CPI does not vary significantly across classes in Kochi and if anything is slightly higher for slums (HT2) and the

lower middle class (HT3). This is in contrast to Ahmedabad on the one hand where participation increases as one moves up the class hierarchy and Hyderabad on the other where quite the opposite pattern is evident.

Figure 6.17: Citizen Participation Index

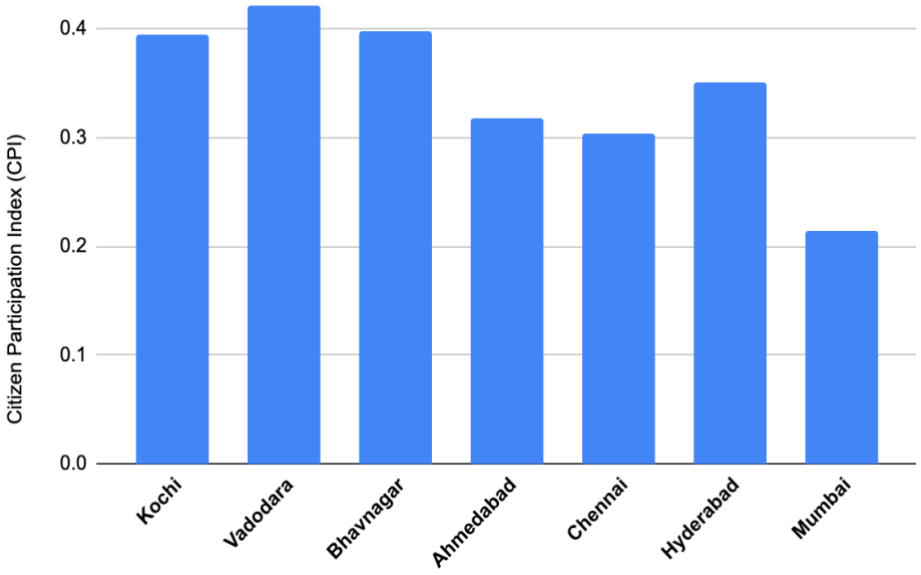


Figure 6.18: Citizen Participation Index (CPI) by Caste

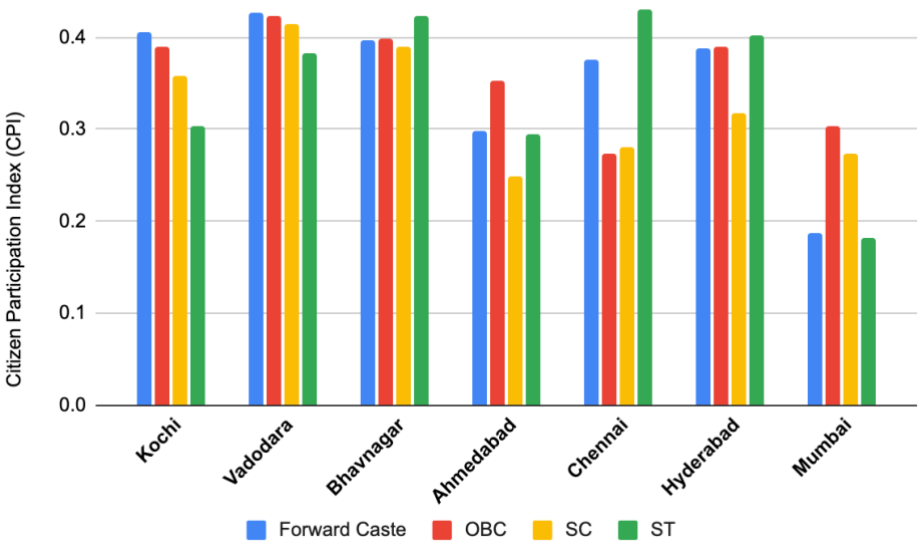


Figure 6.19: Citizen Participation Index by Religion

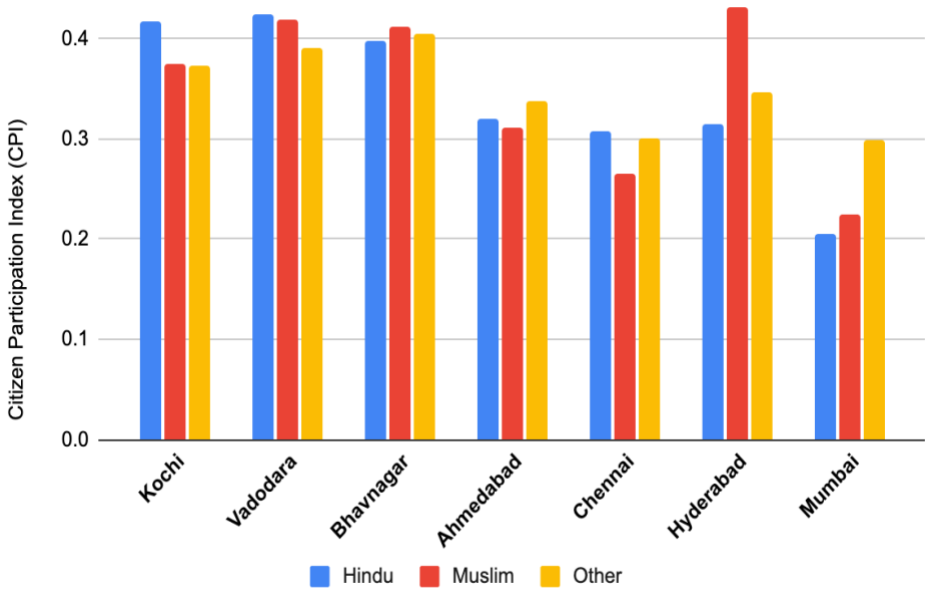
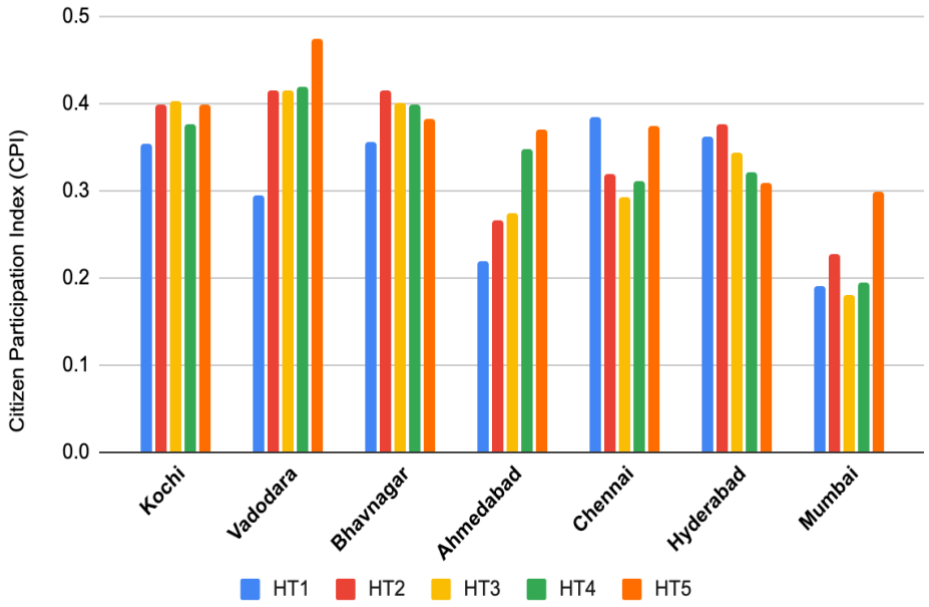


Figure 6.20: Citizen Participation Index (CPI) by Housing Type



6.5 Summary

We can now summarize our findings for citizen participation in Kochi. In terms of electoral participation, respondents are more likely to register to vote than in other cities and have a high

propensity to vote. We however note that in terms of political participation there is a paradox at work here. On the one hand, lower castes and Muslims vote in lower proportions than their counterparts. On the other hand, lower classes and the less educated are also more likely to vote. This paradox may reflect the fact that class and ascriptive identities such as caste and religion are less correlated in Kerala than elsewhere in India. This is reflected for example in the pattern of relatively even distribution of caste and religious communities across housing types reported in Section 4.1.4.

Also, when it comes to non-voting political participation, we find that citizens of Kochi fall somewhere in the middle when compared to all cities in our survey. It is notable however that citizens of Kochi have the highest level of reported party membership. We did not find very significant variation in non-voting political participation across social categories except that SC are slightly more active and that Muslims are slightly less active.

As far as getting involved in civic life is concerned, the citizens of Kochi are about average. We did not find much variance on this measure across social categories, though upper classes are somewhat more active than lower classes and SCs are significantly more active than other castes. But the relatively average overall picture on civic participation comes with a significant qualification. If citizens are not that civically active, they are extremely well represented in civil society, as measured by the extent to which they belong to civic organizations (the highest rate in India) and that they are much more likely to belong to civic or professional rather than identity-based organizations.

Overall, and based in particular on the aggregate CPI, we can say that Kochi citizens are quite active, certainly much more so than in our larger cities, but also just a bit less so than in our smaller cities (Vadodara and Bhavnagar). There are differences across social categories, but these are not very marked and don't move in tandem across the subcomponents of the CPI. If lower classes are more likely to vote, they are also less civically engaged. And if SCs are less likely to vote, they are more civically engaged. The most notable features of citizen participation in Kochi might well be the fact that while direct participation by citizens is about average as measured by the CPI, the level or organization as measured by membership in civil society organizations and political parties is very high.

7. Services

In this section we examine the distribution of basic services in Kerala. These include the quality of 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 (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 neighbourhood. On the index, Kochi scores a 0.904, which is the second highest and only marginally lower than Vadodara's high score of 0.907 (Table 7.1).

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

Kochi	**0.904**
Vadodara	0.907
Bhavnagar	0.880
Ahmedabad	0.855
Chennai	0.743
Hyderabad	0.814
Mumbai	0.715

As can be seen in Figures 7.1-7.3, the distribution of services across social categories, however, varies. The caste picture is along expected lines with services improving as one moves up the caste hierarchy. But the differences are quite minimal and much less pronounced than in any other city. Indeed, SCs have better services in Kochi than in any city other than Vadodara and STs have the best services of any city.[25]

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

Figure 7.1: Basic Service Delivery and Infrastructure Index (BSDII) by Caste

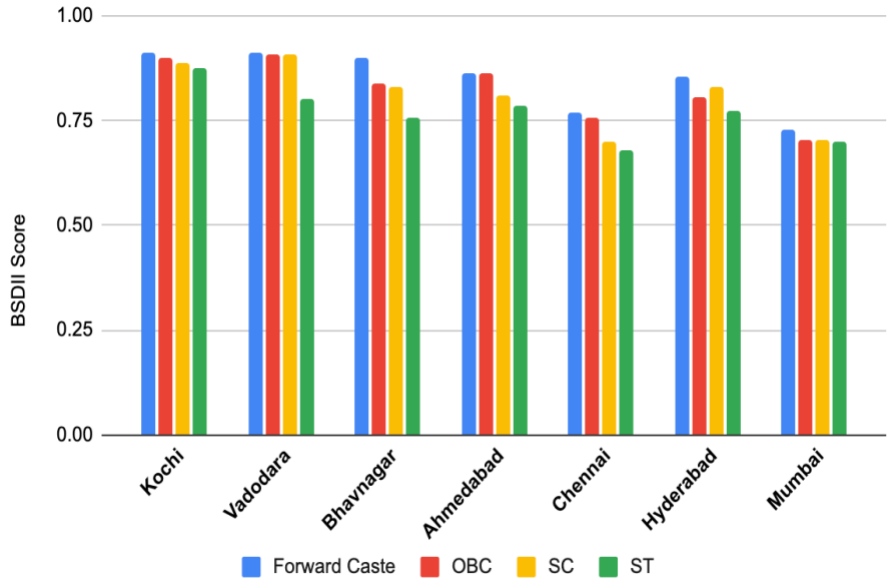


Figure 7.2: Basic Service Delivery and Infrastructure Index (BSDII) by Religion

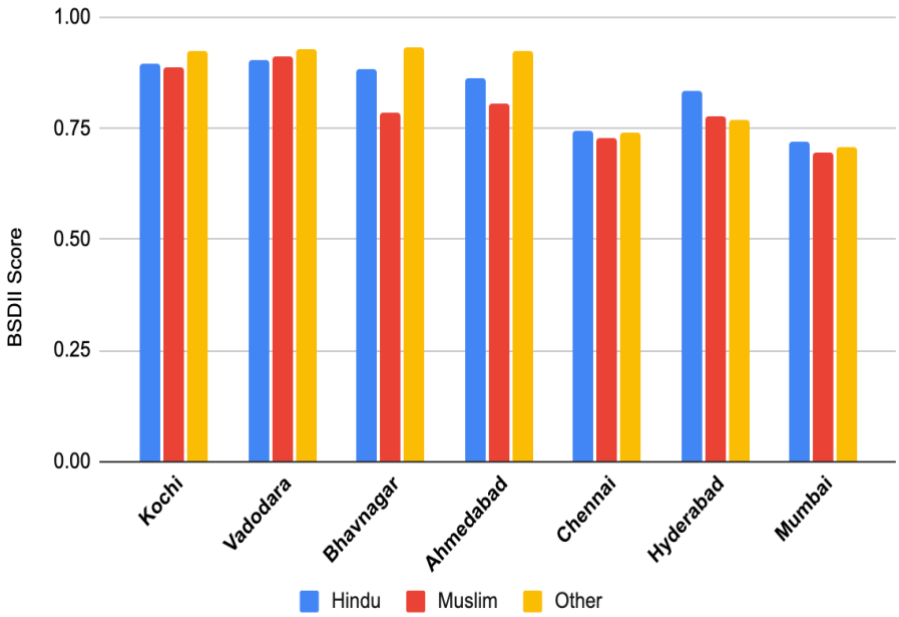
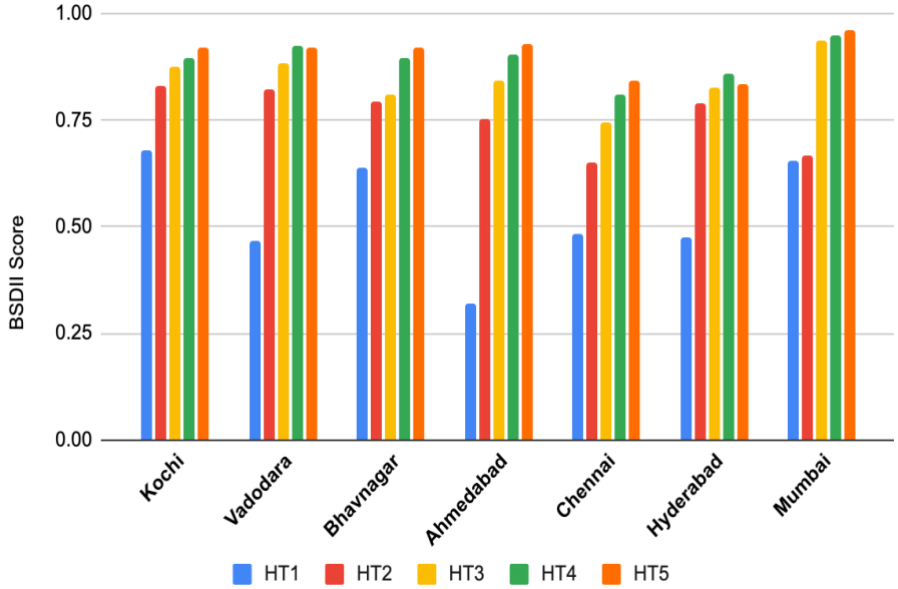


Figure 7.3: Basic Service Delivery and Infrastructure Index (BSDII) by Housing Type



Across all our cities, as is clear from Figure 7.3, the quality of service delivery varies by class. In Kochi, shack dwellers (which we only picked up through the booster sample) are the worst off (0.679). There is then a big improvement as one moves to HT2s (0.832), at which point service quality improves more gradually as one moves up the housing hierarchy. In comparative terms however, the class gradient in Kerala is very low. *The slums of Kochi (HT1 and HT2) have the best services of any city and the gap between HT2 and HT5, at 0.088, is the narrowest of any city.* In all other cities the gradient is much steeper. Across all cities HT1s have significantly lower services and the gap between HT2 and HT5 ranges from 0.1 in Vadodara to almost 0.3 in Mumbai. Since housing types are highly clustered, there is clearly a spatial dynamic at work. In most Indian cities, 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. Kochi comes the closest to defying that logic and is clearly the most inclusionary city in our study.

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. The service gap between Muslims and Hindus in Kochi is very small, and smaller than any other city except Vadodara. Strikingly, Christians have significantly better service levels than Hindus and Muslims (Figure 7.2). This no doubt reflects

the fact that Christians are better off as measured by housing type than either Hindus or Muslims.[26]

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, fragmented and provide highly variable quality of delivery. From our focus groups in informal settlements, we moreover 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 bore wells, 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.

Two thirds of households in Kochi have piped water, 93% of which are inside the premises. Another 27% of households in Kochi get their water from bore wells. Bore wells that function well are an excellent source of water. In the case of Kochi, this is underscored by the fact that it is upper class households (HT5) that have the highest percentage of bore wells (see below).

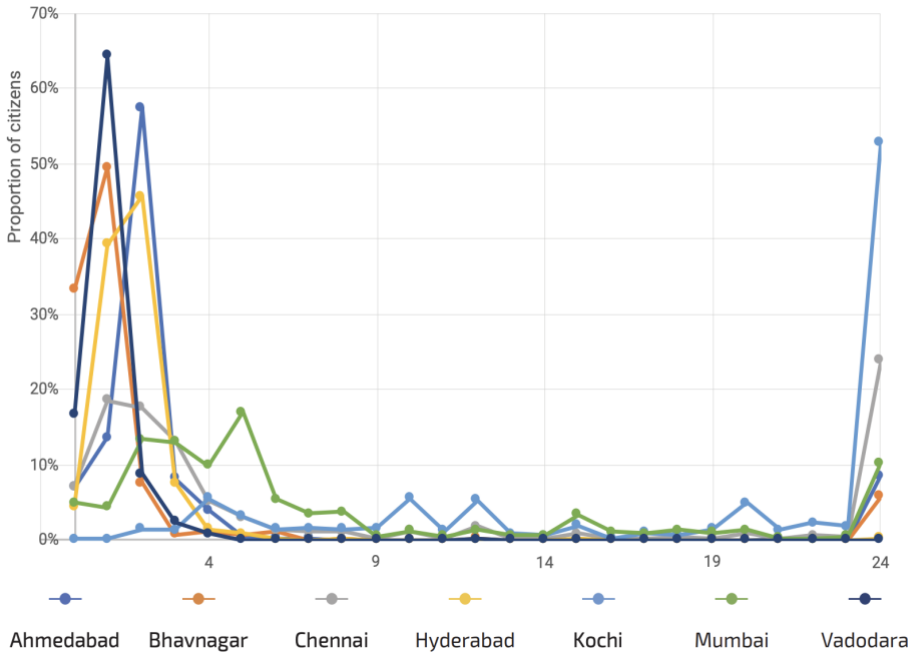
Table 7.2: Main source of water- All cities

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

Judging by the hours of water per day (Figure 7.4), Kochi households have the best water service of all our cities. Thus, only 2% of households have water 2 hours or less in a day, whereas in every other city at least ¼ of all households fall under this very low bar. Indeed, in 4 cities (Hyderabad, Vadodara, Bhavnagar and Ahmedabad) more than ¾ of all households are below this low bar. Over half of all households in Kochi receive water 24 hours a day, the highest figure our study by far.

[26] In the weighted sample, 65% of Christians live in HT5 compared to 60% of Hindus and 56% of Muslims.

Figure 7.4: Hours of Water Supply per Day

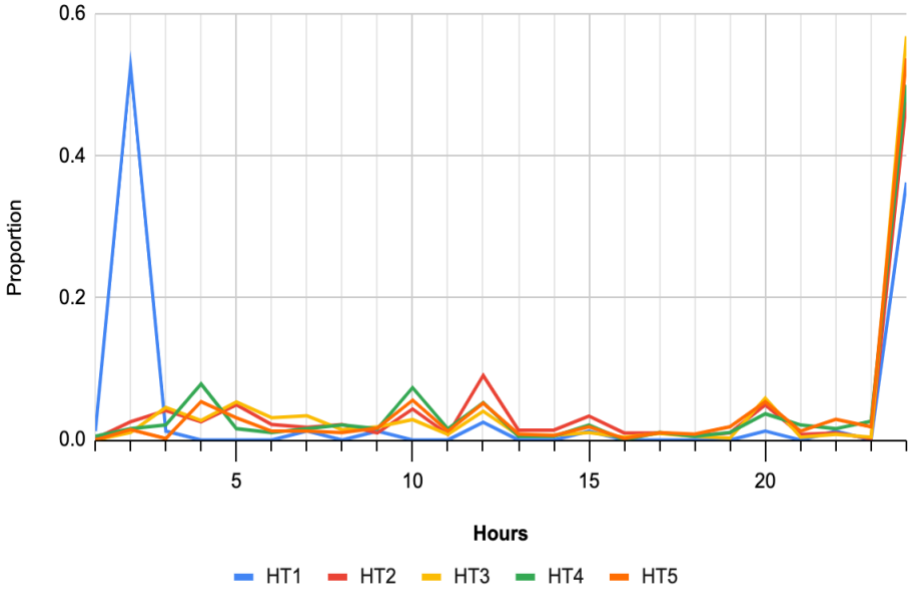


We can now look at how water services are distributed across social categories. The first observation is that 95% of HT1 households in Kochi have tapped water, which is not only higher than any other housing type, but by far the highest for all our cities. There are only 80 HT1 households in our sample (all identified in the booster sample), so we must be cautious, but in all probability the city has simply ensured that this small but highly marginalized population has access to piped water. Across the other housing types there is not much variation with most getting water from pipes and the balance from bore wells. The one class difference is that HT2 and HT3 have much higher percentages of households getting their water from outside the premises than the other HTs.

Table 7.3: Source of Water by Housing Type in Kochi

Source of Water	**HT 1**	**HT 2**	**HT 3**	**HT 4**	**HT 5**
Borewell	0%	22%	24%	25%	28%
Hand pump	12%	3%	0%	0%	0%
Tap (Piped)	95%	70%	64%	68%	67%
Well	0%	4%	5%	6%	2%
Other source	5%	4%	6%	1%	2%
Location of water source					
Inside premises	92%	63%	76%	96%	97%
Outside premises	8%	37%	24%	4%	3%

Figure 7.5: Hours of Water per day by Housing Type in Kochi



For those with limited daily access (which is the vast majority in urban India), 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 one percent of households in Kochi have storage, and of those about 51% have a system that requires minimal labour, namely a large drum (often placed on the roof of the house) with a motorized pump (Table 7.4).

Table 7.4: Water Storage

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

All others depend on manual storage, including 6% who rely on small, movable containers. Having to use buckets for water storage is about as clear and tangible a measure of poverty and precarity as one can imagine. It is notable that the range is from a high of 51% of households in Mumbai to a low of 6% in Kochi.

To summarize, Kochi has a somewhat unusual water profile in that it depends to a significant degree on bore wells. That said, the bore wells appear to be of high quality since they are concentrated in upper class houses (HT5). Overall coverage of inside premises water (piped and borewell) is high at 93%, but what underscores the quality of water delivery in Kochi is the fact that in contrast to all other surveyed cities, almost no households in Kerala have very limited daily availability of water. Kochi households that need storage, moreover, overwhelmingly have high quality storage systems. If the overall quality of the water system is the highest in our cities, a fact attributable in part to the plentiful bulk supply in this high rainfall state, it is important to highlight how inclusive the system is. Thus, the type and quality of supply across all our measures is generally quite even across all social categories especially when compared to other cities.

7.2 Sanitation

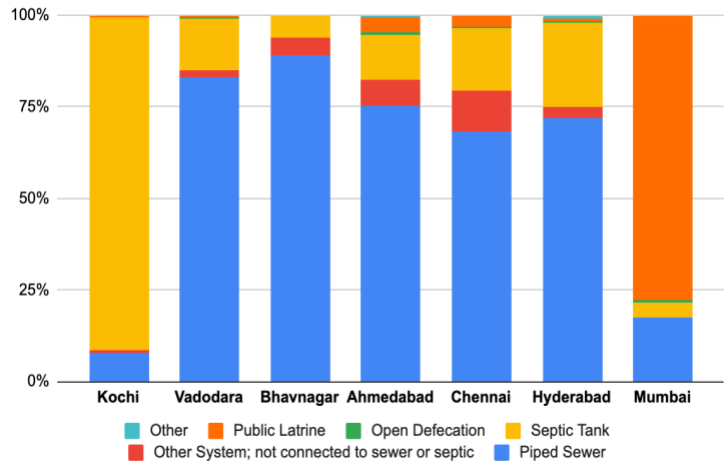
Kochi has a unique sanitation system, relying almost entirely on septic tanks. Indeed, 91% of households have septic tanks with only 8% reporting piped sewage.[27] Less than 1% report having an open sewage system (that is a toilet that is not connected to a sewer or a septic tank) and less than 1% rely on a public toilet. In other words, only 1% of households rely on highly inconvenient or open drainage, which we lump together in the category of "compromised sanitation systems"[28] (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). This in turn means that 99% of citizens in Kochi have "good sanitation" (toilets that are connected to sewage or systems that can be serviced properly), the highest figure in our cities (Figure 7.7).[29]

[27] A 2010 study found that "only 5% of the Cochin Corporation area is connected to an off-site sewerage system. The balance 95% of the city disposes of its waste water (and sludge) through on-site mechanisms, primarily via septic tanks. The bulk of set up, construction and maintenance of septic tanks is currently done privately, with approximately 25 septic tank cleaning agencies throughout the city." (City Sanitation Plan for Kochi, 26)

[28] 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 tank 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.

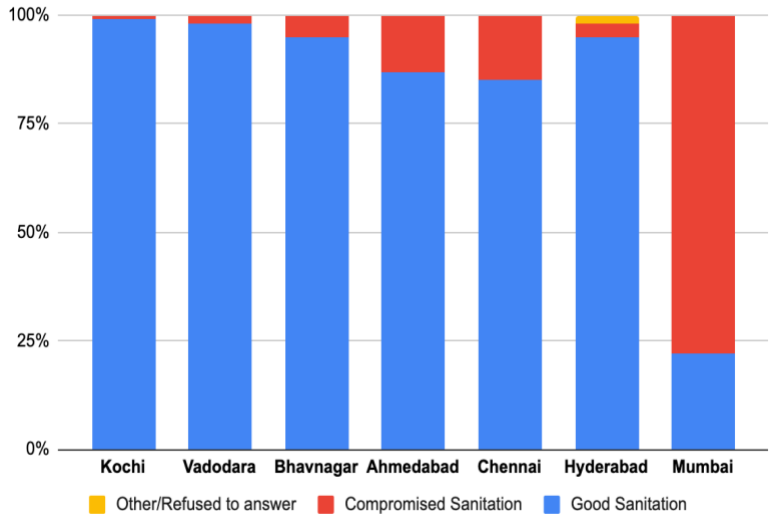
[29] Good Sanitation: (1) Flush/Pour Flush Latrine within premises connected to a Piped Sewer System within premises or (2) connected to Septic Tank or (3) Pit Latrine (Ventilated or Covered); Compromised Sanitation: (1)

Figure 7.6: Household toilet facility in sampled cities



When we break down these figures on good sanitation by class we find that shacks (HT1) in Kochi fall significantly short of universal coverage with 41% of households having compromised sanitation and that 11% of slum households (HT2) also fall into this category. That said, HT1s are much better off in Kochi in terms of sanitation than any other city - by a very dramatic margin - and HT2s are better off than in any city except Vadodara (6%) and Hyderabad (7%).

Figure 7.7: Quality of Sanitation by City



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

Table 7.5: Quality of sanitation in Sample Cities by Housing Type (lowest 3 HTs only)

City	Housing Type	Good Sanitation	Compromised Sanitation	DK/RTA
Kochi	HT 1	59%	41%	0%
Kochi	HT 2	89%	11%	0%
Kochi	HT 3	99%	1%	0%
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%
Mumbai	HT 1	1%	98%	1%
Mumbai	HT 2	5%	94%	0%
Mumbai	HT 3	99%	1%	0%

Table 7.6: Sanitation by Caste - Kochi

Caste Group	Good Sanitation	Compromised Sanitation
Forward	98%	2%
OBC	99%	1%
SC	93%	7%
ST	98%	2%
Other	99%	1%

To determine the difference between Forward castes and Dalits in terms of sanitation quality, we report the percentage difference in good sanitation (that is not compromised). As summarized in Table 7.7 we found the difference in some cities to be as high at 15.5% (Chennai) but found that in Kochi it is quite low at 3.3%. We found no difference between Hindus and Muslims in Kochi.

Table 7.7: Difference between Forward Castes and Dalits in sanitation quality (percentage points)

City	Difference
Kochi	3%
Vadodara	12%
Bhavnagar	3%
Ahmedabad	12%
Chennai	16%
Hyderabad	3%
Mumbai	15%

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. This problem is especially acute in Kerala which has two monsoons and is often afflicted by heavy rains that cause significant damage. Despite this, only 12% of households in Kochi report that the road in front of their household gets waterlogged during monsoon, the lowest by far of any city, including the arid cities of Gujarat. Similarly, only 20% of Kochi households report that their homes experience flooding - with 18% saying “sometimes” and 2% saying “always” - during Monsoon, a figure that is just a bit higher than Vadodara (14%) and Bhavnagar (15%) but much better than all other cities.

Table 7.8: Sanitation by Religion

City Name	Religion	Good Sanitation	Compromised Sanitation	Other/DK/Refused
Kochi	Hindu	99%	1%	-
Kochi	Muslim	99%	1%	-
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%
Mumbai	Hindu	24%	76%	1%
Mumbai	Muslim	14%	85%	0%

Table 7.9: Flooding during Monsoon - Road and Ground floor in Kochi

Floods during monsoon		HT 1	HT 2	HT 3	HT 4	HT 5
Road	Yes	89%	33%	18%	17%	8%
Road	No	11%	66%	82%	14%	92%
Ground Floor	Yes	91%	48%	28%	25%	13%
Ground Floor	Never	8%	52%	72%	75%	87%

Looking at Table 7.9, it is clear that flooding is the one category in which the service quality of life in our study is unevenly distributed across housing types in Kochi. Thus, shacks are much more likely to experience ground floor flooding and flooding of roads than other housing types. The shack population in Kochi is very small (only 80 households in our sample), but even informal slums (HT2) are much more likely to experience road flooding than HT3 and indeed the problem of flooding diminishes significantly and in linear fashion as one moves up to HT4 and HT5. We obtain essentially the same results with our question about ground floor flooding.

When we compare these numbers to other cities, we find that the road flooding situation for informal shack settlements (HT1) in Kochi is worse than other cities, but that all the other housing types do better in Kochi than in any other city.

Figure 7.8: Flooding of roads in all cities by Housing type

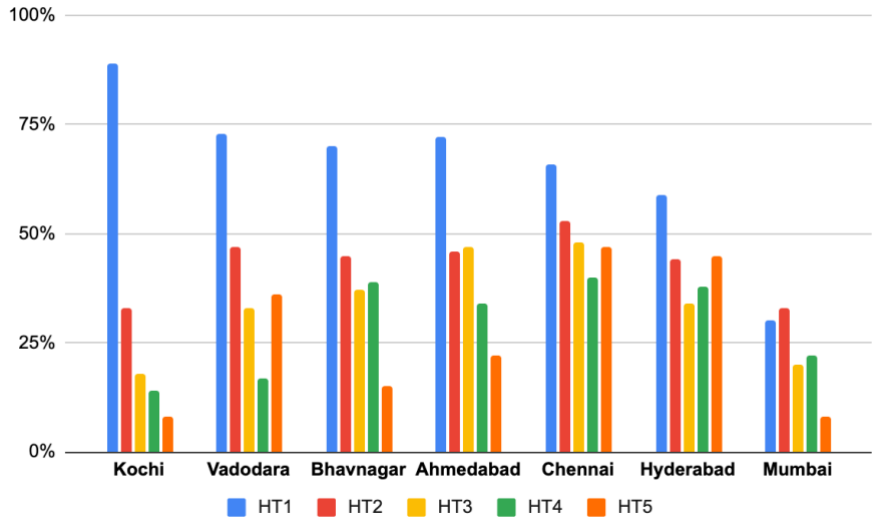
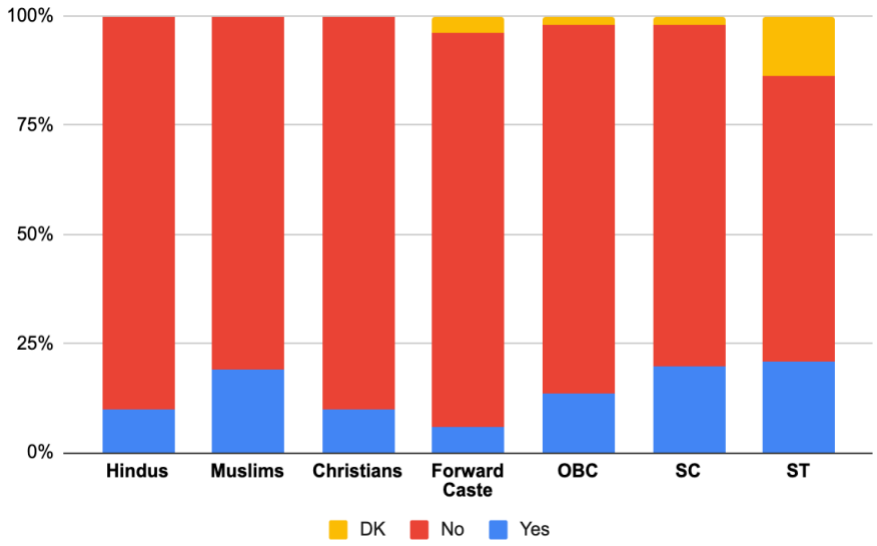
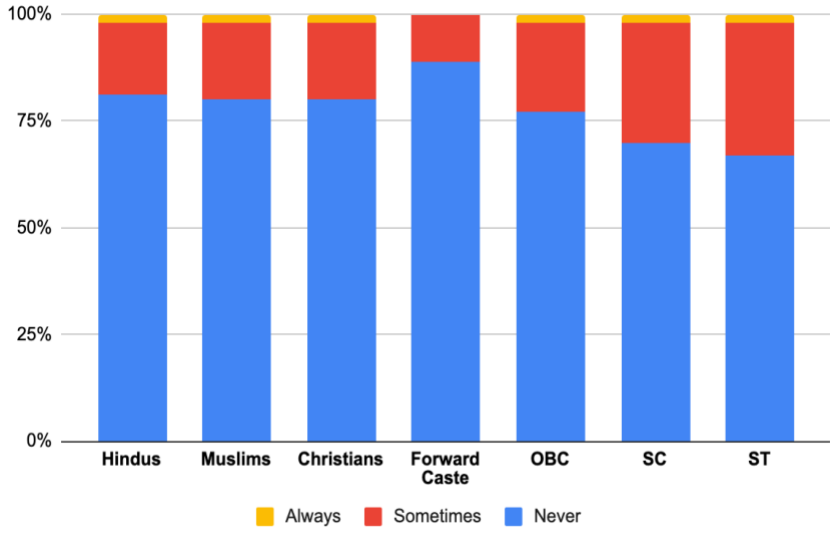


Figure 7.9: Does the road in front of your house get water-logged during monsoon? (Kochi)



In Kochi, across most caste groups, a negligible number of households reported the ground floor of their house ‘always’ gets flooded during monsoon. ST and SC households did however report a greater likelihood of “sometimes” experiencing ground floor flooding (31% and 28% respectively) than OBC (21%) and forward castes (11%). There was no significant difference across religious communities.

Figure 7.10: Does the road in front of your house get water-logged during monsoon? (Kochi)



7.3 Summary

To summarize the quality of service delivery in Kochi, we highlight two major points. First, as indicated by our BSDII measure, Kochi, along with Vadodara, has the highest overall score in our cities. When we break this down we find that in terms of water and sanitation overall coverage and quality is excellent, probably the best in any of our cities. Given the heavy rains Kerala experiences, the city also does a comparatively good job of minimizing flooding. Second, what is even more remarkable and really makes Kochi exceptional in our study, is that services are distributed on a very inclusive basis with only minor differences across classes (housing types), castes and religions. The one exception here is with respect to flooding, where lower classes, lower castes and Muslims are more exposed.

8. Mechanisms of Social Inequality

We know that there is a lot of inequality in Indian cities, including pronounced patterns of spatial exclusion[30]. As we have seen in the previous section, the level of services that households get varies across social categories in all Indian cities, though the pattern is much less pronounced in

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

Kochi. So far, we have only shown that there are correlations: if you live in an HT1 or HT2 settlement, you are less likely to get quality services or that if you are Dalit you are less likely to get quality sanitation. In this section, we are interested in exploring mechanisms that might explain these outcomes. Inequality does not just happen. It is created through specific practices through which groups hoard resources or through which other groups are excluded from accessing resources. We specifically look at discrimination between groups and by state actors, 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 and 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 (Table 8.1). It is clear that the group perceived to get the most preferential treatment in our question about the police are the rich. In a number of cities as many as ⅓ of households report that the rich get better treatment. Upper caste persons are also perceived to get better treatment from the police, though not by as much as the rich (Mumbai is a significant outlier with 33% saying an upper caste person would be treated better). Finally, we find that Hindus are perceived to get better treatment as do those who speak the local language, but not by as wide a margin as for class or caste. What is really striking however are the findings for Kochi. Eight percent did say the rich are treated better, but that is much lower than in any other city. Across religion and caste, households in Kochi do not report any difference in treatment and for language only a negligible percentage (3) report better treatment of local language speakers.

When we pose the question of discrimination more broadly and ask citizens of Kochi if there was discrimination against class, religion, caste, language and gender *at the neighbourhood level* we got very similar findings. As can be seen from Figure 8.1, the proportion of those who said there was neighbourhood level discrimination was mostly insignificant, with the highest being 3% reporting discrimination on the basis of caste. The contrast with other cities, where discrimination on the basis of caste, religion, income and language is clearly present, is striking.

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

Options	Kochi	Vadodara	Bhavnagar	Ahmedabad	Chennai	Hyderabad	Mumbai
Rich Treated Better	8%	25%	29%	23%	38%	10%	35%
Poor treated better	1%	1%	0%	2%	4%	1%	2%
Both treated the same (Rich and Poor)	87%	71%	63%	60%	49%	86%	57%
Upper caste person treated better	2%	17%	17%	16%	24%	5%	33%
Dalit treated better	1%	1%	1%	2%	2%	1%	2%
Both treated the same (Upper caste and Dalit)	93%	77%	73%	66%	64%	91%	59%
Hindu treated better	0%	10%	10%	6%	10%	3%	23%
Non-Hindu treated better	0%	1%	1%	1%	2%	1%	2%
Both treated the same (Hindu and Non-Hindu)	95%	82%	82%	76%	77%	93%	69%
Man Treated better	0%	8%	5%	3%	5%	2%	14%
Woman treated better	8%	12%	18%	6%	10%	5%	24%
Both treated the same (Man and Women)	89%	75%	71%	75%	75%	91%	56%
Person who speaks local language Treated better	3%	14%	17%	10%	13%	6%	36%
Person who does not speak the local language treated better	0%	3%	3%	2%	4%	1%	2%
Both treated the same (one who speaks local language and the one who does not)	93%	75%	71%	72%	73%	90%	56%

When we asked the same question but asked citizens to reflect on this at the *city*, rather than the *neighbourhood*, level (Figure 8.2), the extent of reported discrimination along some categories rose very slightly for all cities except Kochi where only 1% reported discrimination across all categories.

Figure 8.1: Respondents Reporting Neighbourhood-level Discrimination by Type

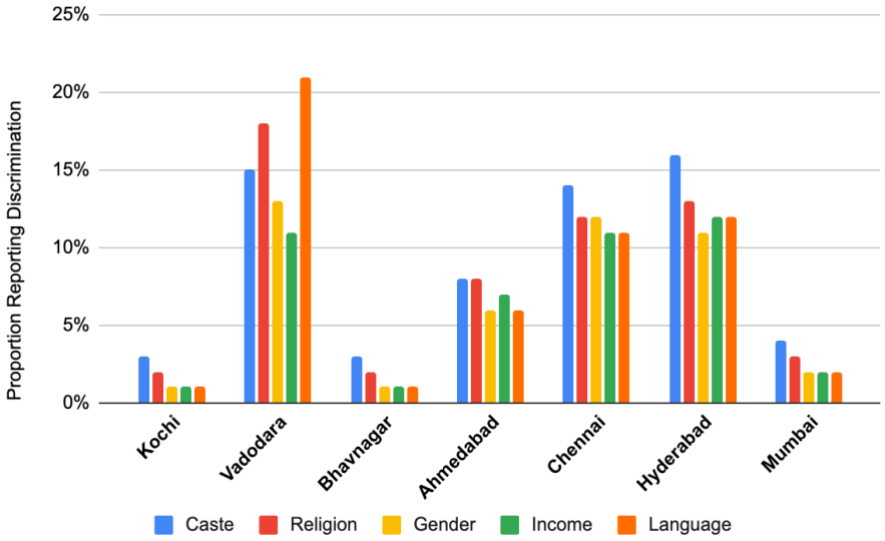
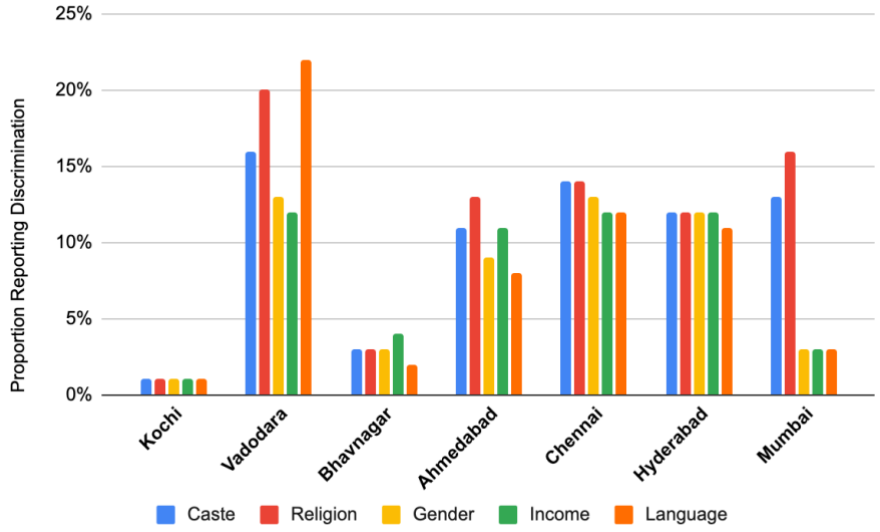


Figure 8.2: Respondents Reporting City-level Discrimination by Type



8.2 Social ties

To what degree are social categories simply being reproduced by 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)?[31] It is generally assumed that cities nurture a plurality of associational ties, giving individual opportunities to engage with and develop social ties to those beyond their immediate identity group. We tried to gauge these questions by asking our respondents about their social ties, 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, Kochi is comparatively pluralistic both in terms of caste but less so in terms of religion. A solid majority of respondents (55%) of respondents report having one or more close friends from a different caste (Table 8.2). There is no other city where a majority have friends outside their caste and in three cities (Vadodara, Ahmedabad and Hyderabab) the number fall below ⅓ of residents. With respect to religion, 41% in Kochi report that they have at least one friend outside their religion (Table 8.3). This is surpassed only by Vadodara with 42% and Bhavnagar with 58% having friends outside their religious community.

On these questions of social ties, it is important to note that a significant percentage of respondents reported either not knowing the answer or being unwilling to respond, the only question in our survey which had such a high non-response rate. Respondents in Kochi were much more likely to answer the question suggesting a greater openness about questions of caste and religious ties. When we break down these findings by class, we find some interesting variation across classes in Kochi. Those in HT1s are the most likely to have friends from different castes and it is HT4s and HT5s that individuals are the least likely to have friends outside their caste. Even more striking is the fact that SCs and STs are not only overwhelmingly likely to have friends outside their caste, but also at a level that is roughly double of OBCs and forward castes. To the extent that there are elites in Kochi - and it is important to bear in mind that 60% of households are HT5 - they are clearly more insular when it comes to caste.

Table 8.2: How many of your friends are from a different caste?

CITY Name	0	1	2	3	4	5
Kochi	35%	24%	20%	6%	2%	2%
Vadodara	57%	23%	8%	1%	0%	0%
Bhavnagar	47%	29%	12%	2%	0%	0%
Ahmedabad	67%	14%	8%	2%	0%	0%
Chennai	25%	21%	21%	4%	0%	0%
Hyderabad	43%	5%	11%	4%	0%	0%
Mumbai	35%	10%	9%	8%	1%	3%

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

Table 8.3: How many of your friends are from a different religion?

City	0	1	2	3	4	5
Kochi	44%	22%	12%	3%	2%	2%
Vadodara	57%	29%	10%	3%	0%	0%
Bhavnagar	31%	21%	29%	7%	1%	0%
Ahmedabad	64%	13%	10%	4%	1%	0%
Chennai	20%	14%	15%	2%	0%	0%
Hyderabad	41%	6%	11%	4%	0%	0%
Mumbai	39%	7%	7%	4%	1%	1%

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

	0	1	2	3	4	5
HT1	61%	36%	1%	0%	0%	0%
HT2	47%	21%	13%	7%	0%	0%
HT3	50%	21%	8%	3%	1%	2%
HT4	44%	19%	16%	4%	2%	2%
HT5	43%	23%	12%	2%	2%	1%
Forward Caste	44%	20%	8%	4%	3%	2%
OBC	48%	23%	13%	3%	0%	1%
SC	20%	28%	23%	3%	2%	3%
ST	11%	43%	30%	9%	0%	2%

In Kochi, the range for residents having a friend outside of their own religion varies from a high of 60% for HT1 to a low of 53% for HT2. Overall, there is no clear pattern across classes. Religions however produce an interesting pattern. Judging by the number of respondents that have no friends outside their religion, Muslims are the most likely to be insular – that is, only socialise within their own community (51%). At only 28%, Christians are the least likely to be insular.

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

	0	1	2	3	4	5
HT1	40%	41%	18%	1%	0%	0%
HT2	38%	22%	21%	9%	1%	0%
HT3	37%	24%	18%	4%	2%	3%
HT4	37%	20%	20%	6%	4%	4%
HT5	34%	24%	20%	5%	4%	2%
Hindu	34%	23%	21%	7%	3%	2%
Muslim	51%	25%	10%	2%	3%	2%
Christian	28%	22%	24%	5%	4%	3%

If this data on social ties outside of one's caste and community show that Kochi is generally quite pluralistic, albeit more so on caste than religion, it is just as clear that extensive weak ties do not translate into exogamous patterns of marriage. Indeed, the willingness to marry outside of caste or religion in Kochi remains very low and in fact quite rare. Thus only 3% report a marriage in the family outside of caste and only 1% outside of religion. This is more or less the picture for all our cities, with Chennai as the notable exception.

Table 8.6: Within your family has anyone married outside caste/Religion?

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

8.3 Summary

To summarise this section, we find that overall levels of reported discrimination in Kochi are very low, especially when compared to other cities. This perception of an inclusive city is mirrored, and indeed probably reflects, the fact the citizens of Kochi have highly pluralistic social ties. This is more so for cross-caste than cross-religious ties, but in either case is much more common than in other cities. It is also quite striking that lower castes and lower classes are much more likely to have social ties outside their own caste communities. However, if friendships can cut across social identities, family cannot. As is true throughout our cities, when it comes to marriage, marrying both outside of caste or religion is a rarity.

9. Conclusion

Compared to the other cities researched in this sample of 7 cities from our project, Kochi is among the best governed, at least in terms of service delivery and how its citizens evaluate their local government. The overall level of service delivery is, along with Vadodara, the highest of any city reported here as well as in the larger sample of 14 cities (See 14 cities report). Most notably, Kochi has the best overall level of water delivery. But what sets Kochi aside from all other cities is just how inclusive service delivery is. Aside from the problem of flooding, we found only very minor differences across housing types, castes and religious communities and that the level of deprivation for shack dwellers (which we could only identify in Kochi through a booster sample) is very low. In part, the socially inclusive nature of service delivery reflects the low levels of

segregation that we found. In contrast to most other cities where there are distinct patterns of lower castes and Muslims being disproportionately present in slums, Kochi is much more integrated, especially with respect to religious communities. SCs and STs may be more likely to live in lower housing, but the pattern is not very pronounced. More than anything, this simply reflects the fact that the overall slum population is very low at 1.4%.

However, the significance of our findings on service delivery for how we assess urban governance in Kerala must be qualified. Our data does not directly speak to this, but the existing literature, including assessments by the Kerala State Planning Board (2017), underscore that urban governance in Kerala remains very top down and fragmented, with most basic service functions provided by state-level departments and with little effective planning. If service delivery is relatively good despite weak local institutions of governance, the answer is perhaps found in the citizen-side of the equation.

The citizens of Kochi engage with their local councillors more than in any other city and have a very high opinion of the work their councillors do. Unlike in other cities, very few households in Kochi rely on intermediaries when they have service delivery problems. The citizens in Kochi are politically active, especially when it comes to voting. This reflects a larger pattern in which our small cities have significantly higher levels of voting than the larger cities. Political engagement outside of elections in Kochi is about average, but it is notable that Kochi has the highest level of party membership of any city. The level of civic engagement was also quite average, though significantly lower than the other small cities (Bhavnagar and Vadodara). But the citizens of Kochi do have the highest level of belonging to associations, and are much more likely to belong to professional or civic associations than to identity-based associations. This is also reflected in our measures of political and social attitudes, which are much more liberal in Kochi than any other city. The density of civil society and the strength of secular values no doubt reflects Kerala's long history of anti-caste and rights-based social movements. When it comes to citizen participation, we did not find any significant variances across social categories.

The inclusiveness of Kochi is also captured in our various measures of the mechanisms of social inequality. We found that Kochi's citizens do not perceive any significant discrimination and that they are much more likely to have friends outside of their own caste or religious group than in any other city.

References

Baiocchi, G., P. Heller, and M. Silva. 2011. Bootstrapping Democracy: Transforming Local Governance and Civil Society in Brazil. Stanford: Stanford University Press.

Bharathi, Naveen, Deepak V. Malghan, and Andaleeb Rahman. "Isolated by Caste: Neighbourhood-scale Residential Segregation in Indian Metros." IIM Bangalore Research Paper 572 (2018)

Bertorelli, Ebony, Patrick Heller, Siddharth Swaminathan, and Ashutosh Varshney. 2017. "Does Citizenship Abate Class? Evidence and Reflections from a South Indian City." *Economic and Political Weekly* 52(32): 47.

Bhan, Gautam, and Arindam Jana. 2013. "Of Slums or Poverty: Notes of Caution from Census 2011." *Economic and Political Weekly 48(*18): 13–16.

Bharathi, N., Malghan, D., & Rahmaan, A. (2019). "Neighbourhood-scale Residential Segregation in Indian Metros", Economic and Political Weekly,. *Economic and Political Weekly, 54*(30), 64-70.

Centre for Public Policy Research. CPPR survey, https://www.cppr.in/reports-and-papers/cppr-kerala-assembly-election-2021-post-poll-survey-result

Census of India. 2011. *Primary Census Abstract for Slum.* New Delhi: Office of the Registrar General & Census Commissioner.

City Sanitation Plan for Kochi. (2010). German Agency for Technical Cooperation.

Chatterjee, Partha. 2011. "Politics of the Governed." *Multitudes* (2): 174–82.

Esping-Andersen, Gøsta. 1990. *The Three Worlds of Welfare Capitalism*. Princeton, N.J.: Princeton University Press.

Fox, Jonathan. 1994. "The Difficult Transition from Clientelism to Citizenship: Lessons from Mexico." *World Politics 46*(2): 151–84.

Granovetter, Mark. 1973. "The Strength of Weak Ties." *American Journal of Sociology 78*(6): 1360-1380.

Heller, Patrick, Swaminathan, Siddharth and Ashutosh Varshney. (2023) “The Rich Have Peers, The Poor Have Patrons: Engaging the State in a South Indian City” American Journal of Sociology. 129(1): 76-122.

Heller, Patrick. 2000. “Degrees of Democracy: Some Comparative Lessons from India.” *World Politics 52*(4): 484–519. 2012.

Heller, Patrick. 2012. “Democracy, Participatory Politics and Development: Some Comparative Lessons from Brazil, India and South Africa.” Polity 44(4): 643–65.

Heller, Patrick, and Partha Mukhopadhyay. 2015. “State-Produced Inequality in an Indian City.” New Delhi: Centre for Policy Research.

Jacob, Babu, and Suraj Jacob. 2021. *Governing Locally: Institutions, Policies and Implementation in Indian Cities*, New Delhi: Cambridge University Press.

Kerala State Planning Board. 2022. Thirteen Five-year Plan (2017-2022). Working Group on Urban Issues.

Kolenikov, Stansilav. 2014. “Calibrating Survey Data Using Iterative Proportional Fitting (Raking).” *The Stata Journal 14*(1): 22-59.

Kruks-Wisner, Gabrielle. 2018. *Claiming the State: Active Citizenship and Social Welfare in Rural India*. New York: Cambridge University Press.

Mathew, Deepthi Mary and D. Dhanuraj. (2017). “Defending Decentralisation in Kerala: Probing the Autonomy of Kerala’s Urban Local Bodies.” Kochi: Centre for Public Policy Research. Pp. 1-22

Mahajan, Gurpreet. 1999. “Civil Society and Its Avatars: What Happened to Freedom and Democracy?” *Economic and Political Weekly 34*(20): 1188–96.

Marshall, T. H. [1950] 1992. *Citizenship and Social Class*. ed. T. B. Bottomore. London: Pluto Press.

O'Donnell, Guillermo. (1993). “On the State, Democratization and Some Conceptual Problems: A Latin American View with Glances at Some Postcommunist Countries. *World*

Development 21(8): 1355-1369.

Putnam, Robert D., and Robert Leonardi. 1993. *Making Democracy Work: Civic Traditions in Modern Italy.* Princeton: Princeton University Press.

Rueschemeyer, Dietrich. 1992. *Capitalist Development and Democracy.* eds. Evelyne Huber Stephens and John D. Stephens. Chicago: University of Chicago Press.

Schattschneider, E. E. 1960. *The Semisovereign People: A Realist's View of Democracy in America*. New York: Holt, Rinehart and Winston.

Singh, Gayatri, Trina Vithayathil, and Kanhu Charan Pradhan. 2019. "Recasting Inequality: Residential Segregation by Caste over Time in Urban India." *Environment and Urbanization 31*(2): 615–34.

Sriraman, T. (2018). In pursuit of proof: A history of identification documents in India. Oxford University Press.

Solon, Gary, Haider, Steven, and Jeffrey Wooldridge. 2015. "What Are We Weighting For?" *Journal of Human Resources 50*(2): 301-316.

Somers, Margaret R. 1993. "Citizenship and the Place of the Public Sphere: Law, Community, and Political Culture in the Transition to Democracy." *American Sociological Review 58*(5): 587–620.

———. 2015. "Asian Democracy Through an Indian Prism." *Journal of Asian Studies 74*(4): 917-926.

Thorat, S., A. Banerjee, V. Mishra, V. and F. Rizvi. 2015. "Urban Rental Housing Market: Caste and Religion Matters in Access." Economic and Political Weekly 50(26): 47-53.

Vithayathil, T. and G. Singh. 2012. "Spaces of Discrimination". *Economic and Political Weekly 47*(37): 60-66.

World Health Organization. 2017. *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).