Negotiating Informality:
Essays on Policy Needs and Political Problem-Solving in Indian Slums

by

Emily Rains

Public Policy
Political Science
Duke University

Date:________________________

Approved:

____

Anirudh Krishna, Advisor

____

Erik Wibbels

____

Adam Auerbach

____

Carolyn Barnes

____

Christopher Johnston

____

Diana Mitlin

Dissertation submitted in partial fulfillment of
the requirements for the degree of Doctor
of Philosophy in Public Policy and
Political Science in the Graduate School
of Duke University

2021

ABSTRACT

Negotiating Informality:
Essays on Policy Needs and Political Problem-Solving in Indian Slums

by

Emily Rains

Public Policy; Political Science
Duke University

Date:________________________
Approved:

____
Anirudh Krishna, Advisor

____
Erik Wibbels

____
Adam Auerbach

____
Carolyn Barnes

____
Christopher Johnston

____
Diana Mitlin

An abstract of a dissertation submitted in partial
fulfillment of the requirements for the degree
of Doctor of Philosophy in
Public Policy and
Political Science in the Graduate School of
Duke University

2021

Copyright by
Emily Rains
2021

Abstract

The world's urban population is projected to increase by more than two billion people over the next three decades, with nearly all of this growth expected in resource-poor cities in the Global South. These demographic trends will substantially challenge governments' ability to provide basic services in cities where the majority of residents already lack access to necessities like water, sanitation, and durable shelter. Ensuring the urban poor can access shelter and basic services will increasingly pose formidable obstacles to sustainable development.

Most urban population growth is expected to accrue to "slums" — neighborhoods that lack access to secure property rights and basic services. Existing evidence suggests that, to mitigate vulnerabilities associated with poverty and informality, slum residents draw on a set of informal political strategies to negotiate with the state for material improvements. Yet, residents of different slums vary considerably in how they engage politically, and it is crucial to understand differences in political behavior within and across slums in order to understand distributive outcomes in the Global South's cities.

This dissertation seeks to advance an understanding of the antecedents of political behavior in Indian slums. In three complementary essays, I develop and test hypotheses to explain differences in problem-solving behavior across settlements. To test the expectations delineated in each chapter, I draw on original surveys of more than 9,000 slum households from three cities. These neighborhoods span a wide range of conditions, allowing me to speak to the substantial variation within and across neighborhoods; moreover, these data

providing some of the most comprehensive evidence on Indian slums currently available to researchers.

In the first essay, I draw on qualitative interviews to propose a framework linking neighborhood characteristics to collective and individual-level mobilization patterns. I empirically test my expectations with the original survey data. I find support for my expectations that collective mobilization is concave (first increases and then decreases) with the neighborhood's level of access to government resources and that collective mobilization simultaneously increases with the strength of the informal networks present in a neighborhood. In the second essay, I propose a framework to explain differences in problem-solving strategies by gender. I argue the gender gap in participation varies by type of activity, and that women's participation in the informal economy can reduce this gender gap for certain types of activities. I draw on qualitative interviews to bolster the framework and support for the mechanisms and empirically test my expectations with household survey data. In the third essay, coauthored with Jeremy Spater, we argue the structure (rather than the level) of local economic inequality affects collective mobilization potential in Indian slums. The empirical evidence presented from the household survey data is consistent with our expectations.

The frameworks and evidence presented in each essay help advance an understanding of the range of living conditions within and across slums as well as how people organize to solve everyday problems in these neighborhoods. These findings help fill gaps in evidence, which is needed to inform appropriately nuanced policies aimed at improving the quality of life for those living in slums.

Contents

Abstract .... **iv**

List of Tables .... **x**

List of Figures .... **xii**

Introduction **1**

Chapter 1: Negotiating Informality 8

Chapter 2: Women and (Informal) Work 9

Chapter 3: A Local View of Between-Group Inequality 10

Limitations 10

Methods 11

Generalizability 13

Alternate explanations 14

Chapter 1. Negotiating Informality, Negotiating Citizenship: ***How Neighborhood Characteristics Shape Political Behavior in Indian Slums*** **16**

1.1 Introduction 17

1.2 Background 23

1.3 Framework 33

1.3.1 Political beliefs 36

1.3.2 Political recruitment 42

1.3.3 Policy priorities 43

1.3.4 Theoretical expectations 44

1.4 Qualitative examples 46

1.4.1 Bhupatipur 46

1.4.2 Yarab Nagar 50

1.5 Empirical setting 55

1.6 Quantitative data and methods 59

1.7 Empirical measures and analysis 61

1.7.1 Neighborhood formality 61

1.7.2 Strength of informal political networks 63

1.7.3 Outcome variables and methods 65

1.8 Results 70

1.8.1 Mechanisms 77

1.9 Discussion 84

1.10 Conclusion 85

Chapter 2. Women and (Informal) Work: *Gender, Informal Labor, and the Civic Participation Gap in Urban Slums* 87

2.1 Introduction 88

2.2 Gender, civic engagement, and informality 91

2.3 Empirical setting 98

2.4 Framework 99

2.4.1 Vote banking activities 100

2.4.2 (Sub)group claim making activities 102

2.4.3 Area leadership 103

2.4.4 Labor force participation 104

2.5 Empirical data and analysis 110

2.5.1 Analyses 111

2.6 Results 113

2.6.1 Labor force characteristics 114

2.6.2 Types of civic engagement 118

2.6.3 Labor force participation and civic engagement 122

2.6.4 Mechanisms 124

2.7 Alternate explanations 133

2.7.1 Selection 133

2.7.2 Reverse causality 135

2.8 Discussion and conclusion 135

Chapter 3. Toward a Local View of Between-Group Inequality: *Implications for Political Mobilization Across Urban Slums* 140

3.1 Introduction 141

3.2 Ethnicity, Inequality, and Political Coordination: Toward a Local View 144

3.3 Empirical Setting 149

3.4 Data, Measures, and Empirical Implications 151

3.5 Results 157

3.6 Mechanisms 163

3.7 Alternate Explanations 169

3.7.1 Preferences 170

3.7.2 Technology 171

3.7.3 Reverse causality 172

3.8 Discussion 174

3.9 Conclusion ... 176
Conclusion ... 179
Appendix A ... 183
A1. Qualitative interviews ... 183
A1.1 Case selection ... 183
A1.2 Recruitment ... 184
A1.3 Leader recruitment ... 184
A1.4 Household recruitment ... 184
A1.5 Interviews ... 185
Appendix B ... 197
Appendix C ... 199
References ... 202
Biography ... 224

List of Tables

Table 1.1: Indicators used in measure of formality 62

Table 1.2: Indicators used in measure of informal network strength 64

Table 1.3: Outcome variables and expected relationships 68

Table 1.4: Collective behavior output 70

Table 2.1: Occupational type for men and women in the paid labor force 116

Table 2.2: Differences in other explanatory factors by gender 120

Table 2.3: Results of hierarchical logistic regressions on participation strategies 120

Table 2.4: Output including information on labor force participation 122

Table 2.5: External claims by location of women's employment 125

Table 2.6: Model output for number of ties 128

Table 2.7: Political interest and higher status occupations 130

Table 2.8: Key informant characteristics by gender 132

Table 3.1: Caste composition by state 151

Table 3.2: Model output (perceptions of vote bank effectiveness) 160

Table 3.3: Model output (perceptions of neighbor cooperation) 162

Table 3.4: Model output (importance of jati for shaping opportunities) 164

Table 3.5: Model output on conflict frequency and resolution 166

Table 3.6: The relationship between caste and individual public goods provision, comparing high- to low-BGI neighborhoods 174

Table A1: Distribution of employment in Indian slums 188

Table A2: Output for model of direct claims 192

Table A3: Output for models of collective efficacy 194

Table A4: Output for models of policy preferences 195

Table B1: Summary of covariates 197

Table C1: Model output on reported importance of vote banks 199

Table C2: Model output on reported position on income distribution 200

List of Figures

Figure 1.1: Share of residents drawing on broker support across settlements 27

Figure 1.2: Informal employment as percent of total employment, 2018 30

Figure 1.3: Variation in policy preferences across settlements.. 32

Figure 1.4: Framework of political behavior 36

Figure 1.5: Theoretical implications 45

Figure 1.6: Vote banking behavior by neighborhood.. 73

Figure 1.7: Unmediated claims by neighborhood 75

Figure 1.8: Key informant reported problem-solving strategies 77

Figure 1.9: Survey experimental evidence on local candidate preferences by neighborhood formality 82

Figure 2.1: Men and women's labor force participation and preferences for daughter's participation by assets ………………………………………………………………...115

Figure 2.2: Incidence of engaging in various activities by gender... 118

Figure 3.1: Distribution of ethnic fractionalization, economic inequality, and between-group inequality across neighborhoods by caste (left) and subcaste/jati (right) …..……………158

Figure 3.2: Caste polarization and social homophily in the eight neighborhoods from the network census dataset 172

Figure A1: Distribution of residential status ……………………………………………..187

Figure A2: Distribution of urban identification documents held 189

Figure A3: Distribution of water sources 190

Figure A4: Predicted probabilities of engaging in collective, mediated behaviors by neighborhood characteristics 191

Figure A5: Experimental evidence of voting based on broker arrangements 192

Figure B.1: Estimated monthly salary by occupational category 198

Acknowledgements

While I am not able to name every person who helped with this research, encouraged me to pursue a PhD, or supported me throughout graduate school, I am deeply grateful to the many people who contributed to this journey. I would like to start by acknowledging my committee, each of whom are not only brilliant scholars but also incredible human beings. It has been an honor to work with and learn from each of them. First, I would like to thank my advisor, Anirudh Krishna, to whom it is difficult to adequately articulate my gratitude. I was especially excited to come to Duke to work with him, and from day one he took me under his wing, extending tremendous opportunities and making me feel fully welcome as a member of the larger research project that eventually informed this work. Anirudh's feedback was always honest but also kind, and I knew that I was on to something when his eyes would light up. Beyond Duke, I aspire to maintain as much energy and excitement as Anirudh for tackling important projects that have real impact. Similarly, working with Erik Wibbels from my first year was a highlight of graduate school. Erik is not only an exceptionally inspiring scholar but is also passionate about creating organizations, partnerships, and projects that make profound change. On top of that, he is an extraordinary advisor who cares deeply about his mentees, and I hope to emulate some of his many strengths in my future role as an assistant professor. I am also thankful that I had the chance to work with Carolyn Barnes. I do not know anyone else who is capable, within the same meeting, of giving such brilliant feedback and then making me laugh so hard I cry. Carolyn was the one who introduced me to policy feedback literature,

and who trained me in qualitative methods, providing me the opportunity to go out and conduct interviews with her in rural North Carolina. Some of those road trips were my favorite experiences in the early years of the PhD program. Working with Adam Auerbach has also been a pleasure. His work has not only been formative for my own, but he is also a role model when it comes to mentoring. His enthusiasm is contagious and talking with him always left me feeling rejuvenated. Diana Mitlin has constantly impressed me with her depth of knowledge, kindness, humility, and commitment to making the world a better place. Finally, I would like to thank Chris Johnston, who taught one of my favorite classes that guided my early analyses and helped clarify my research questions. He has been unfalteringly generous with his time, and has always been supportive of my pursuit of a joint degree.

In addition to my committee, I am grateful to several other faculty members at Duke who taught some my favorite courses, whose work shaped my interests, and who provided crucial insights on my research, including Jennifer Swenson, Nick Carnes, Seth Sanders, Giovanna Merli, Marcos Rangel, Manoj Mohanan, Subhrendu Pattanayak, Deondra Rose, Herbert Kitschelt, Pablo Beramendi, Kyle Beardsley, John Aldrich, Ashley Jardina, and the members of the DevLab@Duke community. Nicholas Carnes, in particular, provided invaluable insights into both teaching and navigating academia.

I also want to offer a special thanks to Linda Simpson, who helped me access resources and opportunities at Duke, and who made me smile every time we spoke. I always looked forward to dropping into her office. Lisa Kukla and Kathy Ivanov were also tremendously helpful.

This research would not have been possible without a large, hard-working, and talented research team. In particular, I am deeply indebted to Sujeet Kumar, Mohammad Mansoor, and Selvam K. for ongoing discussions and excellent research assistance. Fieldscope was a crucial resource in connecting me with highly skilled interview transcribers, including Shobha Raghavan, Esther David, and Lakshmikantha NR. Funding for the survey data collection was provided by Omidyar Network and the International Growth Centre. My time, fieldwork and transcription expenses were funded by several fellowships, including the James B. Duke International Research Fellowship and a fellowship from the Center for the Study of Philanthropy and Voluntarism, as well as several grants from the Sanford School of Public Policy, the Department of Political Science, the Graduate School, the Duke India Initiative, Bass Connections, and the United Nations University World Institute for Development Economics Research.

The friends I have made in India over the years make every trip there special, and I am extremely grateful to have found a community that makes India feel like a second home. In particular, I owe a special debt of gratitude to Priya Kekre and Nav Patel. What started as a few days with them in Bengaluru turned into an extended living arrangement; the time I spent living with them while I was conducting interviews was a highlight of the past six years. Rashi Sabherwal, Richa Verma, Noopur Sen, Anand Kothari, and Abhimanyu Gahlaut are all dear friends who have also graciously hosted me at various times. Ronald Abraham was my mentor in Bihar and very first coauthor.

The friends and colleagues I have met at Duke played an integral role in my graduate experience, providing opportunities to brainstorm, share article drafts, and discuss ideas,

with many fun times along the way. Thank you to Kelly Hunter, Emily Pakhtigian, Nivedhitha Subramanian, Sarah Nolan, Romina Tomé, Hussain Alshammasi, Dean Dulay, Jeremy Spater, Diego Romero, Mateo Villamizar-Chaparro, Marwa AlFakhri, Bobby Harris, Varun Goel, Laura Bellows, Faraz Usmani, Jenny Orgill, Ade Olayinka, and Sarah Cross. Katy Hansen and Ajenai Clemmons, in particular, were my closest walking, cooking, and karaoke partners since first year, and ensured we left no milestone, no matter how small, uncelebrated. I cannot imagine this program without them. I also owe a special thanks to Harlan Downs-Tepper, who was first my colleague at IDinsight in Bihar and now also at Duke. Having him and his partner, Maria Dieci, in Durham has made the last few years far more enjoyable, especially during a global pandemic.

Beyond Duke, I would like to acknowledge my close friends Pam Sherwood-Karlan, Sam Law, Michal Trope, Janine Licare, and Lyndsie Harris, who were and have always been there for me when I needed a breath of fresh air, a break from social science (or impostor syndrome) or anything else.

I am especially grateful to my family — my brother Michael, sister Lindsay, and our parents, Jan and Jim. Our parents taught us to be kind, resilient and hardworking, and have encouraged each of us equally on our three very different paths. My mom fed my reading appetite by purchasing me (an abridged version of) *A Tale of Two Cities* when I was seven, and ten years later asked me to consider applying to Stanford, a school that seemed outside the realm of possibilities. She has undeniably played *the* most important role in setting this entire trajectory into motion.

I would also like to underscore my acknowledgement of my partner, Lysle Boller, who has read countless drafts, listened to countless presentations, and has always made time to brainstorm theory and empirics. As my partner in all things, he helps keep me balanced and manages to make me feel rooted and supported no matter where in the world I am.

Finally, I am deeply indebted to the women and men whose experiences I attempt to convey on the subsequent pages — the residents of the informal settlements in Bengaluru, Jaipur, and Patna who welcomed me into their homes and patiently shared their stories. These interactions and their words motivate me to keep doing the research that I do. This dissertation would, of course, not exist without them, and it is to them that it is dedicated.

Introduction

The world's urban population is projected to increase by nearly three billion people over the next three decades. The vast majority (90%) of this increase is expected to occur in low-income countries in Asia and Africa (Beard et al. 2016; United Nations 2014), concentrating sustainable development challenges in cities of the Global South. In light of these trends, the United Nations dedicated a Sustainable Development Goal exclusively to urban development — specifically to making "cities and human settlements inclusive, safe, resilient and sustainable" (United Nations, 2015, p. 26).

The rapid growth of the urban population in developing countries has gone together with rising inequality. Some of the larger urban areas in developing countries are sites of both concentrated poverty and concentrated wealth, exhibiting the greatest levels of inequality in the world. The range of inequality in Rio de Janeiro, for example, is double that of London or Berlin.[1] Mumbai is home to both Asia's largest "slum"[2] and the world's most

---

[1] OECD: https://www.oecd.org/social/inequality-urban-growth.htm

[2] The word "slum" is sometimes used as a pejorative term to evoke negative stereotypes about the residents of these settlements (Gilbert, 2007). I adopt the term throughout this dissertation to refer to neighborhoods with a certain set of characteristics. My reasoning for and usage of this language is very similar to that described by the journal *Environment and Urbanization*: "The term 'slum' usually has derogatory connotations and can suggest that a settlement needs replacement or can legitimate the eviction of its residents. However, it is a difficult term to avoid for at least three reasons. First, some networks of neighbourhood organizations choose to identify themselves with a positive use of the term, partly to neutralize these negative connotations; one of the most successful is the National slum Dwellers Federation in India. Second, the only global estimates for housing deficiencies, collected by the United Nations, are for what they term 'slums'. And third, in some nations, there are advantages for residents of informal settlements if their settlement is recognized

expensive private home.[3] The richest resident on the African continent lives in Lagos, where the government estimates 70% live in slums (Federal Republic of Nigeria 2006).

An estimated 55% of the urban population of sub-Saharan Africa, 30% of South Asia, and 20% of Latin America, lives in neighborhoods that UN-Habitat[4] recognizes as slums: "The defining characteristics of these areas—now often called slums in the international literature—are their precarious legality and almost non-existent level of services" (UN-Habitat 2016). This UN agency calculates that, on average, 30% of the urban population in developing countries lives in a neighborhood that experiences one or more of the following deprivations — inadequate access to safe water, lack of sanitation, poor structural quality of housing, overcrowding, or insecure residential status—and is therefore counted among a category of neighborhoods regarded as slums.[5] To date, nearly *a billion people* live in urban slums, and this number is projected to increase substantially as a result of current urbanization trends.

---

officially as a 'slum'; indeed, the residents may lobby to get their settlement classified as a 'notified slum'. Where the term is used in this journal, it refers to settlements characterized by at least some of the following features: a lack of formal recognition on the part of local government of the settlement and its residents; the absence of secure tenure for residents; inadequacies in provision for infrastructure and services; overcrowded and sub-standard dwellings; and location on land less than suitable for occupation."

[3] Antilia is the name of Indian billionaire, Mukesh Ambani's, private home in Mumbai. Dharavi, also in Mumbai, is Asia's largest slum.

[4] This UN agency, which has the mandate of supporting effective and equitable development in cities across the developing world.

[5] Data are from UN-Habitat, as retrieved from the World Bank World Development Indicators database. While the proportion of the urban population living in slums in developing countries is 30%, this ranges from 27% in middle-income countries to 65% for low-income countries.

While there are many important differences between contemporary and historical urbanization trends, there are also some revealing parallels (Rains & Krishna, 2019). Industrialization in the United States accelerated urban growth rates, such that the population of New York City doubled each decade between 1800 and 1880.[6] Urban population booms resulted in a vast number of migrants living in overcrowded, structurally unsound housing with inadequate sanitation and water. An estimated two-thirds of New York City's population lived in tenement buildings at the turn of the 20th century. These tenements, like many of today's slums, were overcrowded and structurally unsound, leading to outsized health risks from natural disasters as well as contagious diseases. Moreover, residents of tenements, like those in today's slum settlements, faced high prices for low-quality housing, while also experiencing insecure and legally ambiguous tenure status. A well-know account of the tenements in New York describes the following living conditions (Riis 1890):

> [I]n one cholera epidemic that scarcely touched the clean wards, the tenants died at the rate of one hundred and ninety-five to the thousand of population; which forced the general mortality of the city up from 1 in 41.83 in 1815, to 1 in 27.33 in 1855, a year of unusual freedom from epidemic disease… Swine roamed the streets and gutters as their principal scavengers. The death of a child in a tenement was

[6] Statistics are drawn from historical census data.

> registered at the Bureau of Vital Statistics as 'plainly due to suffocation in the foul air of an unventilated apartment,' and the Senators, who had come down from Albany to find out what was the matter with New York, reported that 'there are annually cut off from the population by disease and death enough human beings to people a city, and enough human labor to sustain it.' And yet experts had testified that, as compared with uptown, rents were from twenty-five to thirty per cent, higher in the worst slums of the lower wards… Whether or not the title was clear to the land upon which they were built was of less account than that the rents were collected. If there were damages to pay, the tenant had to foot them. Cases were 'very frequent when property was in litigation, and two or three different parties were collecting rents.' Of course under such circumstances 'no repairs were ever made.'

Employment, as well, could be both insecure and dangerous. British slum dwellers worked in trades "in which employment [was] so discontinuous" (Booth, 1902). There were often no guarantees a job would still exist for those who took leave after suffering an injury or illness, but it is estimated that one quarter of the employees in American Andrew Carnegie's steel mills died or were severely maimed (White, 2017). Low wages and long hours made it difficult to accumulate savings or invest in human capital even when training opportunities or public libraries were constructed for employees (ibid).

Importantly, these living conditions did not change automatically with economic growth. Instead, intensive policy reforms, promoting intensive investments in human capital via education, public health, labor protections, and affordable housing, accompanied

economic growth, which played a key role in improving living and working conditions and alleviating urban poverty in the United States and elsewhere. Historical parallels, as well as important differences that contribute to additional challenges in today's urban areas, suggest "[s]imilar supports and others are [even] more urgently required for present-day developing country slums" (Rains & Krishna, 2019, 12). Indeed, scholars and practitioners both have called for appropriate policies to reduce and prevent poverty (UN Habitat 2003; Davis 2004), arguing ad-hoc governance and underinvestment in cities results in the vast number of urban citizens who live in under precarious conditions in emerging cities (Fox 2014).

Designing appropriately nuanced interventions to ensure slum residents ultimately share in the benefits of the cities they help build will require far more evidence on residents' lived experiences. Severe data deficits make it difficult to know precisely how many people live in urban slums, let alone to describe living conditions. Across the Global South, there is an "astonishing lack of data about informal settlements" (Mitlin & Satterthwaite, 2013, 279). Moreover, effective policies will need to be appropriately targeted, appreciating the wide range of living conditions across slum settlements. When referring to slum neighborhoods (a term I will use interchangeably with "slums", "slum settlements", and "informal settlements"), I am referring not to any uniform underlying reality or condition but rather to a variety of neighborhoods and a range of living conditions.

Conditions in slums vary substantially along a continuum of wellbeing (Rains, Krishna, & Wibbels, 2019). The bottom of this slum continuum is made up by the most vulnerable settlements, where residents live in flimsy structures constructed from poles, mud and tarp, and residents are entirely disconnected from municipal infrastructure, such as

drainage and water. At the other end of the continuum, however, residents live in sturdily constructed houses with piped water, metered electricity, and closed drainage systems and private toilets; more than 80 percent possess televisions, electric fans and pressure cookers compared to one percent or fewer within the least well off settlements (Krishna et al., 2014). In between the top and the bottom of the continuum, there is a variety of living conditions. The similarity in their conditions is that residents across this continuum experience informality — that is, they lack government protected property rights and/or access to important government-provided infrastructure.

In the absence of access to adequate policy supports, many slum residents turn to informal organizations, including civil society leadership and voluntary organizations, to address pressing needs. While wealthier residents may be able to purchase important infrastructure, such as drainage, electricity, or water, privately, these resources can be prohibitively expensive for poorer slum residents to self-provision (Auerbach, 2016; Nathan, 2016). As a result, local area leaders emerge within slums to organize their neighbors and help residents negotiate with the state for access to crucial infrastructure and social supports (e.g. Auerbach & Thachil, 2018, 2019; Jha, Rao, & Woolcock, 2007; Paller, 2015). These resources are provided in a highly discretionary manner (Chandra 2004), with state support extended to the settlements that are most effectively able to organize (Auerbach, 2017, 2019; Das & Walton, 2015; Lall et al., 2004; Spater & Wibbels, 2020). As stated by Kruks-Wisner (2015): "Access to services[7] in this sense is best understood as a matter of who can 'extract

[7] In addition to infrastructure, access to social supports — even entitlements — including subsidized food or cash assistance, and important documents, including housing and identity

them from the political system.' It is, in other words, a matter of who makes claims on the state" (4). Thus, understanding whether and how slum residents organize is imperative to understanding how these urban citizens attempt to overcome everyday challenges, as well as whether they are likely to succeed.

This dissertation advances an understanding of the range of living conditions across Indian slum settlements as well as how, in the absence of adequate policy supports, slum residents draw on informal strategies to attempt to solve everyday problems. The three complementary essays, described below, each help explain differences in whether and how Indian slum residents make claims on the state. The first chapter proposes a framework to explain how two neighborhood-level characteristics — access to formal resources (including, for example, property rights and identification documents) and strength of informal political networks — jointly shape political strategies across slum settlements. The second chapter proposes a framework to explain how women and men's problem-solving strategies vary and whether female labor force participation affects this variation. The third chapter, coauthored with Jeremy Spater, examines how the structure of inequality in slum settlements shapes collective mobilization potential.

---

documents, can be highly politicized (Díaz Cayeros, Federico, & Magaloni, 2016; Gupta, 2012; Mathur, 2016).

Chapter 1: Negotiating Informality

Nearly one-sixth of humanity live in urban "slums" — neighborhoods that lack access to secure property rights and basic services — and this number is increasing rapidly as developing countries continue to urbanize. Despite their proximity to public servants and public services, slum residents remain largely disconnected from formal institutions. On top of exclusion from government resources, slum residents are also subjected to threats of displacement and financial exploitation from a range of both state and non-state actors. To mitigate these vulnerabilities, residents draw on informal political strategies to negotiate with the state for material improvements. Yet, despite a shared context of poverty and informality, residents of different slums vary considerably in how they engage politically. What explains differences in political behavior across settlements? Drawing on in-depth interviews with over 100 Indian slum residents and leaders, I propose a framework to explain how neighborhood characteristics shape political strategies across slum settlements. I argue slums vary along two key dimensions — access to formal resources (including, for example, property rights and identification documents) and strength of informal political networks — that are crucial for understanding whether and how residents negotiate with the state. I test this framework with original survey data from nearly 10,000 households from over 200 neighborhoods from Bengaluru, Jaipur, and Patna, India. These data comprise some of the most comprehensive data on Indian slums currently available to researchers. The findings not only have important implications for understanding development outcomes, but also for understanding how the urban poor understand and exercise their rights as citizens.

Chapter 2: Women and (Informal) Work

Most of the urban poor in developing countries work in the informal economy. Women, in particular, are disproportionately engaged in informal work. A nascent body of evidence suggests informal employment can have important implications for political behavior, but existing evidence — particularly with respect to differences by gender — is scarce. In this chapter, I draw on existing literature and fieldwork to develop a framework of women's political behavior under informality. I argue gender gaps in civic engagement vary across activities, and (informal) labor participation can reduce this gap for some activities. I test this framework using original survey and social networks data from more than 9,000 slum households, where most residents are employed informally, across three Indian cities. I find employment, particularly outside the household, increases women's confidence navigating interactions outside their neighborhoods, while simultaneously expanding their problem-solving networks in ways that facilitate group-based claim making. I do not find evidence that informal labor force participation affects electoral behaviors, for which women and men participate at similar rates in this context, or deeply entrenched gender gaps in leadership. This chapter advances an understanding of women's civic engagement in informal spaces and presents important empirical evidence on citizens that are often poorly documented in existing data sources. The results have important implications for political behavior as the informal economy continues to grow in urban centers of the developing world.

Chapter 3: A Local View of Between-Group Inequality

Recent literature demonstrates the importance of the relationship between between-group inequality and conflict between groups, provision of public goods, and preferences for redistribution. Much of this work has been conducted at coarse geographical scales, including at the country level. In this chapter, we argue the structure of inequality at the neighborhood-level affects potential for collective action. We argue that higher economic inequality between ethnic groups is associated with diminished potential for neighborhood mobilization. The structure of local inequality between groups, rather than the levels of inequality or ethnic fractionalization, increases ethnic salience, intergroup conflict, and undermines residents' ability to impose social sanctions and, thus, effectively organize. We test our expectations using original household survey and social networks data from urban Indian slums. Our findings contribute to the growing work in comparative politics on how local conditions, the structure of inequality, and urbanization trends affect political behavior.

Limitations

The evidence presented in these chapters draws on original survey data from a large multi-year data collection effort (described further in Section 1.6) as well as in-depth interviews with residents and local leaders from thirteen slums in three cities (described further in Appendix A). The survey data, which provides some of the most comprehensive evidence on Indian slums available to researchers, covers more than 9,000 households from hundreds of settlements spanning the vast distribution of living conditions across three cities. These three cities are not only diverse geographically, but also vary along economic,

cultural and political dimensions, and range in size from approximately 2 to 12 million residents. Most studies have focused on slums from a non-representative subset of living conditions; moreover, most studies have focused on India's five megacities — those with populations greater than ten million — while the majority of India's urban citizens live in smaller cities (United Nations, 2018). This dissertation is one of the first to examine political behavior among slums spanning the full continuum of living conditions from three vastly different cities of varying sizes. However, this project, like all research projects, is not without its limitations. Building on this project by addressing some of these limitations engenders exciting areas for future research.

Methods

This dissertation draws on mixed methods — analysis of in-depth open-ended interviews from a small number of neighborhoods and close-ended cross-sectional surveys from a wider range of settlements. The advantage to using this mixed methodology is that is allows a mix of depth and breadth. In in-depth interviews, residents from a small number of cases describe how they make sense of the biggest challenges in their communities and how they think through how to solve these problems. These interviews provide invaluable insights on lived experiences and the logic of problem-solving for that subset of people, allowing me to generate hypotheses about the factors that influence political behavior across settlements. The survey data then allows me to test whether these hypotheses hold up to scrutiny from a much wider range of respondents.

All methodologies are subject to tradeoffs, and by adopting this methodology, I chose not to adopt other methodologies that would allow for different analyses. First, while the interviews allowed for a deeper understanding of problem-solving strategies among a small number of slums, I did not do an in-depth ethnographic study of an even smaller number of cases. This methodology would require spending more time in each study area, including not only conducting more interviews but also dedicating a substantial amount of time to observing and shadowing everyday interactions of residents from these sites. This type of methodology would allow for a much richer understanding of local challenges, local linkages and networks, and the mechanisms underlying residents' problem-solving decisions, resulting in more specific hypotheses with higher explanatory power for those cases. Because my ultimate goal was to develop more generalizable explanations of behavior, I opted to conduct less detailed fieldwork across a slightly larger number of sites.

Second, while analyzing cross-sectional survey data allowed for a rigorous test of the expected correlations, I did not conduct a randomized experiment or leverage a natural experiment, which would provide an explicit test of the expected causal relationships. In a randomized controlled trial, residents would be randomly assigned to different conditions and the difference in outcomes between two similar residents who were randomly assigned to different conditions could be attributed directly to the different conditions. This was simply not feasible for my purposes, as I could not randomize where people live or work (Chapter 2). In a natural experiment, the research draws on a policy or program that was implemented as if randomly. For example, Kumar (n.d.) studies the causal impacts of slum residents moving into government-provided housing by leveraging a housing subsidy

program that was granted via a lottery system. This methodology provides an important tool for identifying causal impacts for those affected by the policy or program of interest. This methodology is also well suited to examining the impact of one factor on multiple outcomes. My goal was to develop and test frameworks of how multiple factors affect a narrow set of outcomes across as wide a sample as possible; thus, for my purposes, it made most sense to draw on the observational survey data I use.

Finally, the data I draw on are cross-sectional — that is, we collect information from residents at one point in time. In light of severe data constraints on informal settlements, longitudinal data is particularly rare. There are some notable exceptions where scholars have collected data at multiple time periods, sometimes over multiple decades, in Brazil, Ecuador, and Kenya, for example (Perlman, 2006; Moser, 2009; Zulu et al., 2011). These studies are particularly compelling, but again focus on a small number of cases, given tradeoffs between depth and breadth.

Generalizability

The hypotheses and evidence presented in this dissertation are based upon fieldwork and data collected from three Indian cities. The neighborhoods surveyed in these three cities were selected to preserve the spatial and physical characteristics of slums present in each city, and, thus, attempted to be representative of settlements from each of those cities. The extent to which these findings are generalizable beyond India (let alone to other urban areas in India) merits additional attention. While the evidence presented in this dissertation includes both mega and non-mega cities, most of the projected urbanization in low-income countries

is expected to occur in even smaller cities (Cohen, 2004; Davis, 2004; Montgomery, 2008). Moreover, urbanization has been catalyzed at different times and for different reasons across different regions of the Global South (Glaeser, 2014; Gollin, Jedwab, & Vollrath, 2016). This dissertation aims to spur additional comparative research that examines differences in living conditions and problem-solving within and across countries.

Alternate explanations

Finally, these essays examine *some* of the factors that arguably influence political problem-solving within and across informal settlements. Of course, these factors will not perfectly explain human behavior, and, are necessarily not the only factors that influence behavior. Other research further examines the importance of demographics, such as religion, race or ethnicity, gender, and place of origin, as well as characteristics of the local political economy, including structural inequality, in determining both policy needs and political behavior. Moreover, other research examines or calls for additional work on how each of these characteristics interact with other political and economic conditions at various scales. These essays focus on some factors that I expect influence political problem-solving across a range of Indian cities, but are, by no means, the only factors that matter. Moreover, this dissertation focuses entirely on explaining demand-side interactions (i.e. citizen's political behavior) rather than focusing on the supply-side (i.e. politician's decisions). Both demand and supply-side behaviors will ultimately determine distributive outcomes. Future work should focus on delineating which factors matter for political behavior under various

conditions as well as explaining how demand and supply side factors interact to affect development trajectories.

Having caveated some important limitations to this dissertation, I argue that this project does advance some important insights into the challenges and everyday problem-solving strategies that many of the world's most vulnerable citizens draw on to overcome these challenges. These insights are meant to help the reader understand where policy and practice diverge, how resources are distributed unevenly across cities, and, ultimately, to help generate ideas on how to develop more equitable and effective development policies in an increasingly urbanized world.

Chapter 1

Negotiating Informality, Negotiating Citizenship:

How Neighborhood Characteristics Shape Political Behavior in Indian Slums

1.1 Introduction

We are currently experiencing the largest wave of urbanization in human history. Within the next three decades, the global urban population is expected to increase by more than two billion people (United Nations 2014). Almost all of this increase will occur in resource-poor cities in the Global South, with critical implications for the geography of poverty and inequality. Adding to the unique challenges resulting from the unprecedented scale of urban population and poverty growth, many of the urban poor in developing countries are distinctly vulnerable as a result of pervasive informalities. Most of the growing urban population will, like nearly *one billion* other people, live in informal settlements, or "slums," — neighborhoods that not only experience high levels of poverty but are also largely excluded from protective government regulations afforded to other urban residents. Despite their proximity to public servants and public services, slum residents lack access to government provided infrastructure, legally protected housing rights and identity documents, and employment in occupations regulated by the state.

To mitigate the vulnerabilities associated with living and working in spaces that fall outside of government regulation, many of the billion plus people living in slums turn to informal negotiations with the state in order to access to crucial resources. Local brokers, or area leaders, emerge to mediate interactions between slum residents and politicians and encourage neighbors to vote and make claims collectively (Auerbach & Thachil, 2018, 2019; Jha et al., 2007; Paller, 2015). Politicians target goods and services, such as drainage, public toilets, water pipes, and property rights, to the communities that mobilize most effectively (Auerbach, 2016, 2017; Lall et al., 2004; Krishna et al., 2020). Yet, despite a shared context

of poverty, informality, and the importance of informal political linkages for development outcomes (Auerbach, 2019; Mitlin, 2014), slums vary substantially in whether and how residents organize to make claims on the state.

In *Bagri Basti*, a settlement in Patna, the capital of one of India's poorest and most populous states, residents abstain from political negotiations entirely.[1] Nearly 40 families live together, squeezed between a busy road and a railroad track. Families live in 9' by 13' houses constructed from mud, posts, and recycled political banners. No one has been to school, and to earn enough to subsist, men, women and children beg and pick trash. Residents have largely been excluded from the government-provided infrastructure that residents nearby access easily — hospitals, schools, the electricity grid, water pipes, sewage drains. As citizens living well below the poverty line, they qualify for social supports, but they lack the formal identification documents needed to collect entitlements. They do not know who to or how to approach the state to request identification or voter ID cards. Without any local leaders in the area to assist them, they paid people who approached them with offers to help them acquire these documents for a fee, but these "middlemen" took their money and never returned. The residents of *Bagri Basti* do not expect to have any interactions with government representatives until the day they believe they will inevitably be asked to leave the government land they occupy informally.[2]

Nearly four miles east is another slum, *Shivaji Colony*. In contrast to *Bagri Basti, Shivaji Colony* has experienced substantial development over time. Over the years, *Shivaji Colony* has

[1] Names have been changed to preserve anonymity.

[2] Author interviews, July 2016, corroborated with survey data.

received access to some municipal infrastructure, including streetlights, paved roads, and garbage collection services. But despite these improvements, families still lack documents granting them formal rights to their homes, as well as other important infrastructure, such as adequate drainage or water supply that other urban citizens access easily. In this neighborhood, residents draw on a variety of strategies to demand improvements from the state: sometimes protesting, sometimes contacting elected representatives individually, sometimes as a group, and sometimes asking one of the handful of leaders in the area to contact the state on their behalf. Even those with no education and those working as daily wage laborers, for whom existing theory would predict depressed participation, draw on a wider range of political problem-solving strategies in *Shivaji Colony* than those with similar characteristics in *Bagri Basti*.[3]

These examples highlight an important puzzle. Slums, to varying degrees, commonly experience high levels of poverty and informality. Yet, slum residents vary substantially in the range of political strategies they draw on to advance their well-being. This puzzle extends well beyond the examples of these two settlements. Across developing countries, the urban poor draw on "multiple tactics of engagement with the state" — "[f]ormal and informal, legal and illegal, confrontational and cooperative," which have implications for access to resources as well as citizenship (Bénit-Gbaffou & Oldfield, 2011, 445).

In this chapter, I draw on in-depth interviews with over 100 slum residents and area leaders to propose a framework to explain differences in political behavior across

---

[3] Author interviews, September 2019, corroborated with survey data.

settlements. I then test this framework with original surveys, including both observational and experimental data, from three Indian cities. I find slum settlements vary along two important dimensions that shape residents' political behavior. The first is their access to formal resources (including property rights, identification documents, whether residents tend to work in jobs that provide government benefits, and access to municipal infrastructure). The second dimension is the strength of their informal networks — neighborhood cohesion, internal leadership, and connections to external political actors. These two neighborhood characteristics shape whether and how residents organize to make claims, or demand improvements, from the state. I find a concave relationship between a neighborhood's access to formal resources and neighborhood-level engagement, while individual- (or subgroup-level) engagement increases with neighborhood resources. Stronger informal networks shift collective activity upward.

I provide evidence on three mechanisms underlying these relationships: neighborhood characteristics shape *political beliefs, political recruitment*, and *policy priorities.* Both dimensions shape residents' beliefs about which political strategies they are capable of engaging in, as well as which are likely to be effective. In all but the most formal slums, residents believe the state will view them as "clusters of poor voters that are crucial to win over" (Auerbach, 2019, 10). In these settlements, most engagement is collective, mediated by area brokers, and many times outcomes are contingent on the settlement's expected voting behavior. Residents from areas that have received more resources — i.e. are more formal — express more confidence in the neighborhood's ability to successfully organize and negotiate

with the state. In the most formal neighborhoods, residents begin to express greater confidence in their ability to approach the state individually and directly.

For a given level of neighborhood formality, residents describe the strength of their informal political networks as key to whether their neighborhood, collectively, can influence politicians or other government officials. Where both access to formal resources are low and informal networks are weak, as in *Bagri Basti,* residents express limited political efficacy, and they abstain from negotiations. Where informal political networks are stronger, residents are more confident in their neighborhood's ability to organize. Moreover, where networks are stronger, residents will be more likely to be recruited and, thus, likely to engage in collective political behavior.

Finally, neighborhood characteristics shape residents' priorities. The resources that residents have access to shapes their needs. In less formal areas, where residents have a greater variety of needs, residents will prioritize negotiating for collective goods that politicians may be more willing to provide than private goods "since parties can observe how neighborhoods vote by looking at booth-level returns… outsource[ing] monitoring and coordinating of voters to neighbors and their leaders" (Spater and Wibbels, 2020, 39). In more formal neighborhoods, where residents have already received many of the collective goods allocated according to political discretion, residents will begin to prioritize different policy needs that can advance the material interests of their individual households.

In each of these ways, by shaping priorities, beliefs about viable political strategies, and the likelihood that residents are asked by others to participate, neighborhood characteristics affect whether and how residents make claims on the state. There is some

circularity in this relationship. Once residents decide whether and how to take action, officials decide how to respond. Whether and how officials respond at a given period then feeds back into the neighborhood characteristics, further shaping behavior at the next period.

The framework and empirical evidence make several contributions to existing literature on development, distributive politics, and political behavior. First, existing work has either focused on the implications of access to formal resources, like property rights, for development outcomes *or* on how informal political networks shape distributive outcomes in slums. However, I argue considering both simultaneously helps advance an understanding of political behavior, with important implications for neighborhood development trends. Second, given severe data limitations on informal settlements, much existing work has focused on a small number of cases or a subset of slum areas. This study draws on a large-scale original data collection effort, and, as such, is one of the first to examine political behavior among settlements spanning the full range of slum living conditions from three vastly different cities. Finally, this chapter contributes to a growing body of work in comparative and American politics on the important role that local context plays in shaping political beliefs and behavior.

The rest of this chapter proceeds as follows. Section 2 expounds on the variation in political engagement across slums. Section 3 provides an overview of the theoretical framework, while Section 4 grounds the framework with qualitative examples. Section 5 and 6 describe the empirical setting, data and methods. In Section 7, I describe the empirical

measures and analysis, and I present the empirical results in Section 8. Section 9 discusses the findings and implications, and Section 10 concludes.

1.2 Background

Though political participation is foundational to democracy, a large body of literature establishes that citizens do not participate at equal rates (Bartels 2009; Lijphart 1997; Verba, Nie, and Kim 1978; Verba, Schlozman, and Brady 1995). Theory and evidence developed to explain political behavior in high income countries have repeatedly argued and shown that participation is depressed among poorer citizens (e.g. Rosenstone 1982; Brady, Verba, & Schlozman, 1995). In fact, that lower income individuals are "less likely to participate in associational life and are less likely to be active citizens" than richer individuals is one of "the most consistent empirical regularities in survey research conducted in affluent democracies" (Houtzager & Acharya 2011, 9). However, these findings do not generalize to developing countries, where the poor participate just as much as — if not more than — other citizens (Booth & Seligson, 2008; Bratton, 2008; Kasara & Suryanarayan, 2015; Krishna, 2008; Nathan, 2016).

For many of the world's poorest residing in low income countries, political engagement can be crucial for economic advancement and even survival. Up to 70 percent of residents lack access to core services, such as drainage, clean water, and electricity, in cities of the Global South (Beard, Mahendra and Westphal, 2016). While wealthier residents may be able to purchase these services privately, they can be prohibitively expensive for poorer residents to self-provision (Auerbach, 2016; Nathan, 2016). Instead, many of the urban poor

are "left with politics" to secure crucial infrastructure (Harriss, 2010, 6). As stated by Kruks-Wisner (2015): "Access to services[4] in this sense is best understood as a matter of who can 'extract them from the political system.' It is, in other words, a matter of who makes claims on the state" (4).

The prototypical way that slum residents make claims on the state is quite different from the prototypical modes of engagement employed by other members of society (Harriss, 2005, 2010; Mitlin, 2014). According to Chatterjee (2004), only the most elite are, in practice, part of "civil society," for whom the "political process is one where the organs of the state interact with members… in their individual capacities or as members of associations" (38). Others, including urban slum residents*,* exercise their citizenship differently.[5] As members of "political society," Chatterjee argues, they are "only tenuously, and even then ambiguously and contextually, rights-bearing citizens in the sense imagined by the constitution. They are not, therefore, proper members of civil society and are not regarded as such by the institutions of the state" (Chatterjee, 2004, 38). As a result, slum residents make claims on

[4] In addition to infrastructure, access to social supports — even entitlements — including subsidized food or cash assistance, and important documents, including housing and identity documents, can be highly politicized (Díaz Cayeros et al., 2016; Gupta, 2012; Mathur, 2016).
[5] In his seminal essay on citizenship and social class, Marshall (1950) defines citizenship as a set of formal rights: civil (including legal protections of individual freedoms, such as freedom of speech), social (including equal opportunities to economic security), and political (including rights to participate in politics, such as electing representatives). Under this conception, all citizens, formally, have equally protected rights to individual freedom, socioeconomic security, and to exercise political power. However, there is often a vast difference between the set of rights citizens are guranteed formally and the degree to which citizens experience these rights in practice (e.g. Bertorelli, Heller, Swaminathan, & Varshney, 2017; Chatterjee, 2004; Heller, 2000; Rose, 2018; Somers, 1993).

the state in negotiations that "take place away from the transparent and accountable systems of 'modern' government" (Mitlin, 2014, 1).

These negotiations are often described in terms of "vote banks," referring to a situation where residents of a particular area coordinate their votes in the hope of receiving a benefit or transfer in return (Srinivas, 1955). Neighborhood brokers, or informal leaders, emerge to mediate interactions between slum residents and politicians and to encourage neighbors to vote and make claims collectively (Auerbach & Thachil, 2018, 2019; Bjorkman, 2015; Harriss, 2005; Jha et al., 2007; Paller, 2015). Motivated by a range of incentives, including "popularity", "yield[ing] rents", and "careerist aspirations within party organizations" (Auerbach & Thachil, 2019, 4), brokers act as problem solvers or "social workers" who help citizens gain access to government schemes, basic services and infrastructure projects. Area leaders liaise with patrons on behalf of their neighbors, mediating "the iterative, dyadic relationship… between the politician and the settlement. The exchange [of material resources] is not contingent on an individual's vote, but rather on a politician's best sense of the aggregate voting behavior of the settlement and the partisan ties of its leaders" (Auerbach, 2016, 116).[6] Thus, political engagement in slums is often characterized by neighborhood-level, mediated demands on the state for targeted material (rather than programmatic) benefits.

---

[6] Other recent work has begun to delineate various forms of clientelistic exchanges, including not only one-off versus iterative exchanges but also exchanges of private versus collective local public goods (for reviews see Hicken & Nathan, 2020; Pellicer et al., 2018; Yıldırım & Kitschelt, 2020).

A growing body of literature examines how slum residents draw on these informal political networks to mitigate vulnerability and demand development (e.g. Auerbach, 2017, 2019; Auerbach & Thachil, 2018, 2019; Auyero, 2000; Bjorkman, 2015; Chatterjee, 2004; Das & Walton, 2015; Haritas, 2013; Harriss, 2005; Jha et al., 2007; Krishna, Rains, & Wibbels, 2020; Lall, Deichmann, Lundberg, & Chaudhury, 2004; Mitlin, 2014; Paller, 2015; Rains & Wibbels, 2020). State support is extended to the neighborhoods that are most effectively able to organize politically (Auerbach, 2017, 2019; Das & Walton, 2015; Lall et al., 2004; Spater & Wibbels, 2020). In particular, recent work demonstrates the government is more likely to respond to neighborhoods with denser networks of partisan informal leaders (Auerbach, 2019) as well as to neighborhoods with denser social networks (Spater & Wibbels, 2020). However, systematic evidence is lacking on differences in whether and how residents draw on these networks across settlements. Basic descriptive evidence from our survey data shows substantial variation in the proportion of residents asking for and receiving support from area brokers across neighborhoods (Figure 1.1).

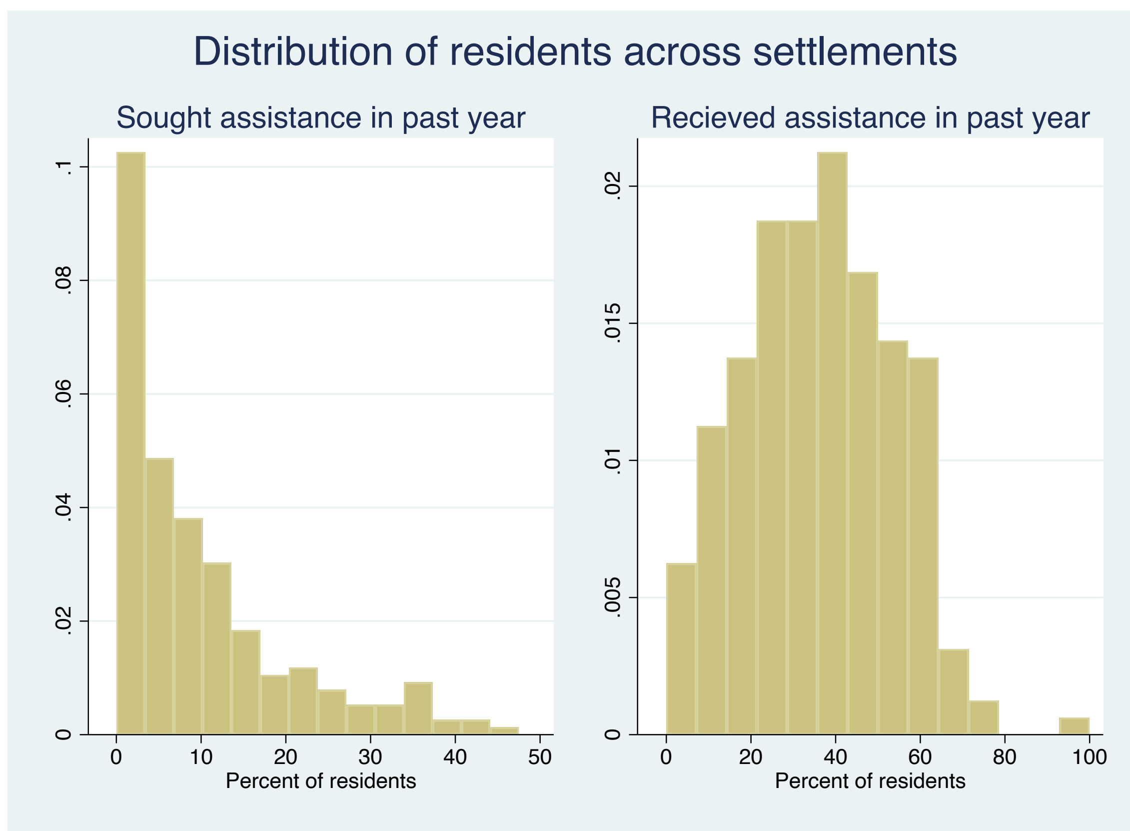


Figure 1.1: Share of residents drawing on broker support across settlements

Slums span a wide-ranging continuum of incrementally improving physical and legal conditions, with greater variation across than within settlements (Krishna, Rains, & Wibbels, 2020; Rains, Krishna, & Wibbels, 2019). Residents in settlements at the bottom of this continuum are particularly vulnerable: they tend to work in highly precarious occupations, searching for employment on a day-to-day basis, and to live in shelters constructed from flimsy materials like mud and tarp. These residents lack any legal rights to their homes, identification documents needed to access social services, and are entirely disconnected from municipal infrastructure, such as drainage, water, or electricity. At the other end of this

continuum, residents live in sturdier houses with access to identification documents and infrastructure; these residents also tend to work in occupations that offer greater income security, and they may have some legal rights to their home (even if not full rights to sell and mortgage).

A defining characteristic of slums, across this continuum, that differentiates them from other high poverty areas is *informality*. I define informality simply as being *unprotected by government regulation*.[7] This definition requires two clarifications. First, informal is not the same as illegal (Altamirano, 2015; Centeno & Portes, 2006). By way of example, consider an informal housing arrangement where a person rents an apartment from her friend. Where they live, this arrangement is not illegal, but it is informal: the renter will not be protected by government regulation in the event that her friend reneges on their arrangement. Second, informality is better understood as a matter of degree than as a binary (Alfaro d'Alençon et al., 2018; Banks et al., 2019; Roy, 2009). Returning to the rental example, the informal housing arrangement between friends could take many different forms that provide varying degrees of protection to the renter. A written contract may be more easily enforceable than a documented oral agreement, which may be more easily enforceable than an undocumented agreement; each of these carry more protection than if there were no agreement (i.e. if she were "squatting").

Slum settlements vary substantially in their degree of informality along at least four dimensions: property rights (Mahadevia, 2010; Payne, 2001; Reerink & van Gelder, 2010;

---

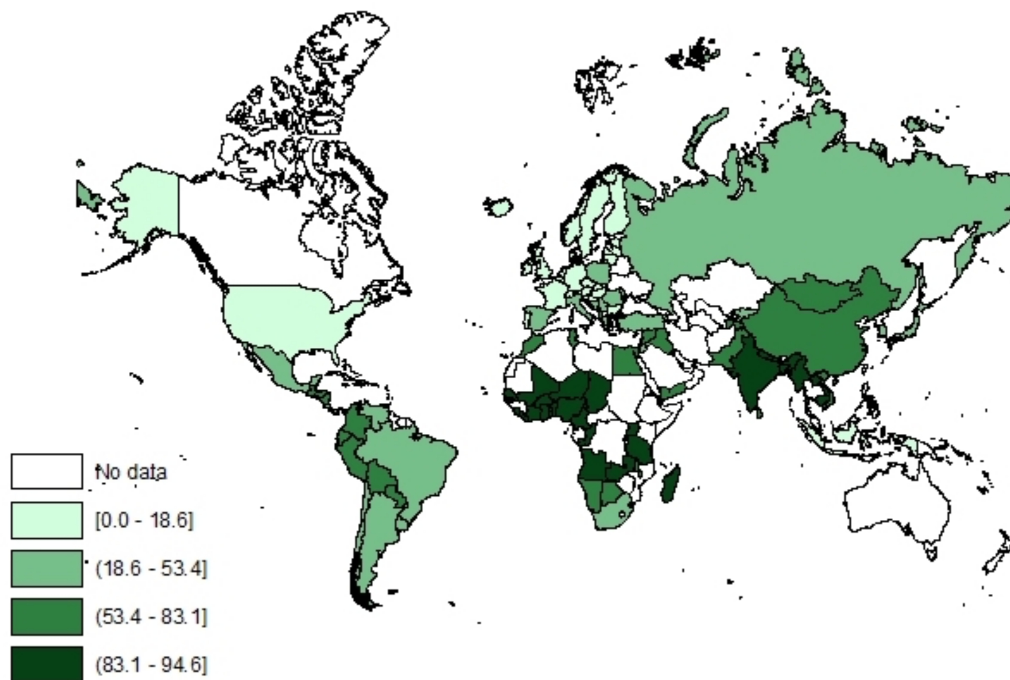
[7] "The word 'informal' is used extensively in academic and policy texts but there is no clear consensus around its meaning"(Alfaro d'Alençon et al., 2018, 60).

van Gelder, 2010; Williams, Shahid, & Martínez, 2016), employment (Auerbach, 2019; Mitra, 2006, 2010; Perlman, 2006; Turok & Borel-Saladin, 2018), identification documents (Hull, 2012; Mathur, 2016; Srivastava, 2012), and neighborhood infrastructure, such as water and electricity (Ezeh, Kodzi and Emina, 2010; Mitlin and Satterthwaite, 2013; Ranganathan, 2014; Beard, Mahendra and Westphal, 2016). Not only do each of these dimensions span a spectrum from less to more formal, but the level of (in)formality can also vary across dimensions in a given neighborhood. As a result, though informality is a common feature across slums, the level and dimensions of informality observed in any given neighborhood can vary tremendously.

While informality has frequently been associated with poverty, these are distinct concepts (Alfaro d'Alençon et al., 2018; Banks et al., 2019; Roy, 2009). Informality, which by definition means a lack of government protection or insurance, increases volatility and risk (Harriss-White, Olsen, Vera-Sanso, & Suresh, 2013; ILO, 2018). Thus, two neighborhoods (or individuals) that experience the same level of poverty, but differ in their level of informality will vary in their level of vulnerability (e.g. Altamirano, 2015; Murillo, Oliveros, & Zarazaga, 2019).[8] The unique challenges posed by informality, combined with the vast number of people living and working informally in developing countries (Figure 1.2), makes informality "perhaps *the* distinguishing feature of contemporary urban life in the Global South" (Auerbach, LeBas, Post, & Weitz-Shapiro, 2018).

---

[8] Vulnerability is a function of level (of income or development) and risk — both of which affect welfare (Ligon & Schechter, 2003).



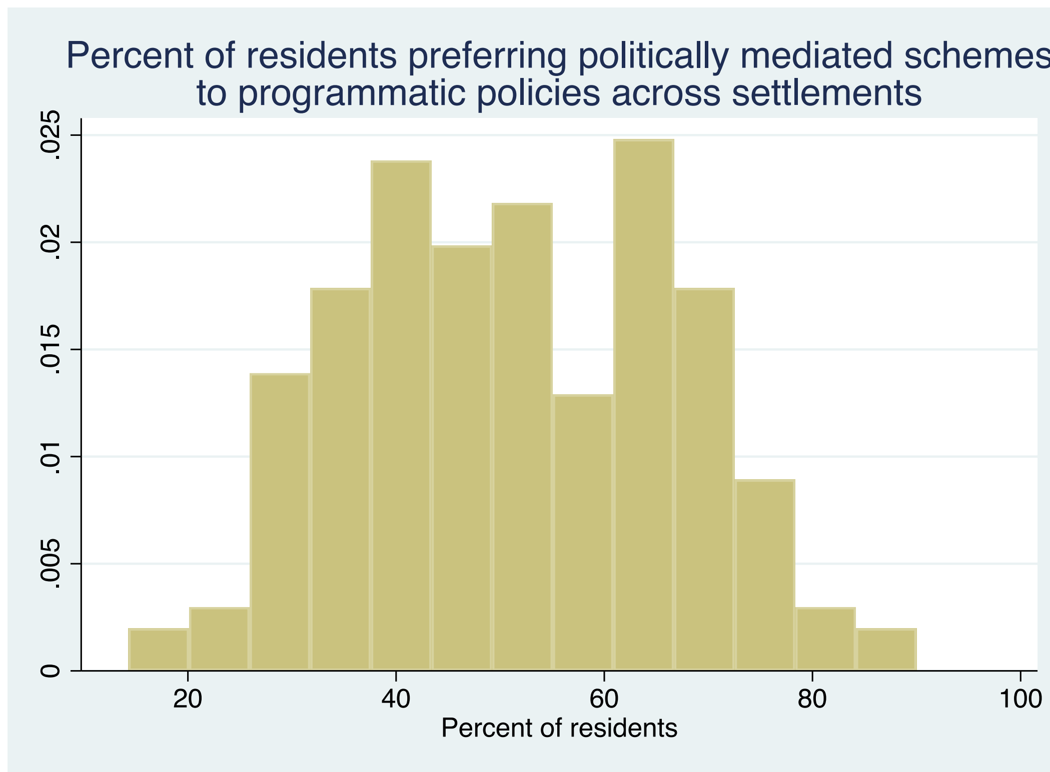
Note: Data from International Labour Organization (2018).

Figure 1.2: Informal employment as percent of total employment, 2018

However, there is still relatively little evidence on the political implications of informality. A small set of studies argue that the vulnerabilities associated with informality affect political preferences among informal workers (Altamirano, 2015; Gottlieb, 2019; Prillaman & Phillips, 2019; Rains & Wibbels, 2020) and residents of informal settlements (Murillo, Oliveros, & Zarazaga, 2020).[9] These studies argue that those working or residing

[9] Others highlight a theoretical link between vulnerability and reliance on clientelistic exchanges (Bobonis, Gertler, Gonzalez-Navarro, & Nichter, 2017) particularly "in the absence of a strong welfare state" (Pellicer, Wegner, Bayer, & Tischmeier, 2018, 5).

informally will be more likely than other citizens to prefer clientelistic exchanges in order to help them meet imminent material needs. Moreover, because government welfare benefits are frequently tied to formal employment, a formal address, and/or formal identification documents, informality may be associated with a preference for politically mediated schemes over programmatically delivered social policies (Altamirano, 2015; Rains & Wibbels, 2020). This nascent body of work focuses on one dimension of informality at a time, but most slum residents experience multiple informalities simultaneously. Our data from hundreds of slums experiencing different levels of informality reveals a wide range of policy preferences across neighborhoods (Figure 1.3).



Note: In one survey wave, respondents are asked the following: 'What do you think is the most effective government policy for reducing the gap between those at the bottom and the top of the economic ladder?" In a later survey wave, respondents are asked the following: "Development means different things to different people. When you think of development, what comes to mind first – bridges and railroads, schemes for the poor, or new jobs and new businesses?" Responses of "More schemes for the poor" are coded as 1, while responses of "more spending on education," "increasing taxes on the rich and spending on the poor", and "government creating more jobs" are coded 0 for the first wave. Responses of "bridges and railroads", "new jobs and new businesses" are coded 0 for the second wave.

Figure 1.3: Variation in policy preferences across settlements

In this chapter, I connect and advance existing work on how slum residents draw on informal political networks to negotiate for development as well as nascent research on the political implications of informality. I draw on interviews with over 100 slum residents and

informal leaders from three Indian cities to develop a framework to explain how differences in both neighborhood informal networks and neighborhood informality jointly shape citizenship practice for urban slum residents. I then draw on original survey data from approximately nearly 10,000 slum residents from more than 220 diverse settlements across three Indian cities to test the framework. The next section presents the theoretical framework developed based on qualitative fieldwork.[10]

1.3 Framework

Every slum neighborhood can be characterized by its level of access to formal resources and the strength of its informal political networks. Formal resources refer to property rights, identification documents, basic municipal-provided infrastructure (i.e. water and drainage), as well as whether residents tend to work in jobs that offer government protections. Neighborhoods with more, higher quality resources are considered more formal. Neighborhoods also vary substantially in the strength of their informal networks. Settlements that are more socially cohesive, where more residents recognize an internal informal leader, or broker, and where these brokers have stronger connections to external political actors and other political mediators, have stronger informal political networks.

These two neighborhood characteristics — access to formal resources and strength of political networks — shape three political characteristics, or mechanisms, that ultimately

---

[10] Further details on the neighborhood selection and recruitment details are provided in Appendix A.

shape residents' political behavior (Figure 1.4). First, neighborhood characteristics shape residents' *political beliefs* — in particular political efficacy. Political efficacy, the belief that one "can be effective and influential in politics" (Verba, Burns, & Schlozman, 1997, 1062), is frequently broken down into two components: internal efficacy — citizens' views of their own capacity to participate — and external efficacy — citizens' expectations of government responsiveness — (see Barnes, 2020; Valentino, Gregorowicz, & Groenendyk, 2009 or many others for discussion). Second, neighborhood characteristics also shape *political recruitment*, or the likelihood that residents are encouraged by their neighbors or local brokers to participate (Verba, Schlozman, & Brady, 1995). Third, these characteristics also shape *policy priorities.* In other words, the resources residents have access to affects what problems they will prioritize solving, and different problems will elicit different problem-solving strategies.

In each of these ways — by shaping beliefs about what to prioritize, how to prioritize, and whether or not residents are asked by others to problem-solve together — neighborhood characteristics affect whether and how residents make claims on the state. Most forms of engagement are the group-level, mediated requests (contingent or otherwise) for material goods characterized by vote banking. However, in some neighborhoods, residents begin to draw on some of the strategies associated with those in more formal areas (or in "civil society"), such as approaching an official directly with a material request[11] or beginning to lobby for programmatic policy reforms.

---

[11] Recent work by Bussell (2019) shows that, in India, higher level politicians frequently engage in noncontingent material exchanges directly with citizens. Contingent exchanges at the local level are more likely to be mediated by brokers.

Once residents decide whether and how to make claims, the state can decide whether to respond or not. There is some circularity in this relationship, as neighborhood characteristics also affect the likelihood that the state will respond to a given request. Politicians face strong incentives not only to respond to settlements with stronger informal networks (Auerbach, 2019; Spater & Wibbels, 2020) but also to target resources to voters in more vulnerable, informal neighborhoods, who may be more dependent on and, thus, more responsive to material appeals than other voters (Altamirano, 2015; Auerbach, 2019; Holland, 2016; Lanjouw & Levy, 2002; Murillo et al., 2019).[12]

Whether or not the request is fulfilled in the next period will feed back into the neighborhood characteristics at that period — not only by affecting which formal resources the neighborhood has access to, but this iterative process may also further strengthen the neighborhood's connection to that external official, affecting their informal networks. These updated neighborhood characteristics will subsequently shape residents' strategies in the next period.

[12] In addition to these neighborhood characteristics, many other factors may affect a politician's decision to respond favorably or not (i.e. budgetary considerations, electoral competitiveness, and/or discrimination against certain populations). Though understanding supply-side behavior is outside the scope of this chapter, it is an important area for additional research.

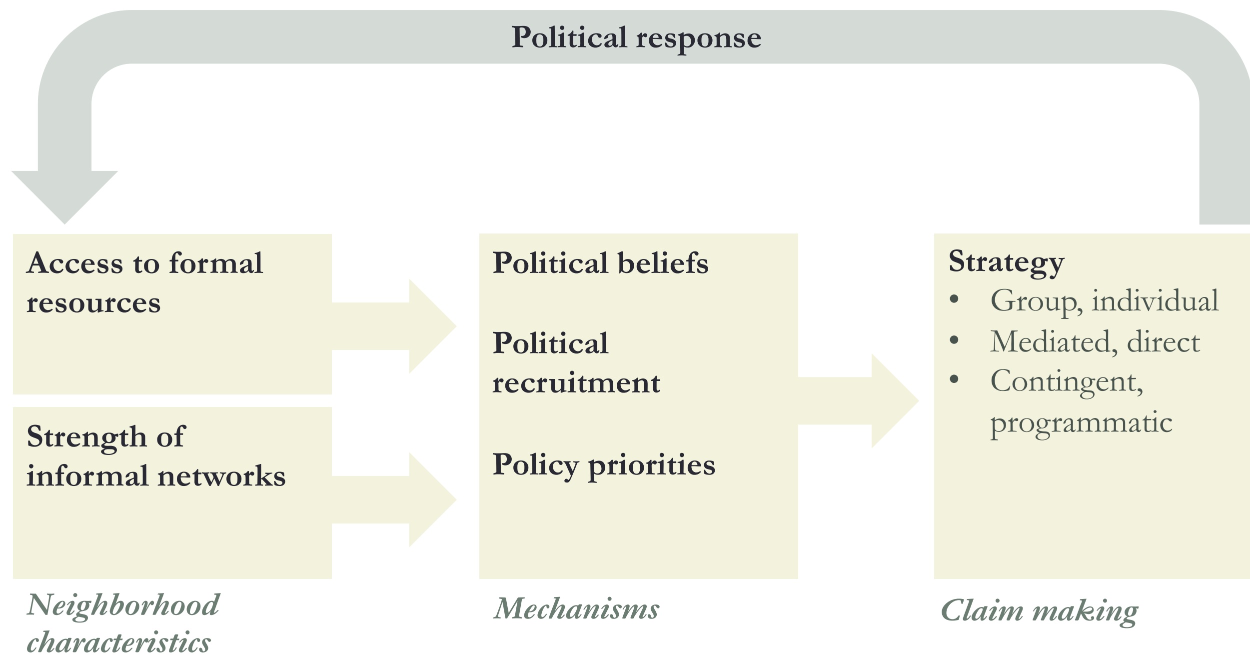


Figure 1.4: Framework of political behavior

1.3.1 Political beliefs

A growing body of work examines how local context shapes political beliefs (e.g. Auerbach & Kruks-Wisner, 2020; Cruces, Perez-Truglia, & Tetaz, 2013; Enos, 2017; Kasara, 2013; Newman, Johnston, & Lown, 2015; Spater, 2020; Walsh, 2012), including how local context can shape political efficacy (Barnes, 2020; Cohen & Dawson, 1993; Michener, 2018; Soss & Jacobs, 2009). My in-depth interviews reveal substantial variation in beliefs about efficacy — whether residents report they think they are capable of engaging in various strategies as well as whether they report that they expect they are likely to receive a favorable

response — across neighborhoods. For example, a resident from *Bhupatipur* expresses limited external efficacy as follows:

> We don't have any power. We don't have the support of the government. We don't have the support of the [elected officials]. Without any support, we cannot do anything. We need some support to back us, for us to be able to move forward and do something.[13]

In sharp contrast, a resident from another settlement explains, "They [politicians] come here and do good work. If we say we don't have something and call them up, they come running here."[14]

Notably, slum residents also distinguish between neighborhood-level and individual- or subgroup-level efficacy, as expressed by Shreya, who does not believe she is capable of making claims on her own, but thinks her neighborhood can make claims collectively:

> We can't proceed without the group… If they lead and stand in the front, we will stand behind them. They talk on behalf of us. We are not educated. We don't know much to read and write. We don't know how to speak too well to important people. We get scared [on our own].[15]

[13] Author interview, October 9, 2018.
[14] Author interview, November 1, 2018.
[15] Author interview, November 6, 2018.

I define *collective or neighborhood efficacy* as whether one believes her neighborhood, either collectively or via a subgroup of representatives, is able to organize politically (internal) and is likely to receive favorable responses to neighborhood problems (external). I define *individual or subgroup efficacy* as whether one believes she can, either completely alone or with a special interest subgroup, organize politically (internal) and is likely to receive favorable responses to these individual or sub-neighborhood problems (external).

Both access to formal resources and informal networks shape efficacy in different ways. Formality shapes efficacy through three channels.[16] Importantly, formality shapes collective efficacy first; only at higher levels does formality begin to affect individual (or subgroup) efficacy.

The first channel through which formality affects beliefs is knowledge. Past successes negotiating for and receiving resources increase community knowledge about how to successfully continue to do so going forward. When asked why they have not or would not approach a politician or government official for help with an issue, many respondents explain that they would not know who to go to or what to say to them. Meanwhile, others attribute increasing levels of confidence in themselves or their neighbors to "increasing knowledge." Shivakumar explains how before his neighborhood had received identification documents, housing documents or government infrastructure (water and electricity connections), when they were "in the sheds means, at that time I was not yet aware."[17] But

---

[16] Another study on India finds higher levels of external political efficacy among poor rural residents than similarly poor urban slum residents, who experience distinctly higher levels of informality than their rural counterparts (Auerbach & Kruks-Wisner, 2020).
[17] Author interview, October 27, 2018.

now, after gaining the experience of negotiating for and receiving these formal resources, he says he and his neighbors have become more aware of which officials to approach for help.

Second, formality shapes whether residents feel entitled to make demands on the government. Past successes or absences of the state convey lessons to citizens about their relative standing in society.[18] In the least formal neighborhoods, residents say they cannot interact with the state as members of civil society because those institutions are "not available to people like them." In fact, in the most informal areas, residents describe themselves as peripheral to or separate from the city, with implications for whether they believe they can receive government assistance. Despite having lived in *Bhupatipur*, around nine kilometers from Bengaluru's city center, for nearly two decades, Ravi says, "The city dwellers get that facility [but] our people don't."[19] In other neighborhoods, too, people describe the "difference between slum and city area[s]."[20] In contrast, in more formal areas, residents describe themselves as urban citizens that the government is obligated to support.[21] In *Yarab Nagar*, residents used to live in conditions similar to *Bhupatipur*, but have experienced a large increase in formality since being selected for in-situ development. There,

[18] A body of literature on policy feedback, primarily focused on the United States, examines how past experiences with the government shape future political actions via several channels, including political efficacy (e.g. Barnes, 2020; Campbell, 2012; Mettler & Soss, 2004; Michener, 2018; Rose, 2018). In the Indian context, Kumar (forthcoming) finds causal evidence from a natural experiment that slum residents who won a formal housing lottery reported higher perceived status relative to local officials than those who did not win the lottery.
[19] Author interview, October 9, 2018.
[20] Author interview, November 11, 2018.
[21] A natural experiment in Argentina finds exogeneous allocation of formal property rights significantly influenced beliefs about the role of government as well (Di Tella, Galiani, & Schargrodsky, 2007).

one resident says of her neighborhood: "It has become a city now… Earlier, this was a slum. They demolished it and constructed these houses. *It's now part of Bengaluru* (emphasis added)." Neighborhood formality shapes the extent to which citizens view themselves as marginal to the city, which influences whether they believe they are capable of making demands on the government as urban citizens.

Third, and relatedly, formality shapes beliefs about whether residents will elicit respect from politicians or government officials as individual "rights-bearing" members of civil society or whether they continue to be viewed as "clusters of poor voters that are crucial to win over" via popular politics (Auerbach, 2019, 10).[22] Only in the most formal areas do residents start to think the state will view or respect them as an individuals (i.e. as members of "civil society" rather than as members of a collective vote bank (i.e. as members of "political society"). As described by Anand:

> There may be people who have been educated in a slum. Nobody gives them respect. In an official area, there are rich people. They give a different kind of respect to rich people. However if we are from a slum, irrespective of how educated we are, they don't give us any respect.[23]

[22] The same study in Argentina finds receiving formal property rights shaped whether slum residents believed they could make progress on their own as individuals or needed to depend on a large group for support (Di Tella et al., 2007).
[23] Author interview, October 5, 2018.

The strength of a neighborhood's informal networks also affects political efficacy — in particular collective efficacy — by shaping beliefs about the neighborhood's political power or influence as a vote bank. As one resident describes:

> The vote bank here is the main thing… If we vote for Congress, they will listen to us. If we approach them with problems, they get it done. They remain the same during elections, and after the elections. If we approach them with problems, they get it done to the extent possible for them.[24]

Residents report that neighborhoods with leaders or other external mediators who are well-connected to politicians or officials and/or that are perceived as well organized are more likely to elicit a favorable response. Deepa describes how another neighborhood with stronger connections to the elected officials receives help more consistently than her neighborhood: "They have attachment [in the other neighborhood]… and the MLA's house is nearby only… If anyone has any problem [there] they will raise the issue and it will be addressed."[25] In another settlement, an emerging leader named Venkatesh explains how, once he demonstrated to the local elected official that he could mobilize his neighborhood by forming and registering a neighborhood association, he received a better response. He says, "Before I became the leader he was not very responsive. After I became the leader, I

---

[24] Author interview, November 7, 2018.
[25] Author interview, October 26, 2018.

have got response from the corporator… Before I was just ordinary, an ordinary citizen, but after I became the leader they started to notice me."[26]

Beyond demonstrating capacity to coordinate votes, respondents also describe how better organized neighborhoods can exert their influence by protesting. Varun says, "If we all go [to officials], we can meet them and they will do it…. They will see so many people and think we may cause trouble. They will be scared if we continue to go and sit over there."[27]

1.3.2 Political recruitment

In addition to shaping political beliefs, neighborhood characteristics also shape the likelihood that residents are recruited to participate in politics. Where informal political networks are stronger, residents will be more likely to be recruited and, thus, likely to engage in collective political behavior. Where area leaders are more effective, they can more easily mobilize neighbors to make group-claims. Shruti describes how when the area leader asks residents to approach the local elected officials with them, "[w]e get together and go to them. 1-2 people from each house gets together and approaches them… all together as a group."[28] Greater social cohesion among residents also increases mobilization potential. Jyoti, a housekeeper in her twenties, describes a time when dozens of her neighbors went to the councilor's house to demand better water supply:

---

[26] Author interview, October 27, 2018.
[27] Author interview, November 8, 2018.
[28] Author interview, November 8, 2018.

> We told him that we don't have water and that we need water absolutely. There was around 50 to 60 of us. The news spread by word of mouth and we got together and decided to go to his house since there was no use talking amongst ourselves only.[29]

1.3.3 Policy priorities

Finally, neighborhood characteristics shape residents' policy priorities. In more informal areas, residents have a greater set of policy needs, and describe their most pressing problems as collective problems. In *Naya Bazaar,* Ramesh says, "what happens to four people is the same that is happening to me"[30]; while in *Nehru Colony* one resident says, "Nobody has different problems here. The problems are common problems like water, electricity."[31] Moreover, given beliefs about being "left to politics" to collectively or indirectly negotiate for resources, residents will prioritize negotiating for collective goods, such as water tanks or public toilets, that are allocated to effective vote banks (Spater & Wibbels, 2020). In more formal neighborhoods, where residents have already received many of the collective goods typically allocated according to political discretion, vote banks may begin to be less useful to citizens as they begin to focus on individual or subgroup needs.

Moreover, in more informal and, thus, vulnerable settlements, politically targeted goods—be they collective goods like water tanks or individual like cooking gas schemes—

---

[29] Author interview, October 8, 2018.
[30] Author interview, November 11, 2018.
[31] Author interview, November 7, 2018.

that can help address immediate challenges may be more attractive to residents than programmatic policies that either do not reach slum residents or have not proven credible in the past. Residents of more informal neighborhoods will be more likely to prefer politically mediated, often contingent, policy tools, while residents of more formal workers will prefer more programmatic policy solutions.[32]

1.3.4 Theoretical expectations

These mechanisms engender theoretical expectations about whether and how slum residents will make claims on the state in order to problem-solve (Figure 1.5). At very low levels of formality (Point A), residents' political efficacy is low. Residents of these settlements not only have limited knowledge about how to negotiate with the state for greater resources, but they also do not expect the state would respond to these negotiations. As a result, political engagement is depressed. At higher levels of formality (Point B), collective efficacy is higher and residents still have use for — or even a need for — drawing on vote banks to solve collective issues. In these settlements, neighborhood-level mobilization occurs more frequently; residents engage in a wider variety of strategies that are still primarily collective and mediated (i.e. protesting or promising to exchange votes as a group). In the most formal neighborhoods (Point C), residents begin to develop beliefs about their individual efficacy, and vote banks or collective negotiations become less

[32] See Altamirano (2015) and Rains & Wibbels (2020) for further elaboration on this argument with respect to informal labor status.

important for solving individual (or subgroup) challenges. In these settlements, residents will begin to substitute away from collective demands associated with "political society" in favor of individual or subgroup efforts, such as approaching politicians or government officials directly to negotiate for improvements, or even exiting the state entirely in favor of private solutions.

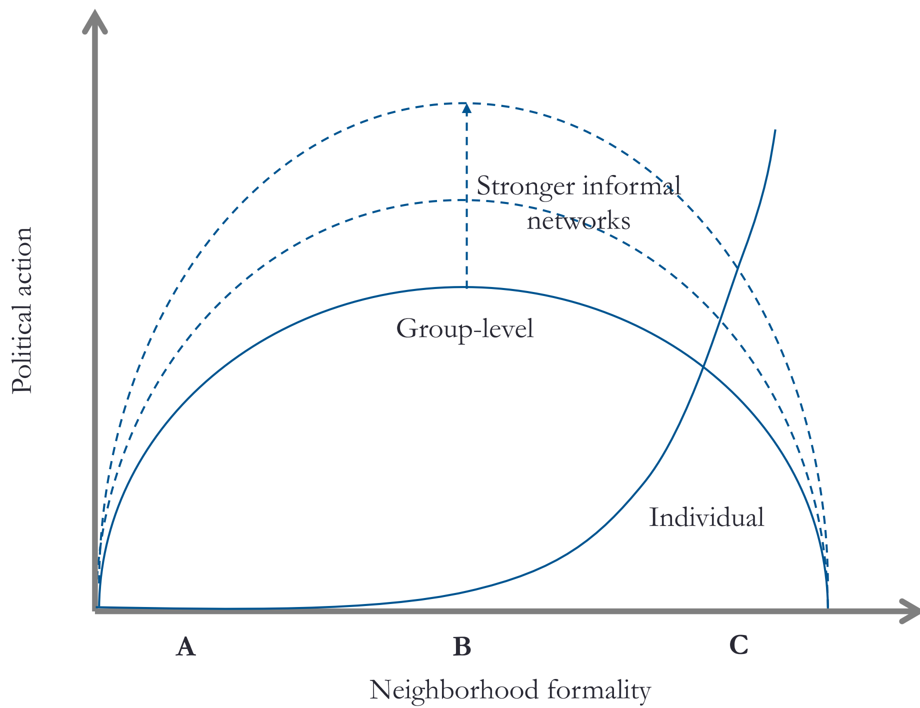


Figure 1.5: Theoretical implications

Stronger informal networks increase collective efficacy and the likelihood of political recruitment, shifting collective activity upward. For a given level of formality, neighborhoods

with stronger informal networks will make more collective demands. Figure 1.5 also indicates that for very low levels of formality (Point A), informal networks are a prerequisite to political engagement.

1.4 Qualitative examples

This section grounds the framework with two examples. I trace changes in neighborhood characteristics and problem-solving strategies in order to illustrate how this process plays out over time and to expand on the mechanisms underlying the expected relationships.

1.4.1 Bhupatipur

Bhupatipur is a destitute settlement located behind a Hindu temple in northwest Bengaluru. Almost 80 families, most of whom migrated to Bengaluru from a rural district in Karnataka up to 40 years ago, live in 10' by 10' houses constructed from mud, cement, and tarp. Men and women work as daily wage laborers, while some men also tell fortunes on the street in exchange for a small fee. The settlement is homogenous with respect to caste, religion, and region of origin, and there is very low economic inequality. Instead, everyone is living hand to mouth:

> Sometimes we do not have money to put food in our stomach. It is difficult to live life. They take loans from here and there and try to maintain. It is the same for

> everyone. Everyone here is poor, there is nobody who has much here. It is difficult. It is difficult for everyone.

Residents moved from site to site in the greater surrounding area until "permanently" settling on their current site, which they described as "barren land" and "like a forest," nearly twenty years prior. Despite residing at that location for up to twenty years and the greater Bengaluru area for up to forty, residents remain almost entirely disconnected form municipal infrastructure, and describe themselves as separate from the city. As described by one resident, "[State officials] do not help very poor people. They might help people who *live in the city*" (emphasis added). According to another resident, "For some other people, even if the roads are slightly damaged, they may call up the politician and it would be remedied. For people like us, we don't even have *kaveri* [drinking] water."

For many years, *Bhupatipur* residents were focused on surviving, resolved to try to accept the status quo and "stay quiet." Tanvi says, "Earlier, we wouldn't know who is coming and going from here at night. Back then there were thieves who troubled us, other people who troubled us from the other localities who could come and beat us. We were frightened back then." But Arjun describes, "We [would] keep quiet. There's a saying which means that we should only dream as per our capacity. Whatever difficulty we face, we see what we have in our hands and do things accordingly." Claim making, or turning to officials, was not seen as a viable option.

Things began to change for *Bhupatipur* around ten years after settling on their permanent site. At that time, they received a visit from a non-governmental organization that

advocates for marginalized caste groups. Residents do not know how the organization located them but say the NGO "look[s] for areas where poor people are living in huts, form a group there and put up a board. They solve the problems there." Some neighbors had heard of the NGO from friends in other settlements, leading them to trust the NGO's motivations to help them negotiate for better infrastructure:

> We have seen in other areas. The poor people are there are without worries. They have got the houses in their own names. They earn their living. The children are looked after well. They are able to go to schools. There is no fear. They trust that [NGO] I have seen this myself with my own eyes. That's the reason, we trusted them. They will make some arrangements through the group. We believe they will help us get the facilities in this area.

Bhupatipur residents now name two non-residents who work at the external caste-based advocacy organization as their area leaders. The organizers have mobilized residents to protest for services and have also encouraged residents to coordinate their votes as a vote bank. Over time, with the NGO liaising between the settlement and elected officials, *Bhupatipur* has received incremental improvements, which they attribute directly to their collective voting efforts: "We have installed the [bathing] water facility… We all came forward to vote for [the MLA] and make him win. He supported us by giving us water facility." Another resident says, "If they win the election through our votes, they will help. If not, they won't."

Prior to the NGO approaching *Bhupatipur* to offer their support, residents did not make any claims, collectively or otherwise. Now, residents meet internally to agree on which collective needs to prioritize and approach the advocacy organization as a group with collective requests when the organization visits the settlement: "We ask them for something specific, we all get together and arrive at a consensus and then cast our votes." The organizers interface with politicians on their behalf, sometimes bringing residents with them, negotiating with the state for resources in exchange for the area's coordinated electoral support. All external claims are still organized and led by the NGO: "When the people from the group call us, we go there. We can't proceed without the group. If they lead and stand in front, we will stand behind them." However, recently a few residents that are slightly more involved with the NGO, acting as key liaisons between the organization and the neighborhood, are emerging as potential internal leaders. Moreover, the area has become more socially cohesive as a result of these changes: "People used to fight with each other. There were problems. From the past 5 years, after the group organizers came here, we continued being like that but from the past 2 years, we have become more organized."

Critically, residents attribute changes in their beliefs to changes in their neighborhood. Misha says, "We didn't think that way, back then. There was nobody to support us. Now our thinking is changing with time." Nirav says, "After the [NGO] came here, we have got strength." And as the area has experienced incremental access to resources, residents describe shifting beliefs about their capabilities:

What we have been doing all these days, is that we have been satisfied with whatever conveniences we manage to get. Our aspirations are limited to our capacities. We hadn't worried about rising above that level. We now worry for the sake of our children. We wanted to do something better for them.

1.4.2 Yarab Nagar

Yarab Nagar provides a helpful contrast to *Bhupatipur*. Both neighborhoods have similar origin stories, but their trajectories diverged substantially over time. Residents from the 64 households are mostly second- or third- generation Bengaluruans, and have lived on this site since the 1950s. Both *Bhupatipur* and *Yarab Nagar* formed on municipal government land that was "empty… like a forest" at the time. The residents set up "huts", or "sheds," on the land resembling the homes in *Bhupatipur*. For decades, they remained disconnected from resources like water and sanitation, and they lacked the documents needed to access government services. To survive, residents worked on nearby farms as agricultural laborers if and when they could find work, and otherwise engaging in daily wage labor (as *coolies*).

Residents report that, at that time, they thought of themselves as separate from the city. According to Taara, "Before if someone asked us we wouldn't even have proof that we were citizens of India." Residents focused on finding work and rebuilding their homes after fires and rainy seasons. They did not make claims on the state because they were "not aware" of their options. Residents attribute the changes in the neighborhood to the efforts of Raj, who emerged as an area leader:

> When there were huts, no one knew who or what [to do]. My uncle, he went to an association for the Dalits [caste group] and said 'See, we don't have anything, we must put in effort. We have to make some changes for the people here.' Then, at that time, before he married his misses, he used to drink a lot. He left all that. He thought to himself, I must raise the people up over here. Even now he puts in a lot of effort.

Raj sought advice from an NGO — another caste advocacy organization — on how to problem solve, and he began to mobilize his neighbors to protest against threats of displacement:

> Before when there were sheds, many people would come and ask us to empty our houses and clear the area. So people stood up and said why should we go from here and where could we possibly go, and made a scene. And… the leader [Raj], he rounded up more people and made a greater scene. With the support of the people, they all went in front of big houses, like those of people who were responsible for election, and fought with them. The leaders then gave us a card, like an identification card, a ration card, a voter ID card.

As time went on, *Yarab Nagar*'s external connections grew stronger. In 2005, recruiters came to the area looking for garbage collectors and cleaners to come work for the municipal corporation (BBMP); dozens of families from the neighborhood began working around

government officials. Around that time, BBMP installed a water pipe in the area. Raj continued to organize the residents to make collective claims and coordinate their votes, and the residents began to "become aware" that "if there are elections, it's they [politicians] who depend on us." *Yarab Nagar* residents began following a systematic negotiation process led by Raj: "They start the process 15 days to a month before. And then the people here come together as a united front and say here's all the things we want for our area, if you can get them all done we will put our vote for you."

Residents continued to experience incremental improvements in their access to formal resources until experiencing a dramatic shift in 2010. In 2008, the area began to fall under a newly delineated constituency, and the incumbent MLA was defeated for re-election under the newly defined boundaries. Between 2008 and 2013, he began heavily campaigning in the area, strengthening ties with Raj. Moreover, in 2010, BBMP held municipal elections for the first time since 2001. Between *Yarab Nagar's* visibility and ties at BBMP and the influence of the MLA candidate who was trying to bolster his following and also had influential contacts, the area was "notified" (formally recognized as a slum entitled to service improvements) during the 2010 BBMP elections. Simultaneously, the central government introduced a scheme to provide funding for local governments to redevelop slum areas in-situ. With the support of several officials, *Yarab Nagar,* along with several other settlements whose residents worked at the municipal government office, were selected to be upgraded.

Residents now live in multi-story apartment towers with access to potable water, electricity, and drainage, describing themselves as "part of Benagluru" and attributing increasing "general knowledge" about how to engage with officials. Girish says:

> Now that the apartments have come, they have taught us and so we understand. The life in the huts was very different... Only if it is nice, will people come and talk to us and look at us. If we simply live like we were in the huts, then no one will come and join us…. Now, we are in the apartments, officials and all these people pass in front of our eyes. When we see them suddenly in the apartments then feel, 'Oh we also should behave in this way'… when people look at us we also must look like officials.

While residents all have some form of housing documents, only around half of the households in *Yarab Nagar* have received full titles that legally allow them to sell and mortgage their homes. These documents were handed out along partisan lines by Raj and the MLA during the 2015 elections, leading many of Raj's neighbors to question his motivations. Anjali says, "in the beginning, when everything was good between us, the help and everything was good. After we started to ask questions, when we saw something wrong and we started to question it, [Raj] did not have an answer to our questions."

As a result, many residents have begun making claims directly, without Raj's help, when they have a problem to solve. Pavan describes a time when a group of neighbors approached the MLA about water prices without the area leader:

> We decided we would all go and speak to the MLA although the councillor has told us that it may not be of any use. We decided to go on our own, we arranged vehicles and went to meet the MLA at his house. He agreed to help us out. He came here and made sure that he got everything done. Since then we have not had any trouble.

Neighborhood conditions, beliefs, and political engagement strategies have all changed substantially in *Yarab Nagar* over time. But individual efficacy still remains limited. Sneha says, "Now if I go alone then I cannot do anything… If 4 or 5 people came along with me then we can come forward. Others say they believe the government still sees them as "just garbage collectors" or looks at them with disdain because they have "given them everything." Raj's daughter says, "As we are 'low' here we feel that our circumstances are the way they are. If it had been better, they [politicians] would have also understood us better." Sabina states this powerfully:

> We are also like the others. We are also living beings, no? No one should look down on us cheaply because we are from the slum. They should also value us. We are also people, blood flows through their veins just like blood flows through our veins. If we all see each other as the same kind of people then there will be no problems for anybody.

In both *Yarab Nagar* and *Bhupatipur*, changes in neighborhood characteristics led to associated changes in political beliefs, as well as recruitment and priorities. These changes

ultimately led to changes in political behavior. In *Bhupatipur*, an external shock set this trajectory in motion. In *Yarab Nagar,* internal leadership arose from the bottom-up. In each of the neighborhoods where I conducted fieldwork, the origin of or important turning points in this dynamic development process can be traced to critical junctures that led to increased informal network strength or access to formal resources. Understanding systematic patterns in these junctures is an important area for future inquiry, but it is outside the scope of this chapter. For this chapter, I examine the implications of neighborhood characteristics for residents' political behavior at a given period in time.

1.5 Empirical setting

I test the static implications of the framework in the context of Indian slums. India provides a compelling case as it is not only the world's largest democracy, but it also home to more than 100 million urban slum residents. Despite vast linguistic, cultural, and socioeconomic differences across states, "democracy in India has proved resilient and adaptable" (Rudolph & Rudolph, 2002, 65). Across states, rich and poor similarly value democracy and vote at similar rates (Chhibber & Verma, 2018; Krishna, 2008), albeit for different reasons (Ahuja & Chhibber, 2012). Beyond electoral participation, richer and poorer citizens largely engage in different ways (Chatterjee, 2004), but the poor are also highly active non-electoral participants (Kruks-Wisner, 2018). This is due, in part, to how many government services are provided in a highly discretionary manner (Chandra, 2004).

Much scholarship on Indian politics and development has focused on rural areas because of the sizeable rural population (DFID, 2011; Jha et al., 2007). As of 2018, only one-

third of Indian residents lived in urban areas (United Nations, 2018).[33] However, over the past several decades, India has experienced substantial urban population growth.[34] Between 1990 and 2020, urban agglomerations grew by 150 per cent on average, and the country is expected to be majority urban within the next three decades.[35]

Recent statistics estimate that as many as 104 million urban Indian residents live in slums — or informal settlements — (UN-Habitat, 2016) and that 76 per cent of urban residents work informally (ILO, 2018). However, severe data deficits make it difficult to know precisely how many people live and work informally. Across the Global South, there is an "astonishing lack of data about informal settlements" (Mitlin & Satterthwaite, 2013, 279).

It is difficult to define or measure slums, which may be best understood as "a relative concept [such that] what is considered as a slum in one city will be regarded as adequate in another city — even in the same country" (UN Habitat, 2003). As a result, official definitions and estimates of the number of people living in urban slums vary widely both within and across countries. In order to engender measurement and international comparisons, UN-Habitat, a leading international authority on slums, developed a widely adopted definition of a slum as "a contiguous settlement that lacks one or more of the following five conditions: access to clean water, access to improved sanitation, sufficient

---

[33] Notably, many more residents work in Indian cities at any given time; more than 100 million people are estimated to come to cities temporarily each year to work as itinerant migrants (see Krishna, 2017).
[34] Indian urbanization has been sizable but not exceptionally rapid (see Tumbe, 2016).
[35] Data pulled from World Urbanisation Prospects 2018. See https://population.un.org/wup/Download/.

living area that is not overcrowded, durable housing and secure tenure" (UN-Habitat, 2016, 57).

In India, government agencies have only recently started to count the number of people who live in slum settlements, and different official agencies often employ conflicting methodologies. Adopting one definition of slums, the National Sample Survey Organization counted 44 million slum dwellers in 2008. Adopting another definition, the Census of India counted 65 million slum dwellers in 2011. Regardless of definition, these official agencies commonly underestimate the slum population, systematically omitting the most vulnerable settlements (Bhan & Jana, 2013; Krishna, 2017). Independent grassroots investigations suggest the UN-Habitat estimate of more than 100 million slum residents is much closer to the facts on the ground than the Indian government estimates (Amis & Kumar, 2000; Harriss, 2005; Khasnabis & Chatterjee, 2007; Mahadevia, 2010; Mitra, 2006; Unni & Rani, 2007).

Though official evidence is lacking on the vast range of living conditions across slums, our original data show living conditions span a wide-ranging continuum of incrementally improving physical and legal conditions (Rains et al., 2019). This continuum includes high poverty neighborhoods with some degree of informality, including not only those areas that would be considered slums by official agencies, but also unplanned "squatter settlements" with populations too small to be considered as slums by the Indian government, as well as redeveloped areas that continue to experience poverty and informality. The number residing in slums, as well as the distribution of living conditions, vary across Indian cities, but the most vulnerable settlements, which are largely omitted from

official data, are present across cities. Most studies have focused on slums from a non-representative subset of this continuum. Moreover, most studies have focused on India's five megacities — those with populations greater than ten million — while the majority of India's urban citizens live in smaller cities (United Nations, 2018). This study is one of the first to examine political behavior among slums spanning the full continuum of living conditions from three vastly different cities.

This chapter focuses on three Indian cities — Bengaluru, Jaipur and Patna — each a state capital, located respectively in the south, west and east of the country. These cities are not only diverse geographically, but also vary along economic, cultural and political dimensions. Bengaluru, with a population of more than 12 million,[36] is the wealthiest and most rapidly growing of the three and has received global attention for its booming information technology (IT) sector (Benjamin, 2000; Jayatilaka & Chatterji, 2007). Jaipur, with a population of around 4 million, has recently been growing due to investments in real estate as well as IT, though not to the same extent as in Bengaluru (Parmar, 2009). Finally, Patna, with an estimated population of over 2 million, is the poorest and slowest-growing city in our sample (McKinsey Global Institute, 2010).

[36] Data pulled from World Urbanization Prospects 2018. See https://population.un.org/wup/Download/.

1.6 Quantitative data and methods

To empirically test the proposed framework, I analyze original surveys of nearly 10,000 households from over 200 Indian slum neighborhoods. Given government information about slums is incomplete and unreliable, and many slums remain undocumented, it is necessary to employ creative methods to locate and sample these understudied populations. To construct an original sample frame, our team iterated between analysis of Google Earth images, ground verifications, and consultation with field experts to identify a sample of Indian slums spanning a wide range of neighborhood characteristics.

We began by examining publicly available satellite images of Bengaluru, identifying urban neighborhoods that appeared visually distinct from known formal, middle class neighborhoods. We next iterated between satellite analysis and ground verifications undertaken by a team of experienced investigators in order to inductively develop a short list of criteria to identify slums from satellite images. We find lack of space between shelter units, roofs that appear to be low quality based on color, haphazard arrangement of shelter units, lack of proper roads, and lack of shadows, signifying single-story units are all associated with slum neighborhoods in Bengaluru. In areas where more of these criteria are detectable from satellite images, we find greater physical deprivations on the ground.

We continued to iterate between manual identification of potential slum areas in Google Earth and ground verifications to compile a list of groundtruthed slums spanning a wide range of physical characteristics. We then selected 40 neighborhoods in 2015, 45 in 2016, and 50 in 2017 to conduct surveys in. We selected a sample that preserved the

distribution of physical characteristics visible from satellite images and the spatial distribution of slums from the full sample frame we constructed.

In Jaipur, a colleague provided a list of 273 slums in the city.[37] As in Bengaluru, these slums were classified into types based on apparent dwelling quality from satellite images, and 40 slums were then randomly selected to preserve the distribution across slum types and spatial location. In Patna, a similar process was followed, except that the slum classification and stratification were carried out according to the availability of local services (due to the availability of data on services provided by a local organization[38] and the indistinct appearance of different slums from satellite images).

For each neighborhood, we conducted focus group surveys, asking about slum histories, available neighborhood amenities, and an estimate of the number of households in the settlement**.** Based on the settlement size, we developed a sampling interval (i.e. every third, fourth, or fifth home), randomly selected a starting point and then followed a right-hand rule to sample between 30-60 households depending on the survey wave. We alternated between surveying men and women in order to ensure at least 40% of our sample were male.[39] Our household surveys spanned topics including demographics, migration histories, livelihoods, tenure and work insecurity, monthly expenditures, policy priorities,

---

[37] This list was provided by Adam Auerbach, who received a map of slums from a government of Rajasthan joint venture, which he then built on for his fieldwork.

[38] This list was provided by Support Programme for Urban Reforms (SPUR), a partnership between the Government of Bihar and the UK Department for International Development (DFID).

[39] In less well-off slums, where both men and women were at work during daylight hours, we conducted surveys early in the morning.

political preferences, and participation in neighborhood activities. We also collected full network census data from a subset of eight of these slums. In these surveys, we enumerated every household in the neighborhood and asked a set of questions about social ties. I draw on these survey data to measure and test relationships between neighborhood characteristics and political behavior as described in the next two sections.

1.7 Empirical measures and analysis

This section first presents the measures of neighborhood characteristics and political outcomes of interest and then presents the empirical implications of the proposed framework.

1.7.1 Neighborhood formality

In order to calculate a single continuous measure of formality for each neighborhood, I first calculate household-level scores from indicators of each of the four types of informality that characterize slum areas, as discussed in Section 1.2 — property rights, employment, identification documents, and neighborhood infrastructure.[40] I then average the household scores to calculate neighborhood values.

To calculate the household score, I run principal components analysis on the indicators summarized in Table 1.1. Principal components analysis is frequently used to reduce multiple indicators to a single score, essentially weighting each indicator by how well

---

[40] Appendix A provides descriptive evidence on the range of values for these indicators.

that indicator explains differences across observations (James, Witten, Hastie, & Tibshirani, 2013).

Table 1.1: Indicators used in measure of formality

Dimension of informality	**Indicators**	**Calculation**
Identity documents	Ration card	Indicator variable = 1 if the respondent has a ration card in the city and 0 otherwise
	Unique ID	Indicator variable = 1 if the respondent has a unique ID card in the city and 0 otherwise
	Voter ID	Indicator variable = 1 if the respondent has a voter ID card in the city and 0 otherwise
Employment	Occupational classification	This is an occupational prestige classification adapted from (Iversen, Krishna, & Sen, 2016); more details are provided in Appendix
	Formal work benefits	Indicator variable = 1 if the respondent's job provides social insurance and 0 otherwise
Infrastructure	Water source	Type of water connection (tanker = 0, borewell = 1, handpump = 2, private connections = 3)
	Electricity connection	Type of electricity connection (none = 0, unmetered = 1, metered = 2)
Housing	Residential status	Residential status (squatting = 0, renting = 1, inherited = 2, purchased= 3, got allotment =4)

The first three components explain the majority (61 percent) of the variance in the data. Therefore, to calculate one score, I average the first three predicted component scores weighted by the amount of variance explained by each component. Importantly, household-

formality varies more across than within neighborhoods.[41] To then calculate one neighborhood-level score, I compute the average by slum. Finally, I scale the values from 0 to 1 where 0 corresponds to the most informal neighborhoods in the sample and 1 refers to the most formal neighborhoods in the sample. The slum-level score is hereafter referred to as the "level of formality."

1.7.2 Strength of informal political networks

I also develop a proxy for the strength of a neighborhood's informal political networks. The strength of these networks depends on social cohesion among neighbors, presence and effectiveness of internal area leadership, and the presence and effectiveness of the leaders' connections to external politicians or other external mediators (i.e. non-governmental organizations). This understanding builds on, but is more general than, the measure Auerbach (2019) develops to show how network structure affects the efficacy of neighborhood mobilization efforts. I use this more general measure to account for differences in the local political economy across cities.[42]

---

[41] I run a random effects model to decompose variance in formality into the proportion attributable to variation within neighborhoods, across neighborhoods, and across cities. The largest share of the variance is attributed to differences across slums.

[42] My interviews suggest the characteristics of network strength may vary across city. For example, non-governmental organizations may play a more important role in mediating interactions between slum leaders/residents and elected in some cities than others. Moreover, whether brokers are affiliated with a political party may matter more for broker efficacy in some cities than others. For example, Auerbach (2019) finds the density of party workers affect slum development trajectories, and he finds an average of 11 informal leaders per slum in Jaipur and Bhopal. Consistent with his estimates, I find an average of 10 leaders per slum in Jaipur, but the average and range are much lower for Bengaluru (6 leaders) and

To calculate a proxy for the network strength, I run principal components analysis on the indicators summarized in Table 1.2. Because some indicators are measured at the neighborhood-level (from the community focus groups) and some are measured at the household-level (from the household survey data), I calculate the neighborhood average of the household-level variables and then run principal components analysis on the neighborhood-level values.

Table 1.2: Indicators used in measure of informal network strength

Characteristic of network strength	**Indicators**	**Calculation**
Social cohesion	Perceived collective action potential	This is the response to "Suppose that 10 of your neighbors were invited to help in community work, such as a community water project, cleaning of gutters, or weeding on the side of the road. How many do you think would show up?"
	Frequency of disputes	Frequency of serious disagreements among neighbors (1 = never, 2 = rarely, 3 = sometimes, 4 = regularly)
Area leader efficacy	Presence of area leader	Indicator variable = 1 if the respondent can name an area leader and 0 otherwise
	Leader activity	Indicator variable = 1 if the respondent received any form of assistance from leader in past year and 0 otherwise
External connections*	Frequency of visits from public officials	Frequency of visits from political leaders and public officials according to focus group (0 = never, 1 = rarely, 2 = yearly, 3 = six-monthly, 4 = quarterly, 5 = once a month or more often)
	Number of officials visiting	Number of officials who visit according to focus group reports

---

Patna (5.5 leaders). Understanding differences in networks across cities is a fruitful area for further research.

***Note:** These questions only included in the 2016 and 2017 waves. For analyses that also draw on the 2015 survey wave, I use a score that omits these variables. The correlation between the two scores is .99.

The first two components explain the majority (61 percent) of the variance in the data. Therefore, to calculate one score, I average the first two predicted component scores weighted by the amount of variance explained by each component. I scale the values from 0 to 1 where 0 corresponds to the most informal neighborhoods in the sample and 1 refers to the most formal neighborhoods in the sample. The slum-level score is hereafter referred to as the "informal network strength."

1.7.3 Outcome variables and methods

The main outcome variables are various forms of engagement. I expect collective, "vote banking" strategies to first increase and then decrease with formality, and to increase with informal network strength. I expect direct engagement with officials to increase with formality.

To measure collective, mediated, "vote banking" strategies, I draw on four observational variables. To examine whether respondents made claims on or via their area broker, I draw on two survey questions. The first question asks, "In the past year, have you contacted any neighborhood, city, or state officials because of personal or neighborhood problems?" The respondent is then asked to specify who (all that apply). I create a binary variable equaling 1 if the responses include the area leader as 1 and 0 otherwise. The second survey question asks, "How often over the last year have you received help from the leader

of your neighborhood (for example, with finding a job, lending money, assistance with access to the hospital)?" If the respondent did not receive help, they are asked why. I create a binary variable equaling 1 if they did not receive help because they did not ask for it and 0 otherwise. I also examine whether respondents participated in a protest in the past two years.[43] Though protests are relatively uncommon as a strategy, they usually involve as many residents as possible and are organized by the area leader. Finally, I examine whether residents vote based on the advice of their area leader or other neighbors. The relevant question asks, "Come election time, is there someone in the neighborhood who advises you who you should vote for?"; those who respond "yes" receive a follow up question: "If so, is it a neighborhood leader, party operative, neighbor, social worker, or someone else?" I create a binary variable equaling 1 if they are advised on how to vote for by a neighborhood leader or a neighbor.

In additional to observational data, I also draw on experimental data to test the relationship between neighborhood formality and collective voting behavior. Respondents may be unwilling to admit to voting based on (often contingent) arrangements between brokers and politicians. To circumvent this issue, I also draw on a list experiment to measure whether respondents vote based on arrangements made by local brokers. List experiments allow respondents to privately report on sensitive behaviors. Respondents are asked to count the number of behaviors or actions they have taken part in without naming which actions they have taken part in. A randomly assigned control group is read a list that does not

---

[43] The question is "In the last two years, have you participated in a protest, like roadblocks, picketing, or a demonstration?"

contain the sensitive behavior of interest, while a randomly assigned treatment group is read a list that includes the sensitive item. The researcher is able to compare the mean counts between the treatment and control groups to assess the overall incidence (on average) of the behavior of interest.

In this case, I am interested in the extent to which voters are responsive to efforts by local vote brokers to coordinate voting by slum residents (Auerbach 2016; Spater and Wibbels 2020). The experimental question is, "People decide who to vote for based on many different considerations. I will read to you some of the reasons people have told us. Please tell me how many of these influenced your vote choice. Don't tell me which ones, just tell me how many." The control group was provided an innocuous list of three alternatives.[44] The treatment group was provided with this list as well as the potentially sensitive item of interest: "The suggestions of your neighborhood leader because he/she has made arrangements with a political party."

Finally, to measure individual, direct claim making behavior, I again draw on the question asking whether respondents have contacted any neighborhood, city, or state officials because of personal or neighborhood problems in the past year. I create a binary variable equaling 1 if the respondent contacted an elected official or bureaucrat *without also contacting an area leader* and 0 otherwise.

To test the relationship between neighborhood characteristics and political behavior, I run hierarchical logistic regression models on each out of the outcome variables, including

---

[44] The options were: The party took me to the party office in Delhi; Listening to radio coverage of the campaign; discussing the election with friends or family.

neighborhood-level random effects and clustering errors at the neighborhood-level. For each of the collective, mediated, "vote banking" strategies, I regress the dependent variable on informal network strength, neighborhood formality, as well as neighborhood formality's squared term. If these behaviors do first increase and eventually decrease with formality, then the coefficient on formality should be positive and the coefficient on the squared term should be negative. If network strength shifts collective behavior upward, then the coefficient on informal network strength should be positive. To test the relationship between formality and individual, direct claims, I regress the dependent variable on neighborhood formality, again controlling for network strength, including neighborhood-level random effects and clustering errors at the neighborhood-level. The outcome variables and my expectations are summarized in Table 1.3.

Table 1.3: Outcome variables and expected relationships

Behavior	**Indicator**	**Expectation**
Collective & mediated	Made claims on/via area broker	Concave with neighborhood formality; increasing with informal network strength
	Did not ask for or receive help from area broker	Convex with neighborhood formality; increasing with informal network strength
	Participated in area protest	Concave with neighborhood formality; increasing with informal network strength
	Advised to vote by broker or neighbor	Concave with neighborhood formality; increasing with informal network strength
Individual/subgroup & unmediated	Made claims on officials without area broker	Increasing with neighborhood formality

I include several individual-level and neighborhood-level variables to account for potential alternate explanations of behavior. First, I control for resources — both material wealth and education levels — which have been established as important predictors of political behavior (see Verba et al., 1995). Following existing studies from developing countries, I assess the number of assets that respondents claim to own from a standard list presented on the survey, rather than examining incomes, which can be inconsistent and difficult to interpret (Huber & Suryanarayan, 2016).[45] I include an indicator variable for whether respondents completed primary school or not (the average resident in the sample has completed 4.9 years of schooling).

I also include an indicator variable for whether the respondent migrated to their city of residence from elsewhere. Migrants may have different priorities and face different political challenges than non-migrants. Recent evidence from urban India finds internal migrants have weak, or even adversarial relationships, with state actors, which can affect political engagement (Gaikwad & Nellis, 2020; Thachil, 2017, 2020).

To account for neighborhood characteristics, I control for the age and size of the settlement, ethnic diversity[46], and land type[47]. Each of these characteristics may affect

---

[45] The asset score is the first component score from a principal component analysis of 20 binary variables indicating whether or not the household owns that asset.

[46] A central result in comparative political economy holds that ethnic diversity is associated with diminished collective action, public goods provision, and support for pro-poor policies (e.g. Alesina, Baqir, & Easterly, 1999; Banerjee, Iyer, & Somanathan, 2005; Habyarimana et al, 2007). To measure ethnic diversity, I calculate a fractionalization score ($1 - \sum_{i=1}^{n} p_i^2$ where p_i is the proportion of individuals belonging to each of n caste groups).

[47] Private land = 1; municipal or state government land = 2; national land = 3; and former rural ("Gram Panchayat") land = 4.

informal network strength and/or policy needs (Auerbach, 2019). Finally, I control for a set of standard demographic variables — age, gender, caste, and religion — as well as the city.

1.8 Results

I first test the relationship between neighborhood characteristics and collective and mediated behaviors. The output is provided in Table 1.4. Consistent with my expectations, the coefficient on neighborhood formality is positive for all but Model 2 (which looks at abstention from making claims on/via the area broker), while the coefficient on its squared term is negative. The results are significant for all models except for the model estimating the likelihood of participating in neighborhood protests. Also consistent with my expectations, informal network strength is positively and significantly associated with collective and mediated behavior.

Table 1.4: Collective behavior output

	1	2	3	4
VARIABLES	Claims on/via broker	Did not ask for or receive support from broker	Protest	Broker or neighbor advises vote
Formality	3.964**	-3.084***	2.67	10.12***
	-1.912	-1.192	-3.02	-3.75
Formality#formality	-3.614**	2.865***	-3.641	-6.875**
	-1.514	-1.098	-2.669	-2.705
Informal network strength	4.238***	-2.536***	1.850***	3.113***

	-0.456	-0.464	-0.669	-0.817
Asset score	-0.0291	0.0237	0.0655	-0.158***
	-0.0367	-0.0215	-0.0598	-0.0523
Primary education	0.0652	0.202***	0.258	-0.00758
	-0.0941	-0.0644	-0.187	-0.0953
Migrant	-0.414***	0.227***	-0.25	0.0615
	-0.133	-0.0718	-0.179	-0.153
Settlement age	-0.00442*	0.00151	-0.0039*	-0.0033*
	-0.00232	-0.00094	-0.00207	-0.00188
Settlement size	-0.000185**	-0.00001	-0.00003	0.00002
	-0.0000867	-0.00005	-0.0001	-0.00006
Caste fractionalization	0.326	-0.139	-0.465	0.139
	-0.359	-0.32	-0.6	-0.343
Municipal/state land	0.413***	0.0425	0.321	-0.158
	-0.14	-0.133	-0.262	-0.135
National land	0.271*	0.091	0.699**	-0.434**
	-0.162	-0.109	-0.323	-0.196
Former GP	0.249	0.129	0.339	
	-0.315	-0.208	-0.408	
Respondent age	0.00438	0.00075	0.00204	-0.00331
	-0.00471	-0.0022	-0.0052	-0.00522
Female	-0.119	0.150***	-0.309**	0.196**
	-0.0983	-0.0509	-0.154	-0.083
Scheduled caste or tribe	0.0711	0.00185	0.153	0.0242
	-0.103	-0.073	-0.169	-0.113
Muslim	-0.228	-0.122	0.537**	-0.0172
	-0.158	-0.123	-0.211	-0.176
Jaipur	-1.013***	-0.0928	-1.259***	
	-0.229	-0.135	-0.295	
Patna	-1.356***	0.189	-0.641*	
	-0.228	-0.173	-0.388	
Constant	-5.665***	1.703***	-3.680***	-6.436***
	-0.688	-0.479	-0.988	-1.352
Observations	7371	5784	5784	1899
Number of id	174	125	125	49

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Figure 1.6 shows the predicted probability that an area broker or neighbor advises a slum resident on who to vote for for various values of neighborhood formality (left) and network strength (right). Similar figures for the other models are provided in Appendix A. The probability that an area broker or neighbor advises a resident on how to vote increases from .01 (±0.03) for residents of the most informal areas to .35 (±0.08) for residents in areas with the median formality score. For residents in the most formal areas, the probability drops to .26 (±0.08). The probability that a neighborhood broker or other neighbor advises residents on how to vote increases consistently with neighborhood network strength. For residents of settlements with the weakest network strength scores, the probability is .04 (±0.05); this increases to .15 (±0.07) for those in settlements with the median network strength score and to .50 (±0.07), for those in settlements with the highest network strength score.

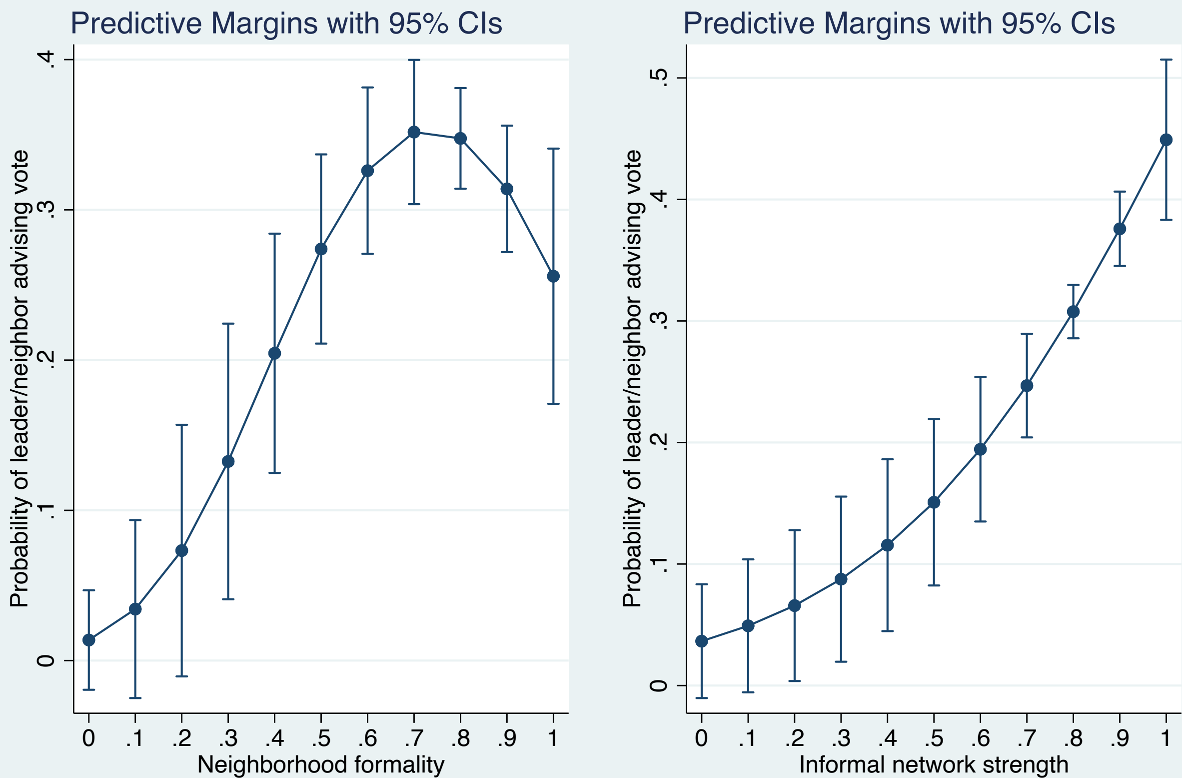


Figure 1.6: Vote banking behavior by neighborhood

I next turn to the list experiment designed to measure the extent to which organizational efforts of brokers affect voter behavior. The results are presented in Appendix A, which displays the difference in the average number of factors (and corresponding confidence intervals) selected by the respondents in neighborhoods with low

(less than 33rd percentile), middle, and high (greater than 66th percentile) formality scores.[48] If broker arrangements did not matter for voter behavior, the treatment and control groups would have the same mean. For low and mid-levels of formality, they do not. The differences in means suggest that 7 percent of residents from the most informal slums vote because of the partisan arrangements of vote brokers. The corresponding figure for middle formality slum residents is 11 percent. For the most formal neighborhoods, the estimated prevalence is 7 percent. I expect this measure to be a conservative estimate of voting according to broker suggestions because we measure voting based on whether the neighborhood leader has *explicitly* made arrangements with a political party, but citizens may also vote per broker recommendations as a result of their ongoing relational exchanges without being aware of "what happens behind the scenes" between brokers and patrons.[49] Regardless, the estimated concave pattern is consistent with my expectations. Though I cannot draw meaningful conclusions about whether the effect size differs significantly with formality, I conclude that this evidence, taken together with the observational evidence, is suggestive.

Finally, I test the relationship between neighborhood formality and direct claim-making on officials. The model output (Appendix A) shows the incidence of unmediated claims is significantly increasing with neighborhood formality. The predicted probability that a resident from a neighborhood with the lowest formality score is .05 (±0.03) (Figure 1.7).

---

[48] The same set of control variables are included and standard errors are clustered by neighborhood.
[49] Author interview, November 10, 2018.

The probability increases to .11 (±0.01) for median-formality slums and .16 (±0.03) for the most formal settlements. This is consistent with evidence from our social networks data from a subset of eight settlements: residents of less formal settlements are less likely to report personally knowing a local elected official (an MLA or ward corporator). The predicted probability that a resident from the most informal settlements personally knows an MLA or corporator is .03 (±0.06), which increases to .77 (±0.08) for residents from the most formal settlements.

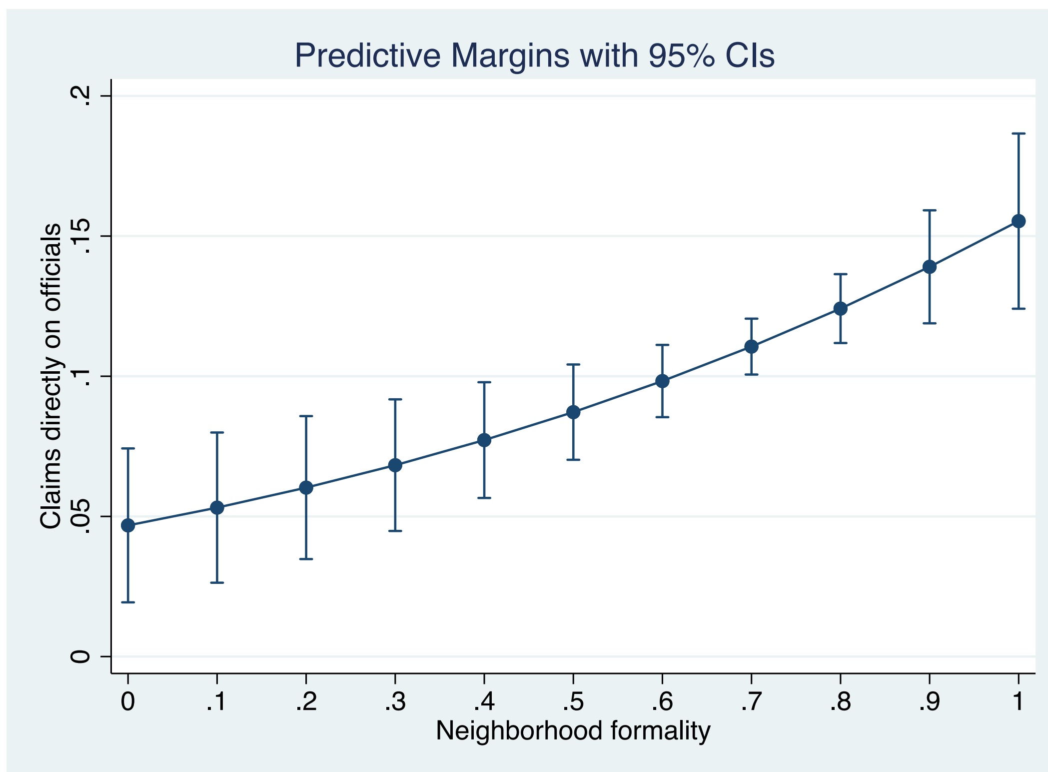


Figure 1.7: Unmediated claims by neighborhood

In a follow up data collection effort in 2020, our team conducted structured interviews with three key informants each from 40 settlements in Patna and Bengaluru selected to represent the full continuum of slum living conditions.[50] The key informants were asked how residents generally solved collective and household-level problems prior to the pandemic.[51] These data provide further evidence that problem-solving strategies vary across settlements. The most commonly reported response to neighborhood-level problems across settlements is to contact politicians. However, residents of more formal settlements are also more likely contact bureaucrats directly, which is meaningful because these interactions are less likely to reflect electorally contingent exchanges. Key informants also report differences in how residents respond to household-level problems. In particular, residents of more formal settlements are much more likely to problem-solve on their own, reflecting a shift away from being "left with politics" to address everyday challenges.

[50] This data collection effort focused on understanding the impacts of the Covid-19 pandemic across a range of settlements. To learn about neighborhood outcomes, we interviewed at least one area leader and two other key informants, including at least one female respondent, who were broadly knowledgeable about neighborhood occurrences.
[51] The relevant questions are, "Before the pandemic, when there was a problem that affected most of the neighborhood (such as with drainage or water), how would the neighborhood usually try to solve this problem?; Before the pandemic, when there was a problem that affected one or a few households (such as accessing a government scheme), how would the household usually try to solve this problem?"

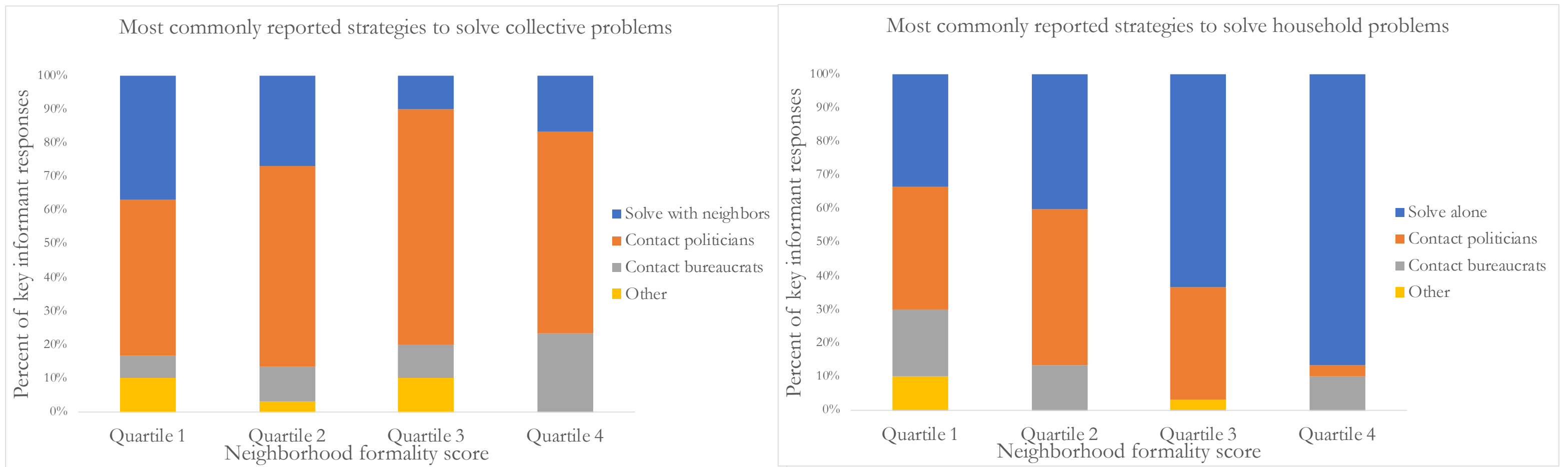


Figure 1.8: Key informant reported problem-solving strategies

1.8.1 Mechanisms

The evidence to this point provides support for the expected patterns of behavior across settlements. In this section, I also provide additional evidence in support of the proposed framework mechanisms. I argue neighborhood formality affects collective efficacy and, ultimately, individual efficacy as well as policy priorities. Informal network strength affects collective efficacy as well as political recruitment.

The qualitative data reveal a wide range of political beliefs that vary more across than within settlements. Priyanka's experience in *M.G. Garden* provides an illustrative example. *M.G. Garden* is the most formal case study neighborhood. In this neighborhood, which developed substantially over time, residents now also express relatively high levels of individual efficacy. As a result, residents are more likely here than elsewhere to make claims individually or in small special interest groups. Priyanka is a housekeeper in *M.G. Garden*. She

is a widowed, single mother who has never attended school and is illiterate. These characteristics would suggest she would have relatively low levels of individual efficacy according to existing theory. Yet, Priyanka describes much higher levels of individual efficacy than described by many residents in more vulnerable neighborhoods. She describes how she "took the phone number of [the counsilor] who has won the position now." Her house is toward the bottom of a hill, in a "low lying" area and her house faces unique challenges during the rainy season as a result. When she faces issues with the drainage around her house, she calls the counsilor directly to ask for help and he sends workers to "get the work done." Other residents in the area describe similar accounts of making individual claims directly on politicians and officials, while residents of other neighborhoods describe these types of strategies as unavailable to or ineffective for them.

Moreover, in our follow up study with key informants from 40 settlements, we ask key informants how confident they are in their ability to meet with officials and ask for help with household problems. Key informants from more formal neighborhoods report a significantly higher level of confidence (p-value .019) seeking help from government officials.

To proxy for collective efficacy, I draw on the following question from the household survey data: "Do you think your neighborhood is an effective vote bank?" I run a hierarchical logistic regression with the response to this question as the dependent variable, including the same set of control variables as in the main analyses. Consistent with my expectation that both neighborhood formality and informal network strength are associated with higher collective efficacy, I find both characteristics are significantly associated with a

greater likelihood that residents report their area is an effective vote bank (output shown in Appendix A). I expect, however, that vote banks lose their importance with neighborhood formality, as residents not only have higher individual efficacy but also shift their problem-solving efforts from collective to subgroup problems. As such, I also test the relationship between neighborhood characteristics and how important respondents believe vote banks are.[52] Consistent with my expectations, I find a negative (though not significant) relationship between neighborhood formality and reported vote bank importance (Appendix A).

To explicitly test how policy priorities differ across settlements, I draw on both observational and experimental survey evidence. Across all survey waves, we ask respondents what they consider to be the most effective policy for reducing income inequality. The responses include government schemes that are typically mediated by political officials (i.e. targeted gas or food subsidies) and government actions that are not (i.e. more spending on education).[53] Schemes are well known for being highly politicized and local leaders often cite gaining access to schemes as a particularly important aspect of their work. I run a logistic regression model estimating the probability that respondents express a preference for mediated schemes by level of formality. The model results (Appendix A) show that neighborhood formality is significantly associated with a decreased preference for

---

[52] The question is, "We have heard that serving as a 'vote bank' can help neighborhoods receive better services or more projects for the government. How important do you think vote banks are for neighborhoods in [city]?"
[53] We ask, "What do you think is the most effective government policy for reducing the gap between those at the bottom and top of the economic ladder?"; answer responses include, "More spending on education"; "More schemes for the poor"; "Increasing taxes on the rich and spending on the poor"; and "Government creating more jobs."

politically mediated schemes. The probability that residents of the most formal neighborhoods prefer mediated schemes to reduce inequality is .39 (±0.05); this increases to .43 (±0.02) for those in median-formality areas and to .55 (±0.10) for those in the least formal settlements.

In the most recent survey wave, we also ask respondents a battery of three questions about which of two "policies" they prefer. In each question, respondents are presented with a programmatic public policy (i.e. affirmative action quotas) and a collective good that is often politically, if not clientelistically, delivered in slums (i.e. improved drainage in the neighborhood). From these three questions, I construct an index, with a value from 0 to 3, equal to the number of questions for which the individual selected the programmatic policy option. I regress this index on the level of formality (Appendix A), finding residents of more formal neighborhoods prefer the programmatic policy more often than residents of more informal neighborhoods (p-value .04).

Finally, I present evidence from a forced-choice conjoint experiment, in which we randomized both the individual characteristics of candidates for ward leader[54] and their electoral promises. Conjoint experiments are useful for causally estimating the relative value respondents place on various parameters in complex, multidimensional choices. In our experiment, respondents were told to imagine that they were comparing two candidates for ward leader and were asked which one they prefer. The candidate characteristics we

---

[54] In India, cities are governed by elected municipal councils that are constructed from single member district wards.

randomized include: member of Congress party; member of BJP party; member of your caste or religion; and “an educated person”. The electoral promises that we randomized include: Promises private benefits to your family (like money or food); promises better community services (roads, drinking water, sanitation, street lights, etc.); promises religious or caste benefits; promises more pro-poor schemes; and has the support of your neighborhood leader. Because we randomize these attributes independently, we can calculate the average marginal component effect (the marginal effect of an attribute averaged over the joint distribution of the other attributes) of each trait simultaneously by estimating a linear regression model (Hainmueller, Hopkins, & Yamamoto, 2014). In this model, the unit of analysis is a hypothetical candidate. The dependent variable takes a value of 1 if the respondent prefers that hypothetical candidate and 0 if they prefer the other candidate presented to them. The independent variables are indicator variables for each of the randomized traits.[55] The average marginal component effect tells us how much a given trait affects the probability that a respondent prefers a ward leader with that trait relative to a ward leader with a specified baseline trait.

Formality levels less than the 33rd percentile value are coded as “Low formality”; levels greater than the 66th percentile are coded as “High formality”; neighborhoods in between are coded as “Middle formality.” Figure 1.9 shows the results from this regression model. The baseline traits are that the candidate is co-ethnic and that he or she has the support of the area leader (broker). The coefficients for the other attributes tell us how

[55] Standard errors are clustered by respondent.

much that attribute affects the probability that a respondent prefers that candidate relative to a candidate with the baseline attribute.

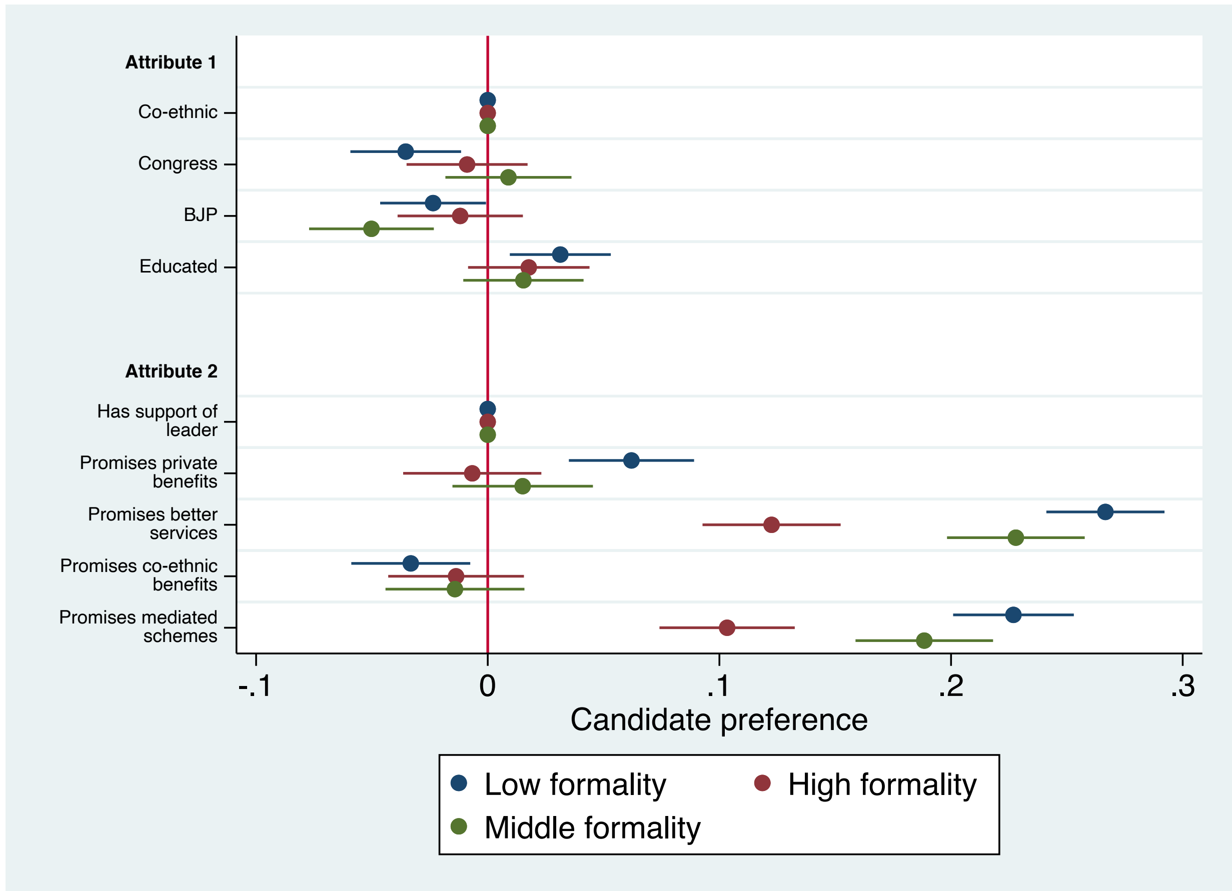


Figure 1.9: Survey experimental evidence on local candidate preferences by neighborhood formality

The coefficients on the second trait provide information on how respondents weight the electoral promises the candidate makes relative to whether the candidate has the support of the local leader. The results show that respondents prefer candidates who explicitly

promise mediated and collective goods relative to those who have the broker's support but have not explicitly promised these goods. Residents of the most informal neighborhoods prefer candidates that explicitly promise private benefits over a candidate with the area leader's support, but there is no significant difference by formality. Residents of slums across the formal spectrum prefer promises of politically mediated schemes and neighborhood goods, but the strength of these preferences differs by formality. Residents of more informal areas are significantly more likely to prefer candidates making these electoral promises than residents of more formal neighborhoods, providing support for my expectations that priorities vary with neighborhood formality.

The final mechanism underlying the relationship between neighborhood characteristics and the expected patterns of political behavior is political recruitment. In neighborhoods with stronger informal networks, residents will be more likely to be asked to engage in collective claim making. This is consistent with the finding that those in neighborhoods with stronger networks are significantly more likely to protest, given all but three percent of respondents who participated in protests report that someone else mobilized the group. As an additional check, I test whether residents of neighborhoods with stronger informal networks are more likely to be targeted with supports from the area broker without initiating a claim on the broker. Indeed, I find a significant positive relationship (p-value 0.00) between network strength and whether residents that did not seek support from the area broker were targeted with benefits.

1.9 Discussion

This chapter sets out to develop and test new ways of understanding how neighborhood characteristics shape political behavior among urban slum residents. The empirical data I draw on to test my expectations are primarily cross sectional and observational, making all causal claims necessarily preliminary. However, the evidence presented, which draws on a multi-year original data collection effort, including from settlements that are otherwise omitted from official data sources, provides compelling initial evidence in support of the proposed framework. Drawing on a natural experiment or other appropriate methodologies to identify causal relationships between neighborhood characteristics and political behavior is a fruitful area for follow up research.

Moreover, a methodological benefit of employing mixed methods research is that, in addition to drawing on the quantitative data to establish associations, I can also draw on the qualitative data to trace chronological changes in neighborhood characteristics and residents' behavior for a small number of cases. Slum residents describe how their beliefs and behaviors change over time, following changes in neighborhood characteristics. Many directly attribute changing behaviors to changes in their neighborhoods.

The qualitative data also helps address concerns about selection effects. If people with certain political beliefs or behavioral tendencies sorted into settlements based on the organizational capacity of the neighborhood, then the association between neighborhood characteristics and claim making would be purely due to selection. However, respondents describe meaningful changes in neighborhood characteristics and subsequent behavioral changes regardless of their reason for moving into a certain settlement. Moreover, our

survey data show that two-thirds of families have lived in the same city for multiple generations. Nearly a quarter of residents (22 percent) were born in the same settlement where they still reside. For those who moved between settlements, the most commonly reported reasons for selecting a neighborhood are to be near family or to be closer to work. Overall, movement between settlements is relatively rare (Rains & Krishna, 2020).

1.10 Conclusion

Scholars have long argued that slums develop along different trajectories (Portes, 1971; Turner, 1969) and have debated what explains these differences. Existing literature on access to formal resources and informal political networks have separately advanced insights into development trajectories, but these bodies of work have not adequately been in conversation with each other. To the extent that slum residents draw on informal networks to mitigate vulnerabilities associated with informality, then whether and how residents draw on these networks should vary with neighborhood formality. However, there is still relatively little research on the political implications of informality, and existing evidence on the implications for development outcomes has been mixed. Meanwhile, the literature on informal political networks has tended to focus on the problem-solving strategies from a subset of settlements that do not capture the vast variation in living conditions across slums.

In this chapter, I seek to advance and connect these two existing areas of work in order to explain how neighborhood formality and informal network strength jointly affect political behavior. I find evidence that collective and mediated "vote banking"-type engagement is concave with neighborhood formality and increases with informal network

strength. Higher levels of neighborhood formality predict more individual and direct engagement. These patterns will have important implications for development outcomes in cities of the Global South when limited resources are distributed according to political discretion.

Future work should further examine how neighborhood characteristics jointly affect supply-side decisions. Relatedly, more work is needed to examine the prospects for neighborhood- and household-level mobility across neighborhoods. Elsewhere, we demonstrate that inter- and intra-generational mobility vary across slums (Rains & Krishna, 2020), and future analyses will explicitly test the relationship between neighborhood characteristics and prospects for upward mobility.

The findings also have important normative implications for understanding how the urban poor understand and exercise their rights as citizens. The vast majority of the urban poor in low-income countries experience some degree of informality. Understanding how these citizens experience and respond to the vulnerabilities associated with living and working in spaces that are unregulated by the state is important for understanding how democracy works for many of the world's urban poor. These questions will take on additional importance as the global urban population continues to grow on an unprecedented scale.

Chapter 2

Women and (Informal) Work:

Gender, Informal Labor, and the Civic Participation Gap in Urban Slums

2.1 Introduction

Nehru Colony is a poor neighborhood in central Bengaluru, India.[1] As in many other "slums" around the world, residents have tenuous rights to their homes and lack access to crucial infrastructure like water and sanitation. Karthik and Abhishek, two men with connections to local political parties, have emerged as local brokers who negotiate with politicians on behalf of Nehru Colony for better services and property rights. They mobilize their neighbors to attend political rallies and vote for their preferred candidates; in exchange, these politicians provide important resources to the community. Karthik and Abhishek are well recognized by both their neighbors as well as local officials as the area's leaders.

Though not described as the main brokers or leaders in the area, two women — Radhika and Asha — are also well-known problem-solvers in Nehru Colony. Neighbors, particularly other women, approach these women to help with internal disputes and to accompany them to meet with government officials. Both Radhika and Asha trace the origin of these efforts to when they began working outside the home. Before that, Radhika says, "I was confined within the four walls of this household… I now know what can be done, when I go anywhere."[2] Asha, describing changes in Nehru Colony says, "From the past ten years, women are stepping out of their homes and are going to work… From the time women have started going out and earning, this place has seen a lot of improvement, when compared to earlier times."[3]

---

[1] All names have been changed to preserve anonymity.
[2] Author interview, October 7, 2018.
[3] Author interview, October 7, 2018.

Radhika and Asha's experiences underscore two important points that have been the subject of much existing research: men are, on average, more likely to participate in politics and other civic activities than women; however, women's labor force participation can help mitigate these gender gaps. While much of the existing research on the implications of female labor force participation has focused on formal employment (i.e. jobs that are regulated by the state and linked to legal benefits), most of the women employed in Nehru Colony, and in cities across the Global South, work in the informal economy.

Informal work, which offers fewer resources, recruitment opportunities, and psychological benefits than formal sector work, differs in meaningful ways that make it difficult to extrapolate expectations across sectors. Moreover, empirical evidence on the political implications of informal employment is scarce, particularly with respect to gender. Meanwhile, "[w]omen's participation in everyday political spaces [also] remains poorly understood" (Carpena and Jensensius n.d., 2). How does participation in the informal economy contribute to women's everyday civic and political engagement?

I seek to address these gaps in this chapter, both connecting and contributing to knowledge of women's political behavior in developing countries, as well as political behavior under informality. I propose and test a framework to explain how gendered differences in civic engagement vary across activities, as well as how women's informal labor force participation can reduce some of these gender gaps. I argue that when women enter the informal labor market, particularly in positions outside of their homes, they gain confidence navigating interactions beyond their neighborhoods and their problem-solving networks expand. Both factors facilitate group-based claim making on public officials. Most

informal work, however, does not provide opportunities for women to develop leadership skills or political interest, and, thus, does not reduce the gender gap in leadership. I test this argument with original household survey data from over 9,000 households across nearly 200 slums. I find evidence to support my expectations that the gender gap varies by activity, and that women's participation in the informal labor force reduces the gap for certain activities. Part of the association between labor force participation and civic engagement is likely due to differences in characteristics of women who enter the labor force in the first place. However, I provide qualitative evidence that this association is explained, at least in part, by the consequences of labor force participation. I also provide evidence that this association is not driven by the reverse scenario — that is, it is not the case that women are provided with jobs as a result of their civic and political activities.

This chapter makes at least two important contributions. First, the framework advances a more comprehensive understanding of women's everyday behavior in informal spaces. Existing arguments are mixed, in part, because they tend to focus on the relationship between certain types of civic or political activities and informal labor force participation. The framework proposed in this chapter reconciles these mixed findings by considering how informal labor force participation affects gender gaps differently for a variety of activities.

Second, I draw on an original database to present novel descriptive evidence on labor force characteristics and civic engagement for a population that is not well documented empirically. Urban slums, where the vast majority of residents work informally, are difficult to find and poorly registered by most city and national governments in the developing world. As a result, empirical evidence on both informal settlements and

employment is limited and can be systematically biased (Bhan & Jana, 2013; Krishna, 2017). The figures presented in this chapter fill important gaps in evidence on this understudied, yet vast population.

The chapter proceeds in eight sections. In the next section, I review relevant literature on gender and political behavior as well as on the relationship between female labor force participation and political participation. I then describe the empirical setting. The fourth section expands on existing literature and fieldwork to develop the framework. The fifth section describes the data and analytical strategy. I then draw on these data to test the proposed framework. Thereafter, I address potential threats to the argument. The final section discusses the findings and concludes.

2.2 Gender, civic engagement, and informality

A large body of literature establishes that women are socially, economically, and politically disadvantaged relative to men (Duflo, 2012; Htun, 2005; Jayachandran, 2015; Sen, 2001). Around the world, women are consistently less likely than men to be "active citizens" (Houtzager and Acharya 2011, 9)[4], and this gap is particularly large in developing countries (Gottlieb, 2016; Isaksson, Kotsadam, & Nerman, 2014). Globally, women are underrepresented in political leadership (Bhalotra, Clots-Figueras, & Iyer, 2018; Paxton & Hughes, 2014), are less likely to engage in many forms of voluntary political activities (Burns,

[4] "One of the most consistent empirical regularities in survey research conducted in affluent democracies is that… women, are less likely to participate in associational life and are less likely to be active citizens" (Houtzager and Acharya 2011, p. 9).

Schlozman, & Verba, 2001; Chhibber, 2002), are less likely to make claims on the state (Harriss, 2005; Kruks-Wisner, 2011, 2018b), and are less likely to express their preferences (or be listened to) in participatory processes than men (Khan, 2017; Olken, 2010; Parthasarathy, Rao, & Palaniswamy, 2017). Not only can underrepresentation of women's distinctive policy preferences (Chattopadhyay and Duflo 2004; Gottlieb, Grossman, and Robinson 2018; Iversen and Rosenbluth 2006) lead to adverse outcomes for women, but the gender gap also raises normative concerns.[5]

Scholars of gender and politics increasingly attribute the participation gap to intra-household inequalities that are reproduced in other spheres (Agarwal 1997; Chhibber 2002; Htun 2005; Iversen and Rosenbluth 2006; Khan 2017). Htun (2005) argues gender is best understood as a social position, whereby traditional institutions create hierarchies with men in positions of power within and beyond the household. In this vein, at least two traditional gendered social norms[6] have structured enduring inequalities that are both "ideological" and "material" (Agarwal 1997, 1).

First, women have traditionally been thought to seek "protection [from men] in exchange for submissiveness and propriety" (Kandiyoti 1988, 283), leading to expectations

---

[5] "Moreover, beyond the possible impact on policy outcomes, participants gain additional benefits from taking part: recognition as full members of the community; education about the social and political world; and information, skills, and contacts that are useful in other social pursuits. Thus we care about group differences in political participation… because they represent a potential compromise in the democratic norm of equal protection of interests" Burns, Schlozman, and Verba (2001, 6).

[6] A social "norm reflects average beliefs held by a group" Bernhardt et al. (2018, 363).

that men will assume leadership or decision-making responsibilities in households, which "are still the sphere of male dominance" (Chhibber 2002, 415). Recent empirical research from India and Pakistan finds women highly value maintaining harmony within the household, even at the expense of asserting their own preferences (Bernhardt et al., 2018; Khan, 2017; Subramanian, 2020), and that men can have a strong distaste for female leadership (Beaman, Chattopadhyay, Duflo, Pande, & Topalova, 2009). Elsewhere, prejudice toward female leaders has been shown to stem from perceptions that female gender roles and leadership roles are incongruent (Eagly & Karau, 2002).

Second, traditional gendered divisions of labor allocate women to domestic caretaking responsibilities, while men are responsible for "obtaining access to goods and services, as well as for financial support through outside employment" (Papanek 1971, 521). As such, it is argued that girls and boys are socialized to view their roles outside the home in general, and with respect to politics in particular, differently (Andersen, 1975; Burns et al., 2001), resulting in politics being a "man's game" (Burns, Schlozman, and Verba 2001, 334). Moreover, not only has this gendered division of labor led to fewer women engaging in paid work outside the home, but it has also resulted in highly gender-segregated labor markets, which have adverse implications for women's wages (Goldin, 2014; Kandiyoti, 1988). As a result, women's household contributions, which are often unpaid or less well paid than men's, are undervalued, ultimately reducing women's bargaining power (Agarwal 1997; Iversen and Rosenbluth 2008). Women's weaker household bargaining power is then thought to be reproduced in the public sphere.

A few compelling models examine how both cultural norms and gendered differences in material resources can explain the gender participation gap. Robinson and Gottlieb (2019) argue women's civic participation[7] is higher in African matrilineal societies because women have access to material resources *and*, *crucially,* these resources are conferred in a way that promote progressive gender norms. Burns, Schlozman, and Verba (2001, 272) attribute the gap in the United States to "women's cumulative deficits with respect to an array of factors that facilitate activity — resources, recruitment, and psychological involvement with politics .… [These factors] have their roots in many aspects of experience that differentiate the lives of males and females in American society."

Notably, the gender gap varies across types of activities (Burns et al., 2001; Chhibber, 2002), implying this combination of explanatory factors may affect various forms of participation differently. In a case study of an urban Indian slum, Haritas (2013) finds women rarely engage in neighborhood leadership roles, but they actively negotiate for services when it is perceived as a natural extension of their domestic responsibilities.[8] Thus, activities that pose greater threats to stereotypical gender roles are likely to have wider and stickier gender gaps (Khan, 2019). This implies the gap for some activities may be difficult to

---

[7] I adopt the definition of civic participation posited in Gottlieb (2016), who defines "civic participation as citizen engagement in public affairs with the aim of improving public life or influencing government policy. Political participation—the act of directly engaging in politics through party activity, electoral campaigns, or serving in public office—is a subset of civic participation. While studies in American politics often focus on political participation…, a broader definition of civic participation is more appropriate in a developing country context" (p. 96).

[8] "After all, if one has to do the laundry, one needs water, and what if there is no water? Thus by extension, obtaining a regular water supply becomes part of doing the laundry" (Haritas 2013, 134-5).

close without broad-based cultural changes, but other forms of participation may be more elastic to individual-level factors.

One individual-level characteristic that has repeatedly been shown to influence civic engagement is women's labor force participation (Andersen, 1975; Burns et al., 2001; Ross, 2008). Labor force participation has the potential to simultaneously influence multiple factors that contribute to the gender participation gap. First, engaging in paid labor can endow women with two resources that are important predictors of civic participation: money and civic skills, such as communication and organizational skills (Verba et al., 1995).[9] Second, labor force participation expands women's networks, which increases their possibility of being recruited to join in civic action, increases information sharing, and reduces costs to collective action (Burns et al., 2001; Ross, 2008). Third, psychologically, labor force participation can alter efficacy and orientations toward politics. Receiving wages for work done outside the home can enhance confidence, increase intra-household bargaining power, and enable women to develop an identity independent of the household, helping to "blur the traditional, sharply differentiated sex roles, in politics and other areas" (Agarwal 1997; Amin et al. 1998; Andersen 1975, 441; Chhibber 2002; Iversen and Rosenbluth 2006).

---

[9] I adopt the conception of civic skills described in Verba, Schlozman, and Brady (1995, 304-305): "In our conception, civic skills are not subjective competencies. Our measures are relatively objective: they include, for example, communications skills such as possessing a good vocabulary or ability to communicate in English and experiences in exercising communications and organizational skills… Thus, we are not referring to subjective feelings of efficacy..."

Most of the empirical literature linking labor force participation to the gender gap in civic participation examines higher income countries in general, and formal sector participation in particular.[10] Yet, nearly *750 million* women around the world are employed in the informal economy (ILO, 2018).[11] In developing countries, 92% of employed women work informally (compared with 85 of employed men). Current urbanization trends will continue to have important implications for the composition of the labor force (Glaeser, 2014; Gollin et al., 2016). Within the next three decades, the urban population in low-income countries is expected to increase by over 2 billion, and the share of people living in poverty is becoming increasingly urbanized (Beard, Mahendra, and Westphal 2016; Ravallion, Chen, and Sangraula 2007; United Nations 2014). As a result, large numbers of urban women (and men) continue to enter the non-agricultural informal economy (Chen & Beard, 2018; Mitra, 2005; Moghadam, 1999; Tripp, 1989), often "not by choice but as a consequence of a lack of opportunities in the formal economy and in the absence of any other means of earning a living" (ILO, 2018). Even in countries like India, where female labor force participation is

---

[10] There are some rich ethnographic accounts of gender norms and informal work in developing countries (e.g. Bowers 2019; Breman 2013; Haritas 2013; Shah 2014), as well as work in economics on how gender norms determine labor force participation, including informal work (Field et al., 2010; Heath & Jayachandran, 2017; Jayachandran, 2019). Within political science, to my knowledge, studies that examine the political effects of labor force participation, including informal participation, examine different outcomes, such as policy preferences (e.g. Gottlieb, Grossman, and Robinson 2018).

[11] The "informal sector" describes employer characteristics while "informal employment" describes employment characteristics. Employers in the informal sector are unincorporated "enterprises… operating at a low level of organization, on a small scale and with little or no division between labour and capital as factors of production" (ILO, 2018). Informal employment is often operationalized as work that does not provide social security, or pension, benefits. The informal economy includes both informal employment and work in the informal sector.

low — and even declining overall (Fletcher, Pande, & Troyer-Moore, 2018) — the number of women entering the informal economy has been increasing (ILO, 2020; Mitra, 2005).

A small but growing set of studies focuses on the political implications of working in the informal economy. These studies find informal workers have different policy and candidate preferences (e.g. Altamirano Hernandez 2015; Rains and Wibbels 2020). Though women are disproportionately represented in the informal sector, evidence on the "gendered dynamics of informality and its consequence for political behavior" is particularly scarce (Prillaman and Phillips 2019).

There are many reasons to expect informal labor force participation may impact civic engagement differently for women than formal labor force participation. The informal sector provides fewer resources, can be more socially isolated, and may be less empowering than the formal sector. Women in the informal economy receive fewer and more volatile wages than those employed formally (Chant, 2013; Mitra, 2005; Tacoli, 2012). Women also experience substantial "time poverty" as they work simultaneously in informal paid labor and as the primary care-givers in their homes (Tacoli 2012, 5). Moreover, while women employed informally often engage in tasks that draw on traditional domestic skills (Mitra, 2005), these jobs likely do not enable women to practice many of the civic skills (i.e. organization or public speaking) that increase civic engagement (Schlozman, Page, Verba, & Fiorina, 2005). While the workplace can be an important site for political recruitment, informal sector workers have fewer political ties at work than formal sector workers (Prillaman and Phillips 2019). Finally, informal work, which can be undertaken out of necessity for survival, may not

be empowering or "consciousness raising" enough to affect women's political participation (Matland 1998).

In this chapter, I advance and connect nascent work on political behavior under informality, gender gaps in civic engagement, and the implications of informal labor force participation for the gender gap in engagement. I draw on existing literature as well as fieldwork to propose a framework that I test with an original dataset. The next two sections present the empirical context and framework.

2.3 Empirical setting

The fieldwork and empirical data collection for this chapter were conducted in slums — neighborhoods with insecure tenure and inadequate services — in three Indian cities. Most slum residents in the labor force are employed informally (Auerbach 2019), making slums an ideal context to locate a substantial number of informal sector workers engaged in a variety of occupations.

Recent statistics estimate that as many as 104 million urban Indian residents live in slums (UN-Habitat, 2016) and that 76 per cent of urban residents work informally (ILO, 2018). However, severe data deficits make it difficult to know precisely how many people live and work informally (Mitlin & Satterthwaite, 2013). Because many, if not most, slum neighborhoods are omitted from official data sources (Bhan & Jana, 2013; Krishna, 2017), we draw on unique methods, employing satellite data analysis, ground verifications, and consultation with field experts, to build an original database of urban slum households in Bengaluru, Jaipur, and Patna.

These three cities are each state capitals, located respectively in the south, west and east of the country. They vary in population (ranging from populations of somewhat more than 2 million in Patna to about 9 million in Bengaluru), economic dynamism, connectedness to the global economy, urban management, electoral competitiveness and alignment with the national governing party. Within and across cities, living conditions in slums span a wide-ranging continuum of incrementally improving physical and legal conditions (Rains et al., 2019). Across neighborhoods, slum residents engage in a wide variety of occupations that are predominantly informal (Rains & Krishna, 2020).

2.4 Framework

This section draws on existing literature and fieldwork[12] to develop the framework. A rapidly growing body of literature examines how citizens turn to local brokers to solve everyday problems associated with informality (e.g. Auerbach, 2017, 2019; Auerbach & Thachil, 2018, 2019; Auyero, 2000; Bjorkman, 2015; Chatterjee, 2004; Das & Walton, 2015; Haritas, 2013; Harriss, 2005; Jha et al., 2007; Krishna, Rains, & Wibbels, 2020; Lall, Deichmann, Lundberg, & Chaudhury, 2004; Mitlin, 2014; Paller, 2015; Rains & Wibbels, 2020). Brokers, or informal leaders, emerge to mediate interactions between slum residents

[12] I draw on 134 interviews with residents and informal leaders from 13 neighborhoods in these cities. Respondents included equal numbers of men and women geographically distributed throughout each neighborhood. Each interview lasted about one hour. Audio recordings from Bengaluru were professionally transcribed and translated from Kannada to English for analysis. Interviews in Jaipur and Patna were used to verify concepts discussed in interviews in Bengaluru but have largely not been transcribed. Further details are provided in Appendix A.

and politicians and to encourage neighbors to vote and make claims collectively (Auerbach & Thachil, 2018, 2019; Bjorkman, 2015; Harriss, 2005; Jha et al., 2007; Paller, 2015). State support is extended to the neighborhoods that are most effectively able to organize politically (Auerbach, 2017, 2019; Das & Walton, 2015; Lall et al., 2004; Spater & Wibbels, 2020). As such, brokers try to coordinate neighbor votes through a "vote bank"[13] in exchange for attention from political parties that can exercise influence with the municipal authorities (Auerbach 2016).

I argue that, within this context, most civic activities can be classified into three categories. The gender gap in participation, as well as the extent to which informal labor force participation may ameliorate this gender gap, varies across category. I first describe my expectations of the gender gap in participation across categories before developing the argument on how women's labor force participation can affect some categories of engagement.

2.4.1 Vote banking activities

Among urban slums, "the exchange [of material resources] is not contingent on an individual's vote, but rather on a politician's best sense of the aggregate voting behavior of the settlement and the partisan ties of its leaders" (Auerbach, 2016, 116). As such, for activities intended to remind politicians of the strength of a neighborhood's vote bank or

---

[13] Vote banking refers to a situation in which the residents of a particular area coordinate their votes, in the hope of receiving a benefit or transfer in return (Srinivas, 1955).

"people power,"[14] brokers will mobilize as many residents as possible. This includes activities such as mobilizing residents to vote, protest or to make neighborhood-level claims on local officials.

Shreya, a 35-year-old scrap picker, explains how this works in Naya Bazaar:

> During elections, they [politicians] come here to ask for votes. Since we vote for them, they win. They promise us saying they will get all our work done but after they win, they don't come back. We get together and go to them. 1-2 people from each house gets together and approaches them… all together as a group.[15]

In M.G. Garden, Jyoti, a housekeeper in her twenties, describes a similar experience when dozens of her neighbors leveraged the strength of their vote bank to demand better water supply from a local representative:

> We told him that we don't have water and that we need water absolutely. There was around 50 to 60 of us. The news spread by word of mouth and we got together and decided to go to his house since there was no use talking amongst ourselves only. We told him there's *kaveri* [drinking] water in [another neighborhood], that's not very far from here. If you can provide water there, you can provide water here. We told him we put our vote in for him...We also went to him because during the election period

[14] Author interview, October 8, 2018.
[15] Author interview, November 8, 2018.

he came to each one of our houses asking for votes and said whatever you need, I will provide, whatever you need I will provide. So we thought, okay, maybe and we all put in our votes for him.[16]

For these types of collective "vote bank" activities that are important for securing development outcomes, I expect women and men will mobilize at similar rates.[17]

2.4.2 (Sub)group claim making activities

Other activities involve smaller groups of residents. Respondents describe making claims on local officials in smaller groups, with or without the area broker, when they have a problem that only affects a subset of the neighborhood, when they have other useful personal connection to local officials, or when the broker has previously been unresponsive to them. Subgroup claim making is not quite the same as the "vote bank" activities, which involve as many residents of the neighborhood as possible, but these claims are still generally made in groups, as described by 19-year-old Shruti: "In [other neighborhood], it is not like that. If anyone has any problem they will raise the issue and it will be addressed. Unlike here

[16] Author interview, October 8, 2018.

[17] A recent paper on participation gaps in Pakistan argues that gender gaps in electoral participation is *higher* in urban than in rural areas (Cheema, Liaqat, Khan, Khan Mohmand, & Rauf, 2021). However, their argument is consistent with mine, as they attribute a low gender gap in voting in rural areas to the importance of collective vote bank style exchanges in rural areas, similar to what I have described in urban slums.

where we have to go [to representatives] in groups and say things a certain way, there are no such requirements there."[18]

I expect this type of activity, which involves traveling to outside areas and/or interacting with people in positions of power outside of their neighborhood, to be male dominated, reflecting traditional gender norms that limit women's involvement in the public sphere and divide labor by gender, such that men take responsibility for external problem solving. Women express this sentiment repeatedly in interviews. Pinki, a 25-year-old homemaker in Janata Colony explains, "I want to be at home and look after my husband and children. It's not safe to move around with politicians… I focus on my children and my family. I don't like talking to people outside."[19] Archana, who is married to a broker in Naya Bazaar, is a 35-year old who runs a small business in her neighborhood. When asked about property documents, she responds, "I don't know that, my husband should know it… I don't go out; my husband takes care of everything."[20]

2.4.3 Area leadership

Another common type of engagement in slums is local leadership. This includes acting as an area broker as well as participating in neighborhood associations that make decisions on behalf of the neighborhood. A recent study of Argentina finds that brokers in poor neighborhoods are predominantly male and that, due to structural barriers, female

---

[18] Author interview, October 26, 2018.
[19] Author interview, November 14, 2018.
[20] Author interview, November 8, 2018.

brokers need to be more efficacious than male brokers to amass the same following (Daby, n.d.). A few existing studies of India find both informal slum leaders and other neighborhood association members are predominantly male (Haritas 2013; de Wit 1996; Auerbach 2017). In fact, one study on neighborhood associations notes, "[t]he *most* striking dimension along which committees exhibit inequality in representation is that of gender" (Auerbach 2017, 123 emphasis added).

Interview respondents, too, describe area leadership as male-dominated. When asked to describe the area leaders, Shilpa, a 20-year-old who works in a brick factory, responds, "I don't know. It's only the men who discussed all that. None of the women were involved."[21] When asked why she does not participate in community meetings, Rekha, a woman in her forties who runs a beauty salon from her home, says, "If we get angry and if we have to voice our objection there, it's not allowed for us to speak. What is the point of going?"[22]

In line with traditional gender norms, I expect to observe a significant participation gap by gender for activities including informal leadership and association participation.

2.4.4 Labor force participation

Relative to formal work, informal work provides fewer resources — including both material resources and opportunities to develop civic skills —, is more socially isolated, and may be less empowering. Each of these characteristics may mitigate the potential positive

---

[21] Author interview, November 14, 2018.
[22] Author interview, October 9, 2019.

impacts of labor force participation on women's civic engagement. However, I argue informal labor force participation, particularly that which occurs outside of the home, increases women's group claim making through two mechanisms. First, working outside the home increases women's confidence navigating everyday travel and interactions beyond their neighborhoods (Tripp, 1989). Second, entering the labor force expands women's problem-solving networks, which decreases costs to group mobilization (Moghadam, 1999; Prillaman, 2017; Ross, 2008). As women gain confidence navigating interactions outside their neighborhood and are exposed to more people that recruit them or they can mobilize with, they will be more likely to engage in external claim making. These themes are repeatedly expressed in in-depth interviews.

Women who work outside the home consistently describe higher levels of confidence navigating interactions outside their neighborhoods than women who stay home. They describe more confidence traveling outside the area as well as engaging in discussions with people unknown to them. The vast majority of women interviewed who do not engage in paid work describe lack of interest in or concerns about traveling and interacting with people outside of their neighborhood. For example, Gaytri, who has completed 12th grade but remains outside the labor force, describes the local police station, approximately half a mile from her neighborhood, as out of reach, making her grateful when the police officers come to deliver information in person: "We don't have much information. We can't go to [the local] police station, which is quite far, to go and ask for information. When they come

here and give us the information, it gives us courage."[23] When asked how she thinks government officials from Vidhana Soudha, the building that houses the state legislature, would respond to her request for help, another woman responds, "I don't know… I do not even know where this Vidhana Soudha is… I have not gone. I have not talked to anybody."[24]

Other women believe they would be more confident and knowledgeable if they were exposed to the "outside world," as summarized by Ananya: "They will be in a good job [in other areas]. If people interact with the outside world they will have more knowledge, as they will be exposed to a different environment. I feel that is good. These people here… don't know about anything else. They don't raise their children properly."[25]

In contrast, most women engaged in the labor force have more experience with and speak more confidently about navigating interactions outside of the neighborhood. In Nehru Colony, where Gaytri describes not wanting to commute to the police station, Asha says about their location: "We can go outside bravely here, even at 12 at midnight. The railway station and bus stand are located nearby. We don't need to pay for an autorickshaw. Yes we can go [by foot]."[26] When describing her neighbors she says, "I feel if these people go outside, they would also do well. If they learn how to talk in front of others, they would also develop."

---

[23] Author interview, November 7, 2018.
[24] Author interview, November 3, 2018.
[25] Author interview, October 27, 2018.
[26] Author interview, October 7, 2018.

In Naya Bazaar, Sunita, attributes her experiences with her work collecting garbage in luxury hotels to her increased proficiency navigating interactions with others:

> R: From the past 7 years I am working with the BBMP in the garbage disposal work and I like it. We get into a contract for recycling garbage with big 5- star hotels…. We have been getting the contract for many years now. We get the waste like papers, bottles, etc. and recycle it.
>
> I: What do you like about your work?
>
> R: I like the process of collection. It's difficult for us to otherwise get an entry into 5-star hotels. We are so poor. I like it that we are able to go there and do all this work.
>
> I: What have you learned?
>
> R: When I went out of this area, I realized how cheap this place is. I learned how to behave with others, how to be responsible, how to give respect to others, the things that remain to be learned. I have learned all this.[27]

Joining the labor force also expands women's networks, especially of other women, which can help reduce barriers to mobilization (Prillaman, 2017; Ross, 2008). Respondents (women and men) reiterate that claims need to be made in groups. Of 122 claims described

[27] Author interview, November 17, 2018.

by interview respondents, 75 percent were made in groups.[28] This is higher for women (81%; 47 out of 58 claims) than for men (70%; 45 out of 64). Moreover, respondents repeatedly state that group claims also need to be made by at least one person who is knowledgeable and/or well connected. Both points are summarized by Divya, a sweeper in Janata Colony: "We need to go to someone known… Now if I go alone then I cannot do anything… If 4 or 5 people came along with me then we can come forward… If someone randomly approaches them [politicians] with a problem then they will not be ready to solve it. They will busy with their own work, they will not be able to help us. But if you take someone known along with you then you get some help. It will be of some use. They will help then."[29]

Women in the labor force have larger networks of influential ties — people who they could make claims with or on — than women not in the labor force. These women are more likely to know who to approach for help, as stated by an office sweeper in Rajwari, "Now, we know everybody. [We] go outside, work and we can take someone's help."[30] With more ties, women are more likely to know who to ask to accompany them and are more likely to be recruited to engage in civic pursuits.

Despite the expected relationship between labor force participation and group claim making, I do *not* expect informal employment to reduce the deeply entrenched gender gap in leadership. Brokers build a following by demonstrating their efficacy as local problem solvers

---

[28] These include claims on formal and informal leaders for improvements or access to water, electricity, drainage, schools, health facilities, personal documents, such as ration cards, and housing documents.

[29] Author interview, October 26, 2018.

[30] Author interview, November 11, 2018.

(Auerbach & Thachil, 2018). Female brokers may need to be particularly efficacious to successfully build a following (Daby, n.d.). Labor force participation *can* increase the necessary civic skills and political interest, but the type of work, rather than employment itself, may matter for these outcomes (Schlozman et al. 2005).[31] In the vast majority of interviews with women in the informal economy, respondents do *not* describe opportunities to develop leadership skills. Pooja, who works as a dishwasher at nearby hotel says, "What is there to learn? Our work is to wash and come back."[32]

Moreover, the scholarship arguing that intra-household inequalities are reproduced in the public sphere suggests that employment would need to substantially alter intra-household dynamics in order to shift gender roles in the community. Recent experimental work based on rural India finds women's factory employment has no impact on intra-household bargaining (McKelway, 2020). However, this study *does* find a causal link between a woman's employment and her agency over making independent decisions without her husband. This evidence is consistent with my expectations that women's informal labor force participation will increase the likelihood that women decide to participate in external claim making with their peers but not to take up community leadership roles.

Notably, the few women who describe more transformative experiences at the workplace, such as Radhika and Asha in the opening vignette, are those who are more likely to engage in leadership activities. Both Radhika and Asha attribute their increased leadership

---

[31] One study from Ethiopia makes a similar argument to explain why they find women engaged in factory work are no more likely than unemployed women to participate in community meetings or express an interest in politics (Aalen, Kotsadam, & Villanger, 2019).
[32] Author interview, November 4, 2018.

in the community directly to their labor force experiences at an NGO and a government-run daycare center. Radhika dates her work in the community back to when she began working with the NGO eight years prior, saying she knew there "were a lot of problems in the area" but she didn't know how to address these issues until receiving training and information from the NGO. Asha says of her work, "I have learned a lot. I now have the capacity to talk to anyone. They have given a card to me. They made us sit inside the Vidhana Soudha during an official meeting. So, I know I have the capacity to do that."[33] Later she says, "We would never know how to go meet the MLA earlier… Now, we go and speak directly to them… We have progressed to that extent, in speaking to them. We can say that we have been able to contact them now and seen some improvement because of that."

I expect that, overall, participation in the informal economy will affect the gender gap in external claim making but not in local leadership. However, I do expect that labor force participation in the informal economy can reduce the gender gap in leadership in the rarer cases when these jobs provide greater opportunities for skill development.

2.5 Empirical data and analysis

To empirically test the proposed framework, I analyze the original survey data of 9,439 households from more than 200 Indian slum neighborhoods described in Section 1.6. I also draw on a follow up data collection effort. In 2020, our team conducted repeated structured phone interviews with three key informants each from 40 settlements we

[33] Author interview, October 7, 2018.

previously surveyed in Patna and Bengaluru. This data collection effort focused on understanding the effects of the Covid-19 pandemic across a wide range of settlements, but we also included questions about female labor force participation and leadership. To learn about neighborhood outcomes, we interviewed at least one area leader and two other key informants, including at least one female respondent, who were particularly knowledgeable about neighborhood occurrences.

2.5.1 Analyses

This section summarizes my hypotheses and the observable implications from the proposed framework. My first hypothesis is that the gender gap in participation varies across activities. I expect women to participate at similar rates as men in "vote banking" activities, and to participate less than men in external (sub)group claim making and leadership activities. To test for differences in participation by gender, I first run hierarchical logistic regression models on whether or not respondents participated in different activities, controlling for relevant covariates summarized in Appendix B. I include a variable indicating whether the respondent is female, which is the coefficient of interest for this hypothesis. I include slum-level random effects and cluster errors at the slum-level.[34]

---

[34] I do not use fixed effects for my primary specification because I lose observations from neighborhoods where there is no variation. However, I also estimate models using fixed effects and find all of the significant results reported in this chapter are robust to a specification using fixed effects.

The relevant questions to measure vote banking activities are the following: Do you have a Voter ID card (EPIC card)?"; and "In the last two years, have you participated in a protest, like roadblocks, picketing, or a demonstration?"

To test whether the respondent engages in external claim making, I draw on the following questions: "In the past year, have you contacted any neighborhood, city, or state officials because of personal or neighborhood problems?"; "If yes, which ones?" I code responses of contacting an elected or other government official[35] as 1; other responses are coded as 0. Note that we do not ask whether they contacted these representatives with a group. However, the interviews suggest *most* claim making is conducted in groups, especially for women. Furthermore, the interviews reveal that a higher level of political efficacy is required to make claims individually than collectively, so I expect that those with the confidence and skills to make claims on their own will also be confident participating in group claim making.

To test whether respondents participate in leadership activities, I draw on the following question: "Have you attended a community meeting in your neighborhood in the past 12 months?" Our data suggest that the majority of these meetings are political in nature. We do not include a question about whether the respondent is a local leader, or area broker. However, to identify the area brokers, we ask respondents, "Can you give me the name of the first most important leader of your neighborhood?" I code the names by sex to provide evidence on the proportion of brokers who are female.

[35] The options are "ward leader"; "municipal corporation"; "MLA"; and "government officials."

My second hypothesis is that women in the labor force will be more likely than women not in the labor force to participate in group claim making strategies. I expect no relationship to vote banking strategies (for which I expect working and non-working women to both participate at rates similar to men) or to leadership activities (for which I expect only a small subset of occupations to influence). To test this hypothesis, I run the same models used to test the first hypothesis, but I include an indicator for labor force participation and run the models only for the sample of female respondents.[36] I also run the model on the entire sample, including an indicator for gender and an interaction between gender and labor force participation to test for whether the relationship between labor force participation and civic engagement differs for men and women.

2.6 Results

I first provide descriptive evidence on labor characteristics in the sample before presenting descriptive evidence of rates of engagement in different activities. I then turn to tests of the hypotheses.

[36] I exclude responses from individuals who are currently in school or retired. Work force participation is coded as 0 if the respondent describes herself as "Unemployed" or if she describes her occupation as "Housewife."

2.6.1 Labor force characteristics

In contrast to the 92 percent of men who are engaged in the labor force, only 41 percent of women are engaged in paid work.[37] However, this figure is much higher than the 24% average reported for urban Indian women (Fletcher et al., 2018). Higher labor force participation among women in urban slums is consistent with existing research that shows Indian women from less advantaged backgrounds are more likely to work outside the home (Deshingkar & Start, 2003; Field, Jayachandran, & Pande, 2010; Kruks-Wisner, 2015). Similarly, within these neighborhoods, the proportion of women who work outside the home decreases from .45 for women with assets ranked in the 25th percentile to .33 for women with assets ranked in the 75th percentile. Of those women who completed primary school (29% of women compared with 45% of men), 28 percent say they are engaged in the labor force. This number increases to 45% for women who have not completed primary school. Higher caste women are also less likely to work outside the home (35%) than scheduled caste or scheduled tribe women (46%).

While women in households with more economic resources appear to exit (or never join) the labor force, both women and men with more assets are more likely to have career aspirations for their daughters in the future (Figure 2.1). These trends suggest that, for women in the informal economy, particularly in more vulnerable positions, exiting the labor force may be seen as a sign of upward mobility. For relatively more well-off households, parents may aspire for their daughters to enter more formal, higher skill-building

[37] I find no differences in the probability that women work outside the home by city.

professions, which are largely out of reach to less well-off slum residents (Rains & Krishna, 2020). This pattern is consistent with the well theorized U-shaped relationship between economic development and female labor force participation (Goldin, 1995).

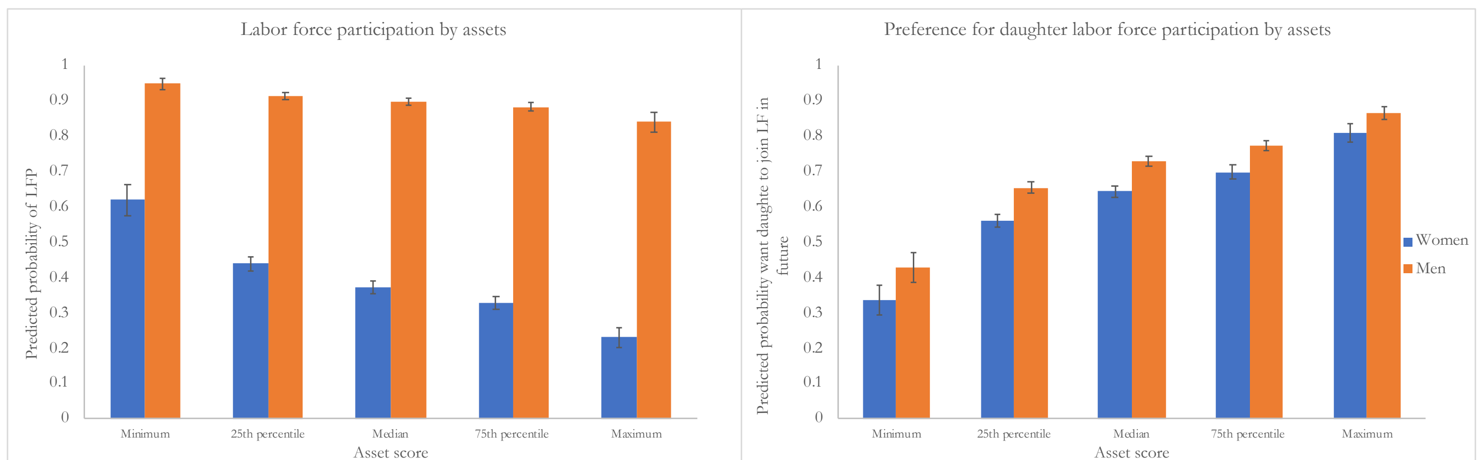


Figure 2.1: Men and women's labor force participation and preferences for daughter's participation by assets

To provide information on the types of work male and female slum residents are engaged in, I classify occupations according to an occupational prestige index developed for the Indian context (Iversen, Krishna, and Sen 2016). The categories range from 1 to 5, with 5 corresponding to higher prestige jobs. The occupational categories are also increasing with frequency and predictability of work, higher incomes, and the likelihood that they provide

access to benefits that are legally required for all formally employed workers (Rains & Wibbels, 2020).[38]

The proportions of working men and women by occupational category are displayed in Table 2.1. The most common forms of employment for women are manual labor and lower status vocational occupations; these are also the most common types of work for male slum residents.

Table 2.1: Occupational type for men and women in the paid labor force

Class	Type	Examples	Percent of employed women in this work category	Percent of employed men in this work category
1	Manual labor	Daily wage labor; construction; garbage collection	39.84	33.7
2	Lower status vocational occupations	Butcher; carpenter; driver; factory work; maid	34.04	33.62
3	Higher status vocational occupations	Cook; electrical work; grocer; security guard	11.32	19.22
4	Clerical	Sales person; receptionist; call center	10.84	9.97
5	Professional	Teacher; engineer; doctor	3.96	3.48

[38] This is measured by the following question: "Does your job provide ESI, PF, or gratuity benefits?" ESI refers to Employee State Insurance, a social security and health insurance program; PF refers to the Provident Fund, a social insurance program for salaried workers. Gratuity refers to a retirement benefit that ostensibly applies to all employees with more than five years' service in a firm with 10 or more employees.

Though employed women and men engage in similar occupational categories within slums, fewer employed women (7%) receive benefits associated with formal employment than men (10%). Moreover, though women and men work a similar number of days per month, women receive much lower wages than men across occupational categories (Appendix B).

Our household data do not include information on where these jobs are located. Yet, some women generate incomes from their home, and whether these women describe themselves as "housewives" or "entrepreneurs" may reflect important systematic differences in their confidence and support networks (Field, Jayachandran, Pande, & Rigol, 2016). Moreover, women may face restrictions on their physical mobility that can restrict their labor market opportunities outside the settlement (Field and Vyborny, n.d.).

Thus, in our key informant interviews from a subset of 40 settlements in two cities, we ask respondents to estimate what percentage of women in their neighborhood earn any income, what percent earn income working *inside* the neighborhood, what percent earn income *outside* the neighborhood and what form of transportation most women use to get to work.[39] Key informants report that most women (85%) who earn income work *outside* of the neighborhood. The most commonly reported mode of transportation (68%) is walking, but

[39] The questions are "Thinking back to before the pandemic, what percent of women in this neighborhood earned any income, including from self-employment?"; "What percent of women earned any income working inside the neighborhood (self-employed or other)?"; What percent of women earned any income working outside the neighborhood?"; and "What is the primary type of transportation these women used to get to work?"

30% of key informants report that women also take public transportation. While these are very rough approximations, they provide important descriptive evidence to suggest that many women in this context leave their neighborhoods to work.

2.6.2 Types of civic engagement

To provide evidence on the civic activities that women and men engage in in the sample, I first examine participation by gender *without* controlling for individual-level characteristics. I include slum-level random effects and cluster standard errors at the neighborhood-level to account for the nested characteristic of the data. Figure 2.2 displays the predicted rates of different forms of engagement for men and women.

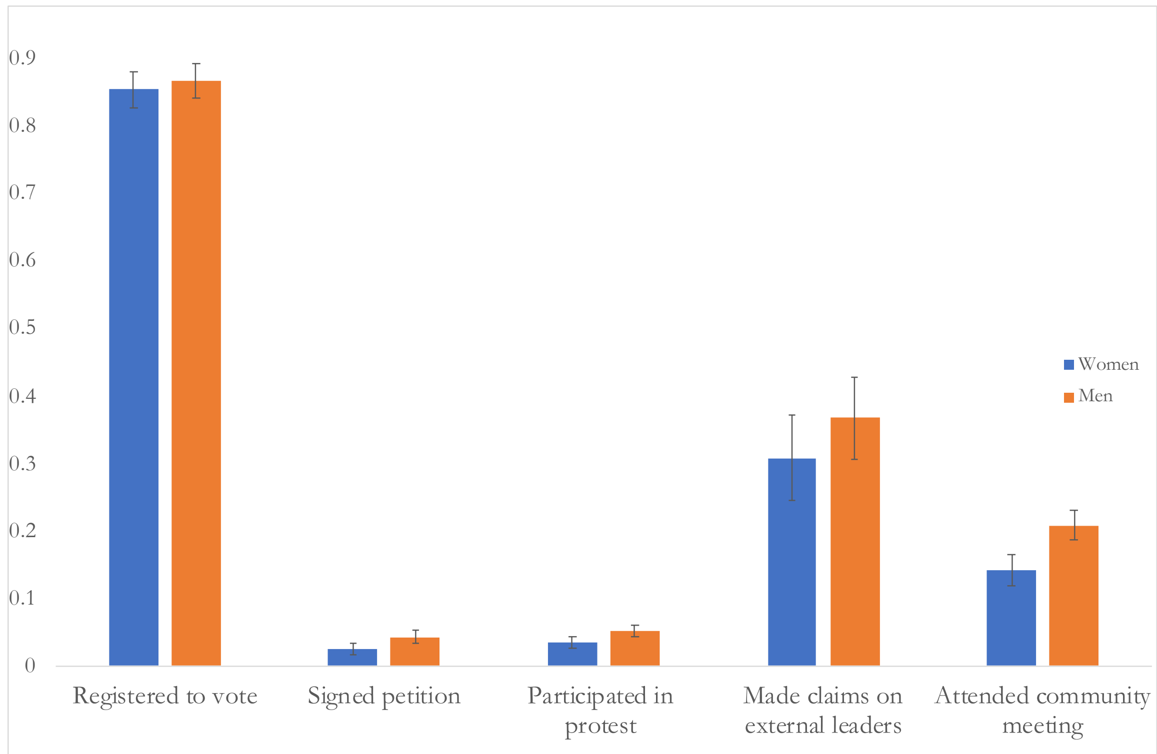


Figure 2.2: Incidence of engaging in various activities by gender

Without accounting for covariates, I find women are significantly less likely to participate in all types of activities (vote banking, group claim making, and leadership). The vast majority of both men (87%) and women (85%) possess voter ID cards, but the proportion of respondents reporting other forms of non-electoral participation are all substantially lower for both men and women. Protesting is relatively rare. More common is making external claims, which 37% of men and 31% of women report they did in the past year. 21% of men and 14% of women report that they participated in neighborhood meetings.

Respondents are also much less likely to report that the most important broker in their neighborhood is a woman. In Nehru Colony*,* where Asha and Radhika live, 95% of respondents provide the name of a male area leader. No one lists Asha and Radhika. Across all neighborhoods, 72% of respondents name an area leader; of these, only 12% are women.

Though the differences in Figure 2.2 adjust for the nested characteristic of the data, they do not account for differences in other key covariates that have been shown to be important predictors of participation. As described in existing literature, I find women are disadvantaged relative to men with respect to resources, recruitment networks, and psychological orientations toward politics, as shown in Table 2.2.

Table 2.2: Differences in other explanatory factors by gender

Indicator	Women	Men
Resources		
Years of education	3.68 (±0.29)	5.83 (±0.33)
Asset holdings (out of 15) for female- and male-headed households	5.88 (±0.29)	6.24 (±0.29)
Recruitment		
Proportion naming a neighborhood leader	0.68 (±0.04)	0.76 (±0.03)
Psychological orientation		
Proportion following news every day	0.49 (±0.04)	0.62 (±0.04)

Thus, to test the first hypothesis on how the gender gap varies by type of activity, I need to account for these other differences. I run hierarchical logistic regression models on different participation strategies, controlling for these and other covariates. The results are displayed in Table 2.3.

Table 2.3: Results of hierarchical logistic regressions on participation strategies

	Vote banking activities			
VARIABLES	Registered to vote	Protest	External claims	Community meetings
Female	0.414***	-0.0821	-0.373***	-0.268***
	(0.106)	(0.173)	(0.0976)	(0.101)
Scheduled caste or tribe	0.173	0.188	0.139	0.0685
	(0.112)	(0.154)	(0.0955)	(0.0940)
Muslim	-0.240	0.530***	-2.15e-05	-0.297*
	(0.208)	(0.190)	(0.214)	(0.161)
Age	0.0413***	-0.00904	0.00711*	0.00832**
	(0.00487)	(0.00640)	(0.00405)	(0.00384)

Household head	0.207*	0.262	-0.171	0.302***
	(0.119)	(0.191)	(0.131)	(0.117)
Migrant	-0.511***	-0.140	-0.350***	-0.180*
	(0.109)	(0.171)	(0.0993)	(0.0958)
Asset score	0.337***	-0.0129	0.0132	0.0270
	(0.0386)	(0.0596)	(0.0343)	(0.0318)
Primary education	0.0809	0.161	0.365***	0.268***
	(0.0999)	(0.165)	(0.0817)	(0.0863)
Household size	0.0836***	0.0267	0.000756	0.0647***
	(0.0255)	(0.0315)	(0.0190)	(0.0163)
Years in current home	0.0845***	0.0145***	0.00493	0.00535
	(0.00675)	(0.00552)	(0.00309)	(0.00326)
Political interest	0.130***	0.150**	0.184***	0.159***
	(0.0398)	(0.0691)	(0.0383)	(0.0478)
Leader in slum	0.410***	0.986***	0.646***	0.656***
	(0.103)	(0.210)	(0.123)	(0.113)
Jaipur	-1.016***	1.146***	-1.706***	-0.150
	(0.206)	(0.268)	(0.287)	(0.165)
Patna	-0.124	-0.197	-2.106***	-0.678***
	(0.221)	(0.247)	(0.338)	(0.216)
Constant	-0.849***	4.751***	-1.912***	-3.588***
	(0.289)	(0.507)	(0.351)	(0.311)
Observations	8,013	6,948	7,391	7,779
Number of id	221	174	218	221

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The results provide clear support for the first hypothesis. For activities that demonstrate vote bank strength, i.e. rely on large numbers of neighborhood residents, women and men participate at similar rates. I find no gender gap in protest rates, and, in fact, find that women are more likely than men with similar characteristics to be registered to vote. However, women are significantly less likely than men to participate in external group

claim making or to participate in internal community meetings. Holding covariates at their mean values, the probability that women make external claims on representatives is .20 (±0.04). The comparable probability for men is 22% higher at .25 (±0.04). The probability that women participate in community meetings is .13 (±0.02) for women, which increases to .16 (±0.02) for men with similar characteristics.

2.6.3 Labor force participation and civic engagement

To test the relationship between female labor force participation and civic engagement (the second hypothesis), I estimate the same models used to test the first hypothesis, but I include an indicator for labor force participation and restrict to the sample of female respondents. The model results are displayed in Table 2.4.

Table 2.4: Output including information on labor force participation

	Vote banking activities			
VARIABLES	Registered to vote	Protest	External claims	Community meetings
Labor force participation	0.235	0.0685	0.564***	-0.0274
	(0.329)	(0.242)	(0.132)	(0.158)
Scheduled caste or tribe	0.0793	0.144	-0.0274	-0.0469
	(0.257)	(0.244)	(0.166)	(0.164)
Muslim	-0.468	0.385	-0.0193	-0.322
	(0.443)	(0.263)	(0.291)	(0.253)
Age	0.0126	0.00279	0.0127*	-0.00581
	(0.0140)	(0.0127)	(0.00690)	(0.00695)
Household head	-0.0622	0.446*	-0.144	0.829***
	(0.375)	(0.245)	(0.183)	(0.164)
Migrant	-0.0631	0.378	-0.0805	-0.176
	(0.344)	(0.238)	(0.157)	(0.170)

Asset score	0.0672	-0.0758	-0.0691	0.0313
	(0.117)	(0.0852)	(0.0529)	(0.0482)
Primary education	-0.344	0.00274	0.309**	0.0602
	(0.381)	(0.300)	(0.155)	(0.171)
Household size	-0.0323	0.0200	0.0453	0.0658**
	(0.0669)	(0.0428)	(0.0305)	(0.0288)
Years in current home	-0.00576	0.0143	0.00142	0.00505
	(0.0127)	(0.0125)	(0.00594)	(0.00549)
Political interest	0.131	0.165	0.255***	0.0872
	(0.125)	(0.112)	(0.0616)	(0.0712)
Leader in slum	0.00608	1.166***	0.667***	0.712***
	(0.338)	(0.279)	(0.188)	(0.177)
Jaipur	-1.463***	1.101***	-1.547***	-1.080***
	(0.452)	(0.418)	(0.263)	(0.234)
Patna	-1.329***	0.00611	-1.590***	-1.189***
	(0.438)	(0.359)	(0.334)	(0.289)
Constant	-3.509***	5.582***	-3.488***	-2.814***
	(0.820)	(0.843)	(0.416)	(0.491)
Observations	2,800	2,968	3,076	3,099
Number of id	134	172	208	216

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The results provide support for the second hypothesis. For women, working outside the home is significantly associated with an increased likelihood of making external claims.

This relationship is significantly higher for women than it is for men (p-value .03).[40] When converted to probabilities, the output show the probability of making external claims increases by 59% from .08 (±0.02) for women who are not engaged in paid work to .12 (±0.03) for women who are. In contrast, there is no relationship between labor force participation and engagement in collective activities that demonstrate vote bank strength, which women and men do at similar rates, or in neighborhood representation, which remains heavily male-dominated.

2.6.4 Mechanisms

I argue that female participation in the informal labor force is *not* likely to increase leadership skills and political interest on average but *is* likely to increase women's confidence with mobility beyond the neighborhood as well as to expand problem-solving networks. To provide evidence on these expectations, I first test whether women's labor force participation is associated with whether women follow the news more frequently (household survey data) as well as whether they are more likely to discuss politics with their peers (social networks data).[41] I find women in the labor force are no more likely to follow the news regularly or discuss politics than other women (results not shown).

---

[40] I estimate the same model on the entire sample, including an indicator for gender and an interaction between gender and labor force participation. This is the p-value from the interaction coefficient.

[41] The question asks them to list who in their social network (if anyone) they discuss politics with during elections: "Come election time, sometimes people talk about politics. During election campaigns, who in the neighborhood do you talk to about politics?"

If working outside the settlement is associated with greater confidence navigating interactions and travel beyond the settlement, as I expect, then the relationship between labor force participation and women's external claim making should be higher for women who work outside the settlement than those whose work is based out of their home. Because I do not have individual-level data on where women work, I code occupations based on where they are likely to occur. I create an indicator variable for the occupations that are more likely to be home- or neighborhood-based (tailoring, vending, and garland-making). I also create a second labor force participation indicator variable that drops all observations of women employed in potentially home-based work. I estimate the relationship between these indicators and whether or not women make external claims.

Table 2.5: External claims by location of women's employment

	External claims	
VARIABLES	Employment likely *not* home-based	Employment potentially home-based
Labor force participation	0.407***	0.398
	(0.149)	(0.284)
Scheduled caste or tribe	0.0172	-0.129
	(0.173)	(0.198)
Muslim	0.133	-0.0470
	(0.285)	(0.289)
Age	0.00858	-0.00435
	(0.00674)	(0.00937)
Household head	-0.180	-0.480*
	(0.201)	(0.252)
Migrant	-0.0171	0.266

	(0.165)	(0.193)
Asset score	-0.0227	-0.111*
	(0.0542)	(0.0614)
Primary education	0.0772	0.207
	(0.163)	(0.187)
Household size	0.0413	0.0599*
	(0.0315)	(0.0334)
Years in current home	0.00448	0.0208**
	(0.00638)	(0.00837)
Political interest	0.244***	0.236***
	(0.0625)	(0.0808)
Leader in slum	0.622***	0.697***
	(0.204)	(0.228)
Jaipur	-1.268***	-1.523***
	(0.245)	(0.244)
Patna	-1.192***	-1.462***
	(0.295)	(0.322)
Constant	-3.466***	-3.133***
	(0.404)	(0.485)
Observations	2,756	1,932
Number of id	191	184

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The results (Table 2.5) are consistent with my expectations. I find a significant positive relationship between women's participation in occupations that are likely not home based and external claim making. However, I do not find a significant association between claim making and participating in occupations that are potentially home- or neighborhood-based.

This evidence, taken together with the qualitative interviews, provides support for

the argument that employment outside the neighborhood can increase women's political participation. Interview respondents describe increased confidence navigating travel and interactions when they work outside the home. This is consistent with other research that finds increased mobility can increase women's empowerment (Field and Vyborny, n.d.).

Access to economic networks, especially of more women, can also increase women's political participation (Prillaman 2017). Women may recruit each other and share information; moreover, being part of a group can further increase women's confidence. To provide evidence on whether women who work outside the home have access to larger problem-solving networks than other women, I draw on our social networks data. We ask respondents whether they know anyone in the following influential positions: teacher, lawyer, doctor or nurse, MLA (elected official), factory owner, contractor, newspaper reporter, police officer, factory worker, and a ward corporator (another elected official). Though we do not ask whether these ties live inside or outside the neighborhoods, given the low number of slum residents employed in these positions, these likely largely reflect ties outside the neighborhood. I run hierarchical regression models on the number of contacts respondents report having. I include individual covariates[42] and slum-level random effects. Standard errors are clustered at the neighborhood level. The first column in Table 2.6 shows the number of influential ties reported for the entire sample of men and women. In columns 2 and 3, I restrict the sample to female respondents.

---

[42] I use the same covariates displayed in the Appendix, but omit asset score, household size, spending on travel to rural areas, and years in home, which are absent from the social networks data. I include indicator variables for roof type to proxy for assets.

Table 2.6: Model output for number of ties

	Number of ties		
VARIABLES	Full sample	Women only	Women in labor force only
Female	-1.311***		
	(0.144)		
Labor force participation		0.571***	
		(0.178)	
Higher status occupation			-0.140
			(0.316)
SC/ST	-0.456*	-0.501**	-0.667***
	(0.242)	(0.248)	(0.216)
Muslim	-0.247	-0.202	-0.313
	(0.271)	(0.300)	(0.335)
Age	0.0201***	0.0134***	0.0233**
	(0.00414)	(0.00489)	(0.00948)
Household head	0.136	0.0514	0.110
	(0.186)	(0.141)	(0.185)
Migrant	-0.571***	-0.499***	-0.608***
	(0.157)	(0.151)	(0.0904)
Education	0.0843***	0.0508***	0.106**
	(0.0173)	(0.0125)	(0.0519)
Tarp roof	0.188	-0.142	-0.141
	(0.136)	(0.103)	(0.196)
Mould roof	0.662***	0.397**	0.646**
	(0.237)	(0.174)	(0.314)
Political interest	0.199***	0.196***	0.252***
	(0.0760)	(0.0618)	(0.0514)
Patna	0.123	0.242	0.167
	(0.229)	(0.213)	(0.346)
Constant	1.941***	0.959	0.945
	(0.416)	(0.595)	(0.621)
Observations	2,345	1,119	309
Number of id	8	8	8

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Column 1 reveals women have fewer influential ties than men. Column 2 provides evidence consistent with my expectations that women who participate in the labor force are more likely to have additional ties than other women. To check whether the higher number of contacts is driven by women in the more formal, or more prestigious occupation types, I restrict the sample to women in the labor force in the third column. I include an indicator variable for whether the respondent works in the highest prestige (type 4 and 5 occupations from Table 2.1). I do not find a significant difference in the number of ties across job types.

I expect most informal positions will not affect the types of skills and psychological orientations toward politics that could influence participation in leadership activities. However, I argue a smaller subset of jobs can provide opportunities to develop these skills. To provide evidence on this point, I examine whether employment in higher prestige occupation types (i.e. clerical or professional positions) is associated with whether women follow the news more frequently (household survey data) as well as whether they are more likely to discuss politics with their peers (social networks data). I find that, while there is no relationship between female labor force participation, on average, and these outcomes, there *is* a positive association between political interest and discussion and working in a category 4 or 5 occupation (Table 2.7).

Table 2.7: Political interest and higher status occupations

VARIABLES	Political interest (HH data)	Political discussion (networks data)
Category 4 or 5 job	0.153*	0.549**
	-0.0832	(0.270)
Scheduled caste or tribe	-0.00588	-0.122
	-0.0488	(0.143)
Muslim	-0.00815	-0.136
	-0.0669	(0.116)
Age	-0.00499**	-0.00315
	-0.00205	(0.0102)
Household head	-0.00267	0.426
	-0.0477	(0.313)
Migrant	-0.00109	-0.585**
	-0.0507	(0.254)
Asset score	0.307***	
	-0.0131	
Primary education	0.383***	
	-0.0502	
Years of education		0.0119
		(0.0167)
Household size	-0.0191**	
	-0.00874	
Years in current home	-0.00138	
	-0.00177	
Leader in slum	0.0178	
	-0.0471	
Jaipur	-0.735***	
	-0.0735	
Patna	-0.575***	0.0964
	-0.0779	(0.511)

Tarp roof		0.394*
		(0.218)
Concrete roof		0.585***
		(0.173)
Constant	3.407***	-0.331
	-0.113	(0.503)
Observations	3322	1,290
Number of id	217	8

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

I do not find a significant relationship between working in these types of occupations and participating in community meetings, and I do not have other data on leadership activities from the household survey data. However, the key informant data provide additional insights. By definition, the key informants we interviewed are well known in their communities and are knowledgeable about neighborhood outcomes. Some are considered area brokers but others, like Radhika and Asha, are those who take on leadership roles but are not described by their neighbors as area brokers. We ask the key informants about their occupational characteristics (i.e. whether they describe their job as *pakka* (more formal) or *kaccha* (less formal), what they earn in their job, whether the job provides benefits legally required for all formally employed workers). We also ask them questions about their self-efficacy (i.e. "how confident would you say you are in your ability to meet with and ask for help from each of the following people?").

Female key informants appear to work in less advantaged positions than male key informants but in more advantaged positions than the other women in their neighborhoods (Table 2.8a). Table 2.8b shows that female key informants also report lower confidence[43] approaching and seeking help from elected officials than male key respondents. The final three columns split female key informants by labor force status. Female key informants in formal occupations express greater confidence overall than female key informants in informal occupations, who in turn express greater confidence than female key informants who are not in the labor force. These data provide suggestive evidence that women who take on leadership roles *may* be more likely to work in higher status positions that are more likely to provide opportunities for skill building. Future scholarship should examine this relationship in much greater detail.

Table 2.8: Key informant characteristics by gender

2.8a. Employment characteristics

	Male key informants	Female key informants	All women from these settlements
% employed	91.14	63.41	39.39
% of employment			
Pakka	29.17	19.23	
Kachha	70.83	80.77	
Formal benefits	20.83	19.23	9.03
Monthly earnings	17,000.00	9,388.46	6,134.96

[43] The options are 1= "Not possible/not confident"; 2 = "Somewhat confident"; and 3 = "Very confident".

2.8b. Reported efficacy

			Female key informants		
Confidence	Male key informants	All female key informants	Formal/“pakka” occupation	Informal/“kaccha” occupation	Not in labor force
Approaching broker	2.08	2.08	1.80	2.10	2.08
Counsilor	2.04	1.79	1.80	1.95	1.46
MLA	1.42	1.39	1.75	1.41	1.00
Bureaucrat	1.69	1.76	2.50	1.71	1.45
NGO	1.85	2.08	2.67	2.00	1.86

2.7 Alternate explanations

This chapter sets out to develop and test a framework to explain women’s civic engagement under informality. The evidence presented, which draws on a multi-year original data collection effort, including from respondents that are largely omitted from official data sources, provides compelling initial evidence in support of the proposed framework. However, the empirical data I draw on to test my expectations are primarily cross sectional and observational, making all causal claims necessarily preliminary. In this section, I address potential concerns with attributing causality to the conclusions. Drawing on appropriate methodologies to identify causal relationships is a fruitful area for follow up research.

2.7.1 Selection

It is important to consider whether the link between claim making and labor force participation is attributable to selection into the labor force. Burns, Schlozman, and Verba (2001) distinguish between “selection” into and “treatment” from certain institutions, including the labor force, arguing both factors explain the relationship between participation

in institutions and political outcomes. I also stress that both factors matter. Especially in this context, where cultural norms restrict female labor force participation, selection is undoubtedly an important part of the story. I cannot disentangle these factors in this chapter, and future work should attempt to rigorously decompose selection and treatment factors.

However, a methodological benefit of employing mixed methods research is that, in addition to drawing on the quantitative data to establish these associations, I can also draw on the qualitative data to examine how the population of interest describe cause and effect. If those who are discouraged from labor force participation are also discouraged from claim making, or if those who choose not to work choose not to make claims for the same reasons, then the association between labor force participation and claim making would be purely due to selection. The in-depth interview responses strongly suggest that this is not the case — that at least part of the association is caused by participation in the labor force (treatment).

In interviews, most women who stay home attribute their lack of civic engagement to not knowing the right people or places to go to rather than to being discouraged from doing so. In contrast, many women in the labor force attribute greater confidence and larger networks to their work. While one interview respondent explicitly attributes her inability to participate in civic activities to her husband disallowing it, she works outside the settlement in a brick kiln. The qualitative interviews bolster the assertion that the association is not purely a result of selection, but further work is needed to determine the extent to which labor force participation leads to increased claim making.

2.7.2 Reverse causality

Another potential threat to the argument is that causality runs in the opposite direction. In other words, women who make external claims may be more likely to join the labor force as a result of asking politicians for help finding work. Evidence from the household survey data suggests this is unlikely. When asked, "How did you find this job?", 89% of employed women say they found their job through a friend, relative, or neighbor. No woman in the survey says a politician or government official helped her find her job. Moreover, the average age of women who made external claims in the past year is 39, but this is well beyond the age that most women describe entering the labor force. Finally, while multiple interview respondents attribute increased civic engagement directly to labor force participation, no one describes the reverse scenario.

2.8 Discussion and conclusion

A vast and growing number of the world's urban poor live and work in spaces that fall outside of government regulation. Informality increases vulnerability for these citizens, and civic engagement can be imperative to a person's ability to access goods and services that can mitigate vulnerability. In this context, it is crucial to understand who is likely to participate.

The results from this chapter support previous findings that women are less likely to be civically engaged than men. As I show, the gender gap differs by type of activity. For activities that are used to demonstrate vote bank strength via large numbers of participants (i.e. voting or protesting), women and men participate at similar rates. For other activities

that involve making special interest claims externally on formal officials, or acting in leadership positions as neighborhood representatives, women are significantly less likely to participate than men.

These differences not only raise important normative concerns but may also lead to underrepresentation of women's distinctive policy preferences (Chattopadhyay and Duflo 2004; Gottlieb, Grossman, and Robinson 2018; Iversen and Rosenbluth 2006). Female brokers may assist with different problems than male brokers (Daby, n.d.). Key informants from Indian slum settlements report that female brokers help with many of the same types of challenges that male brokers do (i.e. helping neighbors access documents and mobilizing the community); but they also suggest that female brokers may be more likely to help with domestic disputes and violence against women.

Interviews also suggest that women's group pursuits may be especially important for certain issues. In Nehru Colony, the male area leaders are the point people for infrastructure or land tenure issues, but the area leaders remain largely uninvolved with domestic violence disputes. For this, women turn to Asha and Radhika for support. According to Asha,

> There is a lot of physical violence against women by men. Now, they don't let it happen. They call us. Whatever be the mistake, we say they cannot beat the women. They can talk and resolve it. They first need to respect women. That's what we are working for. As I told you before, a lot of people give problems. Some people are very scared to go to the police station. We take those people and ask them why they are scared to go to the police station as they are there to work for us. Even if they go

> there, they are not given a good response as they say these problems are always there in this area. We put pressure from the group on the police to act on all complaints from our women.[44]

In other neighborhoods as well, women describe accompanying other women outside of the neighborhood to ask for support with issues of domestic violence or child marriage. This suggests not only that groups of women may attempt to solve different issues than other (mixed or male) groups, but also that problem-solving tasks may differ by gender broker. Future research should study these points more thoroughly.

I find that, when women work outside the home, they are more likely to engage in external group claims on formal representatives. I argue this is because employment outside the home, even in the informal economy, increases women's confidence navigating travel and interactions outside their neighborhoods as well as expands women's networks in ways that can increase group mobilization potential. Both factors facilitate women's group claim making on politicians and government officials. This is not a trivial finding, given how central claim making is to active citizenship in developing countries (Kruks-Wisner, 2018b).

I do not find evidence that women in the informal economy develop other skills that have been shown to increase political participation for women in the formal economy. For example, women's labor force participation does not result in greater political discussions or interest. However, a subset of higher status occupations (even those that do not provide

[44] Author interview, October 7, 2018.

formal legal benefits) may provide greater opportunities to develop leadership skills. This may help explain which women participate in leadership activities in their communities. Much more research should focus on explaining how and why the gender gap in various activities differs across neighborhoods, especially with respect to leadership and other activities with deeply entrenched gender gaps. Another related area of inquiry should examine how women's informal leadership affects other women in their neighborhoods.

Existing literature on the political implications of informality is relatively nascent, and scholarship on the gendered implications is particularly scarce. Moreover, existing empirical evidence on the relationship between women's informal labor force participation and political behavior is mixed. This chapter draws on qualitative fieldwork to augment and connect existing scholarship on gendered differences in political behavior, the implications of labor force participation for women's behavior, and the political implications of informality. The proposed framework offers a more comprehensive explanation for differences in the gender gap across types of behaviors, as well as how informal labor force participation is expected to affect various behaviors differently.

The empirical evidence presented in this chapter also provide a novel contribution to an understanding of women's labor force participation and civic engagement among the urban poor. Many citizens who live and work informally are undocumented in official data sources, such that "a lot of what we know today is informed by quantitative studies that routinely exclude the poorest and most vulnerable populations" (Murillo et al., 2020). To circumvent these deficiencies, I draw on a large-scale original data collection effort to test

the framework. The evidence from this unique dataset supports my hypotheses and provides important descriptive evidence on the population of interest.

My argument has implications for understanding women's civic engagement that will take on additional relevance as developing countries continue to experience both large-scale urbanization and increasingly informalized economies. Going forward, much more evidence is needed to understand gendered differences in citizenship in today's rapidly urbanizing world.

Chapter 3

Toward a Local View of Between-Group Inequality:

Implications for Political Mobilization Across Urban Slums

(With Jeremy Spater)*

* Postdoctoral Associate, Duke University.

3.1 Introduction

Developing countries around the world are rapidly urbanizing. Within the next three decades, the global urban population is expected to increase by more than 2 billion people, primarily in low income countries in Asia and Africa (United Nations, 2014). In the world's ten poorest countries alone, the urban population is expected to increase by 130 percent in the next fifteen years.[1] Cities are heterogenous, bringing different ethnic and socioeconomic groups into closer proximity than in more homogenous rural areas. As such, the urban transformation is not only an economic and spatial process but is also a profoundly social one (Kapur, 2017). How will the changing geography affect social and political identities and what are the implications for distributive politics in these spaces?

Most of the growing urban population will, like nearly *one billion* other people, reside in "slums" — neighborhoods that not only experience high levels of poverty, but also insecure property rights and an "almost non-existent level of services" (UN-Habitat 2016). Many of these settlements share common origin stories. Rural residents migrate to cities in search of economic opportunities. Migrants arrive with varying levels of resources and connections to the city. The poorest among them settle in plastic and wood structures without legal access to land, while others start off in sturdier homes with some degree of tenure security. Settlements that are not evicted or relocated by the government expand over time as more migrants arrive and families grow, often housing families for multiple generations (Rains & Krishna, 2020). Because they offer relatively affordable housing near sites of employment, slums attract

---

[1] Author calculation based on data from World Urbanization Prospects and the World Bank.

migrants from a wide range of regional, religious, and ethnic backgrounds (Auerbach & Thachil, 2019).

A growing body of literature examines how local brokers, or area leaders, emerge to mediate interactions between slum residents and politicians in order to negotiate for access to crucial infrastructure and social supports (e.g. Auerbach & Thachil, 2018, 2019; Jha, Rao, & Woolcock, 2007; Paller, 2015) that are provided by the government in a highly discretionary manner (Chandra, 2004). Brokers mobilize their neighbors to vote and make claims collectively; state support is then extended to the settlements that are most effectively able to organize (Auerbach, 2017, 2019; Das & Walton, 2015; Lall et al., 2004; Spater & Wibbels, 2020). Thus, understanding whether and how neighborhoods organize is imperative to understanding urban development outcomes.

A central result in comparative political economy holds that ethnic diversity is associated with diminished collective action, public goods provision, and support for pro-poor policies (e.g. Alesina, Baqir, & Easterly, 1999; Banerjee, Iyer, & Somanathan, 2005), suggesting heightened diversity in urban slum areas may threaten intergroup coordination. However, many examples demonstrate that diversity does not necessarily undermine collective action potential, particularly in contexts where different groups share common goals (Ichino & Nathan, 2013; Lall et al., 2004; Thachil, 2017, 2020; Yakter, 2018). To date, empirical evidence on the prevalence of intergroup coordination in and across urban slums remains scarce. Moreover, the evidence produces mixed conclusions (Auerbach & Thachil, 2018; Auerbach & Thachil, 2019; Nathan, 2016). This leads to the motivating question for this chapter: what conditions affect intergroup cooperation in urban slum areas?

We argue that inequality between ethnic groups at the local level can affect political behavior. In particular, we find higher economic inequality between ethnic groups is associated with diminished potential for collective action. The structure of local inequality between groups, rather than the levels of inequality or existence of ethnic diversity, increases ethnic salience, increasing group conflicts and undermining residents' ability to impose social sanctions and thus, effectively organize. We test our expectations from original survey and social networks data from more than 9,000 households from more than 200 Indian slum settlements.

This chapter makes at least three important contributions to scholarship on how local conditions, the structure of inequality, and urbanization trends affect political behavior. First, we argue for the importance of measuring conditions at very fine geographical scales, and we develop expectations for how the structure of neighborhood-level inequalities affects communities' potential for collective action. Most existing empirical work on between-group inequality focuses on coarser geographic scales, but our findings contribute to a growing body of work focused on the political implications of local geography (e.g. Auerbach 2016; Ejdemyr, Kramon Robinson 2015; Ichino and Nathan 2013; Kasara 2013). Second, our findings contribute to an understanding of political behavior among urban slum residents. As developing countries continue to urbanize, the number of people residing in slums will continue to grow. Yet, slums are difficult to find and poorly registered by most city and national governments in the developing world, resulting in inadequate data on the vast population of slum residents (Mitlin & Satterthwaite, 2013). We draw on a large-scale original dataset of Indian slums in three cities to provide systematic evidence on between-

group inequality and political organization across neighborhoods. Finally, as articulated by Xu (2020, 5), existing literature on the distributive implications of diversity, which focuses "on public goods *provision* is problematic, because it conflates demand-side effects regarding voter *preferences* for public goods with the supply-side effects of institutions and politicians' incentives." In developing countries, where access to services can be highly dependent on who makes claims on the state (Kruks-Wisner, 2018a), it is particularly important to understand what factors affect demand-side mobilization. This chapter contributes to an understanding of how inequality between ethnic groups affects citizen behavior.

The chapter proceeds as follows. The second section reviews relevant literature on the implications of ethnic identities, diversity, and inequality at various scales for political outcomes. The third section describes the empirical setting, while the following section describes the data and analyses. The fifth section presents the results. Thereafter, we examine mechanisms and discuss potential alternate explanations. Finally, we discuss the results and then conclude.

3.2 Ethnicity, Inequality, and Political Coordination: Toward a Local View

Chandra & Wilkinson (2008 519-520) describe ethnic identity as "an umbrella concept that includes identity categories associated with one or more of the following types: religion, sect, language, dialect, tribe, clan, race, physical differences, nationality, region, and caste…. Ethnic identities… are defined as an arbitrary subset of categories in which descent-based attributes are necessary for membership."

A vast literature argues ethnic diversity is associated with diminished potential for intergroup cooperation (e.g. Alesina, Baqir, & Easterly, 1999; Banerjee, Iyer, & Somanathan, 2005). Different ethnic groups, according to these theories, are not only thought to have different preferences over public goods, but people can also more easily communicate with and sanction co-ethnic individuals (see Habyarimana et al, 2007 for review). Other literature argues that, common development objectives can "outweigh" the potential challenges of ethnic fractionalization on the "willingness of residents to participate in activities that are expected to yield economic benefits or improvements in living standards" (Lall et al., 2004). Especially when different groups share common goals, or challenges, diversity does not necessarily undermine collective action potential or voting behavior (Ichino & Nathan, 2013; Lall et al., 2004; Thachil, 2020; Yakter, 2018).

Neighborhood-level political coordination is particularly important for advancing material interests in urban slums. Many slum settlements lack neighborhood-level services that can be prohibitively expensive to self-provision, leading residents to prefer state provision of collective goods (Auerbach, 2016; Nathan, 2016). Crucial services, including drainage, public toilets, or water pipes, as well as property rights, are extended to neighborhoods according to which communities most effectively mobilize (Auerbach, 2016, 2017; Lall et al., 2004; Krishna et al., 2020).

Yet, recent work provides mixed evidence on the implications of ethnic diversity and identities on political preferences, behaviors and outcomes in slums. Nathan (2016) finds slum residents in Ghana largely vote and organize along ethnic lines, regardless of settlement diversity. He argues that this is driven by the prevalence of clientelistic exchanges that are

targeted along ethnic lines. Evidence from Kenya's largest slum also suggests ethnicity has important implications for distributive outcomes. Residents of the same ethnicity as the local chief are charged lower rents and feel more secure in their properties than residents of different ethnic groups (Marx, Stoker, & Suri, 2013). Spater (2020) finds proximity to neighbors from different ethnic groups within slum settlements is associated with a greater preference for co-ethnic area brokers as well as local politicians. Auerbach & Thachil (2018) also find that slum residents prefer co-ethnic brokers, which helps explain why more diverse settlements have more brokers (Auerbach, 2019). In fact, because they have denser networks of internal brokers, Auerbach (2019) argues more ethnically diverse settlements receive *higher* levels of public goods.

Notabaly, though they prefer co-ethnic brokers, slum residents place a higher value on brokers' capability to mediate interactions with politicians and negotiate for neighborhood improvements (Auerbach & Thachil, 2018). Brokers, in turn, prioritize which neighbors to assist in order to maximize their local reputations as neighborhood problem-solvers rather than prioritizing requests from co-ethnic neighbors (Auerbach & Thachil, 2019). As such, "[t]he heightened diversity of slums especially diminishes the usefulness of ethnicity in crafting coalitions of support, even at highly localized levels" (2). Paller (2015) also provides vignettes of slums in Ghana that form multi-ethnic coalitions to negotiate with the state for greater tenure security.

The empirical results are likely mixed, in part, because the salience of one's ethnic identity can vary substantially based on context (Thachil, 2017; Hale 2004; Chandra and Wilkinson 2008). A large body of literature examines how group identities are formed and

when and why these identities become politicized (e.g. Carter & Pérez, 2016; Chandra & Wilkinson, 2008; Dawson, 1994; Enos, 2017; Gay & Tate, 2003; Gurin, 1985; Hale, 2004; Huddy, 2013; Jardina, 2019; McClain, Johnson Carew, Walton, & Watts, 2009; Sears & Savalei, 2006; Tajfel & Turner, 1986; Walsh, 2012). Indeed, Thachil (2017) finds ethnic salience among poor urban migrants varies situationally, such that ethnic divisions are less salient in contexts that trigger a shared ingroup identity. Though he finds inter-ethnic divisions remain salient within neighborhoods, poor urban migrants "contingently ignore internal ethnic divisions" when interacting with politicians or employers who they believe "perceive and treat them in shared class rather than disparate ethnic terms" (Thachil, 2017, 909). Under what circumstances is ethnicity particularly salient, especially relative to a potential shared identity as urban slum residents?

Ethnic and economic social cleavages are said to be "cross-cutting" when they are largely orthogonal to one another, i.e. when the probability of two individuals sharing a group status along one dimension does not significantly affect their probability of sharing another (Dunning and Harrison 2010). For example, if a society is divided into high and low economic classes as well as different ethnic groups, and the proportions of individuals from each ethnic group are distributed across the high and low classes, the dimensions of ethnicity and class are considered cross-cutting. The presence of cross-cutting identities is believed to reduce the salience of ethnicity because a person's ingroup along one dimension may well contain members of an outgroup along another dimension.

In contrast, when two cleavages overlap, they are said to be "reinforcing." For example, ethnicity and class are considered reinforcing when one ethnic group holds

disproportionate economic resources relative to another group. The difference in income across ethnic groups is referred to as between-group inequality (Baldwin and Huber 2010) or ethnic polarization (Esteban and Ray 1994; Alesina et al 2003).[2] When between-group inequality is higher, i.e. when economic cleavages and ethnic cleavages are reinforcing, ethnicity is particularly salient (Huber & Suryanarayan, 2016), and the result is particularly inauspicious for intergroup cooperation. A growing body of work demonstrates between-group inequality, or ethnic polarization, is associated with increased ethnic conflict (Cederman et. al 2011; Esteban and Ray 1994), decreased provision of public goods (Baldwin and Huber 2010; An et. al 2018), and reduced support for redistribution (Gilens, 1995; Morgan and Kelly, 2017; Alt and Iversen, 2017; Lind, 2007).

Especially outside of the United States, initial studies of between-group inequality, or ethnic polarization, are conducted at gross geographical scales, typically that of an entire country. However, local geography at fine scales, such as neighborhoods, is important for understanding political outcomes (see Post 2018 for a survey). Collective action and public goods provision are conditioned by micro-level interactions and transactions (Auerbach 2016; Ejdemyr, Kramon Robinson 2015; Ichino and Nathan 2013; Kasara 2013), which have been found to occur over fine geographical scales, such as neighborhoods (Dinesen and Sønderskov 2015; Spater 2020; Spater and Wibbels 2020; Wong et al 2012). This points to the importance of measuring how ethnic polarization, at geographical scales corresponding

[2] Between-group inequality and ethnic polarization are measured differently. The difference is that, in the former, levels of inequality are normalized by income levels. We use both phrases when referring to economic inequality that reinforces ethnic cleavages.

to everyday human interactions, are related to intergroup cooperation and public goods provision.

Given the importance of local intergroup coordination in urban slums, we expect residents will view neighborhood political organization as important for development, and therefore in their material interest, regardless of neighborhood composition. However, we expect neighborhood composition to affect the potential for neighborhood coordination. Between-caste inequality reinforces ethnic cleavages, increasing caste salience (Huber and Suryanarayan 2016) and increasing the potential for conflict (Cederman et. al 2011). Moreover, between-group inequality reflects historical legacies of discrimination and status inequality. Where caste and status inequality is more salient, citizens may prioritize increasing representation of their group over material concerns (Chakrabarti, 2020). Recent macro-level analyses find between-group inequality, rather than ethnic diversity, affect political preferences and behavior (Baldwin & Huber, 2010; Morgan & Kelly, 2017). Relatedly, we expect higher levels of local between-group inequality, rather than ethnic diversity, to affect local coordination capacity.

3.3 Empirical Setting

The slums of urban India offer an empirical setting in which the dynamic interplay between local diversity, inequalities, and political mobilization can be studied. The proportion of India's population living in cities increased from 17% in 1951 to 32% in 2011; it hosts three cities with over 10 million people, and by 2031 is expected to have six (United Nations 2012).

We focus in particular on coordination between caste groups. According to Chakrabarti (2020, 3-4), "[s]ocieties with long histories of group-based discrimination owing to legacies of caste, slavery, colonialism or apartheid and not just stratified by *class* but also by *status*. Such societies… 'ranked ethnic systems', are marked by clearly understood conceptions of superordinate and subordinate groups." In India, the caste system, which historically stratified individuals at birth into different positions in a social hierarchy, is an example of a ranked ethnic system. These positions were traditionally linked to specific occupations (Deshpande, 2011). By definition, there was no room for social mobility because a person's position at birth determined their outcomes. The system allowed for discrimination against individuals based on the caste they were born into and was particularly violent toward the *Dalits* (formerly called "Untouchables").

The Indian Constitution was written in large part by B.R. Ambedkar, a Dalit activist and one of India's most famous legal scholars. He argued that urbanization would weaken the rigid caste system, in part by engendering efficiency-based hiring rather than caste-based hiring (see Jodhka 2010; Deshpande 2011). As a result, he wrote extensively on the potential for caste empowerment in cities and encouraged marginalized caste groups to migrate to urban areas. Evidence suggests caste-based stratification and discrimination remain enduringly relevant (Desphande 2011), "[b]ut as India rapidly urbanises, these social cleavages are likely to evolve" (Kapur, 2017, 2).

Overall, historically marginalized caste groups, Scheduled Castes (SCs, or *Dalits*) and Scheduled Tribes (STs) are overrepresented across all slums relative to the Indian average (Rains, Krishna, & Wibbels, 2019; Shah, 2014). Table 3.1 shows the percentage of SC and ST

residents for the three states examined in this chapter. We present the overall proportions from these states according to census data[3] juxtaposed with the percentage of SC and ST residents from our sample areas. The proportion of slum residents who are Scheduled Caste far exceeds the overall proportion for all three states. STs are overrepresented in Bihar's slums, and are likely overrepresented in slums in the other states relative to their overall *urban* populations.

Table 3.1: Caste composition by state

	Karnataka (entire state)	**Karnataka (sample of slums from Bengaluru)**	**Rajasthan (entire state)**	**Rajasthan (sample of slums from Jaipur)**	**Bihar (entire state)**	**Bihar (sample of slums from Patna)**
% SC	16.2	41.1	17.2	34.9	15.7	52.3
% ST	6.6	6.12	12.6	9.02	.9	2.4

3.4 Data, Measures, and Empirical Implications

This study draws on a massive data collection effort spanning three state capitals over three years. These three cities, Jaipur (Rajasthan), Patna (Bihar), and Bengaluru (Karnataka), vary substantially, including regionally, economically, and culturally. Because many slum neighborhoods are omitted from official data sources (Bhan & Jana, 2013; Krishna, 2017), we draw on unique methods to build an original database of urban slum

[3] The Indian census data are drawn from https://censusindia.gov.in/Tables_Published/A-Series/A-Series_links/t_00_005.aspx.

households (see Krishna, Sriram, & Prakash, 2014; Rains, Krishna, & Wibbels, 2019). Details on these data are provided in Section 1.6.

To measure the structure of inequality across ethnic groups, we calculate a standard measure of between-group inequality (Baldwin & Huber, 2010):

$$BGI = \frac{1}{2\bar{y}} \sum_{i=1}^{n} \sum_{j=1}^{n} p_i \, p_j |\bar{y}_j - \bar{y}_i|$$

where *n* is the number of ethnic groups in a neighborhood, *i* and *j* index groups, $\bar{y}$ is the average income in the neighborhood, $\bar{y}_i$ is the average income of group *i*, and p_i is the proportion of the neighborhood in group *i*. BGI ranges from 0 to 1, with higher values corresponding to greater inequality between groups (i.e. a higher correlation between group and income).

We calculate two measures of BGI. The first measure adopts coarser group categories and the second adopts more granular group categories. Across all survey waves, we ask respondents for their broad caste category. The response options are "General", "Backward Caste", "Other Backward Caste", "Scheduled Castes", "Scheduled Tribes", "Backward Tribes", "Religious minorities", or "Other". We aggregate into three groups for this coarser measure, considering the categories of "General", "Backward Caste", "Other Backward Caste", and "Backward Tribes" to be "high" caste for the purposes of this study, while "Scheduled Castes" and "Scheduled Tribes" are considered "low" caste.[4] The third

[4] "Backward Caste" and "Other Backward Caste" are intermediate caste groups who did not originally receive special dispensations at the time of Independence but received them later.

category is comprised of “Religious minorities” — the vast majority (76%) of whom are Muslim.

The second measure draws on more granular data. In two survey waves from Bengaluru, we ask respondents not only what their broader caste group is, but also what their *jati* (subcaste) is. There are over 3,000 jatis in India. Rather than precoding response options, we ask the enumerators to write down the respondent’s jati. We then clean the data to harmonize spellings. We find 69 unique jatis with at least five respondents. For the second measure of BGI, we use these 69 groups.

Finally, following existing studies from developing countries, we assess the number of assets that respondents claim to own from a standard list presented on the survey rather than examining incomes. This is because, “[g]iven that a large proportion of individuals in a developing country like India do not have meaningful cash incomes, it is not feasible to accurately measure inequality by using standard income variables” (Huber & Suryanarayan, 2016, 160).

Our theoretical expectations engender several testable hypotheses as summarized below:

Hypothesis 1: Neighborhood-level BGI is negatively related to local collective action potential.

This implies there is a negative relationship between ethnic polarization and whether residents believe their neighborhood is an effective "vote bank"[5], as well as whether residents believe their neighbors would contribute to group projects. Our respondents are asked the following: "Do you think your neighborhood is an effective vote bank?"; and "Suppose that ten of your neighbors were invited to help in community work, such as a community water project, cleaning of gutters, or weeding on the side of the road. How many do you think would show up?"

Hypothesis 2: Neighborhood-level BGI is positively associated with ethnic salience.

This implies there is a positive relationship between BGI and whether residents believe ethnicity determines outcomes for people in their neighborhood. We ask, "In this neighborhood, how important is jati in determining where a child will end up on the economic ladder when he or she grows up?" The options range from 1 ("Not at all important") to 4 ("Very important"). We also expect that ethnic salience will increase relative to class salience. To test whether respondents in slums with greater between-group inequality are less likely to report that they are relatively disadvantaged economically, we draw on responses to the following question: "If the economic ladder had 10 steps, with Mukesh

[5] Vote banking (Srinivas, 1955) refers to a situation in which the residents of a particular area coordinate their votes, in the hope of receiving a benefit or transfer in return.

Ambani[6] at the top and the poorest person at the bottom, where would you like to put yourself on this ladder?"

Hypothesis 3. Neighborhood-level BGI is positively associated with intergroup conflicts.

The observable implication is that there is a positive relationship between BGI and the frequency of disputes in the neighborhood. We ask, "How often are there serious disagreements among people who live in this neighborhood?" The responses range from 1 ("Never") to 4 ("Regularly"). In a follow up question we ask, "When there are disputes in your neighborhood, are they typically resolved?"

Our final hypothesis is that between-group inequality will increase demand for descriptive and symbolic representation (Chakrabarti, 2020).

Hypothesis 3. Neighborhood-level BGI is positively associated with a preference for co-ethnic brokers.

To test this hypothesis, we leverage a conjoint experiment from our social networks survey. In this experiment, respondents are asked to choose between two putative informal neighborhood leaders. Each candidate has two randomly selected characteristics. We assess respondents' preference for a co-ethnic neighborhood leader by measuring the effect of the

---

[6] Mukesh Ambani is the richest person in India.

attribute “Is a member of your caste or religion” on the probability of that leader being selected.

Conjoint experiments are useful for causally estimating the relative value respondents place on various parameters in complex, multidimensional choices. Because we randomize these attributes independently, we can calculate the average marginal component effect (the marginal effect of an attribute averaged over the joint distribution of the other attributes) of each trait simultaneously by estimating a linear regression model (Hainmueller et al., 2014). In this model, the unit of analysis is a hypothetical broker. The dependent variable takes a value of 1 if the respondent prefers that hypothetical leader and 0 if they prefer the other leader presented to them. The independent variables are indicator variables for each of the randomized traits.[7] The average marginal component effect tells us how much a given trait affects the probability that a respondent prefers a broker with that trait relative to a broker with a specified baseline trait.

For each of the other analyses, we estimate hierarchical regression models (logistic for binary outcomes), including neighborhood-level random effects and clustering errors at the neighborhood-level. We include a standard set of individual-level and neighborhood-level control variables. The individual-level control variables are the respondent’s asset holdings, education level, migration status, age, gender, religion, and caste. To account for

[7] Standard errors are clustered by respondent.

neighborhood characteristics, we control for the age and size of the settlement, and land type.[8] We also include a set of indicator variables to account for differences by city.

3.5 Results

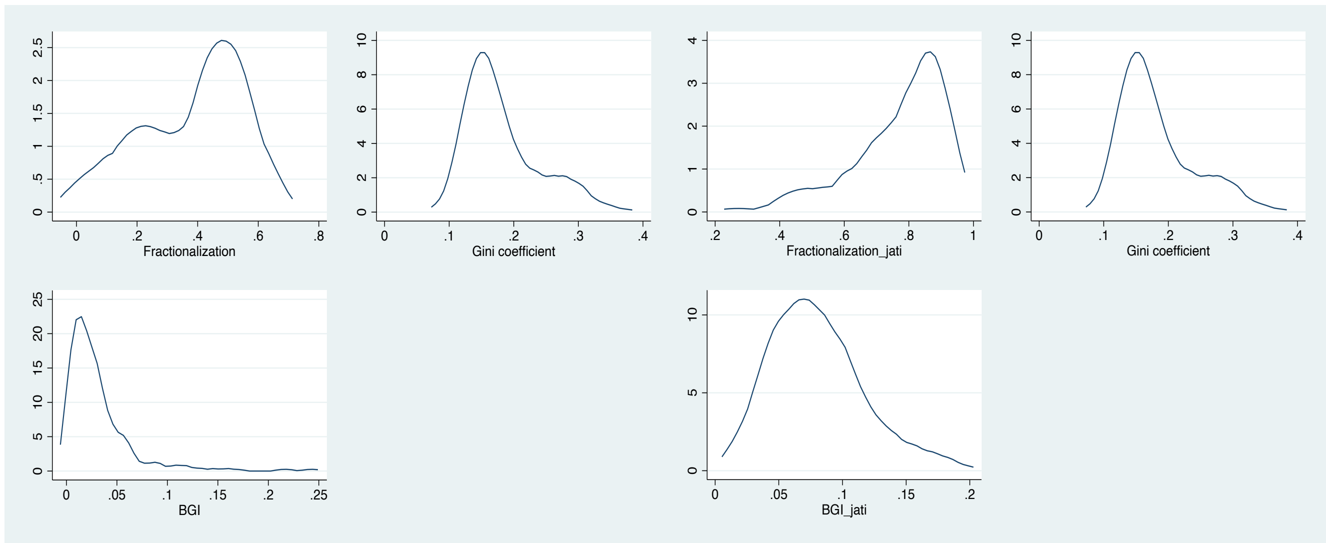
We first provide descriptive evidence on the levels of ethnic fractionalization[9], economic inequality, and between-group inequality in our sample (Figure 3.1). Consistent with existing research, we find slum settlements are quite ethnically diverse. We find economic inequality (the average neighborhood Gini coefficient) is .18, which is unsurprisingly much lower than the average overall urban measures (.32 for urban Bihar, .37 for urban Rajasthan, and .42 for urban Karnataka).[10] These measures are not directly comparable, though, as we consider inequality in asset holdings, rather than income inequality.

The magnitude of between-group inequality is somewhat difficult to interpret because it is sensitive to the number of assets considered. A value of 1 corresponds to neighborhoods with equal proportions of ethnic groups where one group holds no assets and another holds all 20. Average asset holdings in slums are low overall (7 out of 20). Thus,

---

[8] Private land = 1; municipal or state government land = 2; national land = 3; and former rural ("Gram Panchayat") land = 4.
[9] Fractionalization is equal to $1 - \sum_{i=1}^{n} p_i^2$ where p_i is the proportion of individuals belonging to each of *n* caste groups.
[10] See https://www.livemint.com/Opinion/v9bWm59FOXpedpKb7GhqCO/What-is-behind-high-inequality-in-Kerala.html

we examine relative differences in BGI across settlements rather than emphasizing absolute magnitudes. The histograms in Figure 3.1 reveal a positive skew in BGI across settlements.



Notes: Caste fractionalization scores (left) can range from 0 to .66, with higher scores indicating greater diversity. Completely homogenous neighborhoods have a score of 0. Neighborhoods with a score of .66 are comprised of one third high caste, one third low caste, and one third other caste groups. Jati fractionalization scores (right) can range from 0 to .99. Gini coefficients can range from 0 to 1, with higher scores indicating greater economic inequality. In neighborhoods where each household owns the same amount of assets, the score will be 0. In neighborhoods where one household owns all of the assets, the score will be 1. BGI can range from 0 to 1, with higher scores indicating greater inequality between groups. In neighborhoods where the average number of assets held by groups is equivalent, the score will be 0. The maximum value, 1, would occur if groups were present in equal proportions in the neighborhood, and one group held all 20 assets on average, while the other group held no assets on average.

Figure 3.1: Distribution of ethnic fractionalization, economic inequality, and between-group inequality across neighborhoods by caste (left) and subcaste/jati (right)

Before we examine the relationship between BGI and neighborhood coordination, we provide additional descriptive evidence to show that slum residents do indeed describe

themselves as relatively disadvantaged and that they view coordinating with their neighborhood via vote banks as important for economic outcomes. First, we ask respondents to place themselves on the national income distribution.[11] On average, respondents place themselves on the third ladder rung (of ten). Second, we find the majority (52%) of respondents report that organizing as a vote bank is important for neighborhoods to receive better services from the government. There is no relationship between this response and neighborhood ethnic fractionalization, economic inequality, or between-group inequality (Appendix C).

We next examine the hypotheses of interest. The results for our first tests of Hypothesis 1 are shown in Table 3.2. We present the output from five hierarchal logistic regression models with the dependent variable equaling 1 if the respondent believes their neighborhood is an effective vote bank. The first column includes the coarse measure of BGI, while Column 2 includes the more granular measure of BGI calculated from a subset of the data. Columns 3 and 4 include coarse and granular ethnic fractionalization measures. The fifth column includes the Gini coefficient. The results provide strong support for our first hypothesis. We find a significant negative relationship between BGI (using either measure) and the likelihood that the respondent reports their neighborhood is an effective vote bank. Also consistent with our expectations, we find this result only for BGI — there is no relationship between ethnic fractionalization or economic inequality and the outcome of interest.

---

[11] "If the economic ladder had 10 steps, with Mukesh Ambani at the top and the poorest person at the bottom, where would you like to put yourself on this ladder?"

Table 3.2: Model output (perceptions of vote bank effectiveness)

	Effective vote bank				
VARIABLES	BGI (coarse)	BGI (granular)	Frac (coarse)	Frac (granular)	Gini
BGI	-3.890*				
	(2.155)				
BGI_jati		-11.32***			
		(4.093)			
Fractionalization			-0.0188		
			(0.367)		
Fractionalization_jati				0.828	
				(1.028)	
Gini					-1.123
					(1.385)
Assets	0.0502***	0.0528**	0.0536***	0.0571**	0.0522***
	(0.0123)	(0.0241)	(0.0122)	(0.0243)	(0.0124)
Primary education	-0.0162	-0.0686	-0.0199	-0.0624	-0.0220
	(0.0587)	(0.0998)	(0.0588)	(0.100)	(0.0587)
Migrant	-0.204***	0.224*	-0.207***	0.203	-0.206***
	(0.0742)	(0.129)	(0.0740)	(0.128)	(0.0741)
Settlement age	-0.00136	-0.00310	-0.000905	-0.000116	-0.00132
	(0.00140)	(0.00362)	(0.00144)	(0.00397)	(0.00151)
Settlement size	1.23e-05	-1.49e-05	5.34e-06	-0.000117	-4.33e-06
	(9.92e-05)	(0.000178)	(9.67e-05)	(0.000170)	(9.80e-05)
Municipal/state land	0.137	0.211	0.136	0.266	0.131
	(0.136)	(0.277)	(0.136)	(0.289)	(0.136)
National land	0.191	0.189	0.222	0.470	0.210
	(0.163)	(0.369)	(0.166)	(0.370)	(0.166)
Former GP	0.119		0.104		0.108
	(0.332)		(0.336)		(0.328)
Respondent age	-3.64e-05	0.000146	0.000234	0.000438	0.000179
	(0.00195)	(0.00408)	(0.00196)	(0.00406)	(0.00196)
Female	-0.132***	-0.0307	-0.132***	-0.0287	-0.134***
	(0.0479)	(0.0764)	(0.0478)	(0.0762)	(0.0478)

Scheduled caste or tribe	0.0298	0.0811	0.0298	0.117	0.0306
	(0.0631)	(0.0900)	(0.0635)	(0.0888)	(0.0628)
Muslim	0.0838	0.241*	0.0812	0.251*	0.0796
	(0.108)	(0.145)	(0.109)	(0.145)	(0.107)
Jaipur	-0.355***		-0.328***		-0.283**
	(0.123)		(0.126)		(0.131)
Patna	-0.297*		-0.365**		-0.265
	(0.170)		(0.176)		(0.215)
Constant	-0.761***	-0.153	-0.925***	-1.915**	-0.710**
	(0.206)	(0.517)	(0.252)	(0.891)	(0.339)
Observations	9,027	3,064	9,053	3,064	9,053
Number of id	220	94	221	94	221

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 3.3 presents the results from a second set of tests of this hypothesis. In this set of models, we estimate five hierarchal regressions with the dependent variable equaling the number of neighbors out of ten that the respondent believes would cooperate in a community project. The results provide (weaker) support for the hypothesis. We find the granular measure of BGI is significantly associated with reduced neighbor cooperation. The magnitude of the relationship is sizeable. The coefficient for the coarser measure of BGI is also negative but the result is not significant. We find a significant association between the coarse measure of fractionalization as well as the Gini coefficient and social cooperation but the relationship is positive. Notably, the positive association between fractionalization and social cooperation may be driven in part by the increased number of local leaders in more diverse areas. When we control for whether the respondent names an area leader, the

relationship between fractionalization and cooperation decreases in magnitude and significance.

Table 3.3: Model output (perceptions of neighbor cooperation)

	Neighbor cooperation				
VARIABLES	BGI (coarse)	BGI (granular)	Frac (coarse)	Frac (granular)	Gini
BGI	-1.886				
	(2.635)				
BGI_jati		-8.037*			
		(4.562)			
Fractionalization			0.832**		
			(0.420)		
Fractionalization_jati				1.246	
				(1.067)	
Gini					3.498**
					(1.483)
Assets	0.0575***	0.0439*	0.0597***	0.0494**	0.0639***
	(0.0161)	(0.0240)	(0.0159)	(0.0237)	(0.0162)
Primary education	0.196***	0.242**	0.198***	0.248**	0.206***
	(0.0700)	(0.109)	(0.0696)	(0.109)	(0.0699)
Migrant	-0.125	-0.232	-0.128	-0.254*	-0.125
	(0.0801)	(0.146)	(0.0804)	(0.147)	(0.0799)
Settlement age	-0.00476***	-0.0110***	-0.00394**	-0.00848*	-0.00320*
	(0.00167)	(0.00404)	(0.00168)	(0.00434)	(0.00181)
Settlement size	-0.000129	-8.82e-05	-0.000154	-0.000198	-0.000101
	(0.000109)	(0.000186)	(0.000108)	(0.000183)	(0.000107)
Municipal/state land	-0.0419	-0.198	-0.0256	-0.140	-0.0218
	(0.164)	(0.310)	(0.162)	(0.317)	(0.162)
National land	0.113	-0.215	0.183	0.0365	0.170
	(0.204)	(0.421)	(0.205)	(0.409)	(0.204)
Former GP	-0.362	-2.127***	-0.399	-2.719***	-0.395
	(0.358)	(0.439)	(0.361)	(0.354)	(0.393)

Respondent age	0.00452**	-0.000375	0.00465**	-8.72e-05	0.00484**
	(0.00219)	(0.00446)	(0.00219)	(0.00447)	(0.00219)
Female	-0.111**	-0.128	-0.113**	-0.126	-0.111**
	(0.0565)	(0.0919)	(0.0564)	(0.0923)	(0.0563)
Scheduled caste or tribe	0.0600	0.270**	0.0751	0.311***	0.0629
	(0.0732)	(0.113)	(0.0731)	(0.113)	(0.0732)
Muslim	0.0882	0.217	0.114	0.229	0.101
	(0.124)	(0.168)	(0.126)	(0.168)	(0.123)
Jaipur	-0.0307		0.0548		-0.149
	(0.158)		(0.164)		(0.161)
Patna	0.838***		0.868***		0.502**
	(0.188)		(0.187)		(0.220)
Constant	6.154***	7.342***	5.677***	5.535***	5.361***
	(0.252)	(0.618)	(0.305)	(0.976)	(0.396)
Observations	9,023	3,084	9,049	3,084	9,049
Number of id	220	95	221	95	221

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

In separate analyses (not shown), we find no evidence that the relationship between BGI and the outcomes of interest vary with neighborhood size.

3.6 Mechanisms

We expect ethnic identity to be particularly salient in neighborhoods with higher BGI, and the salience may be heightened relative to class identity. To provide evidence on this hypothesis, we first draw on a question about how ethnicity shapes opportunities. The model results are provided in Table 3.4. The results provide weak support for our expectations. We find both measures of BGI are associated with a belief that jati is very

important to determining where a child from their neighborhood will end up. The coefficients for fractionalization are, in contrast, negative. None of the associations are significant; however, controlling for fractionalization, BGI is significantly associated with a belief that jati structures outcomes for both measures of BGI (not shown).

Table 3.4: Model output (importance of jati for shaping opportunities)

	Importance of jati in shaping outcomes			
VARIABLES	BGI (coarse)	BGI (granular)	Frac (coarse)	Frac (granular)
BGI	0.721			
	(0.664)			
BGI_jati		0.708		
		(0.504)		
Fractionalization			-0.143	
			(0.101)	
Fractionalization_jati				-0.182
				(0.118)
Assets	0.0111	0.0112	0.0101	0.00923
	(0.00703)	(0.00719)	(0.00693)	(0.00692)
Primary education	-0.0884*	-0.0867*	-0.0869*	-0.0882*
	(0.0454)	(0.0451)	(0.0450)	(0.0452)
Migrant	-0.0701	-0.0760	-0.0636	-0.0642
	(0.0511)	(0.0516)	(0.0518)	(0.0511)
Settlement age	0.000178	0.000187	-3.22e-05	9.87e-06
	(0.000506)	(0.000503)	(0.000467)	(0.000486)
Settlement size	4.53e-05**	4.89e-05***	5.63e-05***	6.18e-05***
	(1.77e-05)	(1.78e-05)	(1.72e-05)	(1.87e-05)
Municipal/state land	0.00677	0.00837	0.00589	0.00406
	(0.0387)	(0.0381)	(0.0385)	(0.0390)
National land	-0.0137	-0.0105	-0.0372	-0.0311
	(0.0505)	(0.0508)	(0.0486)	(0.0483)

Former GP	-0.0369	-0.0618	-0.0170	-0.00353
	(0.0504)	(0.0538)	(0.0498)	(0.0528)
Respondent age	-0.000883	-0.000944	-0.00101	-0.00104
	(0.00163)	(0.00162)	(0.00163)	(0.00163)
Female	-0.0574*	-0.0582*	-0.0580*	-0.0578*
	(0.0320)	(0.0316)	(0.0317)	(0.0319)
Scheduled caste or tribe	0.0170	0.0241	0.00416	3.06e-05
	(0.0420)	(0.0426)	(0.0415)	(0.0421)
Muslim	0.112*	0.116*	0.0871	0.107*
	(0.0602)	(0.0597)	(0.0620)	(0.0586)
Constant	1.617***	1.576***	1.727***	1.809***
	(0.110)	(0.117)	(0.109)	(0.132)
Observations	2,948	2,972	2,972	2,972
Number of id	94	95	95	95

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

As a crude proxy for class salience, we examine where respondents place themselves on the national income distribution. We expect, where class is relatively less salient, that respondents will place themselves higher on the income distribution. Where salience as slum residents is relatively higher, respondents will likely report lower values. The results are consistent with our expectations (Appendix C). The more granular measure of BGI is significantly associated with a respondent reporting a higher position on the national income distribution. When we control for fractionalization, the coarser measure is also significantly associated with reporting a higher position. The coefficients on fractionalization, in contrast, are negative. Taken together, these analyses provide suggestive evidence that ethnic identity is relatively more salient (and class, or slum, identification relatively less) when BGI is higher.

However, future work should draw on cleaner measures to explore this relationship more rigorously.

We expect that inequality between groups, by increasing caste salience and highlighting status inequality, will lead to increased tensions and potential for conflict in neighborhoods. To test this third hypothesis, we draw on data on dispute frequency as well as data on whether disputes are regularly resolved. The results (Table 3.5) are consistent with our expectations. BGI is associated with more frequent conflicts and less frequent conflict resolutions. We do not see the same associations for fractionalization. The relationship between BGI and conflict is only significant for the granular measure of BGI and conflict frequency. However, after controlling for fractionalization, both measures of BGI are also significantly (negatively) associated with conflict resolution.

Table 3.5: Model output on conflict frequency and resolution

			Conflict frequency			Conflict resolution		
VARIABLES	BGI (coarse)	BGI (granular)	Frac (coarse)	Frac (granular)	BGI (coarse)	BGI (granular)	Frac (coarse)	Frac (granular)
BGI	0.419				-0.412			
	(0.830)				(0.386)			
BGI_jati		1.870**				-0.601		
		(0.857)				(0.576)		
Fractionalization			-0.00317				0.140*	
			(0.123)				(0.0761)	
Fractionalization_jati				-0.113				0.181
				(0.187)				(0.159)
Assets	0.0213***	0.0410***	0.0207***	0.0352***	0.00398**	0.0198***	0.00432**	0.0207***
	(0.00526)	(0.00857)	(0.00522)	(0.00839)	(0.00188)	(0.00474)	(0.00186)	(0.00477)
Primary education	-0.0476**	-0.0628*	-0.0460**	-0.0704**	-0.0146	-0.0229	-0.0164	-0.0227
	(0.0226)	(0.0347)	(0.0225)	(0.0341)	(0.0105)	(0.0206)	(0.0105)	(0.0206)

Migrant	-0.088***	-0.110*	-0.086***	-0.0950	0.0322**	0.180***	0.0316**	0.176***
	(0.0309)	(0.0638)	(0.0312)	(0.0632)	(0.0133)	(0.0316)	(0.0132)	(0.0316)
Settlement age	0.000541	-9.52e-05	0.000494	-0.000392	-0.00044*	-0.00117*	-0.000312	-0.000962
	(0.000529)	(0.000649)	(0.000547)	(0.000621)	(0.000248)	(0.000611)	(0.000245)	(0.000617)
Settlement size	-2.34e-05	-1.67e-05	-1.82e-05	-1.71e-06	-2.53e-06	-7.63e-06	-1.05e-05	-2.09e-05
	(2.47e-05)	(2.45e-05)	(2.43e-05)	(2.42e-05)	(2.00e-05)	(2.96e-05)	(2.01e-05)	(3.02e-05)
Municipal/state land	0.118***	0.0285	0.121***	0.0258	-0.0315	-0.0327	-0.0294	-0.0277
	(0.0413)	(0.0512)	(0.0414)	(0.0533)	(0.0291)	(0.0494)	(0.0289)	(0.0491)
National land	0.0892	0.0311	0.0853	-0.00161	0.00188	0.0157	0.0166	0.0395
	(0.0607)	(0.0711)	(0.0612)	(0.0725)	(0.0340)	(0.0611)	(0.0338)	(0.0572)
Former GP	-0.0557	0.385***	-0.0537	0.489***	-0.0881	-0.275***	-0.0940	-0.328***
	(0.113)	(0.0659)	(0.115)	(0.0643)	(0.0634)	(0.0593)	(0.0673)	(0.0540)
Respondent age	-0.003***	-0.003**	-0.003***	-0.004***	-0.001**	-0.001*	-0.001**	-0.001*
	(0.000811)	(0.00143)	(0.000813)	(0.00139)	(0.000347)	(0.000730)	(0.000347)	(0.000732)
Female	0.0169	0.0181	0.0169	0.0171	-0.0250**	-0.00421	-0.0267***	-0.00464
	(0.0201)	(0.0302)	(0.0200)	(0.0297)	(0.0101)	(0.0213)	(0.0102)	(0.0212)
Scheduled caste or tribe	0.0965***	0.127***	0.0967***	0.0945**	-0.00595	-0.000975	-0.00384	0.00748
	(0.0282)	(0.0426)	(0.0283)	(0.0441)	(0.0122)	(0.0210)	(0.0122)	(0.0210)
Muslim	0.0200	0.0288	0.0191	0.0105	-0.00892	0.0584	-0.000624	0.0603
	(0.0420)	(0.0644)	(0.0422)	(0.0641)	(0.0186)	(0.0405)	(0.0193)	(0.0406)
Jaipur	0.585***		0.579***		0.190***		0.205***	
	(0.0583)		(0.0607)		(0.0253)		(0.0265)	
Patna	0.605***		0.609***		0.185***		0.189***	
	(0.0466)		(0.0486)		(0.0300)		(0.0297)	
Constant	1.739***	1.640***	1.760***	1.960***	0.800***	0.726***	0.721***	0.519***
	(0.0760)	(0.155)	(0.0903)	(0.179)	(0.0449)	(0.0894)	(0.0563)	(0.142)
Observations	8,903	3,058	8,929	3,058	5,146	1,758	5,167	1,758
Number of id	220	95	221	95	180	95	181	95

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Finally, we test the relationship between between-group inequality and preferences for co-ethnic brokers. We draw on a forced-choice conjoint experiment from our social

networks data. Respondents are asked to choose between two putative informal neighborhood leaders. Each candidate has two randomly selected characteristics. We assess respondents' preference for a co-ethnic neighborhood leader by measuring the average marginal component effects of the attribute "Is a member of your caste or religion" on the probability of that leader being selected. We do *not* find that residents from neighborhoods with higher BGI have a stronger preference for co-ethnic brokers (results not shown).

However, consistent with Auerbach & Thachil (2018), we find slum residents value efficacy (measured here as "honesty") more than ethnicity across neighborhoods. The same authors also find that brokers target support strategically to neighbors rather than targeting support primarily to co-ethnic neighbors (Auerbach & Thachil, 2019). To examine whether this is the case in neighborhoods with greater BGI, we test the relationship between BGI and a.) whether respondents asked area leaders for help in the past year; b.) whether respondents received help from area leaders in the past year; and c.) whether they received help from the broker conditional on having asked. We find no relationship between BGI and any of these outcomes (results not shown).

We also examine whether BGI is associated with differences in leader structure and efficacy, both of which are important for understanding which neighborhoods are more likely to receive government support (Auerbach 2019). Auerbach (2019) finds greater diversity leads to more brokers and, subsequently, greater provision of public goods in Indian slums. We examine whether this relationship varies with BGI by regressing the number of brokers in a settlement on BGI, controlling for ethnic diversity and other neighborhood-level covariates. Consistent with existing evidence, we find ethnic diversity is

associated with higher numbers of brokers. Curiously, we find *fewer* leaders where BGI is greater.

Finally, we analyze variation in reported leader effectiveness. As a follow up to the question asking whether the respondent believes their neighborhood is an effective vote bank, we ask those who respond "No" to explain why. One of the answer options is "The neighborhood leader cannot organize voters." We run a hierarchical logistic regression model with the dependent variable equaling 1 if the respondent provides this reason and 0 otherwise. In neighborhoods with higher between-group inequality, residents are more likely to report that their area is not an effective vote bank because their area leader is ineffective. In contrast, residents are *not* more likely to attribute the ineffectiveness to caste diversity (the response option is "We do not belong to the same caste or religion or background"). Further exploration of these findings is outside the scope of this chapter but merit additional follow up work.

3.7 Alternate Explanations

Habyarimana, Humphreys, Posner, & Weinstein (2007) summarize and test three potential types of mechanisms underlying the negative association between ethnic diversity and public goods provision: differences in preferences across groups, differences in technologies, such as common languages or networks, across groups, and differences in coordination strategies across groups that undermine ability to impose social sanctions. They note that the social sanctioning mechanism may "be consistent with the most prominent explanation for successful collective action in the political science literature… [I]f co-ethnics

expect that cooperation with co-ethnics will be reciprocated under threat of sanctioning but cooperation with non-co-ethnics not, then public goods provision will be higher in homogeneous communities" (711).

Consistent with this argument, we find evidence that, in neighborhoods where BGI is higher, disputes are not only more common, but, importantly, they are less likely to be resolved. This suggests that BGI, rather than fractionalization, can undermine residents' ability to impose social sanctions and, thus, effectively mobilize. To examine whether the other two mechanisms underlying the association between ethnic diversity and public goods provision can account for the negative association between BGI and intergroup coordination, we test for differences in preferences and technologies across neighborhoods.

3.7.1 Preferences

In one survey round, we ask respondents a battery of questions to assess whether they prefer collective goods targeted to their neighborhood over caste-targeted programmatic policies.[12] We create an index with values ranging from 0 to 3 to measure how often the respondent chooses the caste-targeted option over the neighborhood improvement

---

[12] The choices are "Reserved jobs in state government for members of your jati or religion (or more reserved jobs, if your jati or religion gets them already); *OR* Second option: More subsidies to improve homes in the neighborhood"; New health clinic near your neighborhood; *OR* Second option: Reserved places in school for members of your jati or religion (or more reserved places, if your jati or religion gets them already); and "Reserved seats in government for members of your jati or religion (or more reserved seats, if your jati or religion gets them already); *OR* Second option: Better water supply in the neighborhood."

option. Most people prefer the neighborhood-targeted options (73% prefer the neighborhood option in all three cases; only 3% prefer the caste-targeted option in all three cases). We estimate a series of hierarchical regression models with the index as the dependent variable and find no evidence to support that these preferences differ with BGI or ethnic fractionalization (results not shown). These results suggest that the mechanism underlying reduced collective action potential in neighborhoods with greater polarization is *not* a difference in preferences.

3.7.2 Technology

To test the technology mechanism, we examine whether between-group inequality is associated with reduced inter-ethnic social interactions, leveraging our social networks data. Respondents are asked whom in the slum they visit outside work, from whom they would borrow a small amount of money, and who would borrow money from them. These questions are used to construct the social networks in each of the eight slums for which social network surveys were conducted, allowing us to measure caste homophily, i.e. the propensity of individuals to socialize with others of the same caste. We operationalize homophily as the proportion of links occurring within the minority caste group, minus the minority caste group's proportion of the population. For example, if low-caste individuals comprise 20% of a slum's population, and 60% of their social links are to other low-caste individuals, then the level of homophily is 0.4.

We assess whether between-group inequality is associated with decreased inter-caste relationships. The results are shown in Figure 3.2, which shows the eight neighborhoods

with network data arranged in order of increasing caste polarization. While most of these neighborhoods have relatively low BGI, and the number of neighborhoods is too low for statistical testing, we observe no clear relationship between BGI and network homophily in these neighborhoods. This suggests that the technology mechanism does *not* underly the reduced collective action potential in neighborhoods with greater polarization.

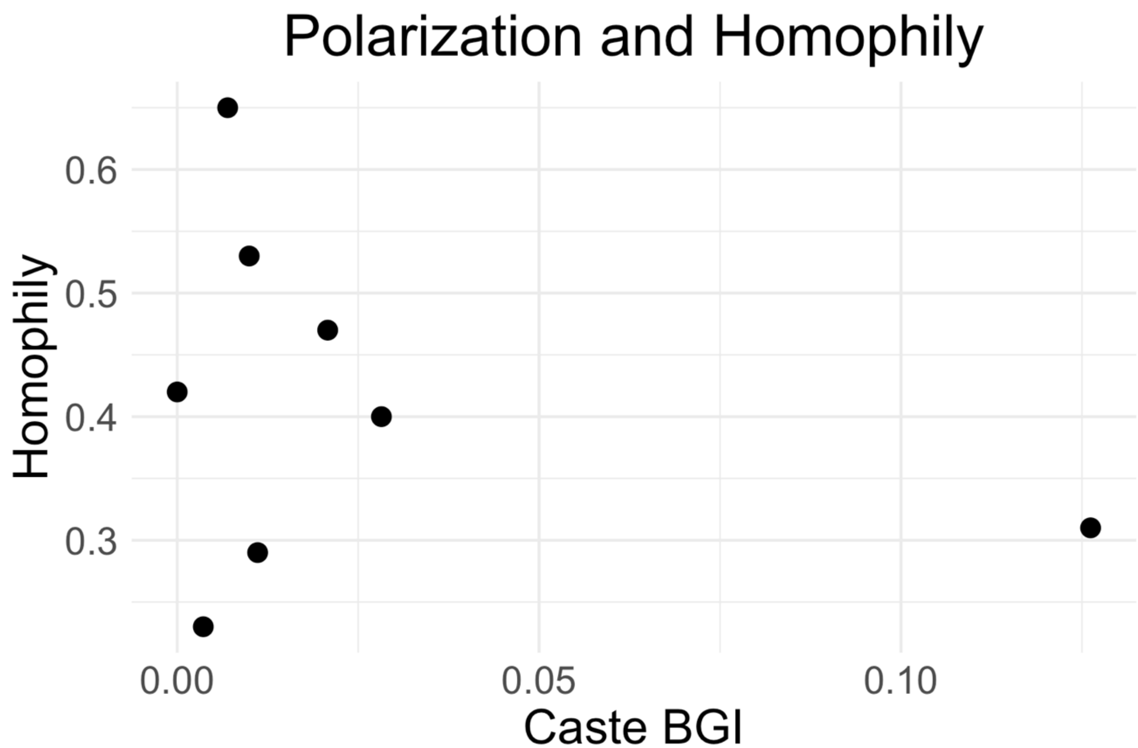


Figure 3.2: Caste polarization and social homophily in the eight neighborhoods from the network census dataset

3.7.3 Reverse causality

One possible alternate explanation for our results concerns reverse causality. In particular, it could be the case that the polarization we observe is the result of fractionalized

patronage networks: perhaps in higher BGI neighborhoods, high and low-caste individuals receive distributions of public goods from separate patronage networks. This is the argument proposed in Nathan (2016) to explain high levels of ethnic voting in Ghanaian slums. Ethnic polarization could be the consequence of fractionalized patronage networks, which could also cause the observed reduction in collective action potential. If this were the case, then we should see larger differences in public goods provision between high- and low-caste individuals in high-polarization neighborhoods than in low-polarization neighborhoods. To test this possibility, we regress individually reported public goods provision on caste, including assets and city as controls. If the observed results are due to high-polarization neighborhoods having more fractionalized distribution networks, then we should see significantly different coefficients on caste for high- versus low-polarization neighborhoods.

The results are shown in Table 3.6. From left to right, the columns show the coefficient on high caste for high-BGI (Column 1) and low-BGI (Column 2) neighborhoods; the standard errors for these coefficients (Columns 3 and 4); and the z- and p-values (Columns 5 and 6) for a comparison between the caste coefficients in high- vs. low-BGI neighborhoods. P-values below 0.05 indicate a statistically significant difference in the effect of caste on the provision of each public good for high- versus low-BGI neighborhoods. In other words, a p-value below .05 suggests caste matters more for public goods provision in high-BGI than in low-BGIs neighborhoods. Instead, for the public goods surveyed, we find that the relationship between individual caste status and the provision of each public good does not significantly differ between high- and low-BGI neighborhoods. Therefore, there is

not strong evidence that observed differences in polarization merely reflect differences in the fractionalization of patronage networks along caste lines.

Table 3.6: The relationship between caste and individual public goods provision, comparing high- to low-BGI neighborhoods

	(1) Coef. (High BGI)	(2) Coef. (Low BGI)	(3) SE (High BGI)	(4) SE (Low BGI)	(5) z-value	(6) p-value
Prim. School	-0.06	-0.01	0.04	0.05	-0.71	0.48
Water	0.01	-0.15	0.14	0.18	0.67	0.5
Voter card	0.01	-0.21	0.17	0.14	0.96	0.34
Ration card	-0.24	-0.23	0.13	0.15	-0.06	0.95
Unique ID	-0.08	0.01	0.17	0.15	-0.41	0.68
Patta	0.15	0.05	0.17	0.26	0.33	0.74
Tenure security	0.14	-0.03	0.07	0.1	1.34	0.18

3.8 Discussion

Existing research demonstrates neighborhood-level organization is crucial for slum residents' ability to access important government services. We find support for this point from our data, which show a majority of slum residents consider organizing as a "vote bank" to be in their material interests, and that slum residents have a preference for government provision of collective goods. Moreover, our results from a conjoint experiment suggest that, across neighborhoods, residents prefer honest neighborhood leaders to those that share ascriptive characteristics. Therefore, it is important to understand the conditions under

which neighborhoods are more effectively able to mobilize and coordinate with their area leaders.

Consistent with our expectations, our results suggest that, though most slum residents report having a material interest in neighborhood-level development, between-group inequality may have deleterious effects on neighborhood organization. Residents of more polarized neighborhoods describe their neighborhoods as less effective vote banks and are less likely to expect their neighbors to coordinate on group efforts. We do not find the same relationship between ethnic diversity and neighborhood coordination.

Our analysis suggests BGI increases ethnic salience, particularly relative to class salience. The measures we draw on to test this point are crude proxies, and future work should examine group identification and the politicization of group identities in urban slums in much greater detail. Our other findings support our argument that BGI increases intra-neighborhood conflicts. That these conflicts are less likely to be resolved in neighborhoods with greater BGI provides evidence to support the conclusion that it is more difficult to effectively impose social sanctions in more polarized neighborhoods, which can be detrimental to creating social institutions of cooperation.

We do not find evidence to support our hypothesis that residents of more unequal slums will have a stronger preference for co-ethnic brokers. Rather, slum residents value broker efficacy across settlements. However, we find that there are fewer leaders and respondents describe them as less efficacious in settlements with greater inequality between groups. Future research should develop and test hypotheses to explain why broker networks and characteristics vary with levels of ethnic polarization.

We also provide evidence that our findings are not driven by three potential alternate explanations. Preferences for neighborhood-targeted versus ethnically-targeted goods do not vary with ethnic polarization. Across neighborhoods, slum residents strongly prefer collective goods. Moreover, we do not find evidence that residents of more ethnically polarized neighborhoods have more segregated social networks. The latter null finding is particularly striking in contrast to results from a Ugandan slum that suggest coordination among co-ethnic individuals is easier because of overlapping networks (Habyarimana et al. 2007). Finally, we provide evidence that the inequality between groups is not caused by the presence of ethnically homogeous patronage networks. This finding contrasts with findings from urban Ghana (Nathan, 2016b). Future comparative research should explore the conditions under which broker networks in urban slums are homogenous versus multi-ethnic.

Overall, we expect urban slums to provide a conservative context to test whether local polarization, or between-group inequality, undermines preferences and capacity for collective mobilization. This is because organizing at the neighborhood level is particularly important for material outcomes for urban slum residents. Further work is needed to examine the consequences of between-group inequality at the neighborhood-level in other contexts.

3.9 Conclusion

Our results show that micro-level economic conditions are important for understanding the relationship between social divisions and political mobilization at the local

level. Consistent with our expectations, individuals in neighborhoods with higher inequality between caste groups are just as likely as those in other neighborhoods to value neighborhood mobilization. They also value collective goods and have similar preferences for local goods. Yet, between-group inequality can have detrimental consequences for collective action.

This chapter advances several recent theoretical and empirical contributions in the comparative politics literature on how the structure of inequality, local conditions, and urbanization trends affect political behavior. First, we provide further evidence that the structure of local inequality between groups, rather than the level of inequality, or level of ethnic fractionalization, can have important political consequences. This finding has important distributive implications for the context studied, as neighborhood coordination is an important predictor of access to basic services and property rights in urban slums (Auerbach, 2016; Krishna, Rains, & Wibbels, 2020; Spater & Wibbels, 2020). While existing studies of between-group inequality focus on coarse geographic scales, we show the structure of inequality at very local scales can have important consequences for outcomes at the local level. We also contribute to the rapidly growing literature on political behavior in urbanizing regions of the developing world.

Future work should carefully consider how within neighborhood *segregation* may also affect preferences and organizational capacity. To the extent that individuals can control where they live within the neighborhood, we might expect higher residential sorting along caste lines (i.e. higher caste segregation) in neighborhoods with higher between group inequality (Glaeser et al. 2008). Recent work has demonstrated significant relationships

between segregation and public goods provision at scales coarser than the neighborhood level (Ejdemyr, Kramon, & Robinson, 2018; Tajima, Samphantharak, & Ostwald, 2018; Trounstine, 2016). Important open questions include whether between-group inequality increases segregation, as well as whether segregation and between-group inequality affect neighborhood organization differently. However, existing measures of residential segregation are not robust in empirical settings with small numbers of people and very fine geographical scale. Advancements in local segregation measurements are needed to further develop our understanding of the relationship between local context and political organization.

Conclusion

We are currently experiencing the largest wave of urbanization in human history. Within the next three decades, the global urban population is expected to increase by over two billion people, primarily in resource-poor cities in the Global South. Already, nearly one-sixth of humanity live in slums, and most of the growing urban population will likely live under similar conditions. Despite residing in close proximity to public servants and public services, many slum residents experience multiple informalities and institutional disconnections that expose them to high levels of risk and threaten their ability to make substantial economic gains in the city (Rains & Krishna, 2020). The extent to which these residents will, in the long-run, share in the benefits of growth in the cities they help build or remain stuck in poverty is debated (see Turok & Borel-Saladin, 2018).

At another crucial period of mass urbanization, scholars had similar queries, and concerns, about whether urban slum residents would experience upward mobility in the long-run. In 1882, the American political economist Henry George wrote, “It is true that disappointment has followed disappointment, and that discovery upon discovery, and invention after invention, have neither lessened the toil of those who most need respite, nor brought plenty to the poor” (George, 1882). Yet, many now reflect on this period of urbanization as one that gave rise to broad-based upward mobility for the urban poor. This may be in large part because economic development was accompanied by widespread community political mobilization that successfully engendered a sweeping set of policy reforms and investments aimed at improving public health via housing and labor standards, reducing child labor, increasing educational attainment, reducing municipal corruption, and

facilitating progressive taxation (Buenker, Burnham, & Crunden, 1977). Policy interventions of these kinds are necessary but lacking in developing countries (Davis, 2004; Fox, 2014; Rains & Krishna, 2019; UN Habitat, 2003), where governments spend only 1.5% of GDP on social welfare programs in contrast to the 4.2%[1] of GDP that the United States spent upon becoming majority urban (World Bank, 2018).

In the absence of adequate policy supports, many slum residents turn to informal political strategies to solve everyday problems associated with informality, and to negotiate for greater inclusion into civil society. This dissertation seeks to advance an understanding of the characteristics that influence whether and when Indian slum residents engage in these strategies. In three complementary essays, I develop and test hypotheses to explain differences in problem-solving behavior across settlements. To test the expectations delineated in each chapter, I draw on original surveys of more than 9,000 slum households from three cities. These neighborhoods span a wide range of conditions, allowing me to speak to the substantial variation within and across neighborhoods.

In my first essay, *Negotiating Informality, Negotiating Citizenship: How Neighborhood Characteristics Shape Political Behavior in Indian Slums,* I examine differences in claim making behavior across neighborhoods. I draw on qualitative interviews to propose a framework linking neighborhood characteristics to collective and individual-level mobilization patterns. I then empirically test my expectations with the original survey data. I find collective

[1] Data are extracted from historical U.S. census reports from 1930 when the country was 56% urban.

mobilization is concave with respect to the neighborhood's level of access to government resources and that collective mobilization simultaneously increases with the strength of the informal networks present in a neighborhood. In contrast, individual mobilization increases monotonically with neighborhood formality. The findings not only have important implications for understanding development outcomes but also for understanding how the urban poor understand and exercise their rights as citizens.

The second essay, *Women and (Informal) Work: Gender, Informal Labor, and the Civic Participation Gap in Urban Slums,* considers differences in civic participation by gender. I propose and test a framework to explain differences in problem-solving strategies between men and women, as well as by labor force status among women. I argue the gender gap in civic participation varies by type of activity. While women and men participate at similar rates in activities that emphasize their neighborhood's strength as a vote bank, women are less likely to engage in group claim making or in local leadership. When women join the informal labor force, they become more confident navigating interactions outside their neighborhood, while the size of their problem-solving networks simultaneously expands. Both factors ultimately increase the likelihood of engaging in group claim making. I draw on qualitative interviews to bolster this framework and to provide support for the hypothesized mechanisms, and I empirically test my expectations with household survey data.

The third essay, *Toward a Local View of Between-Group Inequality: Implications for Political Mobilization Across Urban Slums,* coauthored with Jeremy Spater, examines differences in organization potential across neighborhoods. We argue the structure (rather than the level) of local economic inequality affects collective mobilization potential in Indian slums. We

find evidence that neighborhoods with greater inequality between caste groups face substantial barriers to collective mobilization.

The frameworks and evidence presented in each essay help advance an understanding of the range of living conditions within and across slums as well as how people organize to solve everyday problems in these neighborhoods. Each chapter, in discussing characteristics that affect whether and how slum residents make claims on the state, provides insight into how to augment demand-side efforts to negotiate for development outcomes. However, neighborhood- and individual-level claim making efforts are unlikely to effect the political will necessary to lead to broader policy reforms. Rather, demand-side efforts to push for structural reforms may require coalition building across settlements. Coalitions of neighborhoods united by a shared identity as slum residents will be better positioned to demand policy reforms than individual settlements focused on addressing shorter-term needs. Some existing organizations, such as Slum Dwellers International, undertake work to build these types of coalitions and should be studied in further detail (Patel, Burra, & D'Cruz, 2001; Patel & Mitlin, 2002). Overall, much more research will be needed to document and explain the lived experiences, policy needs, and successful problem-solving strategies of present and future slum residents in order to help facilitate a future of inclusive urban growth.

Appendix A
Supplemental Information for Chapter 1

A1. Qualitative interviews

A1.1 Case selection

Five neighborhoods were selected from Bengaluru that varied on self-reported housing security and service access scores. Housing security was measured as the average response to the following question: "We have heard that sometimes families are threatened with eviction from their homes. What about in your settlement? Do most people feel very insecure, somewhat insecure, a little bit insecure, or very secure in your home?" Where 1 = "Very insecure" to 4 = "Very secure." Service access was measured as the average predicted first component score for a principal component analysis on the respondent's toilet score, electricity score, and satisfaction with public services. Slums were then classified slums according to whether they had "Low," "Middle," or "High" values for both dimensions. Cases were then selected to ensure variation in scores on both dimensions and spatial distribution.

Neighborhood	Services	Housing security	Location
NH 1	Bottom third	Bottom third	North
NH 2	Bottom third	Middle third	Central
NH 3	Middle third	Middle third	Central
NH 4	Top third	Bottom third	West
NH 5	Top third	Top third	South

A1.2 Recruitment

The goal was to first conduct interviews with neighborhood leaders and then to conduct interviews with a range of other residents. The targets were up to 5 of the most important neighborhood leaders and 15 residents that were equally distributed by gender and spatially distributed throughout the neighborhood. The field managers had prior familiarity with the neighborhoods and neighborhood leaders and are local to the city itself. As such, the field managers first went to each neighborhood to recruit leaders and residents for interviews.

A1.3 Leader recruitment

To recruit leaders, we identified the leaders listed during the focus group discussions conducted in prior surveys. The field managers located these individuals and read a recruitment script. If they were interested in participating, the field managers recorded dates and times they were available. They also asked the leaders: "Are there other community members who are particularly active or important in the community? For example, self-help group leaders, association leaders, religious leaders, or health leaders?" They collected additional names and followed up with additional leaders until up to five leaders were identified.

A1.4 Household recruitment

After interviewing area leaders, households were recruited. The field managers followed the right-hand rule approach based on a "sampling" interval to recruit households.

The interval was calculated based on the number of households in the neighborhood as estimated in their focus group data. The goal was to cover the entire spatial distribution of the neighborhood and to recruit up to 30 possible candidates per neighborhood.

The field manager discussed the study and asked if participants were willing to sign up. They were told they would not be offered compensation; though we gave all participants — leaders and non-leaders — a gift (a tiffin) upon completing the interviews. We interviewed 15 people in each neighborhood; half (7 or 8) women and half (8 or 7) men. We started by conducting interviews with the previously recruited individuals, schedule permitting. To recruit additional people, we recruited on days we also conducted interviews. We alternated visiting on weekends and weekdays; and on field visit days, we spent the entire day in the neighborhood, such that we could check on the same house at various times in the day.

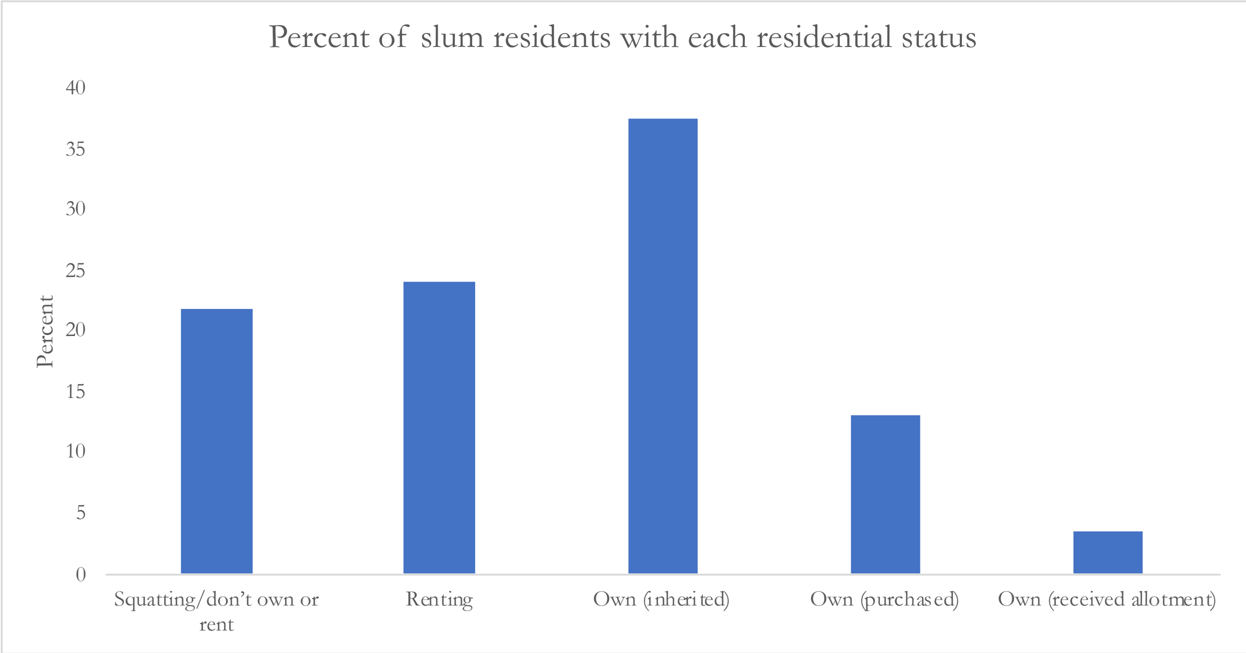
Follow up interviews were conducted using a nearly identical interview protocol with 41 residents from Jaipur and Patna at a later date.

A1.5 Interviews

Interviews were conducted in respondent's homes in the vast majority of cases and ranged in length from 30 minutes to 1.5 hours. Informed consent was conducted before turning the recorder on. All interviews were conducted by one or two field managers in the local language with the PI present. The field managers were trained on study goals and qualitative interviewing methods. The field manager conducted the interview in Kannada. The PI highlighted certain questions to translate back in English during the interview. The

FM would then translate responses and the PI would follow up. In other cases, the FM would stop and translate when he thought relevant to allow for follow up questions. In other instances, when the respondent spoke for a very long time or became particularly animated about a response, the PI would ask for a translation and follow up. A second field manager took notes in English that the PI reviewed each evening after the interviews. At the end of each interview, after turning off the recorder, we administered a brief survey asking the respondent to rank satisfaction with various services, whether and to whom they had ever asked for help with that service, which of a set of leaders they know, and demographics.

All audio files were transcribed and translated through an online platform, Fieldscope, that connects qualified freelance transcribers with researchers. Each transcriber was first vetted by the company. The PI then did a trial transcription with each freelancer before they were hired and conducted random checks of transcription excerpts. Interviews were distributed to six different transcribers.



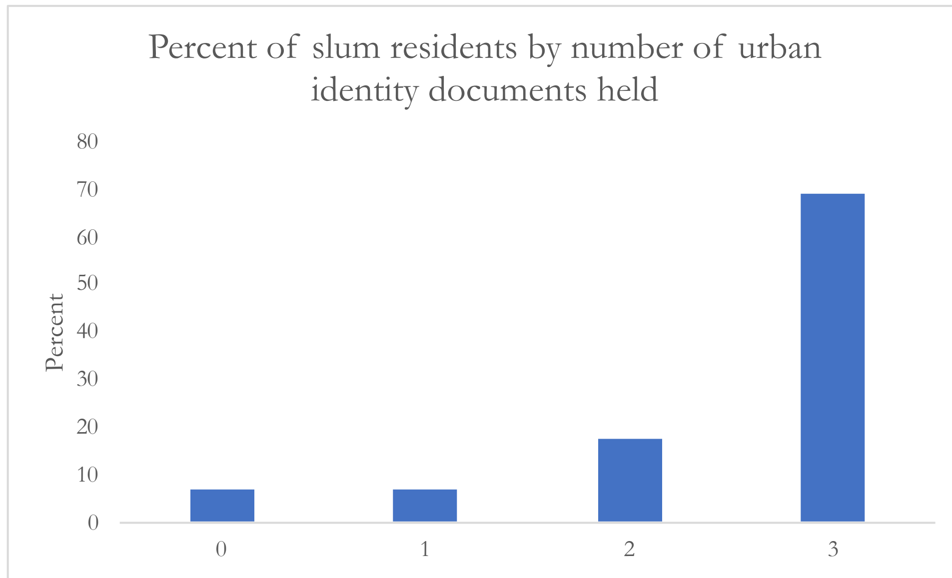
Note: Elsewhere, we undertook a housing-specific inquiry of slum property markets in Bengaluru (Krishna et al., 2020). We find a dizzying array of housing documents carrying a wide range of formal protections. We also find that residents commonly misperceive how much legal protection is guaranteed by their documents. As such, I rely on an approximation of housing formality based not on the paper types residents report having but instead of their self-reported housing "status." We ask respondents whether they own their home and, if so, how they came to own their home. To provide support for this measure, I compare residential status with information we have from one survey wave on whether residents experienced any threats of eviction in the past year. The highest rate of eviction threats (12 percent) were reported by "squatters"; this was followed by 4 percent of renters and 3 percent of the other respondents.

Figure A1: Distribution of residential status

Table A1: Distribution of employment in Indian slums

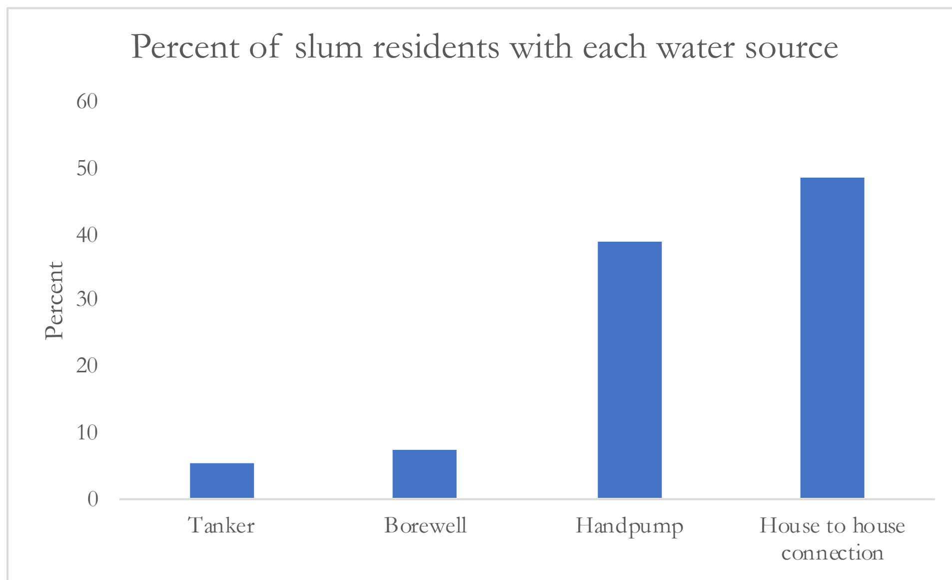
Class	Type	Examples	Percent of employed women in this work category	Percent of employed men in this work category
1	Manual labor	Daily wage labor; construction; garbage collection	39.84	33.7
2	Lower status vocational occupations	Butcher; carpenter; driver; factory work; maid	34.04	33.62
3	Higher status vocational occupations	Cook; electrical work; grocer; security guard	11.32	19.22
4	Clerical	Salesperson; receptionist; call center	10.84	9.97
5	Professional	Teacher; engineer; doctor	3.96	3.48

Note: I apply an occupational classification scheme developed for the Global South to categorize occupations based on their level of prestige (Iversen, Krishna, & Sen, 2016). The categories range from 1 to 5, with 5 corresponding to higher prestige jobs. The degree of formality, and thus, risk, increases with the occupational classification. For example, the percent of workers with the benefits legally required for all formally employed workers increases from 1 percent for those in Class 1 occupations to 77 percent for those in Class 5 occupations.



Note: We ask respondents whether they have an urban-based voter ID card, ration card (needed to access entitlements), and a unique ID card. Figure A2 shows the distribution of the number of urban-based documents held by respondents. Across the three cities, 11 percent of respondents still have at least one of these cards tied to their native region.

Figure A2: Distribution of urban identification documents held



Note: I also examine differences in arrangements for accessing two types of government-provided infrastructure: electricity and water. We ask respondents whether they have an electrical connection and, if so, whether it is metered. In India, many people also informally connect to the electrical grid without paying for a connection or monthly fees (Rains & Abraham, 2018). Only formal connections are metered, so this provides a proxy for whether the respondent has taken and continues to pay for a formal connection. Across the three cities, 65 percent of respondents report having metered electrical connections, while 17 percent report having an unmetered connection, and 18 percent report having no connection. We also ask about the arrangement for water supply (1=tanker, 2=borewell, 3=handpump, 4= house to house connection). Response options shown in A3 are increasing in water quality and connection likelihood of formal provision.

Figure A3: Distribution of water sources

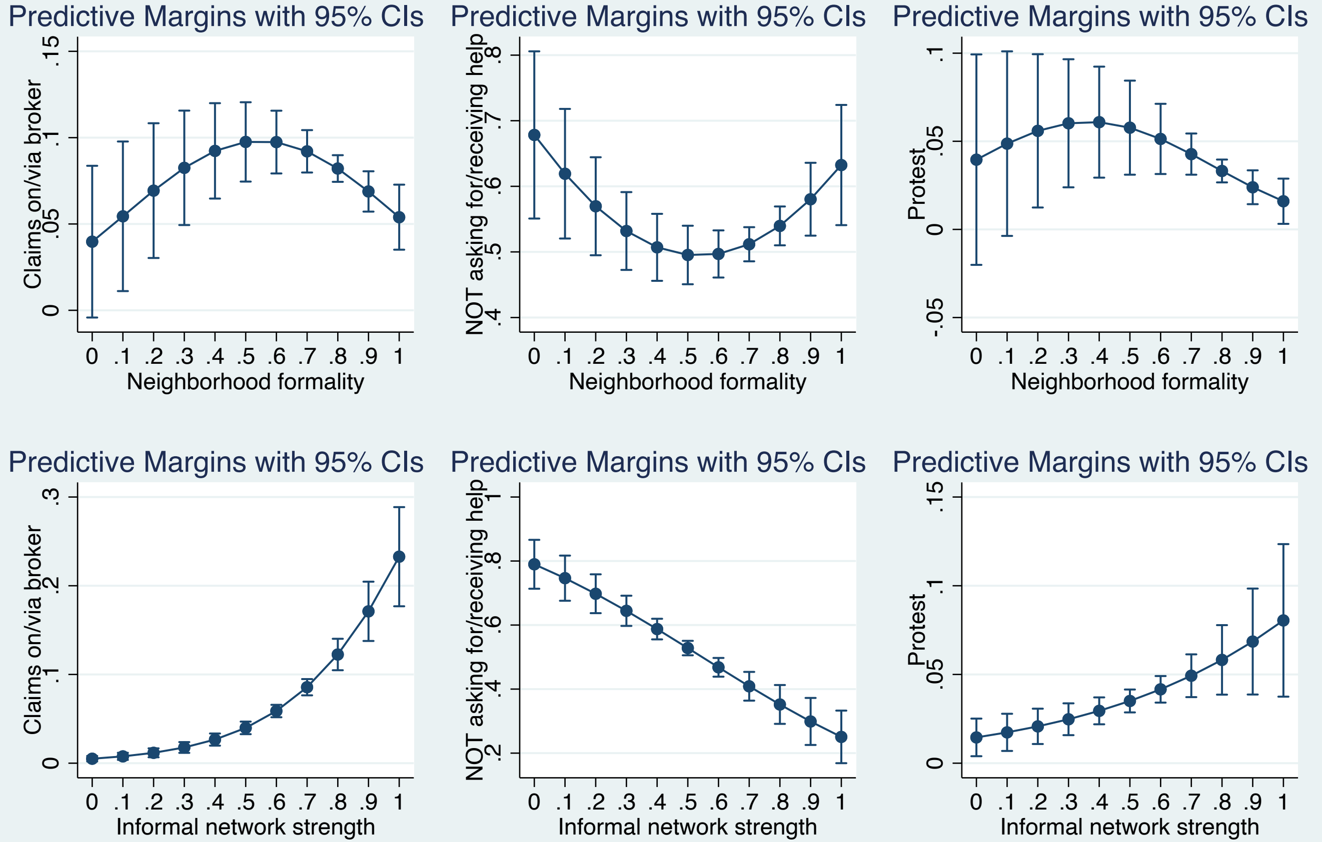


Figure A4: Predicted probabilities of engaging in collective, mediated behaviors by neighborhood characteristics

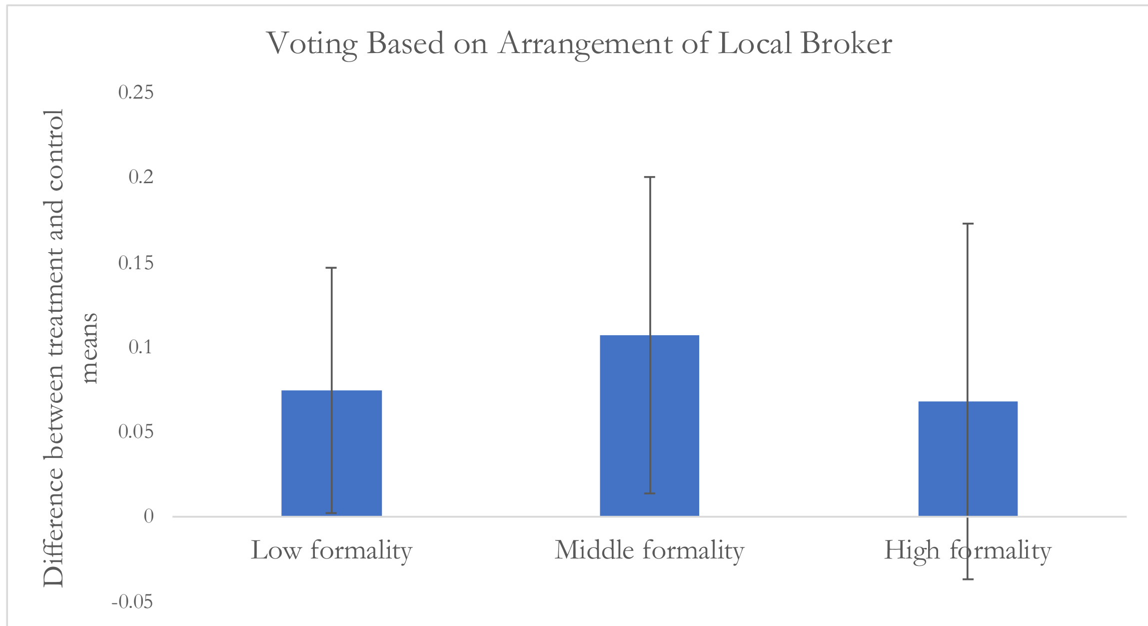


Figure A5: Experimental evidence of voting based on broker arrangements

Table A2: Output for model of direct claims

VARIABLES	(1) Direct claims
Formality	1.367***
	(0.430)
Informal network strength	1.504***
	(0.414)
Asset score	0.0364
	(0.0349)
Primary education	0.269***
	(0.0816)
Migrant	-0.189*
	(0.0978)
Settlement age	-0.00210
	(0.00151)

Settlement size	3.74e-05
	(5.42e-05)
Caste fractionalization	0.278
	(0.295)
Municipal/state land	-0.0519
	(0.128)
National land	0.0581
	(0.163)
Former GP	0.212
	(0.341)
Respondent age	0.00327
	(0.00329)
Female	-0.442***
	(0.0879)
Scheduled caste or tribe	0.0474
	(0.0972)
Muslim	0.148
	(0.144)
Jaipur	0.193
	(0.172)
Patna	0.249
	(0.217)
Constant	-4.176***
	(0.482)
Observations	7,371
Number of id	174

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table A3: Output for models of collective efficacy

VARIABLES	(1) Effective vote bank	(2) Vote bank importance
Formality	0.592*	-0.168
	(0.345)	(0.137)
Informal network strength	2.721***	0.571***
	(0.433)	(0.137)
Asset score	0.0468**	0.0169
	(0.0197)	(0.0109)
Primary education	-0.0310	0.0248
	(0.0554)	(0.0316)
Migrant	-0.126	-0.0549
	(0.0769)	(0.0367)
Settlement age	-0.000280	8.60e-05
	(0.00111)	(0.000518)
Settlement size	-3.20e-05	5.44e-06
	(5.97e-05)	(2.91e-05)
Caste fractionalization	-0.142	0.154
	(0.272)	(0.132)
Municipal/state land	0.0356	-0.122**
	(0.110)	(0.0509)
National land	-0.0108	-0.0374
	(0.118)	(0.0541)
Former GP	0.113	-0.138*
	(0.124)	(0.0720)
Respondent age	-0.00196	-0.000257
	(0.00191)	(0.00110)
Female	-0.157***	-0.0853***
	(0.0438)	(0.0240)
Scheduled caste or tribe	0.0292	0.0811**
	(0.0678)	(0.0344)
Muslim	0.179*	-0.0466
	(0.0940)	(0.0597)
Jaipur	0.223	0.999***

	(0.157)	(0.0516)
Patna	0.366**	1.130***
	(0.180)	(0.0648)
Constant	-2.641***	1.793***
	(0.442)	(0.142)
Observations	9,101	6,553
R-squared		0.155

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table A4: Output for models of policy preferences

VARIABLES	Mediated schemes	Programmatic preferences
Formality	-0.673**	0.298**
	(0.321)	(0.142)
Informal network strength	0.600*	-0.675***
	(0.326)	(0.125)
Asset score	-0.100***	-0.000470
	(0.0208)	(0.00417)
Primary education	-0.368***	0.0311*
	(0.0620)	(0.0160)
Migrant	-0.0316	-0.0303**
	(0.0706)	(0.0124)
Settlement age	0.000712	0.000268
	(0.00101)	(0.000321)
Settlement size	5.57e-05	4.32e-05*
	(4.12e-05)	(2.27e-05)
Caste fractionalization	0.201	-0.149
	(0.269)	(0.109)

Municipal/state land	0.0487	0.0262
	(0.0980)	(0.0370)
National land	0.134	0.0732*
	(0.111)	(0.0442)
Former GP	0.00264	-0.000769
	(0.238)	(0.0553)
Respondent age	0.00322	-0.000411
	(0.00212)	(0.000489)
Female	0.161***	0.0414***
	(0.0567)	(0.0128)
Scheduled caste or tribe	0.169***	0.00992
	(0.0646)	(0.0166)
Muslim	0.219**	-0.0485*
	(0.0916)	(0.0280)
Jaipur	-0.349***	-1.424***
	(0.103)	(0.0523)
Patna	-0.604***	-1.366***
	(0.104)	(0.0591)
Constant	-0.0973	1.495***
	(0.310)	(0.146)
Observations	5,927	7,683
Number of id	131	174

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Appendix B

Supplemental Information for Chapter 2

Table B1: Summary of covariates

Variable	Construction	Average
Scheduled caste or tribe	Indicator for Scheduled Castes and Scheduled Tribes	.48
Muslim	Indicator for Muslims	.13
Age	Years	39
Household head	Indicator for whether respondent is the household head or not	.62
Migrant	Indicator for whether the respondent was born outside of the city	.31
Assets	This is the first component of a PCA of indicator variables for whether or not household owns each of 15 different assets	.00
Primary education	Indicator for whether respondent completed primary education or not	4.89
Household size	Number of people who live with respondent	3.98
Years in current home	Years respondent has lived in current home	19.41
Political interest	This is a score that ranges from 1 to 4 depending on how often the respondent follows the news	3.03
Leader in slum	Indicator for whether respondent knows of a leader who lives inside the slum	.46

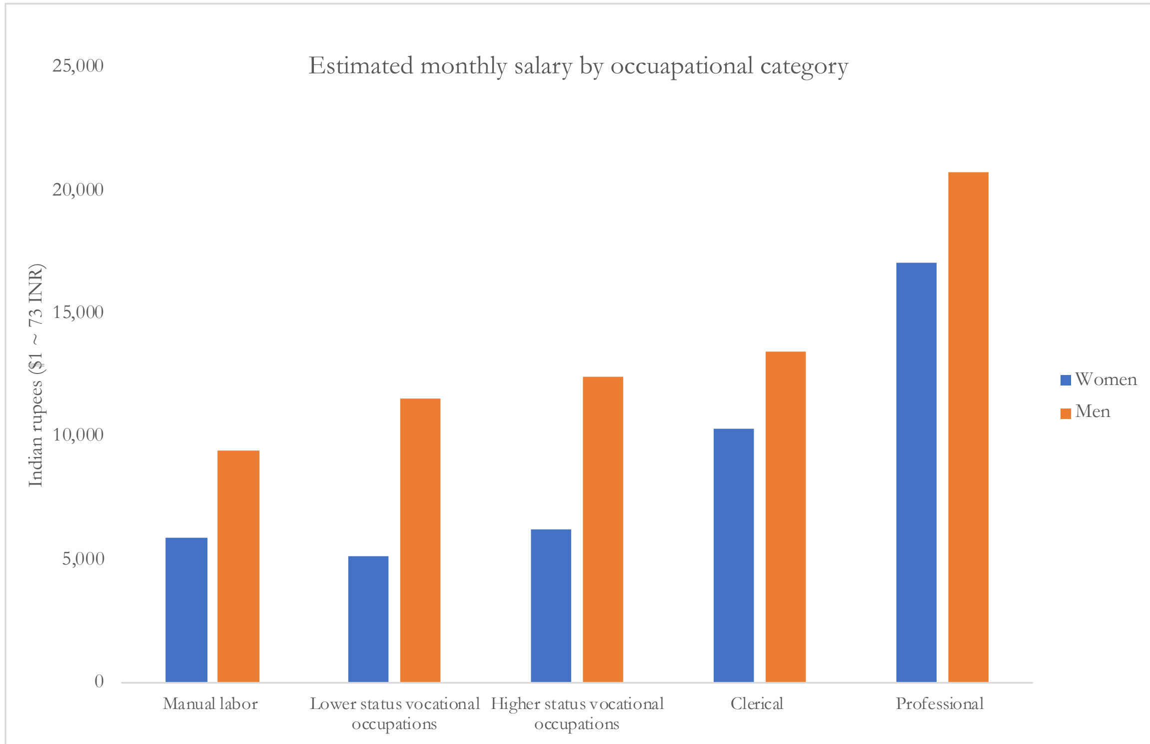


Figure B.1: Estimated monthly salary by occupational category

Appendix C

Supplemental Information for Chapter 3

Table C1: Model output on reported importance of vote banks

VARIABLES	Vote bank importance		
BGI	1.143		
	(1.635)		
Fractionalization		0.213	
		(0.288)	
Gini			-0.764
			(1.023)
Assets	0.0101	0.00906	0.00640
	(0.0131)	(0.0127)	(0.0132)
Primary education	-0.0184	-0.0245	-0.0264
	(0.0697)	(0.0693)	(0.0691)
Migrant	-0.0219	-0.0227	-0.0188
	(0.0717)	(0.0717)	(0.0715)
Settlement age	-0.000763	-0.000709	-0.00109
	(0.000917)	(0.000946)	(0.000975)
Settlement size	-2.02e-05	-2.53e-05	-2.46e-05
	(6.46e-05)	(6.62e-05)	(6.24e-05)
Municipal/state land	-0.196*	-0.187*	-0.194*
	(0.106)	(0.107)	(0.105)
National land	-0.0683	-0.0672	-0.0790
	(0.103)	(0.103)	(0.102)
Former GP	-0.323	-0.326*	-0.313
	(0.202)	(0.196)	(0.193)
Respondent age	-0.000864	-0.000907	-0.000950
	(0.00235)	(0.00234)	(0.00236)
Female	-0.180***	-0.185***	-0.186***

	(0.0518)	(0.0515)	(0.0515)
Scheduled caste or tribe	0.158**	0.165**	0.158**
	(0.0711)	(0.0724)	(0.0706)
Muslim	-0.0591	-0.0478	-0.0610
	(0.114)	(0.115)	(0.115)
Jaipur	1.847***	1.850***	1.862***
	(0.0904)	(0.0938)	(0.0940)
Patna	2.087***	2.108***	2.160***
	(0.139)	(0.138)	(0.167)
Constant	-1.119***	-1.160***	-0.902***
	(0.185)	(0.220)	(0.287)
Observations	6,503	6,526	6,526
Number of id	170	171	171

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table C2: Model output on reported position on income distribution

	Reported position on income distribution				
	(1)	(3)	(2)	(4)	(5)
VARIABLES	BGI (coarse)	BGI (granular)	Frac (coarse)	Frac (granular)	Gini
BGI	2.770				
	(2.239)				
BGI_jati		11.41*			
		(6.550)			
Fractionalization			-1.652**		
			(0.650)		
Fractionalization_jati				-1.742	
				(1.374)	
Gini					1.607
					(2.021)

Assets	0.142***	0.121***	0.140***	0.117***	0.140***
	(0.00789)	(0.0173)	(0.00790)	(0.0169)	(0.00798)
Primary education	0.125**	0.0180	0.125***	0.0137	0.125***
	(0.0487)	(0.0778)	(0.0484)	(0.0778)	(0.0485)
Migrant	0.107***	0.300***	0.114***	0.309***	0.111***
	(0.0391)	(0.0779)	(0.0394)	(0.0773)	(0.0393)
Settlement age	0.00398**	0.0116***	0.00278	0.00777	0.00429**
	(0.00193)	(0.00436)	(0.00191)	(0.00497)	(0.00192)
Settlement size	-3.14e-05	-6.66e-05	2.73e-05	8.82e-05	-5.25e-06
	(0.000149)	(0.000224)	(0.000147)	(0.000215)	(0.000145)
Municipal/state land	0.0925	0.345	0.0601	0.253	0.106
	(0.236)	(0.413)	(0.234)	(0.426)	(0.235)
National land	0.0879	0.560	-0.0606	0.188	0.0797
	(0.298)	(0.550)	(0.297)	(0.528)	(0.295)
Former GP	0.417	1.949***	0.479	2.791***	0.404
	(0.573)	(0.628)	(0.621)	(0.459)	(0.563)
Respondent age	0.000129	0.000564	0.000116	0.000375	0.000118
	(0.00153)	(0.00355)	(0.00153)	(0.00353)	(0.00153)
Female	-0.0698*	-0.298***	-0.0727*	-0.300***	-0.0722*
	(0.0414)	(0.0744)	(0.0413)	(0.0742)	(0.0413)
Scheduled caste or tribe	-0.107**	0.139**	-0.109**	0.116*	-0.105*
	(0.0536)	(0.0706)	(0.0534)	(0.0705)	(0.0534)
Muslim	-0.112	-0.0301	-0.124*	-0.0412	-0.109
	(0.0731)	(0.125)	(0.0733)	(0.125)	(0.0729)
Jaipur	-0.598***		-0.758***		-0.682***
	(0.208)		(0.225)		(0.227)
Patna	-0.688***		-0.759***		-0.778**
	(0.222)		(0.231)		(0.302)
Constant	2.357***	0.978	3.198***	3.493***	2.160***
	(0.349)	(0.704)	(0.489)	(1.241)	(0.450)
Observations	7,791	3,084	7,817	3,084	7,817
Number of id	180	95	181	95	181

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

References

Aalen, L., Kotsadam, A., & Villanger, E. (2019). Family Law Reform, Employment, and Women's Political Participation in Ethiopia . *Social Politics* . Oxford University Press . https://doi.org/10.1093/sp/jxz010

Agarwal, B. (1997). "'Bargaining'" and Gender Relations: Within and Beyond the Household . *Feminist Economics* . Taylor & Francis . https://doi.org/10.1080/135457097338799

Ahuja, A., & Chhibber, P. (2012). Why the Poor Vote in India: "If I Don't Vote, I Am Dead to the State" . *Studies in Comparative International Development* . New York : Springer-Verlag . https://doi.org/10.1007/s12116-012-9115-6

Alesina, A., Baqir, R., & Easterly, W. (1999). Public Goods and Ethnic Divisions . *The Quarterly Journal of Economics* . MIT Press . https://doi.org/10.1162/003355399556269

Alfaro d'Alençon, P., Smith, H., Álvarez de Andrés, E., Cabrera, C., Fokdal, J., Lombard, M., … Spire, A. (2018). Interrogating informality: Conceptualisations, practices and policies in the light of the New Urban Agenda . *Habitat International* . Elsevier BV . https://doi.org/10.1016/j.habitatint.2018.04.007

Altamirano, M. (2015). Democracy and Labor Market Outsiders: The Political Consequences of Economic Informality. Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwnV07TwMxDLZ4LIilvFRKkfwHCtekucux9iGGIhYGtlPOSSagEtCh_7527irKbTB6cB6OnNixPxtAq7ts1LkTotSHLZSvbbCZ1i4ab5QvnbLG-qKkDkZs166wU21APM3xvbR0ZH_nkFVDgrPL_Fch__QuLHpwOtuLZ5_BQfg4h16bU-besNWcC3idhfcVfTraIE

Amin, S., Diamond, I., Naved, R. T., & Newby, M. (1998). Transition to Adulthood of Female Garment-Factory Workers in Bangladesh . *Studies in Family Planning* . United States : Population Council . https://doi.org/10.2307/172158

Amis, P., & Kumar, S. (2000). Urban economic growth, infrastructure and poverty in India: lessons from Visakhapatnam . *Environment & Urbanization* . Thousand Oaks, CA : Sage Publications . https://doi.org/10.1177/095624780001200113

Andersen, K. (1975). Working Women and Political Participation, 1952-1972 . *American Journal of Political Science* . Wayne State University Press . https://doi.org/10.2307/2110538

Auerbach, A. (2016). Clients and Communities: The Political Economy of Party Network Organization and Development in India's Urban Slums. *World Politics*. Princeton:

Cambridge University Press. https://doi.org/10.1017/S0043887115000313

Auerbach, A. (2017). Neighborhood Associations and the Urban Poor: India's Slum Development Committees. *World Development*. Oxford: Elsevier Science Publishers. https://doi.org/10.1016/j.worlddev.2017.03.002

Auerbach, A. (2019). *Demanding Development: The Politics of Public Goods Provision in India's Urban Slums*. *Cambridge Studies in Comparative Politics*. Cambridge: Cambridge University Press. https://doi.org/DOI: 10.1017/9781108649377

Auerbach, A., & Kruks-Wisner, G. (2020). The Geography of Citizenship Practice: How the Poor Engage the State in Rural and Urban India. *Perspectives on Politics*. https://doi.org/10.1017/S1537592720000043

Auerbach, A., LeBas, A., Post, A., & Weitz-Shapiro, R. (2018). State, Society, and Informality in Cities of the Global South. *Studies in Comparative International Development*. New York: Springer US. https://doi.org/10.1007/s12116-018-9269-y

Auerbach, A., & Thachil, T. (2018). How Clients Select Brokers: Competition and Choice in India's Slums. *American Political Science Review*. Washington: Cambridge University Press. https://doi.org/10.1017/S000305541800028X

Auerbach, A., & Thachil, T. (2019). Cultivating Clients: Reputation, Responsiveness, and Ethnic Indifference in India's Slums. *American Journal of Political Science*. https://doi.org/10.1111/ajps.12468

Auyero, J. (2000). The Logic of Clientelism in Argentina: An Ethnographic Account . *Latin American Research Review* . Pittsburgh : Latin American Studies Association . Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwrV09T8MwED1BWRASH6UVpSB5QjAEYid1EgYQICp-AAxMkT-hEqRAy1B-PefYgVIkJtYkjhKd_e7OvnsPIGHHcbSACZTZFLPbIk5SLrVUVlKDjptLmVJNhV3oEWtEUoO1G5CskVuPlds0P3G-aYDOlZ-_vEZORcqdtjaSGiJILbgTm0GRL8MK-qnccevnl_ffJS

Baldwin, K., & Huber, J. D. (2010). Economic versus Cultural Differences: Forms of Ethnic Diversity and Public Goods Provision. *American Political Science Review*. Washington: Cambridge University Press. https://doi.org/10.1017/S0003055410000419

Banerjee, A., Iyer, L., & Somanathan, R. (2005). History, Social Divisions, and Public Goods in Rural India . *Journal of the European Economic Association* . MIT Press . https://doi.org/10.1162/1542476054473251

Banks, N., Lombard, M., & Mitlin, D. (2019). Urban Informality as a Site of Critical Analysis

. *The Journal of Development Studies* . https://doi.org/10.1080/00220388.2019.1577384

Barnes, C. (2020). State of empowerment: low-income families and the new welfare state . Ann Arbor : University of Michigan Press . https://doi.org/10.3998/mpub.10131793

Beaman, L., Chattopadhyay, R., Duflo, E., Pande, R., & Topalova, P. (2009). Powerful Women: Does Exposure Reduce Bias? . *The Quarterly Journal of Economics* . MIT Press . https://doi.org/10.1162/qjec.2009.124.4.1497

Beard, V. A., Mahendra, A., & Westphal., M. I. (2016). *Towards a More Equal City: Framing the Challenges and Opportunities*. Washington, DC.

Bénit-Gbaffou, C., & Oldfield, S. (2011). Accessing the State: Everyday Practices and Politics in Cities of the South . *Journal of Asian and African Studies* . London, England : SAGE Publications . https://doi.org/10.1177/0021909611403703

Benjamin, S. (2000). Governance, economic settings and poverty in Bangalore . *Environment & Urbanization* . Thousand Oaks, CA : Sage Publications . https://doi.org/10.1177/095624780001200104

Bernhardt, A., Field, E., Pande, R., Rigol, N., Schaner, S., & Troyer-Moore, C. (2018). Male Social Status and Women's Work. *AEA Papers and Proceedings*, *108*, 363–367. https://doi.org/https://doi.org/10.1257/pandp.20181086

Bertorelli, E., Heller, P., Swaminathan, S., & Varshney, A. (2017). Does Citizenship Abate Class? Evidence and Reflections from a South Indian City . *Economic and Political Weekly* . India : Athena Information Solutions Pvt. Ltd . Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwvV1Lb9QwEB71cYBTKQW6lFbmwDElD-fhSmi1LF2VC2orOEdOMm5XapOy7h7gp_TXdsaJobsnTlwi5SEn0YznYc98H0ASH4fBmk0wRoUVVqmmcB6bItFhxTS3SMl0w0QDaz1inW-NGcTtraQz3U1X86r5R3JWCeV25N_Gdz8D5pHi_VZPquFHcF0A9Q2ZDlcX4F

Bhalotra, S., Clots-Figueras, I., & Iyer, L. (2018). Pathbreakers? Women's Electoral Success and Future Political Participation . *The Economic Journal* . Wiley Subscription Services, Inc . https://doi.org/10.1111/ecoj.12492

Bhan, G., & Jana, A. (2013). Of Slums or Poverty; Notes of Caution from Census 2011. *Economic & Political Weekly*. Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwpV07a8MwEBZNlnYpfdInaGkX42BblmVROoTQ0i5NICl0C5JlhQ51IHYK_fc9WXJeZEjpIsxhbPSduTuf7r5DiESdwN-wCYlW4ByYUFwxQrKMUB6pnMcJeCQp6UaP2IJaZ3unlat2_re-QQYaN_2zf9D54qEggGvQPKyge1h30n5fe0MwO3W5-cBUaVY_hqz_bV

Bjorkman, L. (2015). *Pipe Politics, Contested Waters: Embedded Infrastructures of Millennial Mumbai*. Durham, NC: Duke University Press.

Bobonis, G. J., Gertler, P., Gonzalez-Navarro, M., & Nichter, S. (2017). *Vulnerability and Clientelism* (National Bureau of Economic Research Working Paper Series No. 23589).

Booth, C. (1902). *Life and labour of the people in London*. London: Macmillan and Co.

Booth, J. A., & Seligson, M. A. (2008). Inequality and Democracy in Latin America: Individual and Contextual Effects of Wealth on Political Participation. In A. Krishna (Ed.), *Poverty, participation, and democracy : a global perspective* (pp. 94–124). New York, NY: Cambridge University Press.

Bowers, R. (2019). Navigating the City and the Workplace: Migrant Female Construction Workers and Urban (Im)Mobilities . *Global Labour Journal* . https://doi.org/10.15173/glj.v10i1.3406

Brady, H. E., Verba, S., & Schlozman, K. L. (1995). Beyond Ses: A Resource Model of Political Participation . *The American Political Science Review* . Washington, D.C., etc : American Political Science Association . https://doi.org/10.2307/2082425

Bratton, M. (2008). Poor People and Democratic Citizenship in Africa. In A. Krishna (Ed.), *Poverty, participation, and democracy : a global perspective* (pp. 28–64). New York, NY: Cambridge University Press.

Breman, J. (2013). At work in the informal economy of India: a perspective from the bottom up . New Delhi : Oxford University Press . Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwdV1JCwIhFH60QHVrpRU8dikmR02P0ULRtc7hNE8IYjrUpX-fThk11NEFFxTf4ve-BxDScTDKvAnHaaBlpEMtRBxMUVqhhezIOY-l0kaYTIyYT-rouYizQOdnvftDXey3S8cpYtUaofLW9gonn_Q50rkhmGfa8WX6Rf2fSpJVFQouuqAGOUzqUPKw8zqUfYTwtQ

Buenker, J. D., Burnham, J. C., & Crunden, R. M. (1977). *Progressivism*. Cambridge: Schenkman Pub. Co.

Burns, N., Schlozman, K. L., & Verba, S. (2001). The private roots of public action: gender, equality, and political participation. Cambridge, Mass: Harvard University Press. Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwdV09T8MwED3RdulWChUFWlkMbEVOHDvtSkmFhNhgtuLGkZDArfj4_9zZTkMLSFmcRE4u_ngX--49AJHe8NnBnIBAj02PaIfebVlXeWalKevESo515D6p_2eOWCPq2HARHwY6h_O0h3r3_FBQR00X6Al0oJNJGehzdgstxJGHsEp_ZCrPPP9I0hYUzyMNT3OR75

Bussell, J. (2019). *Clients and constituents : political responsiveness in patronage democracies*. New York, NY: Oxford University Press.

Campbell, A. L. (2012). Policy Makes Mass Politics . *Annual Review of Political Science* . Annual Reviews, Inc . https://doi.org/10.1146/annurev-polisci-012610-135202

Carpena, F., & Jensensius, F. R. (n.d.). Age of Marriage and Women's Political Engagement: Evidence from India. *Journal of Politics*.

Carter, N. M., & Pérez, E. O. (2016). Race and Nation: How Racial Hierarchy Shapes National Attachments: Race and Nation . *Political Psychology* . https://doi.org/10.1111/pops.12270

Centeno, M. A., & Portes, A. (2006). The informal economy in the shadow of the state. In M. P. Fernández-Kelly & J. Shefner (Eds.), *Out of the shadows : political action and the informal economy in Latin America* (pp. 23–48). University Park, Pa: Pennsylvania State University Press.

Chakrabarti, P. (2020). *The Politics of Dignity: How Status Inequality shaped Redistributive Politics in India*.

Chandra, K. (2004). Why ethnic parties succeed: patronage and ethnic headcounts in India . Cambridge, UK;New York; : Cambridge University Press . Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwY2AwNtIz0EUrE9JSEtPSkoHVbWKSsSmoUZCSnJJiYpGYYpJomJwIHttB3iMGu9QRdhYx-kJniDhoDtUl1NsVdB8ZaCrSjJmB2cTUCHJ8DmKgxdIQmCoNoftULQxBM43Qk3dgfCOUqwDANYubIAMLaLeBEANTap4wAxfi5lthBknIzlkFaO4rVtCAHhGtKcIgFZ

Chandra, K., & Wilkinson, S. (2008). Measuring the Effect of "Ethnicity" . *Comparative Political Studies* . Los Angeles, CA : SAGE Publications . https://doi.org/10.1177/0010414007313240

Chant, S. (2013). Cities through a "gender lens": a golden "urban age" for women in the global South? . *Environment & Urbanization* . London, England : SAGE Publications . https://doi.org/10.1177/0956247813477809

Chatterjee, P. (2004). The politics of the governed: reflections on popular politics in most of the world . New York : Columbia University Press . Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwdV1LD8IgDG58XLzp1PiYhj-gcd0QPesWE696XqYUL0ZN_P-JZWy-okcgvKH9WkoLEOJ0NvmiCUtS2qhAU4BmzhgArRMYYu5yWDCCz20z3_-IlUEdS1_E34bOLt--oa7325gPJjIsDpkSVyOJzn3OU9HimJS0EhljGSbZc1SF550yjR-hAHLOkjShZn8btKBCFw

Chattopadhyay, R., & Duflo, E. (2004). Women as Policy Makers: Evidence from a Randomized Policy Experiment in India . *Econometrica* . Evanston : Econometric Society . https://doi.org/10.1111/j.1468-0262.2004.00539.x

Cheema, A., Liaqat, A., Khan, S., Khan Mohmand, S., & Rauf, S. F. (2021). *The Empty Promise of Urbanisation: Women's Political Participation in Pakistan* (IDS Working Paper No. 547). Brighton. https://doi.org/10.19088/IDS.2021.021

Chen, M.A., & Beard, V. A. (2018). *Including the Excluded: Supporting Informal Workers for More Equal and Productive Cities in the Global South*. Washington, DC.

Chen, Martha Alter. (2007). *Rethinking the Informal Economy: Linkages with the Formal Economy and the Formal Regulatory Environment* (DESA Working Paper No. 46). New York.

Chhibber, P. (2002). Why are Some Women Politically Active? The Household, Public Space, and Political Participation in India . *International Journal of Comparative Sociology* . Thousand Oaks, CA : Sage Publications . https://doi.org/10.1177/002071520204300310

Chhibber, P. K., & Verma, R. (2018). Ideology and identity: the changing party systems of India. New York, NY: Oxford University Press. Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwdV1NawIxEB2KXrypVWytZf-AbT7N5lwq7b2H3iQmGSiUXah68N872WzVSj2GwIQJmXmTSeYNgBRPbH7hE4wPRnuGTAQfEVFx9OtArhAp_tUuXqsRu3jQt_K53tSJFTaVQBNyky2nt4TEQkhXoC7Bk-KZPuf3UEkpLYEUPyZeBJMEYirT62QZn6eB5WVLy3Nc4M

Cohen, C. J., & Dawson, M. C. (1993). Neighborhood Poverty and African American Politics . *The American Political Science Review* . New York, USA : Cambridge University Press . https://doi.org/10.2307/2939041

Cruces, G., Perez-Truglia, R., & Tetaz, M. (2013). Biased perceptions of income distribution and preferences for redistribution: Evidence from a survey experiment . *Journal of Public Economics* . Elsevier BV . https://doi.org/10.1016/j.jpubeco.2012.10.009

Daby, M. (n.d.). The Gender Gap in Political Clientelism: Problem-Solving Networks and the Division of Political Work in Argentina . *Comparative Political Studies* . Los Angeles, CA : SAGE Publications . https://doi.org/10.1177/0010414020926194

Das, V., & Walton, M. (2015). Political Leadership and the Urban Poor: Local Histories . *Current Anthropology* . University of Chicago Press . https://doi.org/10.1086/682420

Davis, M. (2004). Planet of Slums. *New Left Review*. London: New Left Review Ltd. Retrieved

from
http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwrV09T8MwED1BWVhK-RIfRcofCPgrjj0hhKjYGNq9smN7TAotK7-dc-wUKBITU4ZToiSO372cn-8BcHZLyh1MkMpZKZVyQlZBeEy6IjY-w3xBuKee7OwRGyxc82gPINkjt-uaWDS_Q_DFZIbXoPer1zLaSMXl1sFTw2SvhbhkU2m1DwdIvWWcuR8v8-0fGU175f

Dawson, M. C. (1994). Behind the mule: race and class in African-American politics . Princeton, N.J : Princeton University Press . Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwdV07b8IwED61YWGpwktQSOWpG1VkJ7GztoCQWNsZGftQB9qtA_-eOztBIqLj2ZJfsn3-znffASj5li87dwKqyrmKEEuNmjCRKZy27iA96RuFlbedGLE2qWPLRdx1dI7l_Ie6-tqtWe9ruoEJBD0WpYz0Oe2mksYQwslrRmQV6UajgxCYd1pZ3qQCCJplk0LC0Q

de Wit, J. (1996). *Poverty, Policy and Politics in Madras Slums: Dynamics of Survival, Gender and Leadership*. London, New Delhi: Sage, Thousand Oaks.

Derenoncourt, E. (n.d.). Can you move to opportunity? Evidence from the Great Migration. *American Economic Review*.

Deshingkar, P., & Start, D. (2003). *Seasonal migration for livelihoods in India: Coping, accumulation and exclusion*. London: Overseas Development Institute.

Deshpande, A. (2011). *The Grammar of Caste: Economic Discrimination in Contemporary India*. New Delhi: Oxford University Press.

DFID. (2011). *Slum Development Strategy Under SPUR*.

Di Tella, R., Galiani, S., & Schargrodsky, E. (2007). The Formation of Beliefs: Evidence from the Allocation of Land Titles to Squatters. *The Quarterly Journal of Economics*. Oxford: MIT Press. https://doi.org/10.1162/qjec.122.1.209

Díaz Cayeros, A., Federico, E., & Magaloni, B. (2016). The political logic of poverty relief: electoral strategies and social policy in Mexico. New York, NY: Cambridge University Press. Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwdV07b8IwED4VurDxKKK85IVuIBw7JpkpqBIriBE5yd1CBSgb_77nOKEiahdLPkt-6z7f-R4AKlgs5zWeQEpZTVpmlEgTh6kOUKYpFyZDBt2w5iNWJXWsYhHXDZ093f2hfh52GweDmpFo1YCGDrUPn_OraDGMYC4GYMuJOixPBFFYxnqq6tFTKoACWbZtaDpvgw

Duflo, E. (2012). Women Empowerment and Economic Development . *Journal of Economic Literature* . Nashville : American Economic Association . https://doi.org/10.1257/jel.50.4.1051

Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders . *Psychological Review* . United States : American Psychological Association, Inc . https://doi.org/10.1037//0033-295X.109.3.573

Ejdemyr, S., Kramon, E., & Robinson, A. L. (2018). Segregation, Ethnic Favoritism, and the Strategic Targeting of Local Public Goods . *Comparative Political Studies* . Los Angeles, CA : SAGE Publications . https://doi.org/10.1177/0010414017730079

Enos, R. D. (2017). The space between us: social geography and politics . Cambridge : Cambridte University Press . Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwdV09D4IwEL0oLsbFzyiK6eSmOQtVmP2IiavOxNI6uhgH_729FlCJjkBSoC133Md7DyDkC5xXbIJUxBMmzM-CkCvic1H0XRHbXKhjaXG1nxixQtSx4CKuNjq781RD3Z6PO4sXXSZrE7nXI8Edfc470ZJQoQGtShDGETc-OM65nsrjLykA61n2bfAIbdCBmr51of

Ezeh, A. C., Kodzi, I., & Emina, J. (2010). Reaching the Urban Poor with Family Planning Services . *Studies in Family Planning* . New York : Wiley-Blackwell . https://doi.org/10.1111/j.1728-4465.2010.00231.x

Field, E., Jayachandran, S., & Pande, R. (2010). Do Traditional Institutions Constrain Female Entrepreneurship? A Field Experiment on Business Training in India . *The American Economic Review* . Nashville : American Economic Association . https://doi.org/10.1257/aer.100.2.125

Field, E., Jayachandran, S., Pande, R., & Rigol, N. (2016). Friendship at Work: Can Peer Effects Catalyze Female Entrepreneurship? . *American Economic Journal: Economic Policy* . American Economic Association . https://doi.org/10.1257/pol.20140215

Fletcher, E. K., Pande, R., & Troyer-Moore, C. (2018). *Women and Work in India: Descriptive Evidence and a Review of Potential Policies* (HKS Faculty Research Working Paper Series No. RWP18- 004).

Fox, S. (2014). The Political Economy of Slums: Theory and Evidence from Sub-Saharan Africa . *World Development* . Oxford : Elsevier Science Publishers . https://doi.org/10.1016/j.worlddev.2013.08.005

Gaikwad, N., & Nellis, G. (2020). Do Politicians Discriminate Against Internal Migrants? Evidence from Nationwide Field Experiments in India . *American Journal of Political Science* . https://doi.org/10.1111/ajps.12548

Gay, C., & Tate, K. (2003). Doubly Bound: The Impact of Gender and Race on the Politics of Black Women . *Political Psychology* . Wiley . https://doi.org/10.1111/0162-895x.00098

George, H. (1882). *Progress and Poverty: An Inquiry into the Cause of the Industrial Depressions, and of Increase of Want with Increase of Wealth - The Remedy*. London: Kegan Paul, Trench & Co., 1, Paternoster Square.

Gilbert, A. (2007). The Return of the Slum: Does Language Matter? *International Journal of Urban and Regional Research*. Oxford, UK: Blackwell Publishing Ltd. https://doi.org/10.1111/j.1468-2427.2007.00754.x

Glaeser, E. L. (2014). A World of Cities: The Causes and Consequences of Urbanization in Poorer Countries. *Journal of the European Economic Association*. https://doi.org/10.1111/jeea.12100

Goldin, C. (1995). The U-Shaped Female Labor Force Function in Economic Development and Economic History. In T. P. Schultz (Ed.), *Women's Human Capital and Economic Development* (pp. 61–90). Chicago: University of Chicago Press.

Goldin, C. (2014). A grand gender convergence: Its last chapter . *The American Economic Review* . Nashville : American Economic Association . https://doi.org/10.1257/aer.104.4.1091

Gollin, D., Jedwab, R., & Vollrath, D. (2016). Urbanization with and without industrialization . *Journal of Economic Growth* . New York : Springer US . https://doi.org/10.1007/s10887-015-9121-4

Gottlieb, J. (2016). Why Might Information Exacerbate the Gender Gap in Civic Participation? Evidence from Mali . *World Development* . Oxford : Elsevier Science Publishers . https://doi.org/10.1016/j.worlddev.2016.05.010

Gottlieb, J. (2019). *Will the Decline of Clientelism Lead to Programmatic Politics? Theory and Evidence from Senegal*.

Gottlieb, J., Grossman, G., & Robinson, A. L. (2018). Do Men and Women Have Different Policy Preferences in Africa? Determinants and Implications of Gender Gaps in Policy Prioritization . *British Journal of Political Science* . Cambridge : Cambridge University Press . https://doi.org/10.1017/S0007123416000053

Gupta, A. (2012). *Red tape: bureaucracy, structural violence, and poverty in India*. Durham, NC: Duke University Press.

Gurin, P. (1985). Women's Gender Consciousness . *The Public Opinion Quarterly* . Princeton, N.J : Elsevier North-Holland, Inc . https://doi.org/10.1086/268911

Habyarimana, J., Humphreys, M., Posner, D. N., & Weinstein, J. M. (2007). Why Does

Ethnic Diversity Undermine Public Goods Provision? *American Political Science Review*. Washington: Cambridge University Press. https://doi.org/10.1017/S0003055407070499

Hainmueller, J., Hopkins, D. J., & Yamamoto, T. (2014). Causal Inference in Conjoint Analysis: Understanding Multidimensional Choices via Stated Preference Experiments. *Political Analysis*, *22*(1), 1–30. https://doi.org/10.1093/pan/mpt024

Hale, H. E. (2004). Explaining Ethnicity . *Comparative Political Studies* . SAGE Publications . https://doi.org/10.1177/0010414003262906

Haritas, K. (2013). Gender identity in urban poor mobilizations: evidence from Bengaluru . *Environment & Urbanization* . London, England : SAGE Publications . https://doi.org/10.1177/0956247813477811

Harriss-White, B., Olsen, W., Vera-Sanso, P., & Suresh, V. (2013). Multiple shocks and slum household economies in South India . *Economy and Society* . Taylor & Francis Group . https://doi.org/10.1080/03085147.2013.772760

Harriss, J. (2005). Political Participation, Representation and the Urban Poor: Findings from Research in Delhi . *Economic and Political Weekly* . Sameeksha Trust . Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwlV1NSwMxEB2kF734WfET8gNc3U2y2Y0X8at4LFJPHkqynWChpLXV_-8km4Va8CDsKSwhZMPMy8578wAEv86zjZjQFEY13GBoiGWFmuRVwwtVGem0VI02GxqxztQxkCwjSzDW9Aku2RneyIAhhLxbfGbBPCoUWZOTBkViQQgonu2HLh4LSkrJx4BnWofmIuvMw5

Harriss, J. (2010). *"Participation" and contestation in the governance of Indian cities* (Simons Papers in Security and Development). Vancouver.

Heath, R., & Jayachandran, S. (2017). *The Causes and Consequences of Increased Female Education and Labor Force Participation in Developing Countries* (No. 22766).

Heller, P. (2000). Degrees of Democracy: Some Comparative Lessons from India . *World Politics* . Cambridge, UK : Cambridge University Press . https://doi.org/10.1017/S0043887100020086

Hicken, A., & Nathan, N. L. (2020). Clientelism's Red Herrings: Dead Ends and New Directions in the Study of Nonprogrammatic Politics . *Annual Review of Political Science* . https://doi.org/10.1146/annurev-polisci-050718-032657

Holland, A. C. (2016). Forbearance. *American Political Science Review*. Washington: Cambridge University Press. https://doi.org/10.1017/S0003055416000083

Holland, A. C., & Palmer-Rubin, B. (2015). Beyond the Machine: Clientelist Brokers and Interest Organizations in Latin America . *Comparative Political Studies* . Los Angeles, CA : SAGE Publications . https://doi.org/10.1177/0010414015574883

Houtzager, P. P., & Acharya, A. K. (2011). Associations, active citizenship, and the quality of democracy in Brazil and Mexico . *Theory and Society* . Dordrecht : Springer . https://doi.org/10.1007/s11186-010-9128-y

Htun, M. (2005). What it means to study gender and the state. *Politics & Gender*, *1*(1), 157–166.

Huber, J. D., & Suryanarayan, P. (2016). Ethnic Inequality and the Ethnification of Political Parties: Evidence from India . *World Politics* . Cambridge University Press . https://doi.org/10.1017/S0043887115000349

Huddy, L. (2013). From Group Identity to Political Cohesion and Commitment. In L. Huddy, D. Sears, & J. S. Levy (Eds.), *The Oxford handbook of Political Psychology* (2nd ed.). Oxford University Press.

Hull, M. S. (2012). *Government of Paper: The Materiality of Bureaucracy in Urban Pakistan*. Berkeley: University of California Press.

Ichino, N., & Nathan, N. (2013). Crossing the Line: Local Ethnic Geography and Voting in Ghana. *The American Political Science Review*. NEW YORK: Cambridge University Press. https://doi.org/10.1017/S0003055412000664

ILO. (2018). *Women and men in the informal economy: A statistical picture (3rd ed.)*. Geneva, Switzerland.

ILO. (2020). ILOSTAT database [Informal employment and informal sector by sex]. Retrieved from https://ilostat.ilo.org/data/

Isaksson, A.-S., Kotsadam, A., & Nerman, M. (2014). The gender gap in African political participation: Testing theories of individual and contextual determinants. *The Journal of Development Studies*. Abingdon: Frank Cass & Company Ltd. https://doi.org/10.1080/00220388.2013.833321

Iversen, T., & Rosenbluth, F. (2006). The Political Economy of Gender: Explaining Cross-National Variation in the Gender Division of Labor and the Gender Voting Gap . *American Journal of Political Science* . 350 Main Street , Malden , MA 02148 , USA , and 9600 Garsington Road , Oxford OX4 2DQ , UK : Blackwell Publishing . https://doi.org/10.1111/j.1540-5907.2006.00166.x

Iversen, T., & Rosenbluth, F. (2008). Work and Power: The Connection Between Female

Labor Force Participation and Female Political Representation . *Annual Review of Political Science* . https://doi.org/10.1146/annurev.polisci.11.053106.151342

Iversen, V., Krishna, A., & Sen, K. (2016). *Rags to riches? Intergenerational occupational mobility in India* (GDI Working Paper No. 2016–004). Manchester.

James, G., Witten, D., Hastie, T., & Tibshirani, R. (2013). *An Introduction to Statistical Learning with Applications in R*. New York: Springer.

Jardina, A. (2019). White identity politics . Cambridge, United Kingdom : New York, NY, USA : Cambridge University Press . Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwdV1Jq8IwEB5cLt7cfW70D1TSNEt7dkHwqufSagLCo0_w5L93slTfK8_jJJnABCazJDMfQExXJKzdCSZldeFKSxqrSEapKlguNEswhrmgTp5rNWIVqGPVi7j-0dmNmzfUzemwNW3VjBvOmugfceLa57wSLRjhMBJzixJE0NomgiQVITnGYZ4Q6MskBgWK2dc3gX

Jayachandran, S. (2015). The Roots of Gender Inequality in Developing Countries . *Annual Review of Economics* . Annual Reviews . https://doi.org/10.1146/annurev-economics-080614-115404

Jayachandran, S. (2019). Social Norms as a Barrier to Women's Employment in Developing Countries.

Jayatilaka, B., & Chatterji, M. (2007). Globalization and Regional Economic Development: A Note on Bangalore City. 地域学研究. 日本地域学会. https://doi.org/10.2457/srs.37.315

Jha, S., Rao, V., & Woolcock, M. (2007). Governance in the Gullies: Democratic Responsiveness and Leadership in Delhi's Slums . *World Development* . Oxford : Elsevier . https://doi.org/10.1016/j.worlddev.2005.10.018

Kandiyoti, D. (1988). Bargaining with Patriarchy . *Gender and Society* . Sage Publications . https://doi.org/10.1177/089124388002003004

Kapur, D. (2017). How Will India's Urban Future Affect Social Identities? *Urbanisation*, *2*(1), 1–8.

Kasara, K. (2013). Separate and Suspicious: Local Social and Political Context and Ethnic Tolerance in Kenya . *The Journal of Politics* . New York, USA : Cambridge University Press . https://doi.org/10.1017/S0022381613000777

Kasara, K., & Suryanarayan, P. (2015). When Do the Rich Vote Less Than the Poor and Why? Explaining Turnout Inequality across the World . *American Journal of Political*

Science . Wiley . https://doi.org/10.1111/ajps.12134

Khan, S. (2017). *Personal is Political: Prospects for Women's Substantive Representation in Pakistan*.

Khan, S. (2019). *Making Democracy Work for Women: Essays on Women's Political Participation in Pakistan*.

Khasnabis, R., & Chatterjee, T. (2007). Enrolling and Retaining Slum Children in Formal Schools: A Field Survey in Eastern Slums of Kolkata . *Economic and Political Weekly* . Sameeksha Trust . Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwlV3LSgMxFA3SjW58VnxCfmB0mlcTN1JLB8Gd7b7kcQNqmdY-BP_ePGagFly4DRMyZJJ7zyTnnoMQJXdlsRMTQDLwsmSMO68cOM-8kkxZa_sm_BfJnRqx1tQxkiwTSzDd6Qe4ZGZwHxJ4wOjicfFZRPOoeMnaOGmESEwDAkpr-6mNxzQkpcbHgBRKRXGRbeZhyi

Krishna, A. (2008). Do Poor People Care Less for Democracy? Testing Individual-Level Assumptions with Individual-Level Data from India. In A. Krishna (Ed.), *Poverty, participation, and democracy : a global perspective* (pp. 65–93). New York, NY: Cambridge University Press.

Krishna, A. (2017). *The Broken Ladder: The Paradox and Potential of India's One-Billion*. Cambridge University Press.

Krishna, A., Rains, E., & Wibbels, E. (2020). Negotiating informality – ambiguity, intermediation, and a patchwork of outcomes in slums of Bengaluru. *Journal of Development Studies*, 1–17. https://doi.org/10.1080/00220388.2020.1725483

Krishna, A., Sriram, M. S., & Prakash, P. (2014). Slum types and adaptation strategies: identifying policy-relevant differences in Bangalore . *Environment & Urbanization* . London, England : SAGE Publications . https://doi.org/10.1177/0956247814537958

Kruks-Wisner, G. (2011). Seeking the Local State: Gender, Caste, and the Pursuit of Public Services in Post-Tsunami India . *World Development* . Oxford : Elsevier Ltd . https://doi.org/10.1016/j.worlddev.2010.11.001

Kruks-Wisner, G. (2015). *Navigating the State: Citizenship practice and the pursuit of services in Rural India*.

Kruks-Wisner, G. (2018a). *Claiming the state : active citizenship and social welfare in rural India*. Cambridge: Cambridge University Press.

Kruks-Wisner, G. (2018b). The Pursuit Of Social Welfare: Citizen Claim-Making in Rural India . *World Politics* . Princeton : Cambridge University Press .

https://doi.org/10.1017/S0043887117000193

Kumar, T. (n.d.). Home-price subsidies increase local level political participation in urban India. *Journal of Politics*.

Lall, S. V, Deichmann, U., Lundberg, M. K. A., & Chaudhury, N. (2004). Tenure, Diversity and Commitment: Community Participation for Urban Service Provision . *The Journal of Development Studies* . Taylor & Francis Ltd . https://doi.org/10.1080/0022038042000213184

Lanjouw, J. O., & Levy, P. I. (2002). Untitled: A Study of Formal and Informal Property Rights in Urban Ecuador . *The Economic Journal* . Oxford : Blackwell Publishers . https://doi.org/10.1111/1468-0297.00067

Ligon, E., & Schechter, L. (2003). Measuring Vulnerability. *The Economic Journal (London)*, *113*(486), C95–C102. https://doi.org/10.1111/1468-0297.00117

Lind, J. T. (2007). Fractionalization and the size of government . *Journal of Public Economics* . Elsevier B.V . https://doi.org/10.1016/j.jpubeco.2006.09.006

Mahadevia, D. (2010). Tenure Security and Urban Social Protection Links: India . *IDS Bulletin* . https://doi.org/10.1111/j.1759-5436.2010.00152.x

Marshall, T. H. (1950). *Citizenship and Social Class*.

Marx, B., Stoker, T., & Suri, T. (2013). *There is no free house: Ethnic patronage and property rights in a Kenyan slum*.

Mathur, N. (2016). Paper tiger: law, bureaucracy and the developmental state in Himalayan India . Delhi, India : Cambridge University Press . Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwY2AwNtIz0EUrE0zTDBLNjNNMks0sjZMNDVKSkg2BVR-oS5QILB1N09D2iMEudYSdRYy-0BkiDppDdQn1dgWVuIbApjWw585sYmoKOT4HMdBiCqyhzMzAtwSB6lMzYAsaetYTjG-AchUAuGZxE2RgAe02EGJgSs0TZmD2SSwXZpCEbJlVgGa7YgUN6NnQmsIMUv

Matland, R. E. (1998). Women’s Representation in National Legislatures: Developed and Developing Countries . *Legislative Studies Quarterly* . Comparative Legislative Research Center of the University of Iowa . https://doi.org/10.2307/440217

McClain, P. D., Johnson Carew, J. D., Walton, E., & Watts, C. S. (2009). Group Membership, Group Identity, and Group Consciousness: Measures of Racial Identity in American Politics? . *Annual Review of Political Science* . Annual Reviews . https://doi.org/10.1146/annurev.polisci.10.072805.102452

McKelway, M. (2020). *Experimental Evidence on the Effects of Women's Employment.*

McKinsey Global Institute. (2010). *India's urban awakening : Building inclusive cities, sustaining economic growth*. Retrieved from http://www.mckinsey.com/global-themes/urbanization/urban-awakening-in-india

Mettler, S., & Soss, J. (2004). The Consequences of Public Policy for Democratic Citizenship: Bridging Policy Studies and Mass Politics . *Perspectives on Politics* . Cambridge University Press . https://doi.org/10.1017/S1537592704000623

Michener, J. (2018). Fragmented democracy: medicaid, federalism, and unequal politics . New York, NY;Cambridge, United Kingdom; : Cambridge University Press . Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwY2AwNtIz0EUrEwwMk0AzeKapxkZpoE4JsJozNrFMs0wF1lfJxqlJaHvEYJc6ws4iRl_oDBEHzaG6hHq7QqoxYMuAGdg-MjWCHJ-DGGgBtpgtDCxAm7qMDc1ASdDSAMoxA_YOLKDH8MAljRF8sLwlyj0B4GrHTZCBBbQVQYiBKTVPmIHDFzoNLszACxlsU4DsIR

Mitlin, D. (2014). *Politics, informality and clientelism – exploring a pro-poor urban politics* (No. 34).

Mitlin, D., & Satterthwaite, D. (2013). *Urban poverty in the global south: scale and nature.* Routledge.

Mitlin, D., & Walnycki, A. (2020). Informality as Experimentation: Water Utilities' Strategies for Cost Recovery and their Consequences for Universal Access. *The Journal of Development Studies*. Informa UK Limited. https://doi.org/10.1080/00220388.2019.1577383

Mitra, A. (2005). Women in the Urban Informal Sector: Perpetuation of Meagre Earnings . *Development and Change* . Oxford, UK; Malden, USA : Blackwell Publishing Ltd/Inc . https://doi.org/10.1111/j.0012-155X.2005.00412.x

Mitra, A. (2006). Labour Market Mobility of Low Income Households . *Economic and Political Weekly* . Sameeksha Trust . Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwlV07b8IwED4hlrK05VFRCpL_QCDYqeNMCBCIAbbuyCb2RGNKiir-PX4kUqhgYPVg3XC6O919DwCCh2HwryYIjneMC_oZJ2wXK9MVuUgpVeFYpUQ4jZ8qR6w0dbQgS4cSdDd9My6JvRyZBm5mYjY5_ATWPMoeWQsnDVOJiZmAXG7PynpMTFMqfAxwkCRWXKSKPH

Mitra, A. (2010). Migration, Livelihood and Well-being: Evidence from Indian City Slums . *Urban Studies* . London, England : SAGE Publications .

https://doi.org/10.1177/0042098009353621

Moghadam, V. (1999). Gender and Globalization: Female Labor andWomen's Movements. *Journal of World-Systems Research*, *5*, 367–388.

Morgan, J., & Kelly, N. J. (2017). Social Patterns of Inequality, Partisan Competition, and Latin American Support for Redistribution . *The Journal of Politics* . University of Chicago Press . https://doi.org/10.1086/687412

Murillo, M., Oliveros, V., & Zarazaga, R. (2019). *The Most Vulnerable Poor: Clientelism among Slum Dwellers*. https://doi.org/10.13140/RG.2.2.26295.68008

Murillo, M., Oliveros, V., & Zarazaga, R. (2020). The Most Vulnerable Poor: Clientelism among Slum Dwellers.

Nathan, N. L. (2016a). Does Participation Reinforce Patronage? Policy Preferences, Turnout and Class in Urban Ghana . *British Journal of Political Science* . https://doi.org/10.1017/S0007123416000351

Nathan, N. L. (2016b). Local Ethnic Geography, Expectations of Favoritism, and Voting in Urban Ghana . *Comparative Political Studies* . Los Angeles, CA : SAGE Publications . https://doi.org/10.1177/0010414016655540

Newman, B. J., Johnston, C. D., & Lown, P. L. (2015). False Consciousness or Class Awareness? Local Income Inequality, Personal Economic Position, and Belief in American Meritocracy . *American Journal of Political Science* . Wiley . https://doi.org/10.1111/ajps.12153

Nigeria, F. R. of. (2006). *Report of the Presidential Committee on the Redevelopment of Lagos Mega-City Region*. Abuja, Nigeria.

Olken, B. A. (2010). Direct Democracy and Local Public Goods: Evidence from a Field Experiment in Indonesia. *American Political Science Review*. Washington: Cambridge University Press. https://doi.org/10.1017/S0003055410000079

Paller, J. W. (2015). Informal Networks and Access to Power to Obtain Housing in Urban Slums in Ghana . *Africa Today* . USA : Indiana University Press . https://doi.org/10.2979/africatoday.62.1.31

Papanek, H. (1971). Purdah in Pakistan: Seclusion and Modern Occupations for Women. *Journal of Marriage and the Family*. Minneapolis, Minn: National Council on Family Relations. Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwrV1NS8NAEB3UXrz4LbZWGRC8pSbZfK0HJSQpLbVJbBs8ljTZHFPFk-CPdzebVazQk-

eFZWCGebM78-
YBEHOgaxs5gRDb8SqXMcrfY17BKq8yV5VgYdu0NO1ygyP2rKgxrbtVlmxSd7kuxK
_5HUcqXnubvGR4fH3ThI6U6LcqUY28FVsQPRubervQMYhrCI2DCd

Parmar, M. S. (2009). *A Case Study of Slum Redevelopment in Jaipur, India: Is Neglecting Women an Option?* ("The Places We Live" Research Paper Competition). Retrieved from http://www.geo.mtu.edu/~raman/Parmar_Malvika_CFP.pdf

Parthasarathy, R., Rao, V., & Palaniswamy, N. (2017). *Deliberative Inequality: A Text-As-Data Study of Tamil Nadu's Village Assemblies* (Policy Research Working Paper No. 8119).

Patel, S., Burra, S., & D'Cruz, C. (2001). Slum/Shack Dwellers International (SDI) - foundations to treetops . *Environment and Urbanization* . https://doi.org/10.1630/095624701101285865

Patel, S., & Mitlin, D. (2002). Sharing experiences and changing lives . *Community Development Journal* . Oxford University Press . https://doi.org/10.1093/cdj/37.2.125

Paxton, P. M., & Hughes, M. M. (2014). Women, politics, and power: a global perspective . Thousand Oaks, California : SAGE Publications . Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwdV07D8IgEL5oXVyMr0brI2wuamrpA2atMXHV2bRIJ2OMHfz7Ho8aNTpyEF4BPjjuvgOgwdJffJ0JSR7yQhTMZ8U5izjiTMZwZynyKC4SzaD_7iNWBXWsuIi_DZ2NXP2hbo77VIXGixD24jrUwygy9DkvRQveMRAWV9qpC8GNszgOKq4nm44_QgFoZNm2wVHeBh

Payne, G. (2001). Urban land tenure policy options: titles or rights? . *Habitat International* . Elsevier Ltd . https://doi.org/10.1016/S0197-3975(01)00014-5

Pellicer, M., Wegner, E., Bayer, M., & Tischmeier, C. (2018). *Clientelism from the Client's Perspective: A Framework Based on a Systematic Review of Ethnographic Literature* (ECPR Workshop: Political Clientelism in the 21st Century: Theory and Practice).

Perlman, J. E. (2006). The Metamorphosis of Marginality: Four Generations in the Favelas of Rio de Janeiro . *The Annals of the American Academy of Political and Social Science* . Thousand Oaks, CA : Sage Publications . https://doi.org/10.1177/0002716206288826

Portes, A. (1971). The Urban Slum in Chile: Types and Correlates . *Land Economics* . Chicago : University of Wisconsin Press . https://doi.org/10.2307/3145054

Prillaman, S. (2017). *Strength in Numbers: How Women's Networks Close India's Political Gender Gap.*

Prillaman, S. A., & Phillips, J. (2019). How the Labor Force is Mobilized: Patterns in Informality, Political Networks, and Political Linkages in Brazil. In S. López-Cariboni

(Ed.), *The Political Economy of the BRICS Countries: Volume 3: Political Economy of Informality in BRIC Countries*.

Rains, E., Krishna, A., & Wibbels, E. (2019). Combining satellite and survey data to study Indian slums: evidence on the range of conditions and implications for urban policy. *Environment and Urbanization*, *31*(1). https://doi.org/10.1177/0956247818798744

Rains, Emily, & Abraham, R. J. (2018). Rethinking barriers to electrification: Does government collection failure stunt public service provision? . *Energy Policy* . Kidlington : Elsevier Ltd . https://doi.org/10.1016/j.enpol.2017.12.011

Rains, Emily, & Krishna, A. (2019). *Will urbanization raise social mobility in the South, replicating the economic history of the West?* (No. 102). Helsinki, Finland. Retrieved from https://doi.org/10.35188/UNU-WIDER/2019/738-5

Rains, Emily, & Krishna, A. (2020). Precarious gains: social mobility and volatility in urban slums. *World Development*, *132*. https://doi.org/https://doi.org/10.1016/j.worlddev.2020.105001

Rains, Emily, Krishna, A., & Wibbels, E. (2019). Combining Satellite and Survey Data to Study Indian Slums: Evidence on the Range of Conditions and Implications for Urban Policy. *Environment & Urbanization*, *31*(1), 267–292. https://doi.org/10.1177/0956247818798744

Rains, Emily, & Wibbels, E. (2020). *Informal Work, Risk and Clientelism: Evidence from 223 Slums Across India*.

Ranganathan, M. (2014). Paying for Pipes, Claiming Citizenship: Political Agency and Water Reforms at the Urban Periphery . *International Journal of Urban and Regional Research* . Oxford : Wiley Subscription Services, Inc . https://doi.org/10.1111/1468-2427.12028

Ravallion, M., Chen, S., & Sangraula, P. (2007). New Evidence on the Urbanization of Global Poverty . *Population and Development Review* . Oxford, UK : Blackwell Publishing . https://doi.org/10.1111/j.1728-4457.2007.00193.x

Reerink, G., & van Gelder, J.-L. (2010). Land titling, perceived tenure security, and housing consolidation in the kampongs of Bandung, Indonesia . *Habitat International* . Elsevier Ltd . https://doi.org/10.1016/j.habitatint.2009.07.002

Riis, J. (1890). *How the other half lives : studies among the tenements of New York*. New York: C. Scribner's Sons, 1890 (Trow's Print. and Bookbinding Co.).

Robinson, A. L., & Gottlieb, J. (2019). How to Close the Gender Gap in Political Participation: Lessons from Matrilineal Societies in Africa . *British Journal of Political*

Science . https://doi.org/10.1017/S0007123418000650

Rose, D. (2018). Citizens by degree: higher education policy and the changing gender dynamics of American citizenship . New York : Oxford University Press . Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwY2AwNtIz0EUrE4ySDJKMTNKA1Tmo_WGZZGoJrHjMUo2NLBITgXnODG2PGOxSR9hZxOgLnSHioDlUl1BvV_CxbMbApj4zA7OJqRHk-BzEQAuwBjY2s4QcpwM5MC4CiWNqAT2GByZpgMoH1VtI9wSAqx03QQYW0FYEIQam1Dxh0P3K0LUYIgxCzpklmVXAHqhCUq

Ross, M. L. (2008). Oil, Islam, and Women. *American Political Science Review*. Washington: Cambridge University Press. https://doi.org/10.1017/S0003055408080040

Roy, A. (2009). Why India Cannot Plan Its Cities: Informality, Insurgence and the Idiom of Urbanization . *Planning Theory* . London, England : SAGE Publications . https://doi.org/10.1177/1473095208099299

Rudolph, S. H., & Rudolph, L. I. (2002). New Dimensions in Indian Democracy . *Journal of Democracy* . National Endowment for Democracy . https://doi.org/10.1353/jod.2002.0015

Schlozman, K. L., Page, B. I., Verba, S., & Fiorina, M. P. (2005). Inequalities of Political Voice. In L. R. Jacobs & T. Skocpol (Eds.), *Inequality and American democracy : what we know and what we need to learn*. New York: Russell Sage Foundation.

Sears, D. O., & Savalei, V. (2006). The Political Color Line in America: Many "Peoples of Color" or Black Exceptionalism? . *Political Psychology* . Malden, USA : Blackwell Publishing Inc . https://doi.org/10.1111/j.1467-9221.2006.00542.x

Sen, A. (2001). Many Faces of Gender Inequality. *Frontline*, *18*(1).

Shah, S. P. (2014). Street corner secrets: sex, work, and migration in the city of Mumbai . Durham : Duke University Press . Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwdV3NbsMgDLa27rLL1HWtlraROK2nTAmQANdNq_YAu0eFwDGbmu6wtx8_SUuz7mjFQIwwYBt_BiD4Oc9Ge4JijWJKS54bKrXAWFXSgb0Zo7Uud2KUI7a5HNC3x5NDhHUg5VYvSle_-rrkbi2_ZPzkWSkKwkjhwR4tY1lZk-JECM4HwnWBexCeiDOiBS8i2g8ZxT

Somers, M. R. (1993). Citizenship and the Place of the Public Sphere: Law, Community, and Political Culture in the Transition to Democracy . *American Sociological Review* . Washington : SAGE Publications . https://doi.org/10.2307/2096277

Soss, J., & Jacobs, L. R. (2009). The Place of Inequality: Non-participation in the American

Polity . *Political Science Quarterly* . Oxford, UK : Academy of Political Science . https://doi.org/10.1002/j.1538-165X.2009.tb00643.x

Spater, J. (2020). Exposure and Preferences: Evidence from Indian Slums. *American Journal of Political Science*, *Forthcomin*.

Spater, J., & Wibbels, E. (2020). *Social Density, Clientelism and Vote Banking*.

Srinivas, M. N. (1955). The social structure of life in a Mysore village. In M. Marriott (Ed.), *Village India*. Chicago: University of Chicago Press.

Srivastava, S. (2012). Duplicity, intimacy, community: An ethnography of ID cards, permits and other fake documents in Delhi . *Thesis Eleven* . London, England : SAGE Publications . https://doi.org/10.1177/0725513612456686

Subramanian, N. (2020). *Workplace Attributes and Women's Labor Supply Decisions: Evidence from a Randomized Experiment*.

Tacoli, C. (2012). *Urbanization, gender and urban poverty: paid work and unpaid carework in the city* (Urbanization and Emerging Population Issues No. 7).

Tajfel, H., & Turner, J. C. (1986). The Social Identity Theory of Intergroup Behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of Intergroup Relation* (pp. 7–24). Chicago: Hall Publishers.

Tajima, Y., Samphantharak, K., & Ostwald, K. A. I. (2018). Ethnic Segregation and Public Goods: Evidence from Indonesia. *American Political Science Review*. Washington: Cambridge University Press. https://doi.org/10.1017/S0003055418000138

Thachil, T. (2017). Do Rural Migrants Divide Ethnically in the City? Evidence from an Ethnographic Experiment in India: DO RURAL MIGRANTS DIVIDE ETHNICALLY IN THE CITY? . *American Journal of Political Science* . https://doi.org/10.1111/ajps.12315

Thachil, T. (2020). Does Police Repression Spur Everyday Cooperation? Evidence from Urban India . *The Journal of Politics* . The University of Chicago Press . https://doi.org/10.1086/708643

Tripp, A. M. (1989). Women and the Changing Urban Household Economy in Tanzania . *The Journal of Modern African Studies* . Cambridge University Press . https://doi.org/10.1017/S0022278X00020462

Trounstine, J. (2016). Segregation and Inequality in Public Goods . *American Journal of Political Science* . Oxford : Wiley Subscription Services, Inc . https://doi.org/10.1111/ajps.12227

Tumbe, C. (2016). *Urbanisation, demographic transition, and the growth of cities in India, 1870 – 2020* (No. C-35205- INC-1).

Turner, J. (1969). Uncontrolled Urban Settlement: Problems and Policies. In G. W. Breese (Ed.), *The City in Newly Developing Countries: Readings on Urbanism and Urbanization* (pp. 507– 534). Englewood Cliffs, NJ: Prentice Hall.

Turok, I., & Borel-Saladin, J. (2018). The theory and reality of urban slums: Pathways-out-of-poverty or cul-de-sacs? . *Urban Studies* . London, England : SAGE Publications . https://doi.org/10.1177/0042098016671109

UN-Habitat. (2016). *World Cities Report 2016: Urbanization and Development: Emerging Futures.* Nairobi, Kenya.

UN Habitat. (2003). *The Challenge of Slums: Global Report on Human Settlements, 2003*. London, UK.

United Nations. (2014). *World Urbanization Prospects: The 2014 Revision, Highlights (ST/ESA/SER.A/352).*

United Nations. (2018). *World Urbanization Prospects: The 2018 Revision.*

Unni, J., & Rani, U. (2007). Informal Workers in Ahmedabad City. In A. Shaw (Ed.), *Indian Cities in Transition* (pp. 217–237). Chennai: Orient Longman.

Valentino, N. A., Gregorowicz, K., & Groenendyk, E. W. (2009). Efficacy, Emotions and the Habit of Participation. *Political Behavior*. New York: Springer Science and Business Media LLC. https://doi.org/10.1007/s11109-008-9076-7

van Gelder, J.-L. (2010). What tenure security? The case for a tripartite view . *Land Use Policy* . Elsevier Ltd . https://doi.org/10.1016/j.landusepol.2009.06.008

Verba, S., Burns, N., & Schlozman, K. L. (1997). Knowing and Caring about Politics: Gender and Political Engagement . *The Journal of Politics* . Chicago : Cambridge University Press . https://doi.org/10.2307/2998592

Verba, S., Schlozman, K. L., & Brady, H. E. (1995). Voice and equality: civic voluntarism in American politics. Cambridge, Mass: Harvard University Press. Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwdR27bsJAzKKwZOMVQSnS_QDocu_MPFSpa2FFJjgTonP_vudeQkvUjrYlS5bs8_kNoNVarjpvQnRaXhm0ZUVenouisoWOnq_SZCMGQ2dGrD3q2O4i7jY6JzzXULeHtx1_eZT0KjzF2EuZtD6nVSquE1obHEdkzpuSzzOpX4BuFj_dieUjrN3DnYBvt7MfQp9HEU

Walsh, K. C. (2012). Putting Inequality in Its Place: Rural Consciousness and the Power of Perspective. *The American Political Science Review*. Washington: Cambridge University Press. https://doi.org/10.1017/S0003055412000305

White, R. (2017). *The Republic for which it stands : the United States during Reconstruction and the Gilded Age, 1865-1896*. New York: Oxford University Press.

Williams, C. C., Shahid, M. S., & Martínez, A. (2016). Determinants of the Level of Informality of Informal Micro-Enterprises: Some Evidence from the City of Lahore, Pakistan . *World Development* . Elsevier Ltd . https://doi.org/10.1016/j.worlddev.2015.09.003

World Bank. (2018). Strengthening Social Protection. In *World Development Report 2019: The Changing Nature of Work* (pp. 105–122). The World Bank. https://doi.org/doi:10.1596/978-1-4648-1328-3_ch6

Xu, A. (2020). *Segregation and the Spatial Externalities of Inequality: A Theory of Collateral Cooperation for Public Goods in Cities*.

Yakter, A. (2018). Circles of Solidarity: The National Contexts of Diversity and Redistribution in Developed Democracies . ProQuest Dissertations Publishing . Retrieved from http://duke.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMwrV07T8MwED5BWRAD5SUeBVliTmkSJ3VYGFoKK4-9utiuVKkkkLYSQ398fY5NS5E6scVyFOdk-86---4-gDhqd4INnaCiROcjYU4TkVQCUSDxXCiRdiXnHZVv5Ii9-NQYN91eS1rVrUpJXvM7s9d4Riym3YfPr4B4pCje6kk10JEtUMwmycQu7IXG1hHo62n9gL

Yıldırım, K., & Kitschelt, H. (2020). Analytical perspectives on varieties of clientelism. *Democratization*, *27*(1), 20–43. https://doi.org/10.1080/13510347.2019.1641798

Biography

Emily Rains earned a Bachelor of Arts in Economics (with Interdisciplinary Honors) from Stanford University in 2011. Prior to matriculating at Duke University in 2015, she worked as an economic research consultant at Compass Lexecon in New York City (2011-2013) and as a development research consultant at a nonprofit organization, IDinsight, based in Bihar, India (2013-2015). She then earned a Master of Arts in Political Science from Duke University in 2017 and a dual Doctor of Philosophy in Public Policy and Political Science from Duke University in 2021.

Her research has been published in four peer-reviewed journals (*World Development, The Journal of Development Studies, Environment and Urbanization,* and *Energy Policy*), in the *United Nations University World Institute for Development Economics Research* working paper series, and she has a book chapter forthcoming with *Oxford University Press*. She also has two articles currently undergoing the peer review process at *The British Journal of Political Science* and *Environment and Urbanization*.

During graduate school, she received several fellowships to support her time spent conducting research and teaching, and she received several grants to fund additional research costs. She received two year-long research fellowships from the Duke Center for the Study of Philanthropy and Voluntarism as well as the James B. Duke International Research Fellowship from the Graduate School. She also received a semester-long teaching fellowship (Bass Instructional Fellowship), and she received four Summer Research Fellowships. Her research was supported by grants from Duke University (including from the Sanford School of Public Policy, the Department of Political Science, the Graduate School, the Duke India

Initiative, and Bass Connections) and from the United Nations University World Institute for Development Economics Research.

Emily will join the Department of Political Science at Louisiana State University as an Assistant Professor in Fall 2021.