Exclusion Before Elections: How Faulty Voter Lists Disenfranchise Women in India

Franziska Roscher

June 3, 2024

1 Introduction

Voting is the most fundamental act of political participation in a democracy, as well as the main mechanism for holding officials accountable (Lijphart, 1997; Burns et al., 2001). But only *registered voters* get to participate in elections. Voter registration laws regulate how eligible adults become registered voters: passive enrollment means that eligible adults are automatically enrolled in the voter list when they reach voting age (or move to a new place of residence). By contrast, active voter registration requires eligible adults to take action to have their name added to the voter list. Voter registration laws and processes that constitute legal and administrative hurdles for registration and distort the relationship between the population of eligible adults and the population of registered voters therefore raise serious questions about the quality of democracy (Rugeley and Jackson, 2009; Pryor et al., 2019). The accuracy of voter lists – the extent to which all eligible adults are enrolled and all ineligible individuals are deleted from the list – therefore is an indicator of the health of a democracy.

While voter lists have been widely studied in the US, where voter registration is active and variation in legal requirements, administrative hurdles, and registration apathy have been shown to affect the share of the eligible population that is registered to vote (see,

for example, Highton and Wolfinger, 1998; Highton, 2004; Ansolabehere and Konisky, 2006; Rugeley and Jackson, 2009; Nickerson, 2015), this topic has attracted less scholarly attention in other parts of the world. That is despite the fact that in many countries worldwide – from Mexico to France to India – the onus of voter registration lies on the individual (Rosenberg and Chen, 2009; Braconnier et al., 2017; Schumacher and Connaughton, 2020).

Faulty voter lists pose both normative and practical challenges. First, non-registered adults are effectively disenfranchised, excluding them from exercising their fundamental right to participate in democracy even though they are eligible to do so under the law (Braconnier et al., 2017). Where this disenfranchisement is systematic – based, for example, on ethnicity, gender, or class – it distorts democratic principles and has the potential to affect election outcomes (Lijphart, 1997; Pryor et al., 2019). Second, inflated voter lists – that is, those that include "deadwood," or obsolete records of persons who have moved away or died – distort our evaluation of the extent of voter registration: If the number of registered voters is inflated, because obsolete records are not deleted, the total number of registered voters looks higher than it actually is, potentially obscuring the fact that some eligible adults are not actually registered (Stewart, 2019).

Practically, inflated voter lists also distort official voter turnout statistics and therefore our understanding of popular participation in democracy. Usually, voter turnout is calculated as the number of registered voters who turnout out divided by the number of registered voters. If the number of registered voters is inflated, because obsolete records are not deleted, then true voter turnout will be underestimated. By contrast, if a share of the population is unenrolled, official statistics underestimate factual participation rates. Finally, where voter lists are used as sampling frames for survey research, systematic distortions in voter registration rates across groups can mean that researchers will not reach representative or meaningful samples (see, for example Green and Gerber, 2006; Jackman and Spahn, 2021; Joshi et al., 2023).

India's elections are regularly lauded as the largest democratic exercise in the world, but

while politician conduct and voter turnout receive intense scrutiny during and after elections, we know relatively little about the extent of voter registration in India. I investigate the quality of voter lists in Uttar Pradesh, India's most populous state. I rely on data from two full village censuses, as well as from a voter survey that sampled from the official voter lists. I find that both villages exhibited under-enrollment – that is, disenfranchisement of eligible adults – as well as over-enrollment – i.e., deadwood on the voter list – simultaneously. On average, one quarter of adult residents was not registered to vote in each location, despite being legally eligible. At the same time, an average of 9 percent of entries in the electoral roll were confirmed to be deadwood, because the person was deceased, had moved away, or never existed. Another 17 percent of names on the list could not be verified. Using data from a larger voter survey, I also find evidence that this extent of voter list inflation is similar across other locations in Uttar Pradesh.

Based on these findings, I argue that analyses that compare aggregate population estimates to constituency-wise enrollment numbers are inadequate at identifying deadwood on the electoral rolls and, consequently, at spotting disenfranchisement. However, monitoring mechanisms meant to ensure the quality of the of voter lists in India are almost entirely based on such aggregate analyses. When the voter registration process breaks down, these mechanisms are ill-equipped to catch errors, and in fact set perverse incentives for the grass-roots officers in charge of verifying the list. I furthermore argue that traditional marriage customs combine with perverse incentives for low-level officers to make women particularly likely to be disenfranchised.

This article makes several important contributions. First, it contributes to a small but growing literature on voter registration in India that raises important questions about the inclusiveness and health of Indian democracy (Retnakumar, 2009; Shariff and Saifullah, 2018; Verma et al., 2019; Roy and Sopariwala, 2019; Retnakumar and Kurup, 2021). While journalists and scholars have concluded that the country's democracy is backsliding, based on instances of crackdowns on the media, threats to freedom of speech and discrimination

against minorities (Alizada et al., 2021; House, 2023; Majumdar, 2024), voter registration processes and the potential for disenfranchisement have received relatively less attention. Yet, arguably, inclusive voter registration is a prerequisite for free and fair elections, and therefore for a healthy democracy.

Second, it provides the first of its kind data that enumerates two entire villages, and compares their actual populations to the names listed in the electoral roll. This micro-level data allows us to evaluate the health of the voter list, and therefore the extend of voter registration and disenfranchisement, in ways that aggregate data does not.

Third, through dozens of interviews with officers involved in the registration process and eligible adults, as well as a close study of the laws and regulations guiding voter registration processes in India, I theorize about where and why the voter registration process breaks down, and why current monitoring mechanisms are not equipped to detect the type of under-enrollment and over-enrollment that I find empirically. I also provide policy-relevant suggestions for improving the health of electoral rolls, based on data from the village censuses.

2 Voter Registration in India

2.1 The Process of Voter Registration in India

Only those persons whose name is contained in the voter list – called *electoral roll* in India – are allowed to cast a ballot on election day. The onus of adding a person's name to the electoral roll is on individuals: Voter registration in India is active, meaning that those who meet the eligibility criteria for voters have to actively enroll to ensure that their name is contained in the voter list. This stands in contrast to passive voter enrollment, a process in which all individuals who meet the eligibility criteria are automatically added to the voter list, as practiced, for example, in Germany, Canada, or Chile (see, for example Rosenberg and Chen, 2009; Schumacher and Connaughton, 2020). The legal provisions for voter eligibility are laid out in Article 326 of the Indian Constitution, which prescribes universal adult

suffrage. Accordingly, any individual who is both a legal citizen of India and 18 years old[1] as of the qualifying date[2] and not legally disqualified from voting[3] is eligible to register as a voter at her usual place of residence.

The Indian Constitution, as well as the Representation of the People Act (1950) and the Registration of Electors Rules (1960), put the Election Commission of India (ECI) in charge of creating and maintaining the official voter lists for all state and national elections in India.[4] Voter lists are decentralized in India: electoral rolls are maintained for each Assembly Constituency (AC), that is, the electoral constituency for state elections.[5] However, the electoral roll for an Assembly Constituency is *prepared* at the local level, more specifically, at the level of the polling station. A polling station is the physical location where all voters residing in a clearly defined catchment area will cast their vote on election day, usually a government school.[6] Together, the voter lists for all polling stations contained in an Assembly Constituency make up the electoral roll for the AC. Between 2016 and 2022, the average Indian Assembly Constituency contained over 260 polling stations, meaning that its electoral roll was made up of more than 260 parts.[7]

---

[1] The voting age was originally 21; the 61st Amendment to the Indian Constitution reduced the voting age to 18 in 1989.

[2] The "qualifying date" is prescribed by law; any person that is 18 years of age as of this date is considered eligible, while individuals who turn 18 at a later point in the year will only be eligible to register by the next qualifying date. Currently, there are four qualifying dates per year, namely January 1, April 1, July 1, and October 1 (see (of India, 2023, p. 46)).

[3] Incarcerated individuals as well as persons found to be "not of sound mind" might be precluded by law from voting.

[4] Local-level elections, for village councils (*panchayats*) and municipal councils, are managed by the State Election Commission (SEC) for each state. Some SECs rely on the ECI's voter lists, while others create their own.

[5] *Assembly Constituencies* (ACs) are the electoral districts from which exactly one representative is elected to the state parliament, called *Legislative Assembly* or *Vidhan Sabha* in India. By contrast, Parliamentary Constituencies (PCs) are the electoral districts from which exactly one representative is elected to the national parliament, called *Lok Sabha* in India. India has a total of 4,120 ACs and 543 PCs, with Assembly Constituencies nesting neatly into Parliamentary Constituencies. Accordingly, the voter list for a PC is made up of the voter lists of the contained ACs.

[6] As per directions of the ECI, any one polling station should not have more than 1,500 voters registered in its electoral roll, although the limit under the law is 2,000 voters (of India, 2023, p. 51). The ECI also aims to locate polling stations in a manner that does not require any voter to walk farther than 2 kilometers to the locations.

[7] The number ranged from an average of 19 booths per constituency in Sikkim in the North East to an average of 437 polling stations per constituency in Bihar in the Indian heartland.

Because electoral rolls in India are decentralized and place-specific, any adult Indian citizen who is eligible to register as a voter, therefore, has to enroll in the voter list *for her polling station.* Voters register by filling out Form 6, provided by the ECI, which asks for demographic details such as gender and age, but also for proof of residence. Accordingly, if a registered voter moves, she has to change her registration in order to be deleted from the electoral roll in her previous place of residence and added to the electoral roll in her new place of residence (by filling out the ECI's Form 8). Because of the decentralized nature of the electoral roll, this is true even if she moves from one polling station to another within the same Assembly Constituency. Similarly, if a registered voter dies, her family should fill out the ECI's Form 7 in order to have her name deleted from the electoral roll.

While it ultimately falls on voters to register themselves, the ECI has over the years taken an increasingly active role in voter enrollment and maintaining the health of electoral rolls (Singh and Roy, 2019; Quraishi, 2019, p. 133-134). The ECI conducts regular revisions of the voter lists, during which new applicants are supposed to be added, those who are deceased or have moved away are supposed to be deleted, and any other necessary changes to the roll are made. The frequency of revisions has increased from once every five years immediately after Independence to currently at least once a year.[8] The computerization of electoral rolls starting in 1998, as well as the availability of online forms and processes for registration, are meant to make enrolling easier for voters.[9] The commission has also over the years invested heavily in voter education, starting its own division to raise awareness about voter registration, the voting process and upcoming elections in 2009 (Quraishi, 2019, p.214-2015).

One of the most important innovations meant to improve the quality of electoral rolls that the ECI has implemented was the introduction of Booth-Level Officers (BLOs) in 2006. A Booth-Level Officer is a low-level government employee who is in charge of maintaining the voter list for one specific polling station. Earlier, different officers were drafted each

---

[8] Manual on Electoral Rolls (2023), chapter 9.
[9] Manual on Electoral Rolls (2023), p. 6.

time the voter list was supposed to be updated or verified. By contrast, a Booth-Level Officer is assigned permanently to the same polling station, and ideally resides herself in the catchment area of that polling station (of India, 2023, p. 6-7; Quraishi, 2019, p. 71). By putting the same – ideally local – person in charge of the electoral roll who is expected to make regular field visits to the area, the goal was for the BLO to become intimately familiar with the population of her polling station, to the point where she knows who is about to turn eligible, who migrated away or who passed away, and able to help voters update the electoral roll accordingly. Between the Booth-Level Officer and the Assistant Electoral Registration Officer ranks a supervisor, who is in charge of about 10 BLOs and supposed to check and support their ground-level work.

2.2 The Extent of Voter Registration in India

India started the process of creating its very first electoral roll right after independence, and before the first elections were announced, with the Election Commission making extensive efforts to fulfill its mandate of creating a comprehensive voter list (Shani, 2017, p. 1-4). However, right from the start, officials in charge of preparing electoral rolls ran into difficulties, ranging from individuals lacking the documentation required to satisfy the residence requirement (Shani, 2017, p. 208) to women refusing to provide their own names, instead insisting to be listed as "wife of" or "mother of" a male relative (Shani, 2017, p. 45-47; of India, 2023, p. 2). "The total number of electors in the country (excluding Jammu & Kashmir) as per first electoral rolls was around 17.3 crore [173 million] which constituted 49% of the total population as per 1941 Census" (of India, 2023, p. 2). Since then, the Indian electorate has grown to 968.8 million in 2024.[10] But while the conduct of India's elections as well as the extent of voter turnout across time and space have attracted both journalistic as well as academic attention, the quality of voter lists has received relatively less scrutiny.

Several studies have aimed to assess the quality of the lists by comparing the aggregate

---

[10] https://pib.gov.in/PressReleasePage.aspx?PRID=2005189

number of registered voters with administrative population data, with mixed results. In their book, Roy and Sopariwala (2019) compared the sex ratio in the population, based on extrapolations from the 2019 census, to the sex ratio in the voter list ahead of the 2019 Lok Sabha elections. Based on the assumption that all male registrations are correct, they concluded that there are 21 million women missing from the voter lists (p. 80-82). Another study relied on detailed information provided on the published electoral rolls from Karnataka in 2018, including an ID number for each separate household in a polling location, to estimate voter enrollment. By comparing the number of households in the voter list that only have a single registered voter with census information on the number of households that only contain a single adult, the authors found that the number of single-voter households far outpaced the number of single-adult households. They proposed that many of the single-voter households probably have other, unregistered adults living at the home. They concluded that based on their data, "It is likely that over 15% of all adults are either left out or excluded from voting lists in India," and that that percentage is likely much higher among Muslims than non-Muslims (Shariff and Saifullah, 2018, p. 3).

By contrast, Retnakumar (2009) compared census data on the adult population[11] and the number of registered voters ahead of all Lok Sabha elections from 1962 to 2004 and found that the "total electorate enrolled in the rolls of the Commission has been consistently higher than the estimated Census electorate in all the Lok Sabha elections since 1962" (p. 141), with almost 21 million more voters enrolled in the voter lists in 2004 than eligible adults counted in the population (p. 144). Over-enrollment was larger for men than women in this data (p. 150). A different analysis of the electoral rolls in Kerala between between 2011 and 2021 assessed both levels of voter enrollment as well as incremental changes in enrollment between consecutive elections, and compared those to census-based population projections from the state. It concluded that in some years, the number of registered voters lagged behind the population estimates, while in others, it exceeded population estimates. The

---

[11] That is, individuals aged 21 years or older until 1987 and persons aged 18 years or older from then on, since the voting age was reduced from 21 to 18 in 1987.

same study also compared the voter lists prepared by the ECI with those prepared by the State Election Commission for local body elections, and found that the ECI's list from April 2021 contained 300,000 voters *less* than the SEC's list from December 2020, and that the difference was larger for women than men (Retnakumar and Kurup, 2021, p. 157-158).

Instead of relying on aggregate data, other studies have employed surveys to assess the quality of the electoral rolls. Verma et al. (2019) used data from the 2009 National Election Study (NES) conducted by the Centre for the Study of Developing Societies in Delhi to show that there is deadwood on official voter rolls. The 2009 NES, a nationally representative survey with more than 36,000 participants, sampled respondents from the official voter lists. It also collected data on all selected voters that *did not* participate in the survey, including the reason for non-participation. Investigators found that 15 percent of registered voters sampled had permanently migrated away, and that a full 5 percent had died.[12] At least 20 percent of the sampled names of the voter lists, then, were deadwood. In a report from 2015, the NGO Janaagraha showed that Delhi's electoral rolls exhibited high levels of both over- and under-enrollment. The authors sampled more than 3,000 names across 8 Assembly Constituencies from the official voter lists published ahead of the 2015 Delhi state elections, and found 32 percent of the entries to be deadwood, including 21 percent who had permanently migrated away and 11 percent whose address could not be tracked down on the ground. They also surveyed randomly sampled households in the same locations as the voter list verification exercise, and found that 49 percent of respondents were not registered in the electoral roll of the nearest polling station (although 28 percent were registered at other polling stations in Delhi, and 1 percent outside of Delhi). Joshi et al. (2023) created full household listings in the catchment areas of 13 polling stations across 4 states in North India[13] and compared those to the official voter lists. They found that 91 percent of households across locations have at least one member enrolled in the voter list, largely independent of the household's ethnic identity or class. The authors suggested that therefore, electoral rolls make for good

---

[12] By comparison, only 6 percent of sampled subjects outright refused to participate in the survey.
[13] The states were Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh.

sampling frames for household surveys. However, the authors focused on *households*, not individuals; it is unclear how many of the individuals enumerated in their household listing were enrolled in the voter list.

Research also points out that migrants might be particularly likely to be omitted from the electoral rolls in India, because voter registration is location-bound and those moving to a new place might not want to or be able to register there (Kumar and Banerjee, 2017; Thachil, 2017; Gaikwad and Nellis, 2021; Verma et al., 2019). While anecdotal evidence claims that migrants – particularly those semi-permanent migrants who move for work but stay connected to their regions of origin, sometimes even leaving their immediate family behind there (Tumbe, 2018) – regularly travel home in order to vote,[14] current research suggests otherwise. Gaikwad and Nellis (2021) found that across migrant settlements in Delhi and Lucknow, migrants were less likely to be enrolled to vote in their hometown and to actually travel back to cast a ballot the further the hometown was from their new place of residence, and the longer their had lived in their new city. Verma et al. (2019) looked at Banda, a rural district in Uttar Pradesh with very high labor out-migration, in the wake of the 2019 election. They showed that polling stations where more labor migrants that normally reside elsewhere in the country were registered to vote recorded lower turnout than others, and noted that "some migrants did return to vote, but their numbers were minuscule compared to the total number of migrants." High costs of traveling home to vote, the loss of income associated with this travel, and the specter of losing one's job because of the absence are frequently cited as reasons why migrants do not go home to vote;[15] bureaucratic hurdles also often prevent them from registering to vote in their new place of residence (Gaikwad and Nellis, 2021; Kumar and Banerjee, 2017).

---

[14] See, for example, *The Hindu*, April 19, 2024, "Construction sector impacted in Bengaluru as immigrant workers travel to vote"; *The Hindu*, October 28, 2015, "The Bihari versus the bahari"

[15] See, for example, *The Indian Express*, April 24, 2024, "Work or vote? It's a choice no citizen should have to make", *BBC*, May 8, 2014, "Why India's migrants are unable to vote."

3 The Data

I contribute to this literature by investigating the quality of electoral rolls in Uttar Pradesh, India's largest state. Home to around 200 million people, Uttar Pradesh not just has the largest number of registered voters in the country (around 153 million[16]), but also sends the largest number of Members of Parliament (MPs) to the Lok Sabha of any state (80 out of 543) and is generally considered a bellwether for Indian national elections. I use a mix of village censuses, similar to Joshi et al. (2023) but focused on the *individual* resident, and administrative data from an unrelated survey that used voter lists as the sampling frame, similar to Verma et al. (2019). I supplement this with insights from interviews with a range of officials involved in the voter registration process, from a former Chief Electoral Officer of a North Indian state down to Booth-Level Officers in charge of the voter list for a single polling station, as well as from interviews with eligible adult residents of Uttar Pradesh.

3.1 Village Censuses

I conducted two village censuses in Uttar Pradesh, during which surveyors enumerated all adults 18 years or older that normally reside in the respective villages. Because the voter survey that is used as a secondary data source in this analysis was conducted in Bijnor and Bahraich district, I opted to survey one village each in these districts. I followed a multi-stage randomization process, where in each district, I randomly selected one of the four Assembly Constituencies in which the other survey had been conducted; and within that AC randomly chose one polling station. The catchment area for the selected polling stations formed the field sites for the census. Figure 1 shows the location of the two study villages on a map. The village censuses were conducted in March 2022, after the 2022 Uttar Pradesh state elections had concluded in both districts.

Village A is located in Nagina Assembly Constituency in Bijnor District.[17] In 2011, at

---

[16] https://www.deccanchronicle.com/nation/in-other-news/may-10-weather-forecast-prayer-timings-893279?infinitescroll=1

[17] In fact, this study site only includes *half* of a village, since the village has two polling stations and

Figure 1: Study Sites for Village Censuses and Voter Survey
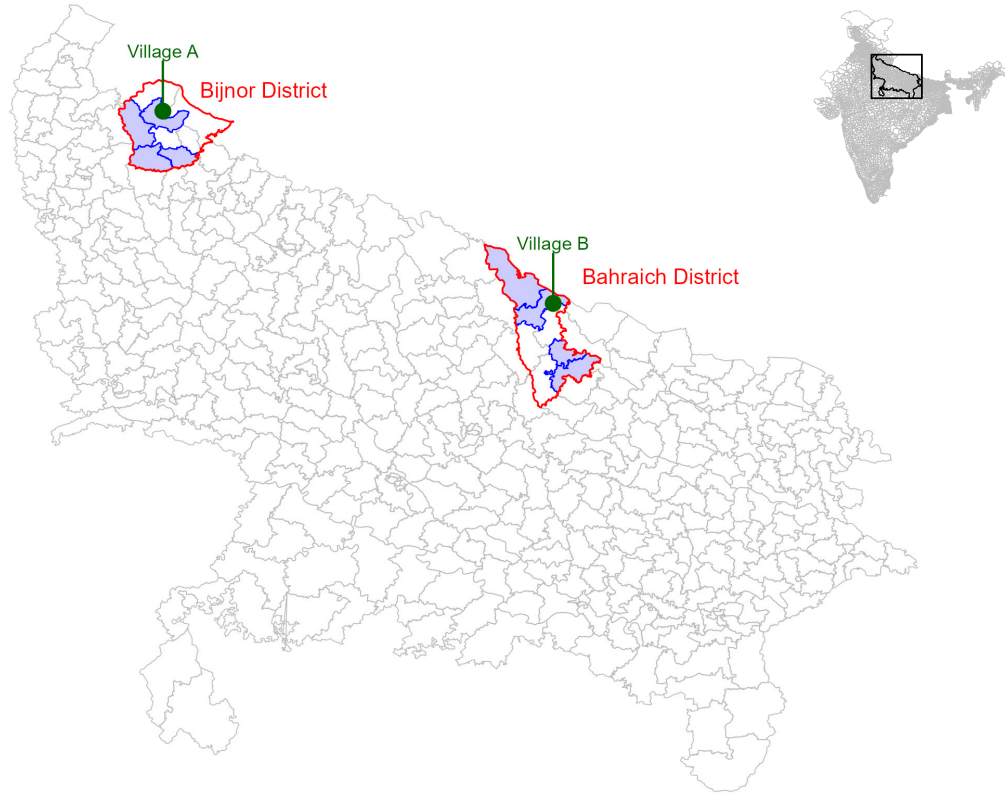
the time of the most recent government census, Village A counted a total of 2,951 inhabitants in 407 households. With 1,509 male and 1,442 female citizens, Village A had a sex ratio of almost 956 women per 1,000 men, way above Uttar Pradesh's average sex ratio of 912 at the time. About half of these persons (1,490) were considered literate by the census; Village A's literacy rate of 50.5 percent lagged behind the state's average of 67.7 percent. Only 26 individuals belonged to the Scheduled Castes, and none to the Scheduled Tribes. The 2011 census classified almost 47 percent of houses in the village as "good," more than 42 percent as "liveable" and close to 11 percent as "dilapidated." More than 91 percent of houses were brick buildings. The main water source in the village were handpumps; 53 percent of

---

therefore two separate electoral rolls. The survey team determined the boundaries of the selected polling station's catchment area by talking to the local pradhan and BLO.

households had water access on their premises, 43 percent near their premises and 4 percent said the closest source of water was away from their residence. More than 42 percent of households used electricity as their main source of lighting, while almost 58 percent relied on kerosene. Only about 11 percent of households owned a radio, and 14 percent possessed a television; more than 71 percent of households had a bicycle.

Village B is located in Nanpara Assembly Constituency in Bahraich District. The 2011 census put the total local population at 1,153 individuals across 224 households. The sex ratio stood at 880 females per 1,000 males, well below the state average of 912. Only 43.2 percent of the population was listed as literate by the census, compared to a state average of 67.7 percent. A total of 180 individuals belonged to the Scheduled Castes (almost 16 percent), while none belonged to the Scheduled Tribes. The census classified 10 percent of the village's houses as "good" and another 86.8 percent as "liveable;" the rest was considered "dilapidated." About half of all residences were made from mud or unburned brick; the other half was constructed from burned bricks. The main source of drinking water were handpumps in the village at the time of the last census; about 46 percent of HHs had a pump on their own premises, 43 percent had one near their house, and 11 percent indicated that the nearest source of water was away from their residence. The main source of lighting was kerosene for the majority of the village (almost 91 percent of households); only 9 percent used mainly electricity. Overall, 20.5 percent of households owned a radio in 2011, and 8.2 possessed a television; 65.3 percent owned a bicycle.

In each village, enumerators approached every household contained within the boundaries of the village and interviewed at least one respondent from within that household. From this interlocutor, enumerators collected information on the household, including religion, caste and income; as well as information on each adult aged 18 years or older of the household, such as gender, age, marital status and education. For each adult, investigators checked whether the individual is registered to vote by checking the person's information against the official electoral roll. If any adult within the household was not registered to vote, the team

collected information on the reasons for non-enrollment as well. If no one was home at any particular house, enumerators tried again a few days later, or alternatively collected contact information for the residents from neighbors or the *pradhan*, the village council president. Some households, which stay away from the village for extended periods of time but still maintain a homestead in the location that they regularly visit, where interviewed either at their second residence in a nearby town or by phone. In this fashion, enumerators tried to speak with at least one informant from every single house that is physically located within the village boundaries, collecting information on all adults that would be legally eligible to vote at the selected polling station.

At the same time, enumerators collected information on all names contained in the electoral roll. For those electors who were not encountered during the village census, that meant asking family members[18] about their whereabouts. Where we were not able to track down anyone with a connection to the elector in question, we asked the local representatives for the different wards (ward members) within the village about the individuals.

Based on the census of all adult residents of the village, I am able to distinguish two different populations in each village:

- **Registered Voters**: Those adults residing in the village whose name is listed in the electoral roll constitute the population of correctly registered voters.

- **Unregistered Adults**: Those adults residing in the village whose name is *not* listed in the electoral roll even though they meet the eligibility criteria for voter registration constitute the population of unregistered adults. They are *de facto* disenfranchised individuals.

Based on the annotated electoral roll, I am able to distinguish two types of entries in the voter list of each village:

---

[18] The electoral roll indicates "house(hold) numbers" for each voter. In reality we found shared numbers to not very accurately indicate actual co-residence, but oftentimes to correctly suggest some type of (distant) familial relation.

Figure 2: Assessing the Quality of Electoral Rolls in Study Villages
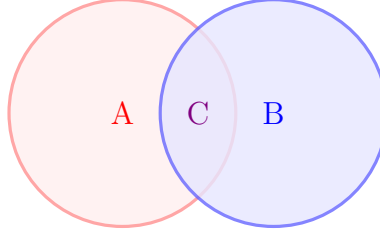
Note: A = Adult Residents; B = Names on Electoral Roll; C = Registered Voters.

- **Correct Entries**: Those names on the electoral that correspond to an adult residing in the village constitute correct entries in the voter list. They represent all **registered voters** factually living in the village.

- **Deadwood**: Those names on the electoral roll that cannot be matched to an adult residing in the village – for example because the corresponding individual has migrated away or died – constitute deadwood on the voter list. These names artificially inflate the voter list, and will therefore bias any turnout estimates downwards.

The overlap between the population of resident adults and names on the electoral roll, therefore, constitutes the population of registered voters (see 2). In an ideal world, the census of all adult residents of the village will perfectly overlap with the electoral roll: in that case, all eligible adults are registered to vote, and all names on the voter list perfectly correspond to a resident. By contrast, a high number of unregistered adults in the village and/or a large share of deadwood on the voter list would raise concerns about the quality of the voter list.

3.2   Voter Survey

The voter survey was conducted prior to the village censuses, just ahead of the 2022 Uttar Pradesh state elections in February and March 2022. The survey interviewed female registered voters in Bijnor district and Bahraich district, as well as the head of their household. Female respondents were selected using a multi-stage random sampling procedure: First,

within each district, I randomly selected four Assembly Constituencies, blocked on reservation status (for three general and one reserved constituency in each district).[19] In each constituency, I then randomly chose 16 polling stations (for a total of a total of 128 polling stations). Finally, five registered female voters were chosen at random from the electoral roll for each polling station.[20] Enumerators then tracked down the selected woman, and attempted to interview her along with the person whom she identified as the head of her household.

For the purpose of this article, I rely on administrative data collected during the implementation of the survey. Whenever enumerators were unable to interview a selected female registered voter, they noted down the reason. This provides me with information on the quality of voter lists, at least for female registered voters, in the 128 locations of the survey. In both districts, success rates for interviews were under 15 percent. To complete 345 pre-election surveys of female electors in Bijnor District, enumerators had attempted a total of 2,341 interviews, for a success rate of 14.7 percent. In Bahraich District, field investigators attempted 2,902 interviews in order to complete the final N of 359, which means the success rate was 12.4 percent. Only a small minority of sampled respondents had refused to participate; instead, the vast majority was absent from the location, or enumerators were unable to track down the person corresponding to the entry on the voter list.

4 Descriptives

Village Populations

In 2022, Village A counted two polling stations within its boundaries. I only enumerated electors who are registered to vote in the local primary school (as opposed to those registered

---

[19] In India, some constituencies at the national, state, and local level are reserved for members of the *Scheduled Castes*, or *Dalits*, and members of the *Scheduled Tribes*, or *Adivasis*. While all registered voters in those constituencies can vote, only members of the groups that enjoy reservation status can run for office. In Uttar Pradesh, 84 out of 403 ACs (21 percent) are reserved for the Scheduled Castes, and 2 (.5 percent) are reserved for the Scheduled Tribes.

[20] The survey, including the sampling procedure and sample, are described in detail in Roscher (2023).

to vote in the local middle school). Because assignment to polling stations is based on physical location, that meant I surveyed the northern part of the village (see Appendix Figure 1). The survey team enumerated a total of 1,175 adults across 319 distinct households in Village A for an average household size of 3.7 adults (see Table 1). Just over 50 percent of enumerated residents were female. The average age of residents was a little over 40 years. Village A was a Muslim majority village, with almost 95 percent of residents identifying as Muslim and only 5 percent as Hindu. All of the Muslim residents identified as belonging to the Other Backward Classes (OBCs), while all of the Hindu residents identified as belonging to the Scheduled Castes (SCs). The average monthly household income in Village A was close to 11,400 INR ($\approx$ \$136).

Table 1: Village Population Descriptives

	Village A	Village B
N Adults	1175	708
% Female	50.47	47.18
Avg Age	40.37	41.26
% Hindu	5.11	93.93
% Muslim	94.89	6.07
% General	0.00	28.81
% OBC	94.89	53.39
% SC	5.11	17.80
N HHs	319	239
N Adults/HH	3.68	2.96
Avg HH Income	11377	6345

By contrast, in Village B the survey team enumerated 708 adults across 239 households, for an average household size of close to 3 adults. Only 47 percent of adult residents were female; the average age for an enumerated adult was 41.2 years. Village B was a Hindu majority village, with almost 94 percent of residents identifying as Hindu and only 6 percent as Muslim. All Muslim residents identified as belonging to the OBCs. Of the Hindu respondents, around 30 percent said they belong to the general caste category; around half identified as OBC; and close to 19 percent said they belong to the Scheduled Castes. The

average monthly household income in Village B was a little over 6,300 INR ($\approx$ \$76).

5   Analysis

To assess the quality of the electoral rolls, I look at the extent of under-enrollment (disenfranchisement) of adult residents in each village, as well as deadwood on the voter list of each village. To this end, I rely on micro-level data from the village censuses and voter surveys described above.

The analysis of the village census data shows that in both study sites, two facts were true at the same time, namely that a) a considerable share of villagers were not registered as voters (disenfranchisement) and that b) the voter list contained a sizable number of obsolete entries (deadwood). As Figure 3 shows, of the 1,175 resident adults enumerated in Village A, only 911 (77.5 percent) were enrolled in the voter list; the other 264 individuals (22.5 percent) were not registered to vote, and therefore *de facto* disenfranchised, despite being eligible to register by law. In Village B, only 483 out of 708 adult residents (68.2 percent) were enrolled, while 225 (31.8 percent) remained unregistered. That is, both villages exhibit considerable under-enrollment (disenfranchisement) of eligible adults.

At the same time, the electoral roll in both study sites was inflated, containing a sizable share of deadwood. I distinguish different types of entries on the electoral roll, namely correct entries, deadwood, and undetermined entries. First, those names that correspond to adult residents who are enrolled in the voter list constitute *correct entries*, representing the population of correctly registered voters. In Village A, only 911 out of the 1,072 names on the list (85 percent) corresponded to resident adults. In Village B, a mere 483 out of 825 entries on the voter list (58.5 percent) corresponded to a village resident enumerated as part of the census.

The second type of entry on the list is what I term *deadwood*. This category includes listed electors that a) have been identified as having died, b) those that have permanently

Figure 3: Voter Registration Rate of Adult Village Residents
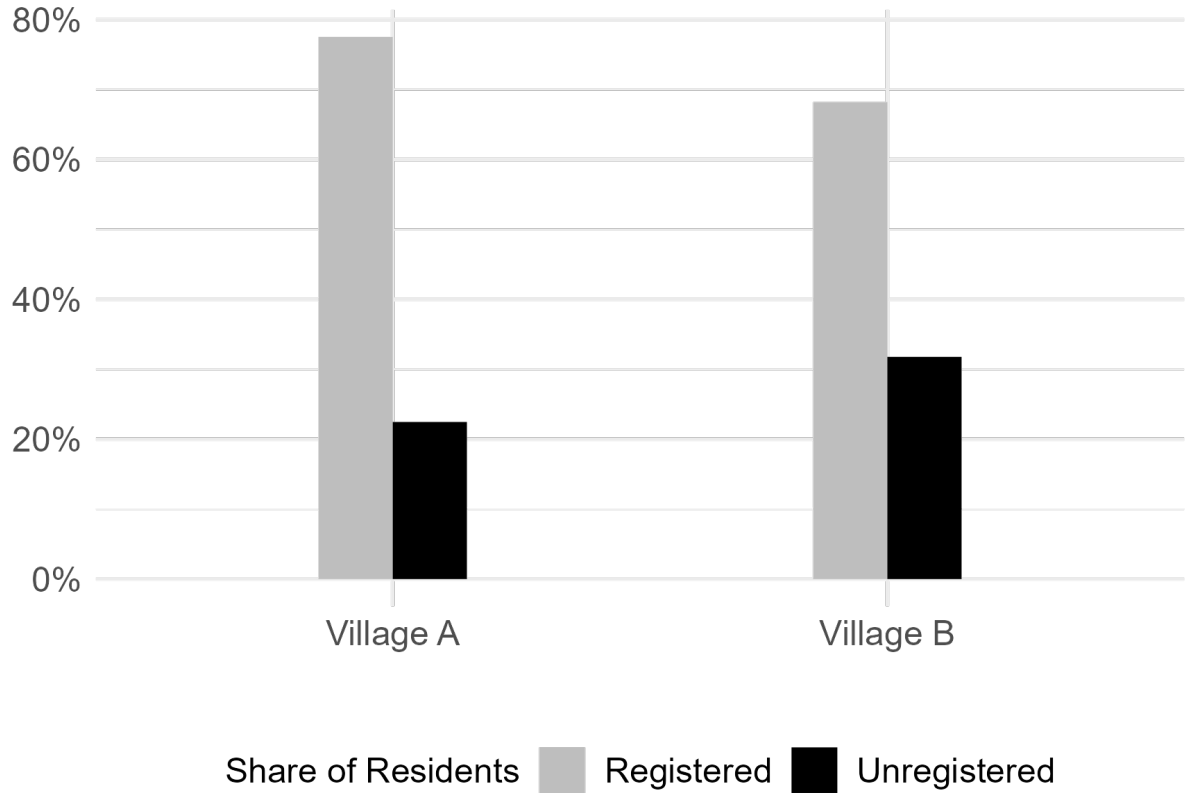
moved away (usually because of marriage) and c) clerical errors on the list. The individuals corresponding to these entries either do not exist or have left the location permanently, meaning their names should have been removed from the electoral roll; these entries therefore are definite deadwood. In Village A, 8.3 percent of entries are definite deadwood. Almost 4 percent of the names on the list correspond to individuals who were deceased, and around 4 percent to women who had permanently moved away after marriage. In Village B, almost 11 percent of the list represented definite deadwood, with around 6 percent of the individuals listed having deceased and 3 percent having migrated for marriage; the rest represent clerical errors.

The third type of entry is what I term *undetermined entries*: these individuals were not encountered during the village census, nor did we survey family members that said these persons normally live with them or plan to return to their home eventually. Instead, we learned

Figure 4: Deadwood on Electoral Rolls, by Village
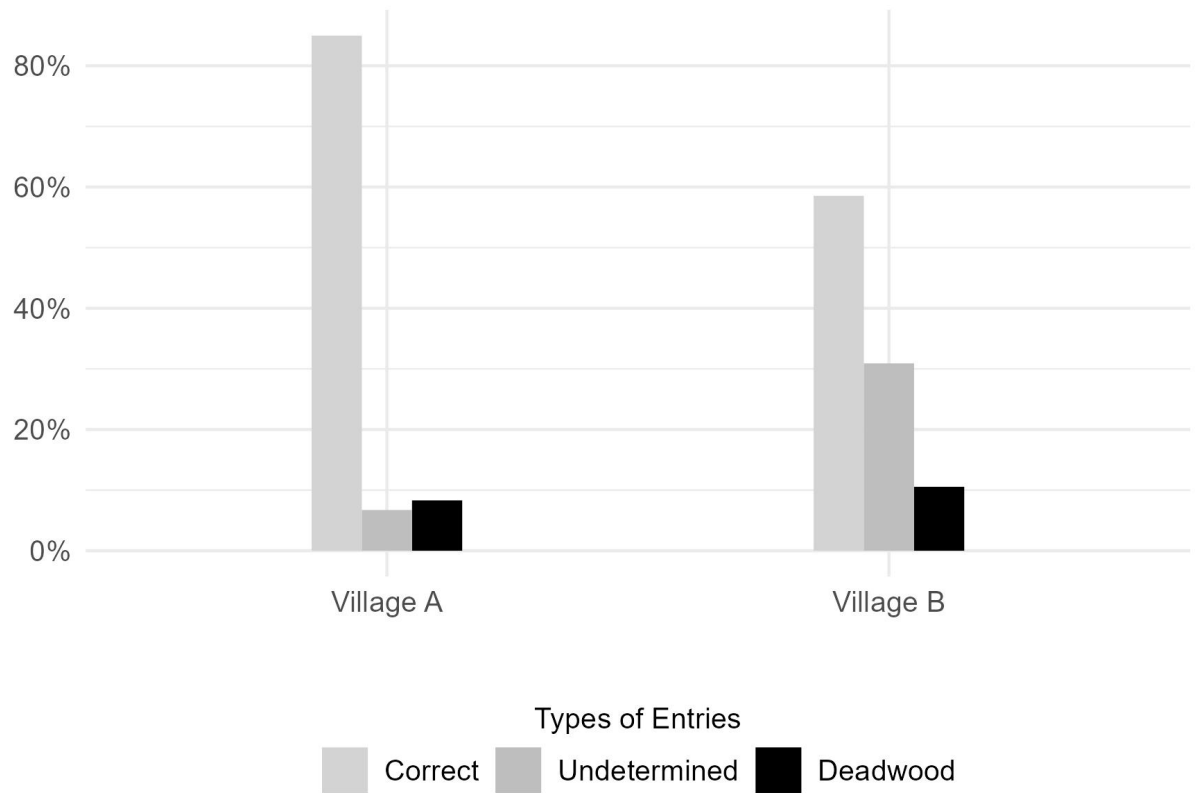
from neighbors or local representatives that these individuals had migrated away, as a family; or we were unable to obtain any information about the persons corresponding to the entry from local informants. This type of entry is more difficult to judge. Migrants, even those that move away as a family unit, could still consider this location their home and purposefully maintain their voter registration in the village. I do not, in my data, have information on whether the persons corresponding to these entries maintain any sort of homestead within the village boundaries. Entries identified as migrants could, therefore, be legitimate entries that simply correspond to persons not physically present at the location during the survey (and for most of the year, for that matter); or they could represent obsolete entries that should be removed from the list because the individuals have permanently migrated away and have no remaining ties to the location. Unidentified individuals, too, pose a problem. To identify persons listed in the electoral roll, we looked for individuals who shared a house

number with them, and interviewed the local *pradhan* and other notables such as the school teacher or health worker. Failing to obtain any information about the person that the entry might correspond to, we marked them as "not identified." While it is possible that low information among village informants is the reason that we were not able to determine to whom the entry corresponds, the person was also not personally encountered during the village survey and no other interviewed individuals claimed them as members of their household. At the very least, then, these entries represent physically absent individuals, i.e., long-term migrants; potentially, they represent clerical errors or the deceased instead. In Village A, 5.4 percent of entries are classified as undetermined; 4.2 percent represent migrants and the rest unidentified individuals. In Village B, the share of undetermined entries was a full 30 percent. Almost 20 percent of the names on the list were identified as migrants; we were unable to identify 10 percent of the entries on the list.

Based on this analysis, at the very least, then, 8.6 percent of the electoral roll in Village A is deadwood; that share might be as high as 14 percent, depending on the nature of the undetermined entries. In Village B, at least 11 percent of the list represents deadwood and, depending on the nature of undetermined entries, up to 41 percent might constitute deadwood.

Comparing Registered Voters and Unregistered Adults

Drawing on the demographic data collected for each individual during the village censuses, I can compare registered and unregistered residents in each village. As Table 2 shows, a higher share of unregistered adults is female and younger than among registered voters across locations. Education and household income do not consistently differ across the two populations. By contrast, there is no difference in ethnic composition between registered and unregistered adults, either along the dimension of religion or caste. Because the gender and ethnic composition of the two villages is different, I compare registered voters and unregistered adults for each village separately.

Table 2: Comparing Registered and Unregistered Adults

	Village A			Village B		
	Registered	Unregistered	P-Value	Registered	Unregistered	P-Value
% Female	46.43	64.39	0.000	42.03	58.22	0.000
% Male	53.57	35.61	0.000	57.97	41.78	0.000
Avg Age	43.61	29.20	0.000	45.51	32.13	0.000
Avg Education	5.14	6.95	0.000	3.78	4.20	0.284
% Hindu	4.94	5.68	0.746	94.20	93.33	0.778
% Muslim	95.06	94.32	0.746	5.80	6.67	0.778
% General	0.00	0.00		30.43	25.33	0.191
% OBC	95.06	94.32	0.746	51.76	56.89	0.233
% SC	4.94	5.68	0.746	17.81	17.78	1.000
Avg HH Income	13305	12977	0.516	8920	7538	0.074

Gender composition and age differ significantly between registered and unregistered adults. A higher share of unregistered residents is female, while a higher share of registered voters is male across locations: only 46 percent of enrolled voters in Village A are female, but 64 percent of unregistered adults are; in Village B, women make up 42 percent of registered electors, but 58 percent of unregistered adults. The difference is statistically significant (p<.001). Accordingly, men are statistically significantly more likely to be registered voters across both locations. Additionally, those who are enrolled in the voter list are, on average, much older than those who are unregistered: the mean age of registered voters in Village A is more than 43 years, while the average age of unregistered adults is only 29 years. In Village B, registered electors on average are 45.5 years old, while unregistered adults have an average age of 32 years. The difference is statistically significant (p<.001) in both locations.

Registered and unregistered adults do not consistently differ in their educational achievements and household income across both locations. In Village A, registered voters on average had about 5 years of formal education, while unregistered adults actually had almost 7 years. The difference is statistically significant (p<.001). While the general pattern holds in Village B – with registered voters having an average of 3.8 years of education while unregistered adults had 4.2 years – the difference is not statistically significant (p=.28). In Village A, the

average household income of registered voters ($\approx$ 13,300 INR) was not statistically different from that of unregistered adults ($\approx$ 13,000 INR). In Village B, however, registered voters recorded a higher average household income ($\approx$ 9,000 INR) than unregistered adults ($\approx$ 7,500 INR); the difference is statistically significant (p.=.074).

However, across both villages, the share of Hindus and Muslims among the registered and unregistered population was statistically indistinguishable; as was the share of the different caste groups present at the village level. That means that the ethnic identities of registered voters and unregistered adults within the same village were very similar.

What predicts an individual's enrollment status among surveyed adults? I run OLS regressions to estimate the predictive power of the different demographic variables for voter registration. I estimate the following model:

$$Y_i = \alpha + \beta X_{ki} + Village FE + \epsilon, \tag{1}$$

where Y_i is an indicator variable for whether an adult was registered to vote, which takes the value of 1 if the respondent was enrolled as a voter, and 0 otherwise; X_{ki} is the battery of k demographic variables, namely gender, age, education, household income and ethnic identity (religion and caste); and $Village FE$ are village fixed effects. The coefficient β can be interpreted as the change in conditional probability of a respondent being registered to vote, holding constant all other predictors.

Table 3 shows results. Gender, age, and education emerge as strong predictors of enrollment status, while household income and ethnic identity are not. The probability of being enrolled in the voter list is 11 percentage points *lower* for women than that for men, holding all other variables constant. All else equal, each additional year of age increases an individual's probability of being enrolled by about 1.1 percentage points. Furthermore, an additional year of education corresponds to a .6-percentage-point higher probability of being a registered voter.

Table 3: Predictors of Voter Registration

	Dependent variable:
	Registered (0/1)
Female (0/1)	−0.111***
	(0.019)
Age (in yrs)	0.011***
	(0.001)
Education (in yrs)	0.006***
	(0.002)
HH Income (in INR)	0.00000
	(0.00000)
Muslim	0.023
	(0.050)
OBC	−0.009
	(0.042)
SC	0.002
	(0.049)
Village FEs	✓
Observations	1,883
R^2	0.787
Adjusted R^2	0.786
Residual Std. Error	0.398
F Statistic	768.354***

Note:	*p<0.1; **p<0.05; ***p<0.01
	Clustered robust standard errors in parentheses.

Comparing Registered Voters and Deadwood on the Voter List

I next compare correct entries on the electoral roll – i.e., existing voters – with other types of entries on the electoral roll. The voter list in India provides the gender and age of every registered elector; I can therefore compare the share that is female and the average age between populations. First, I compare confirmed voters with the entries that were determined to be definite deadwood. As Table 4a shows, the share of women among the obsolete entries is substantively larger than among the existing voters in both villages, by around 30 percentage points; the difference is statistically significant (p<.001). That means that across locations, a much higher share of the female names on the list are definite deadwood than of the male

names. The average age of the confirmed voters was lower than that of entries that were determined to be deadwood, by more than 7 years; the difference is statistically significant (p<.02). The fact that definitely faulty entries in the list are associated with a higher age makes sense, given that one of the reasons why entries might be obsolete is that the individual has passed away.

Table 4: Comparing Existing Voters and other Entries on the Electoral Rolls

(a) Existing Voters Vs. Definite Deadwood

| | Village A | | | Village B | | |
	Voters	Deadwood	P-Value	Voters	Deadwood	P-Value
% Female	45.99	77.53	0.000	42.44	70.11	0.000
Avg Age	42.72	50.27	0.014	45.45	53.52	0.002

(b) Existing Voters Vs. Undetermined Entries

| | Village A | | | Village B | | |
	Voters	Undetermined	P-Value	Voters	Undetermined	P-Value
% Female	45.99	34.72	0.084	42.44	46.27	0.358
Avg Age	42.72	33.94	0.000	45.45	42.29	0.007

I next compare confirmed voters with those entries that were undetermined, i.e., long-term migrants or those that were not identified (Table 4b). The share of women among the undetermined entries on the voter list was substantially and statistically significantly *lower* than among the confirmed voters in Village A (p<.1); but Village B shows no difference in the gender ratio between both groups. However, those names that could not be tracked down corresponded to younger adults, on average. In Village A, names on the voter list that could not be confirmed were associated with an average age of under 34 years, while confirmed voters were, on average, almost 43 years old (p<.001). In Village B, confirmed entries on the list were associated with a mean age of 45.4 years, while undetermined entries averaged 42.4 years (p<.01). The fact that undetermined individuals are, on average, younger than registered voters makes sense, given that one of the reasons why individuals could not be tracked down was migration; younger adults are more likely to engage in labor migration

than the old.[21]

The Prevalence of Deadwood on Voter Lists

So far, I have only analyzed data from the two village censuses, which provides suggestive evidence of both considerable under-enrollment as well as voter list inflation, specifically for women. Yet extrapolations based on this limited data are difficult to make. I therefore draw on administrative data collected in the course of the voter survey in Uttar Pradesh to gain insights into the extent of voter list inflation across the state more generally. I find that across locations, a sizable share of female names on up-to-date electoral rolls are deadwood.

Recall that the voter survey randomly sampled *female registered voters* from the electoral rolls across 128 distinct polling stations (64 in Bijnor district and 64 in Bahraich district) to be interviewed along with the head of their household. Based on this data, I can therefore only speak to the extent that *female names* on the voter lists are correct. Whenever enumerators were unable to interview a selected woman, they noted down the reason for non-participation. Of 2,341 attempted interviews in Bijnor, only 345 could be completed (14.7 percent); in Bahraich, only 359 out of 2,902 attempted interviews could be completed (12.4 percent). As Table 5 shows, the reason why field investigators were unable to interview the selected female electors was rarely that respondents refused to participate in the survey. Instead, the most common reason was simply that the woman was temporarily absent from the home, for work, travel, errands, or other reasons. We also did not interview the woman if the (usually male) head of household was absent either; the most common reasons for male absence were work-related.[22]

However, some of the reasons why enumerators could not interview selected respondents

---

[21] Appendix Table A.2 compares confirmed voters with all other entries on the list, i.e., definite deadwood as well as undetermined entries. I find that the share of women among unconfirmed entries is substantively higher, by at least 10 percentage points, than among confirmed voters. That difference is statistically significant (p<.01). I, however, do not find meaningful differences in age between the groups.

[22] If the head of household was temporarily absent but was going to be available within the next few days, enumerators tried to make appointments by phone and conducted up to three additional visits over the course of a few days in order to complete both interviews within the household.

Table 5: Response Rates and Reasons for Non-Response to Survey

(a) Bijnor District

	N	Percentage
Total	2341	100.00
Completed	345	14.74
Noncompletion: Temporary Reason		
Female Absence	462	19.74
Male Absence	247	10.55
Refused	159	6.79
Health Reasons	25	1.07
Noncompletion: Permanent Reason		
Female Migration	132	5.64
Died	123	5.25
List Error	3	0.13
Noncompletion: Unclear Reason		
Not Identified	587	25.07
Family Migration	258	11.02

(b) Bahraich District

	N	Percentage
Total	2902	100.00
Completed	359	12.37
Noncompletion: Temporary Reason		
Female Absence	1161	40.01
Male Absence	579	19.95
Health Reasons	86	2.96
Refused	16	0.55
Noncompletion: Permanent Reason		
Died	153	5.27
Female Migration	53	1.83
Noncompletion: Unclear Reason		
Not Identified	386	13.30
Family Migration	109	3.76

suggest that the woman was permanently absent from the location and should therefore *not* have been listed in the electoral roll for that polling station. For one, more than 5 percent of the sampled women had died; that is despite the fact that the electoral rolls should have been updated within just a few weeks of the survey.[23] In addition, almost 6 percent of sampled female respondents in Bijnor had permanently migrated away; in Bahraich, the share was close to 2 percent.[24] These entries constitute confirmed deadwood on the voter lists.

Finally, enumerators were unable to track down a sizable share of sampled respondent, either because individuals had migrated or because no information on them was available. These entries may or may not constitute deadwood on the voter list. As discussed earlier, family migration may or may not indicate permanent relocation: while some families might move away to permanently settle in a new location, others might maintain ties to their region of origin, and might occasionally return. I do not have information in my data on whether these migrant families still maintained a homestead in the location in which they were listed in the electoral roll; however, they were excluded from the survey because local informants or the respondents themselves (where we were able to obtain phone numbers) informed us that they were not returning to the location before the election. At least some of these migrant families, therefore, should likely be excluded from the local electoral roll (see also Verma et al., 2019; Gaikwad and Nellis, 2021). Eleven percent of female sampled respondents in Bijnor had migrated away with their family, either semi-permanently or permanently; in Bahraich, the share was under 4 percent.

In addition, enumerators were unable to obtain any information locally on a sizable share of sampled entries from the voter list. All we had to go by to find the selected female was her rough residential area (within the catchment area of the polling station), her name, her age, either her father's name or her husband's name, as a well as a "house number" that

---

[23] For comparison, only one of the 704 women interviewed in the baseline survey passed away between the first wave and the follow-up survey, conducted between two and four weeks later.

[24] The most common reason why women would migrate on their own is marriage. In India, women traditionally leave their natal family and move into their husband's family home after marriage. I will discuss this in more detail in the next section.

does not denote an address so much as it indicates some sort of familial relationship with other names listed under that same house number. Field investigators usually approached the *sarpanch* (president of the village council) in rural areas or municipal councillor in urban areas to locate sampled women. Failing to do so, they approached other interlocutors that might have information on residents, such as the local teacher or health worker. If this was not successful either, enumerators asked up to five residents of the area encountered in public spaces, such as vendors or shop keepers, about the individuals. If the sampled woman (or members of her household) could not be located in this way, enumerators noted that they could not track down the individual. While this inability to track down a name on the voter list might simply be due to low information about individual residents among representatives and neighbors, particularly in urban areas, it can also indicate that a sampled respondent has migrated away or has passed away, or that the entry is faulty. In Bijnor district, which is a relatively more urban district, field staff was unable to track down a full quarter of selected female respondents. In Bahraich district, which is relatively more rural, that share was 13.3 percent.

At the very least, then, 22 percent of the randomly sampled female entries in the Bijnor rolls constitute deadwood – because the woman had passed away or moved away – and 11 percent of entries in Bahraich did. At the same time, only 53 percent of entries on the Bijnor lists and 76 percent of entries on the Bahraich lists were confirmed to be existing resident adults.[25]

However, a sizable share of the names sampled from the voter lists were of undetermined status, as the person was either (semi-)permanently absent or untraceable. The share of undetermined entries was 36 percent in Bijnor and 17 percent in Bahraich. The much higher prevalence of undetermined entries on voter lists in Bijnor than Bahraich lies in Bijnor's higher urbanization: we found many more undetermined entries on voter lists of urban polling stations than of rural polling stations, and since Bijnor is more urban than

---

[25] All those sampled female voters who either participated in the survey, or could be tracked down but not interviewed (because of temporary absences or refusal) were considered confirmed existing voters.

Figure 5: Deadwood Among Female Entries on Electoral Rolls, by District

Types of Entries

Correct　　Undetermined　　Deadwood
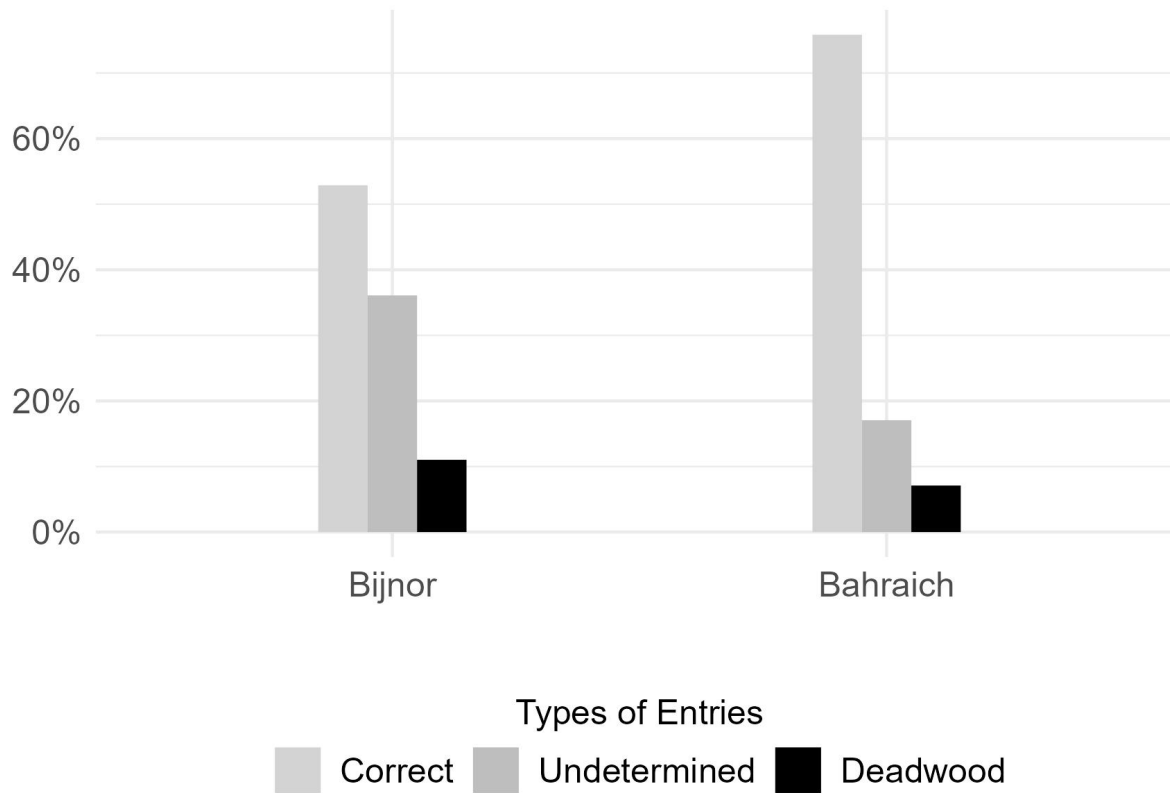
Bahraich, more of the polling stations selected in Bijnor were urban. Depending on the underlying reasons for why enumerators could not track down a share of the sampled women and entries were deemed "undetermined," then, the percentage of deadwood among female names on the Bijnor lists might be up to 47 percent, and as high as 24 percent in Bahraich.

These figures suggest that the extent of deadwood I found on the electoral rolls of the villages where the census was conducted might not be an outlier, but rather the norm, at least for the female entries on the list.

Rethinking Voter Turnout

My analysis of both the village censuses and the voter survey data has shown a significant share of deadwood on the voter lists. Yet the number of entries on the voter list is used as the denominator when calculating voter turnout. If a sizable share of those entries are

obsolete, then the denominator is *inflated* and official voter turnout statistics *underestimate* true turnout. At the same time, a large share of adult residents of each village was unenrolled. This artificially *deflates* the voter list, leading us to *overestimate* true turnout. Which of these countervailing effects prevailed in the study villages?

I use polling-station-wise data on the number of ballots cast, published by the office of the Chief Electoral Officer, for the 2022 Uttar Pradesh state elections and match it to the village census locations. This *official turnout* divides the number of registered electors who turned out on election day by the number of electors on the voter list. I then recalculate turnout using two different denominators. One is the number of electors on the roll without the deadwood I found on the list. Dividing the number of voters by this cleaned number of electors provides a better picture of turnout among registered voters. Note that I only delete confirmed deadwood and not undetermined entries. As discussed earlier, it is possible that at least some of the undetermined entries constitute deadwood as well, and should therefore be deleted from the list. Consequently, this denominator constitutes an upper bound for the number of registered electors that should be kept on a cleaned voter list. The second denominator adds to the cleaned voter list – that is, all names on the electoral roll minus the deadwood – all unenrolled adults living in the village. Dividing the number of voters by this corrected number of eligible adults shows turnout among all those who are eligible to vote under the law, whether or not they are registered in the list. Figure 6 plots *official turnout* as provided by the ECI; turnout using the *cleaned voter list*; and turnout using all *de jure eligible adults*.

Official turnout in Village A was 58.1 percent for women and 54.6 percent for men. However, deleting all confirmed deadwood from the list reduces the denominator. Based on the cleaned voter list, turnout in that location would have been considerably higher, at 67.1 percent for women and 56.6 percent for men. The difference between official turnout and turnout based on the cleaned voter list is statistically significant for women (p<.01) but not for men. However, when considering all eligible adults – that is, the cleaned voter list

31

Figure 6: Official Turnout Vs. Actual Turnout, by Gender
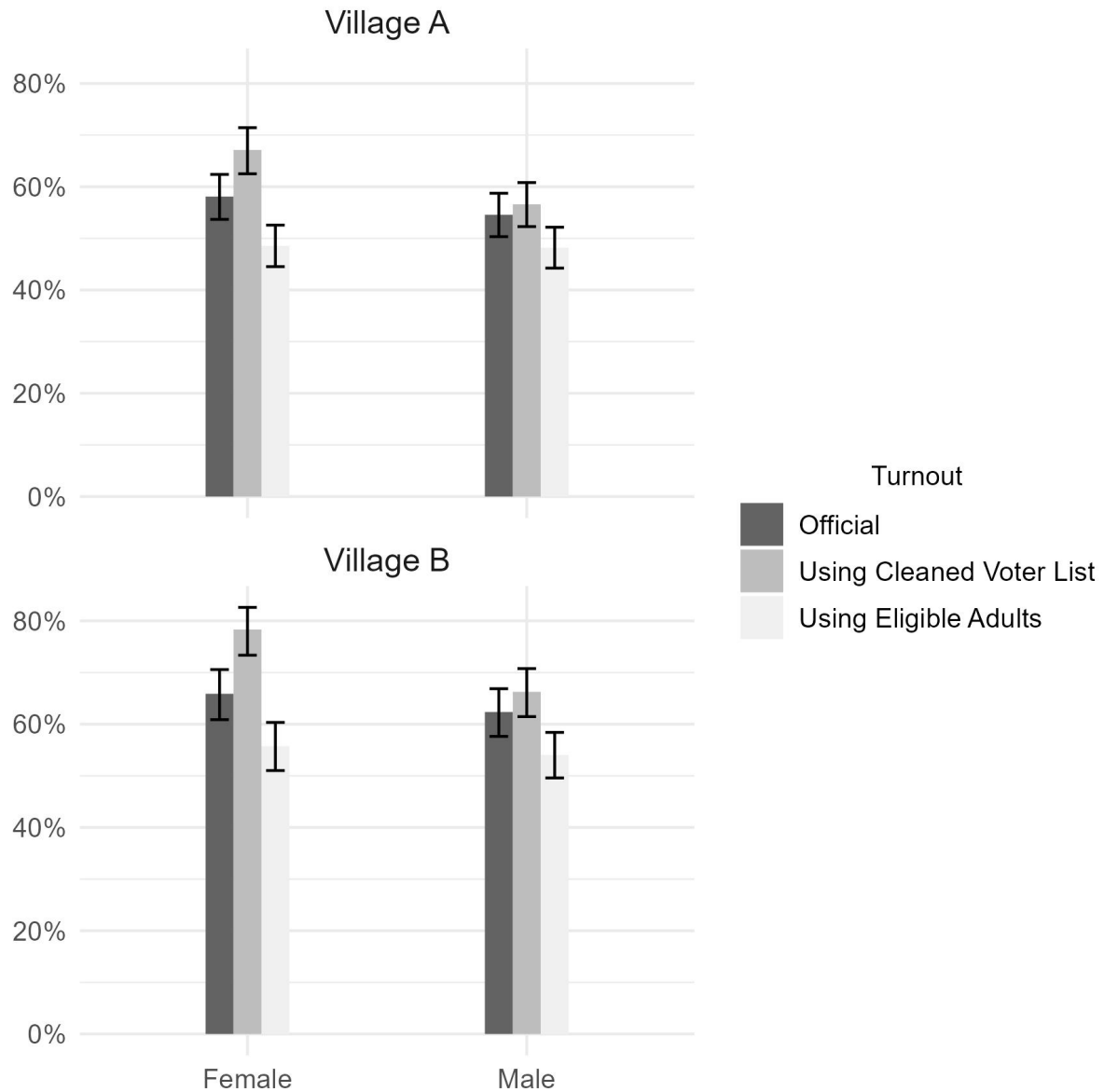
devoid from deadwood as well as unregistered, but eligible residents of the location – the denominator increases considerably. Turnout based on the number of eligible adults would have been significantly *lower*, at 48.5 percent for women (p<.002) and 48.2 percent for men (p<.05).

In Village B, official turnout stood at 65.9 percent for females and 62.4 percent for males. However, after deleting all confirmed deadwood from the denominator, turnout based on

the cleaned voter list would have been 78.3 percent for women and 66.3 percent for men. Again, the difference is statistically significant for women (p<.001) but not for men. By contrast, using all eligible adults as the denominator when calculating turnout considerably decreases participation rates: only 55.7 percent of eligible women and 54 percent of eligible men turned out. The difference between official turnout and recalculated turnout among all eligible adults is statistically significant (p<.005 for women and p<.02 for men).

As becomes clear from Figure 6, the fact that females are both more likely to be disenfranchised and more likely to constitute deadwood on the voter list than males means that turnout figures are much more variable for women than men, depending on which denominator we use. However, across the board, female turnout outpaces male turnout, although the difference does not always reach conventional levels of significance.

6   Discussion

So far, I have provided evidence of considerable problems in voter registration in Uttar Pradesh. In two full village surveys, I found that a sizable share of the local adult population was not enrolled in the voter list; while the electoral roll contained a significant proportion of deadwood. Data from a survey of registered female voters across two districts suggests that the presence of a considerable number of obsolete entries in the voter list is the norm, rather than the exception.

Here, I wish to make three important, interrelated points that follow from my analysis. First, aggregate data – at the village, constituency, state or national level – is not suitable for evaluating the health of the electoral roll. That is because aggregate data does not allow us to gauge the extent of deadwood on the list; and because any deadwood on the list, in turn, will likely obscure the true scope of voter disenfranchisement in a locality. Aggregate data, therefore, will almost always underestimate, or fully overlook, existing voter disenfranchisement in India.

Second, the root cause of both persistent under-enrollment and deadwood on the list lies in the perverse incentives faced by grassroots electoral officers in charge of maintaining the rolls, as well as in insufficient monitoring capabilities on part of the Election Commission of India, which relies mostly on aggregate data.

Third, the confluence of traditional marriage customs and the decentralized nature of voter lists in India mean that women are much more likely to be disenfranchised than men. It also leads to a higher share of deadwood among female entries on the voter lists, which in turn masks, to an extent, the considerable disenfranchisement of women residents in a locality.

6.1 How Aggregate Data Mask Problems with the Voter List

I argue that aggregate data is not suitable for evaluating the quality of the electoral roll, partly because in aggregate data, deadwood on the voter list will mask the true scope of disenfranchisement. I will illustrate this point using data from the village censuses.

Earlier, I have shown that both villages where I conducted full censuses simultaneously exhibited a) under-enrollment, that is, adult residents that were not registered to vote, and b) over-enrollment, that is, deadwood among the entries on the official electoral roll for the village. However, these patterns are not obvious when only looking at village-level aggregates. Village A had 1,175 adult residents, and 1,072 entries in the voter list; Village B had 708 adult residents and 825 entries in the voter list. These aggregate numbers might tempt one to conclude that Village A suffers from under-enrollment, with $1,175 - 1,072 = 103$ names missing from the list, while Village B displays deadwood on the voter list to the extent of $825 - 708 = 117$ entries. However, such a conclusion would be based on two strong assumptions, namely that all existing entries in the electoral roll in Village A are correct, and that all actual residents of Village B are registered. As I have shown above, that is not the case.

Figure 7 visualizes the true scope of over-enrollment and, more importantly, under-

enrollment across the two locations. It shows that deadwood on the voter lists masks the true extent of disenfranchisement in each location. In Village A, while aggregate figures might suggest that 103 names are missing from the electoral roll, the true number of disenfranchised adults is 264; the actual scope of under-enrollment is partially masked by obsolete entries on the voter list: 89 entries were determined to be definite deadwood, while an additional 72 were undetermined, meaning they might be deadwood in total or in part. In Village B, aggregates had suggested an excess of 117 names on the voter list, but gave no indication of disenfranchisement. In reality, 225 eligible adults were not registered to vote, but that number was masked by the 342 obsolete or undetermined entries on the voter list (87 confirmed deadwood and 255 undetermined).

Based on these findings, I would caution against drawing conclusions about the quality of voter lists based on discrepancies between aggregate voter registration numbers and aggregate population data (see, for example, Retnakumar, 2009; Shariff and Saifullah, 2018; Roy and Sopariwala, 2019; Retnakumar and Kurup, 2021). The possibility of deadwood on the voter lists is rarely addressed in research (although see Retnakumar, 2009; Verma et al., 2019; Retnakumar and Kurup, 2021, for notable exceptions). But comparisons of aggregate data are ill-suited to spot the true extent of deadwood on the voter lists. Researchers who noted that the number of listed electors outpaced the census population figures have relied on the – unspoken – assumption that every person enumerated in the census is listed in the electoral roll, and that only the difference between the number of listed electors and the number of adults in the census constitutes deadwood (Retnakumar, 2009; Retnakumar and Kurup, 2021). However, my analysis has shown that the true share of obsolete entries on the voter list is much higher, on average between 11 and 22 percent (see also Verma et al., 2019).

At the same time, if electoral rolls in fact regularly contain a certain amount of deadwood, as my research suggests, then any comparison between aggregate voter numbers and population figures from the census are bound to underestimate the true extent of voter disen-

Figure 7: Comparing Actual Village Population to Electoral Roll
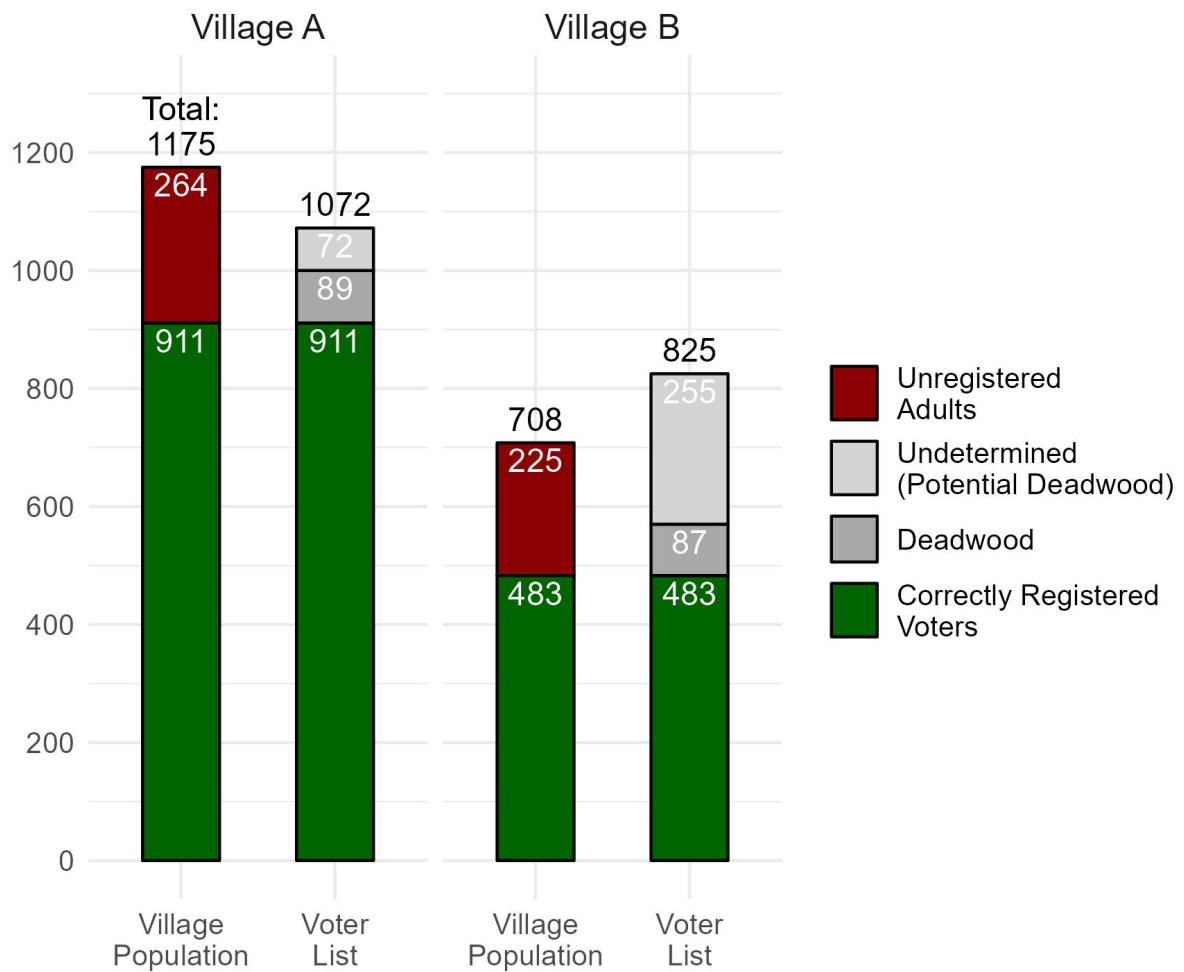
franchisement. Scholars finding that census population figures are higher than the number of registered voters have regularly relied on the – again, unspoken – assumption that all entries in the electoral rolls are correct, and that under-enrollment is limited to the difference between census population numbers and the number of voters listed in the rolls (Roy and Sopariwala, 2019; Shariff and Saifullah, 2018; Retnakumar and Kurup, 2021). However, if between 10 and 20 percent of the list entries are deadwood, as my findings from Uttar Pradesh suggest, then the extent of under-enrollment is much more dire than previously thought. Studies relying on comparisons of aggregate data, therefore, cannot capture the true scope of disenfranchisement.

6.2   The Crux of Voter List Maintenance

I argue that the reason for the poor quality of voter lists that I found in my studies is the result of a breakdown of the ECI's voter registration process, specifically, the result of perverse incentives for Booth-Level Officers (BLOs), combined with a lack of oversight mechanisms at higher levels of the electoral administration able to catch such errors. In what follows, I will first provide background on the electoral machinery involved in the voter registration process, and then explain where and why the process breaks down.

To create, update and maintain the voter list, the election commission draws on a hierarchically organized election machinery that deputizes government officials to perform election-related tasks under the ECI's direction and supervision. Figure 8 visualizes the hierarchy of officers involved in creating and maintaining the electoral roll. The ultimate responsibility for the electoral roll lies with the Election Commission of India at the national level. Under the ECI's supervision, a Chief Electoral Officer (CEO) is in charge of the voter list in each state. At the level of the administrative district, responsibility for the voter lists of all Assembly Constituencies contained within a district lies with the District Electoral Officer (DEO).[26] Below the DEO, an Electoral Registration Officer (ERO) is in charge

---

[26] Assembly Constituencies usually nest neatly into administrative district in India. However, while ACs

of the voter list for exactly one Assembly Constituency within the district.[27] The ERO is aided in this task by one or more Assistant Electoral Registration Officers (AEROs). Unlike District Electoral Officers and Electoral Registration Officers, AEROs are not necessarily in charge of a well-specified geographical unit; instead, the ECI has advised that AEROs be appointed based on workload within a constituency, i.e., based on the number of forms to be processed.[28] Finally, at the level of the polling station, a Booth-Level Officer (BLO) is appointed, who is in charge of the localized electoral roll for that polling booth. The BLO is expected to make frequent field visits, to collect forms or help citizens fill out the required forms, to verify the identity of applicants, and to conduct door-to-door surveys at least once a year during revisions to update the voter list. Between the BLO and the AERO, a supervisor acts as a liaison and support; a supervisor usually has not more than 10 BLOs under her, and is expected to not just closely monitor them, but actively support them in filling out and processing forms, conducting door-to-door surveys, or resolving complaints.[29]

The positions and tasks of the commissioners of the ECI, the Chief Electoral Officers, District Electoral Officers, Electoral Registration Officers, and Assistant Electoral Registration Officers are defined in the Representation of the People Act (1950). All three members of the ECI as well as the CEOs are appointed, and hold no other office simultaneously. By contrast, the District Electoral Officer is also simultaneously the District Magistrate, that is, the highest-ranking administrative officer in the district. "When not in their election officer avatar (which is more often than not), the DEOs look after a wide range of activities such as land administration, civil supplies, law and order, licensing and public service delivery, etc." (Quraishi, 2019, p. 65). The ERO and AERO, too, are full-time employees of the district administration with many other responsibilities besides their election-related duties. EROs
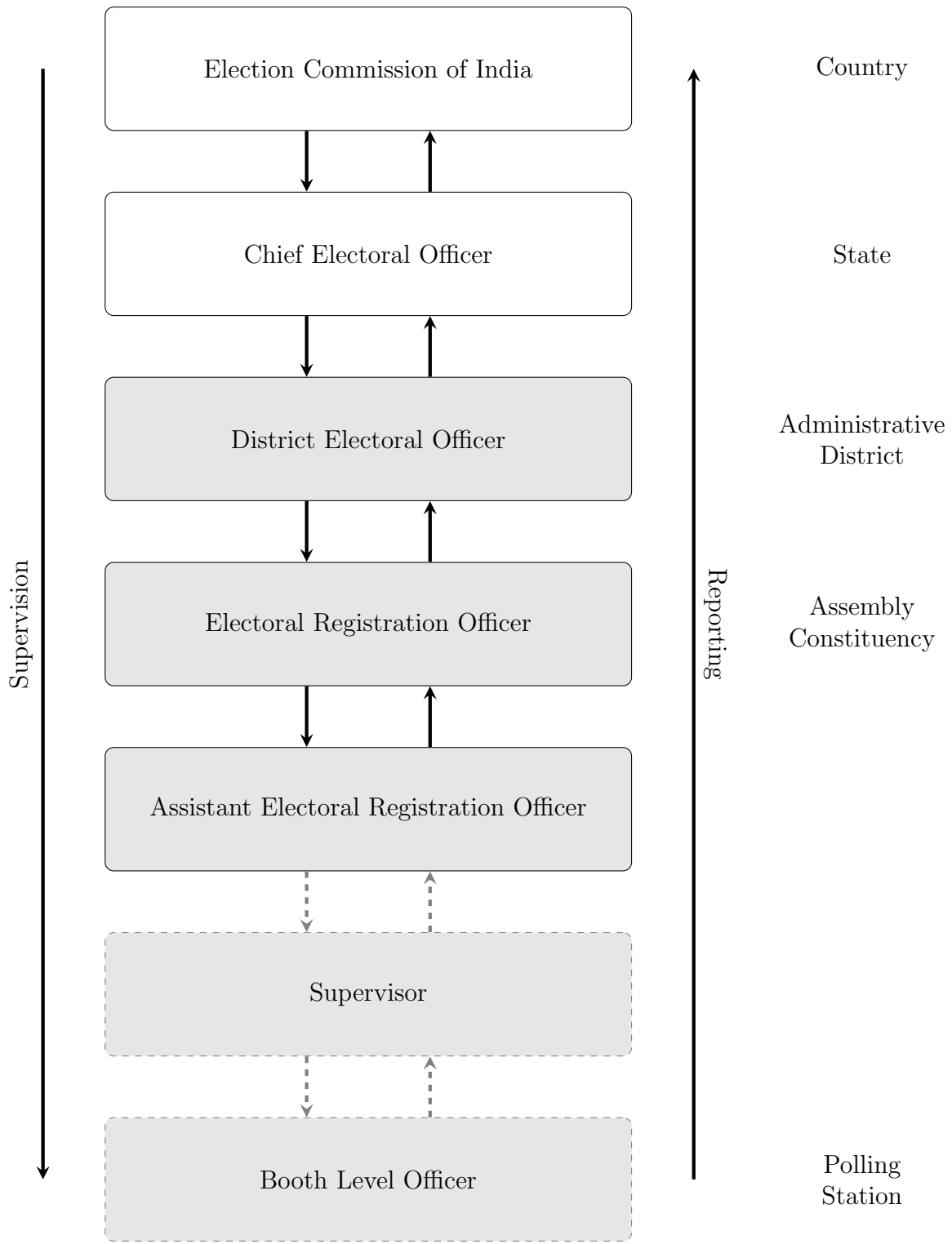
---

nest neatly into Parliamentary Constituencies as well as into districts, PCs and districts do not overlap, and their boundaries often are cross-cutting. In 2023, India had 783 administrative districts, meaning that on average, a district contained a little over 5 ACs (https://theprint.in/india/governance/politics-but-also-grassroots-governance-why-india-has-gained-50-new-districts-since-2020/1751966/).

[27] While EROs ideally are supposed to be in charge of only one AC, by orders from the ECI they can be in charge of up to two.

[28] Manual on Electoral Rolls 2023, p. 28

[29] Manual on Electoral Rolls, p. 22.

Figure 8: Institutional Setup

| Election Commission of India | Country |

Supervision

Reporting

| Chief Electoral Officer | State |

| District Electoral Officer | Administrative District |

| Electoral Registration Officer | Assembly Constituency |

| Assistant Electoral Registration Officer | |

| Supervisor | |

| Booth Level Officer | Polling Station |

might be drawn from among the subdivisional officers within an administrative district, high-ranking officers who, "when not doing election related work, [...] are either busy with developmental work, or approving arms or explosives licenses, or raiding black marketers," among other tasks (Quraishi, 2019, p. 65-66). AEROs are drawn, for example, from among the ranks of Tehsildars or Block Development Officers that perform important non-electoral duties in the district administration year round.

Unlike the other officials involved in the preparation of the voter list, the role of the supervisor and Booth-Level Officer are not defined in the Representation of the People Act (1950), but arise from the ECI's power under said law to deputize additional personnel as needed "for the preparation and revision of the electoral roll for the constituency" (Representation of the People Act (1950), Section 13B (2)). That means that while supervisors and BLOs are commonly deployed under ECI directives, their use is not mandated by law and, consequently, their position is less well-defined than that of other officials involved in the preparation of the electoral roll. Booth-Level Officers can be drawn from a wide range of government and semi-government employees, but most commonly are teachers at government schools (particularly in urban areas) or anganwadi workers (particularly in rural areas), that is, workers at rural government-run child care centers.[30]

It is at the level of the Booth-Level Officer, I argue, that mistakes in voter registration are made – either by not enrolling eligible adults living within the catchment area of a polling station, or by not removing those voters that have passed away or moved away. The reasons for this failure lies at least partly in the perverse incentives that BLOs face. These incentives are set, in turn, by the ECI's monitoring system meant to supervise the work of BLOs, which relies entirely on aggregate data and is insufficient to detect underperformance on part of the BLOs. I will elaborate on these claims in turn below.

First, Booth-Level Officers are the most central actor in the creation and maintenance of electoral rolls in India. Unlike superior officers that might rotate frequently, a BLO is

---

[30] Based on availability of qualified workers, however, BLOs could also include electricity bill readers, panchayat secretaries, postmen, or other government or semi-government officials.

permanently assigned to a particular polling station, and therefore permanently in charge of a specific part of the electoral roll for an Assembly Constituency.[31] It is the BLO who is tasked with conducting door-to-door surveys during the annual summary revision of the voter list, in order to determine who should be added to or deleted from the electoral roll in a particular location. The BLO's long-term connection with the area should ideally aid her in identifying individuals who have reached maturity or have newly arrived and, conversely, in identifying those who have died or migrated.

Yet it might be this very long-term familiarity that leads BLOs to neglect their duty to go door-to-door. In interviews, BLOs regularly acknowledged that while they conducted frequent field visits, they did not always conduct full censuses, partly because they assume that they know all residents well enough to be informed of any changes within a household, without the need to proactively knock on every single door. One *anganwadi* worker, who has worked as a BLO for around six years in her current locality, said that she knows all families living in her area and knows which household has a child who is about to turn 18 years old. She added that because all residents know her well, they will call her if they need to make changes to their voter roll entries.[32] A group of three BLOs – all *anganwadi* workers – in an interview was insistent that they regularly conduct door-to-door surveys in their polling station area to update the list. But when pressed on whether they visit *every house* in the locality, even those that they know do not have children who recently turned 18 or got married, they said that of course they only visit those houses where they expect a change, based on their familiarity with the family.[33]

In addition, the ECI's supervision mechanisms of BLOs are ineffective at catching dead-

---

[31] For example, a survey of BLOs working in Bangalore, conducted by the NGO Janaagraha in 2015, found that more than 30 percent of the 106 BLOs interviewed had been in the role for 9 years or more, and 36 percent held the post between 5 and 8 years (p. 30). By comparison, the maximum tenure of an election commissioner is six years, and the average length of a district magistrate's tenure in Uttar Pradesh is about 1.5 years https://www.hindustantimes.com/cities/lucknow-news/average-tenure-of-district-magistrates-goes-up-to-18-months-in-uttar-pradesh-101663181867188.html.

[32] Personal interview, Chhattisgarh, March 16, 2024.

[33] Personal interview, Chhattisgarh, March 17, 2024.

wood on the voter list and, consequently, at inferring the presence of unenrolled adults. They also produce perverse incentives for BLOs. First, higher-ups only assess the overall quality of the electoral roll using aggregates. That is, officers ranging from the AERO to the DEO will use polling-station-wise population projections based on the census, and compare those to the voter lists. Specifically, they check whether there are gaps between the projected adult population and the number of registered voters; whether the gender ratio in the census data matches the gender ratio on the voter list; whether the number of newly enrolled young adults aged 18 or 19 matches census projections for that age cohort; and whether an unusually high number of new voters was added or entries deleted from the list between revisions.[34] As I have demonstrated above, comparing aggregates is not an effective way of spotting deadwood on the voter lists and, consequently, of detecting under-enrollment among the local population. Yet no officer other than the BLO actually conducts door-to-door surveys to check the quality of the voter lists.[35] If the quality of the existing voter list is poor – as was the case not just in my census villages but across most of the 128 locations of the voter survey – then incremental changes are unlikely to remedy that, and the ECI has no mechanism to detect such shortcomings.

Second, the ECI's focus on aggregate numbers and lack of micro-level quality checks produces perverse incentives for BLOs. Superiors aim to match voter lists closely to census-based population projections. But that only requires slight adjustments each year, such as the addition of a few new voters who recently turned 18, and the deletions of a few names because of deaths and migration. One BLO, who holds the job not because he himself works for the district administration but because his wife is the local *anganwadi* worker, told me that before the most recent state elections, he was told by his supervisor that based on population projections, he should add 20 more voters in his locality. To him, that

---

[34] Manual on Electoral Rolls (2023), p. 54, p. 84.

[35] By contrast, officers ranging from the supervisor to the DEO are required to conduct spot checks of newly processes forms, i.e., of new additions to the voter list or of deletions from the voter list. However, that only means that superiors monitor the quality of *changes* made to the electoral roll, not of the current stock of the electoral roll.

meant that after 20 additions, he could stop surveying the village and still be considered a good BLO.[36] In addition, Assistant Electoral Registration Officers are required to conduct audits of the 20 polling stations with the highest number of additions or deletions under their charge, meaning that a thorough cleaning of the electoral roll by a BLO will actually attract critical views from superiors.[37] In more than a dozen interviews with Booth-Level Officers across North India, several also pointed out that deleting a name from the list is comparatively hard, because they either need to obtain a death certificate for the deceased (which is difficult to get in India), or have several family members certify that the person moved away in the case of migrants (which is difficult if the entire family migrated, or hard to manage if the remaining family refuses because they hold out hope that the migrant will return in future). In addition, if the BLO initiates a deletion and someone objects to it – a migrant herself, or a family member of the individual, or even a local politician – the BLO might get reprimanded. Existing incentives, therefore, lead BLOs to focus on adding newly eligible youths to the lists and refraining from deleting names from the electoral rolls. Because of the growing deadwood on the voter lists, however, even their effort to enroll eligible adults will be capped.

Besides a false sense of security because of their long-time assignments, insufficient oversight mechanisms, and perverse incentives, BLOs encounter a range of problems in their duties. All of the ground-level officers I interviewed complained about inadequate pay, long hours, and sometimes rude treatment or apathy on the part of citizens. BLOs are paid 6,000 INR a year ($\approx$ \$72), but many of those interviewed said they either hadn't received their remuneration or they considered it too little money for the effort the job required. Because all BLOs are government or semi-government workers, they have to do their BLO work in addition to their regular jobs. Even though they are supposed to get some time off from their regular job to fulfill their BLO duties, all interviewees said they often work nights,

---

[36] Phone interview, Uttar Pradesh, March 4, 2022.

[37] AEROs are required to spot check the additions and deletions and ask the BLOs a series of questions, not to verify the overall quality of the electoral roll in said polling stations (Manual on Electoral Rolls, 2023, p. 92).

weekends, and holidays when revising the electoral rolls. Some respondents estimated that they spent 100 days out of the past year on their BLO duties, while that number might be even higher during election years. Particularly in urban areas, BLOs regularly complained that citizens would not open the door during surveys; some said that citizens sometimes are rude toward BLOs. These complaints echo findings from other studies of BLOs (Janaagraha 2015).

6.3 Why Women Are More Likely to Be Disenfranchised Than Men

In the village censuses, I found that a significantly higher share of the female entries on the electoral rolls was deadwood than of the male entries;[38] and that, accordingly, a significantly larger proportion of women than of men in the location was disenfranchised (see Figure 9). I argue that traditional marriage customs combined with the decentralized nature of the voter register in India drive the relatively higher disenfranchisement of women.

On the one hand, marriage customs which require women to leave their natal village and move to their husband's residence combine with a decentralized voter list that demands effort to change registrations upon moving to create incentives for families to hold off on enrolling women until after they are married. Once women are married, they are often dependent on their new marital families for support in registering to vote, for example by providing address proofs; empirically, they are less likely to get that support than their husbands. On the other hand, those women that *do* register to vote before marriage are likely to eventually become deadwood on the list: the bureaucratic hurdles associated with changing a localized voter registration mean women (and their families) are unlikely to delete their names from the list when they leave; the lack of incentives for BLOs to thoroughly cleanse voter lists of migrants' names means that the share of female deadwood on the list keeps growing.

---

[38] Recall that Indian voter lists provide an elector's gender, age, her father's or husband's name, as well as a house number that she shares with relatives in addition to the name and voter ID number. I am therefore able to distinguish between deadwood among women on the list and deadwood among men on the list.

Figure 9: Disenfranchisement and Deadwood, by Gender
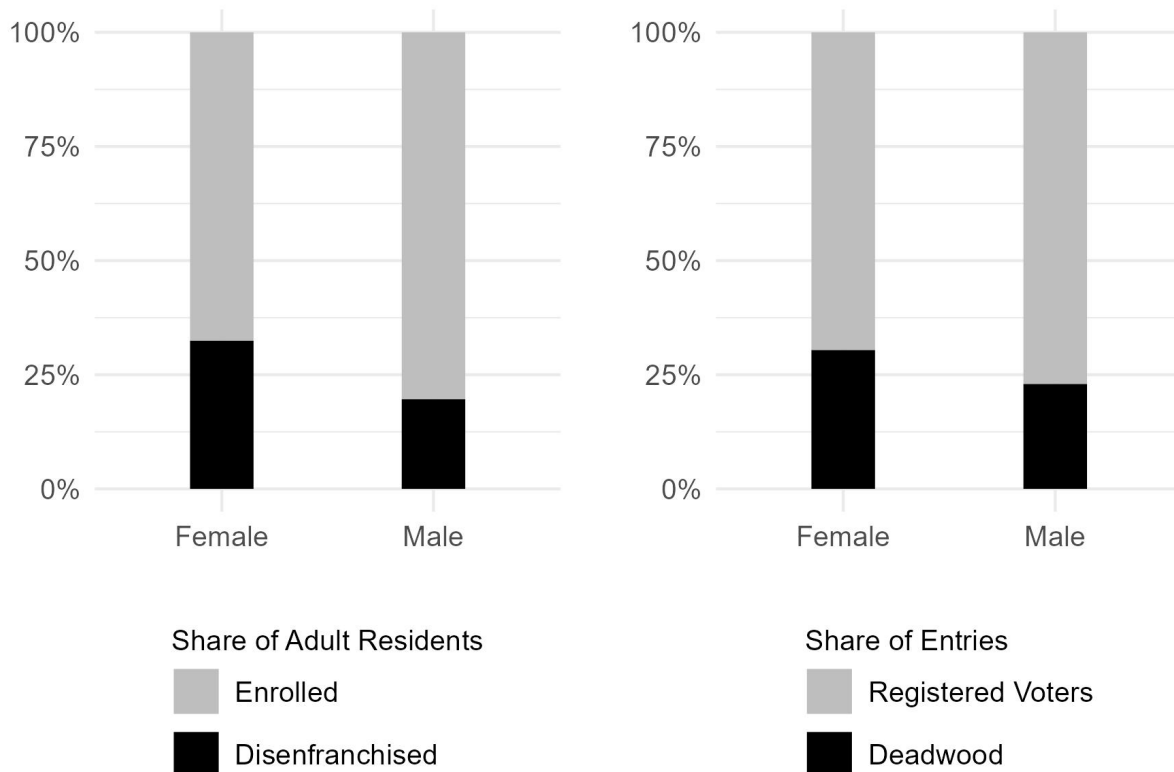
Marriage customs among most Hindus and some Muslims in India prescribe patrilocal village exogamy, meaning that upon marriage women leave the family and village they grew up in and join their husband's household in another location. By contrast, sons usually are expected to stay with their parents and take care of them in old age, with their (future) wives joining them (see, for example, Dube, 1997; Jejeebhoy and Halli, 2005; Brulé, 2020). In fact, women make up the largest group of *permanent* migrants in India, as they tend to permanently relocate upon marriage (Tumbe, 2018, p. 34-35). By contrast, men are much more likely to be *seasonal* or *semi-permanent* labor migrants: they leave their place of origin to work somewhere else from anything between a few weeks (seasonal) to several years or even decades (semi-permanent), while maintaining a homestead – and often leaving behind their wife and kids – in their natal place (Tumbe, 2018, p. 40). While permanent migrants, settling in a new place for good, should be registered to vote at their new residence, semi-

permanent migrants do not usually change their voter registration to their new place of residence. Sometimes, they hold off on changing their registration because they want to maintain the connection with their region of origin and reserve the right to vote there; while other times bureaucratic hurdles make it hard for new arrivals to register to vote in cities (Kumar and Banerjee, 2017; Gaikwad and Nellis, 2021).

The average age at marriage coincides closely with the legal voting age in India: As per the 2011 census, women were, on average, 19.3 years old when they got married (up from 18.3 years in 2001), while men were 23.3 years old (up from 22.6 years).[39] Unlike men – who expect to stay put or, even if they migrate for work, to stay tethered to their natal village – many women expect to permanently move away at that age. Accordingly, women, as well as the families they depend on to help them navigate the registration process, often choose to defer voter registration until after they are married and settled in their marital village. Farzana, who was married with 5 kids when I spoke to her, said that she had voted for the first time in her life in the 2021 local elections in Uttar Pradesh: "I didn't vote before that. I voted when I came here after my marriage."[40] One man, now in his 80s with six grown and married children, told me that unlike for his sons, he had not helped his daughters register to vote before marriage, because "they will get married, what is the point of making their IDs here," referring to the localized voter list for the polling station of the women's natal home.[41] And a Booth-Level Officer who was assigned to a semi-urban slum area said that registering young women as voters sometimes proves harder than registering young men. She reported that occasionally, families do not wish to have their unmarried daughters enrolled when they turn 18, presumably because they expect them to get married and migrate soon.[42]

As the data from the two village censuses shows, the lion's share of women surveyed (76 percent) indeed only enrolled in the voter lists after they got married, while a slight majority of men (55 percent) were registered before marriage (Figure 10). This is not an artifact of
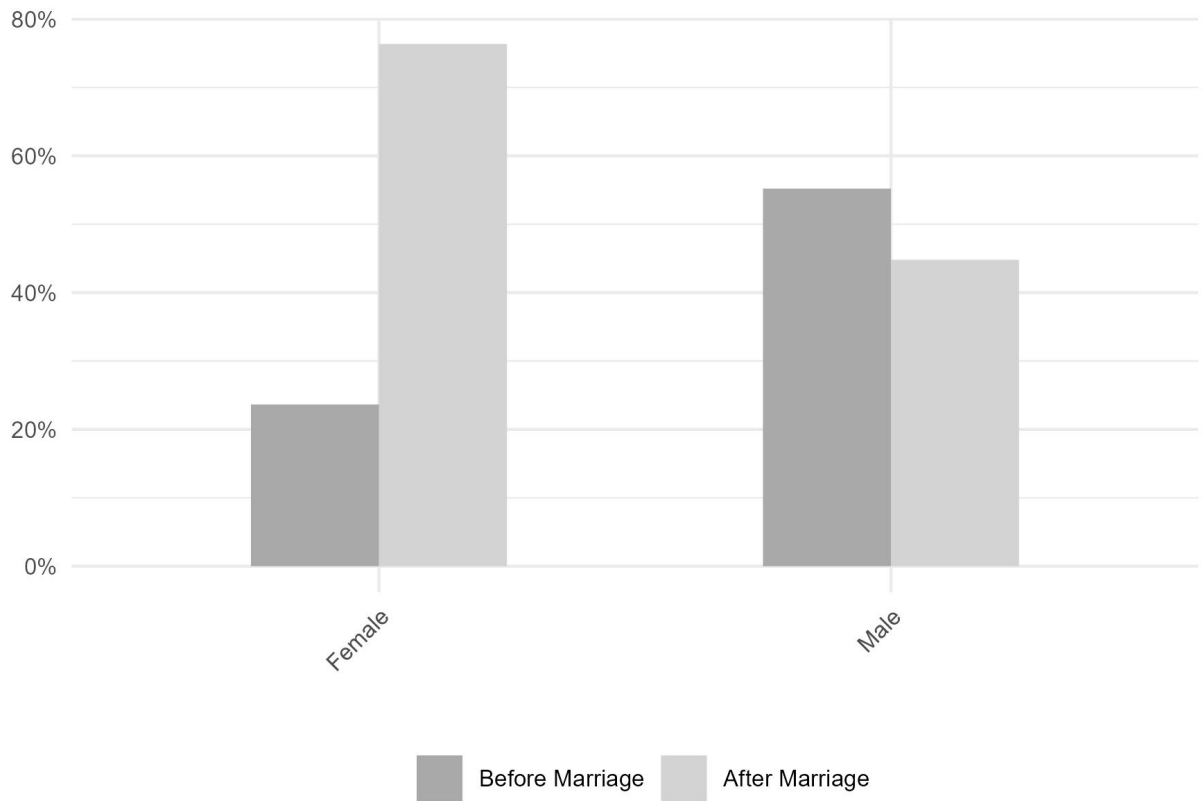
---

[39] See https://pib.gov.in/newsite/PrintRelease.aspx?relid=119871.

[40] Video interview, Uttar Pradesh, February 21, 2022.

[41] Video interview, Uttar Pradesh, November 10, 2021.

[42] Personal interview, Chhattisgarh, March 15, 2024.

Figure 10: Did You Register to Vote Before or After Marriage?

differences in marriage age between women and men, but a sign of differences in registration age. The village census collected information on how many years a person was enrolled; using that and the individual's age, I calculated the age when the respondent first registered to vote. As Appendix Figure 2 shows, women in the two census villages were, on average, older than men when they became registered voters. The mean age for women to enroll was 24.7 years, compared to 23.3 years for men.

However, getting married is not a guarantee of voter enrollment for women. Among ever-married adults – i.e., those who are currently married, widowed, or divorced – there are stark gender differences in registration rates. As Figure 11a shows, 70 percent of ever-married women are registered to vote, but more than 89 percent of men are; the difference is statistically significant (p<.001). In fact, out of 689 currently married women I surveyed across the two villages, 165 (24 percent) were not registered to vote, *even though their*

husband was enrolled. By contrast, I only encountered 16 currently married men who were not registered even though their wife's name was in the voter roll (2.3 percent out of 677 married men surveyed).

Figure 11: Registration Rates Among Ever-Married and Never-Married Adults, by Gender

(a) Ever-Married Adults   (b) Never-Married Adults
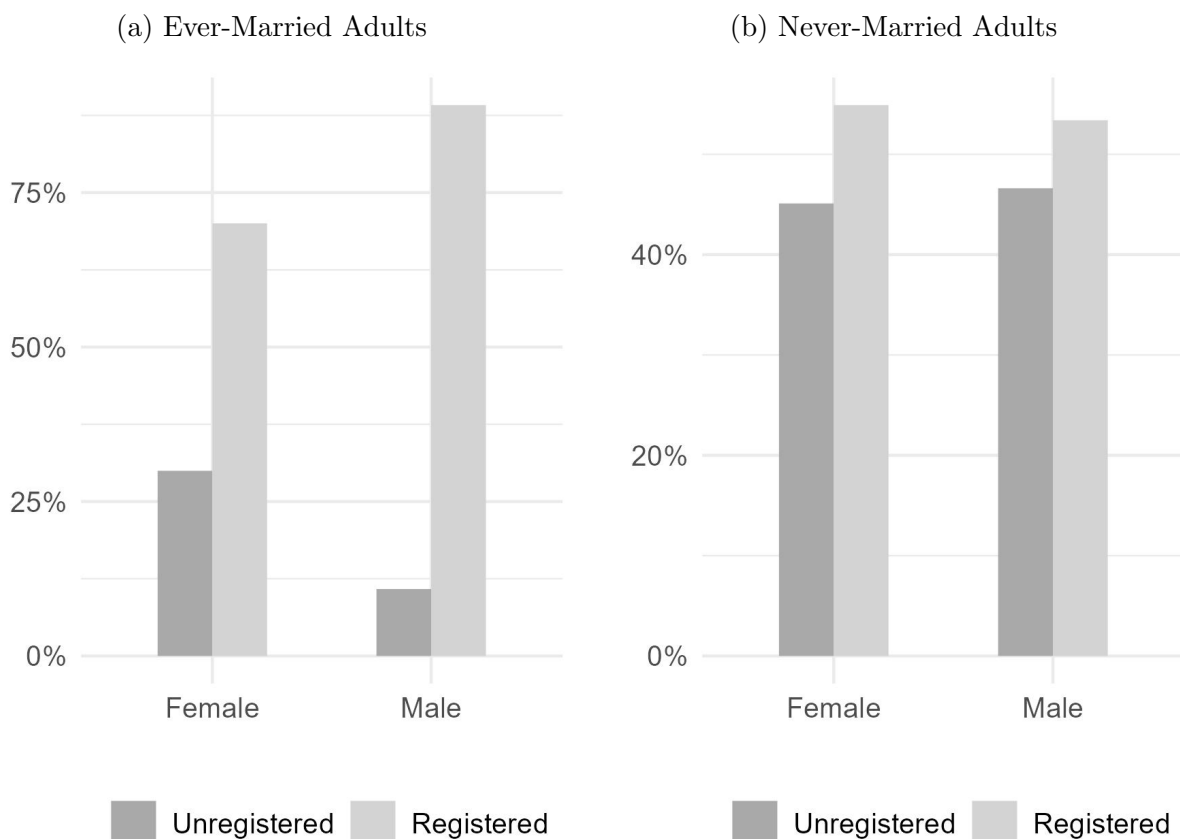
However, while historically, women seem to have been much more likely than men to only register after marriage and to have been, on average, older than men when they first registered, this pattern might be slowly disappearing. In fact, those women who said they had first registered to vote before marriage were much younger than those who said they registered after marriage (see Figure 12). The mean current age of women who had registered to vote even before they got married was just under 32 years old, while those who enrolled only after marriage were on average close to 49 years old. The difference is not that stark for men, where those who registered to vote before marriage were on average 40 years old, and those who enrolled only after marriage averaged 49 years. In addition, there is no gender

gap in enrollment among currently unmarried adults across the two villages, as Figure 11b illustrates. Just under 55 percent of unmarried women and a little more than 53 percent of unmarried men were registered to vote; the difference is not statistically significant.

Figure 12: Age Distribution of Registered Voters by Timing of First Registration
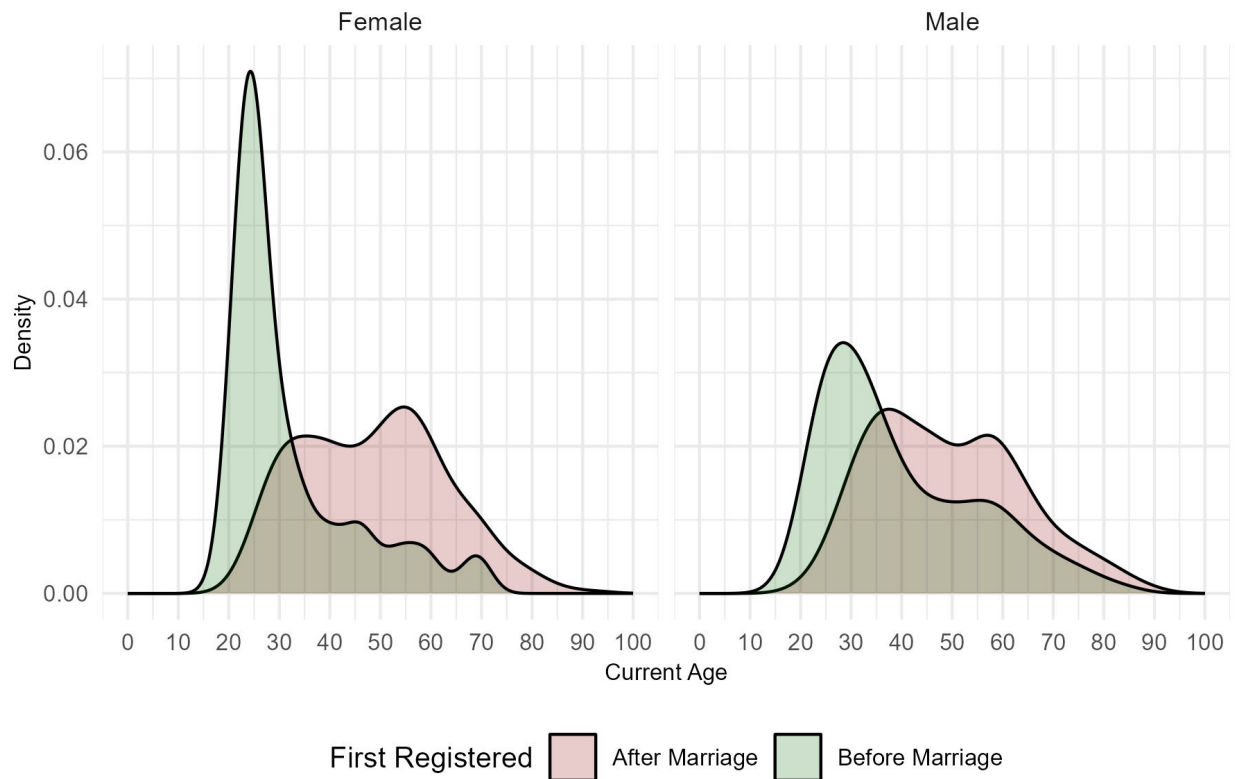
While it is of course normatively positive that women's registration rate is catching up with men's among younger cohorts and unmarried individuals, this also means that the share of deadwood among female entries on the voter list that permanent marriage migration produces will likely grow in future in these two villages.

7   Conclusion

In this article, I have drawn attention to an understudied phenomenon in India: the coexistence of both under-enrollment as well as over-enrollment on the official voter lists. Because

only registered voters – that is, those individuals whose name is contained in the electoral roll – are allowed to vote on election day, unenrolled individuals are *de facto* disenfranchised. This raises important normative questions about the quality of democracy. At the same time, over-enrollment – that is, the presence of names on the official voter list that should not be listed – produces deadwood on the electoral roll. This deadwood not just distorts official voter statistics, by inflating the number of registered voters used to calculate turnout, but also masks the scope of disenfranchisement in the population.

In two full village censuses in Uttar Pradesh, I found that between 20 and 30 percent of adult residents were not registered to vote, despite being eligible under the law. At the same time, between 8 and 11 percent of entries in the voter list were deadwood, representing individuals that had passed away, women who had migrated away permanently in marriage, or clerical errors. Data from another voter survey suggests that deadwood on the electoral roll is a persistent problem across Uttar Pradesh, not just in the census villages.

My findings have policy implications related to the maintenance of electoral rolls, and raise important normative questions.

I argue that aggregate data does not allow us to evaluate the quality of voter registration in India. Comparing village-, constituency-, or state-level population figures with the aggregate number of registered voters runs into the problems the moment that deadwood is present on the list, the extent of which is not visible in the aggregate numbers. Furthermore, I argue that the very fact that aggregates are insufficient to assess the health of the electoral roll is part of the reason why voter lists are flawed: monitoring mechanisms put in place by the Election Commission of India, which is ultimately in charge of creating and maintaining the voter lists, rely entirely on aggregate data. This, in turn, sets incentives for the grassroots officers in charge of conducting field visits to update electoral rolls to only make minimal changes to the voter lists.

The scope of both deadwood on the electoral rolls as well as disenfranchisement among the adult population that I found in my study suggests that micro-level quality checks might

be required in order to improve the health of the electoral roll. This could take the form of rotating BLOs more frequently, or allowing for complete overhauls of the voter list once a new BLO is assigned without the threat of audits for workers who make too many changes to the list. It could also mean having supervisors conduct at least some of the door-to-door surveys that normally solely Booth-Level Officers (BLOs) are tasked with, or for supervisors to at least perform ground-level spot checks of the list. One option for such spot checks would be to involve local notables. As part of the village censuses, I also interviewed the *pradhan* (village council president) of each location and asked him to mark on the voter list all those entries that he thinks should be deleted. On average, the pradhan was able to identify, with minimal effort, 45 percent of the confirmed deadwood on the list (Figure 13). Pradhans were able to point out a sizable number of people who had passed away, as well as some of the women who had gotten married and moved away.

Figure 13: Share of Deadwood on Electoral Rolls That Pradhans Were Able to Find

51
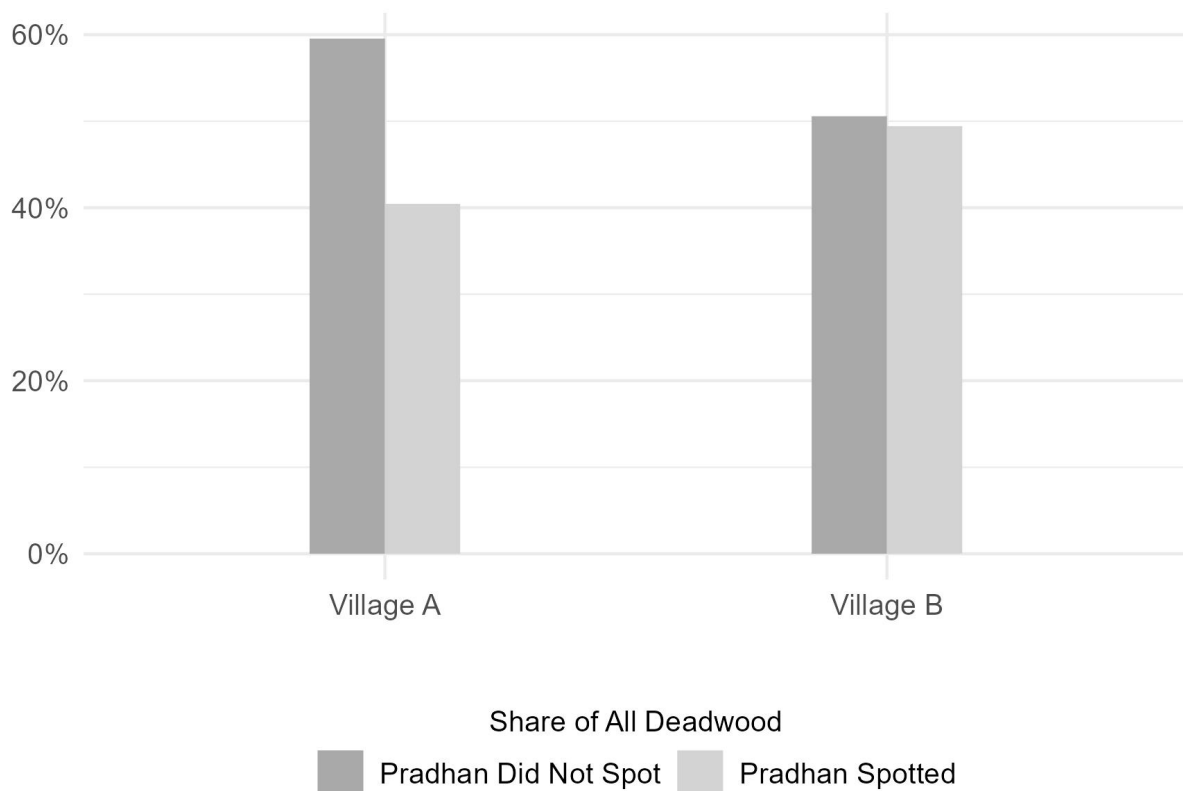
My findings raise important questions about the quality of democracy in India. Observers have chronicled the country's democratic backsliding over the past decade, bemoaning in particular "the diminishing of freedom of expression, the media, and civil society," which was the main reason why India was downgraded from an electoral democracy to an electoral autocracy in the V-Dem Institute's Democracy Report 2021 (Alizada et al., 2021, p. 20). While the independence of the Election Commission of India (ECI) has increasingly come under threat (Alizada et al., 2021; Quraishi, 2023), elections have largely been considered free and fair (House, 2023).[43] However, large-scale underenrollment in the voter list, as I have found in my study, means that a considerable share of Indian citizens, particularly women, are in effect disenfranchised in India (see also Shariff and Saifullah, 2018; Roy and Sopariwala, 2019).[44] Almost 20 percent of adult men surveyed across the two study sites were not enrolled, and more then 32 percent of adult women were unregistered. That means that one-fifth of male residents and one-third of female residents did not get to participate in choosing their government, even though they were eligible under the law. This large-scale disenfranchisement is normatively incompatible with the ideal of democracy (Lijphart, 1997).

---

[43] Although expectations for the 2024 Lok Sabha elections are mooted. Furthermore, Das (2024) found evidence of election manipulation in the 2019 elections by the ruling BJP, particularly in constituencies with a high share of Muslims.

[44] See also Das (2024) for evidence of systematic suppression of voter registration among minorities.

Appendix

Tables

Table A.1: Reasons for Non-Enrollment Among Married Adults

Reason	% Women	% Men	P-Value
Never filled out Form	32.89	43.62	0.022
Enrolled at another PS	19.60	21.81	0.636
Applied but mistake in documents	15.28	7.98	0.025
Don't know what to do to enroll	11.30	14.89	0.306
Applied but never received Voter ID	7.97	3.19	0.051
Don't have required identification	7.31	4.26	0.240
Applied but official refused to accept	3.65	1.60	0.294
Other	1.99	2.66	0.865

Table A.2: Comparing Existing Voters With Potential Deadwood (Deadwood + Undetermined Entries) on the Voter List

	Village A			Village B		
	Voters	Potential Deadwood	P-Value	Voters	Potential Deadwood	P-Value
% Female	45.99	58.39	0.005	42.44	52.34	0.006
Avg Age	42.72	42.97	0.900	45.45	45.15	0.802

Figures

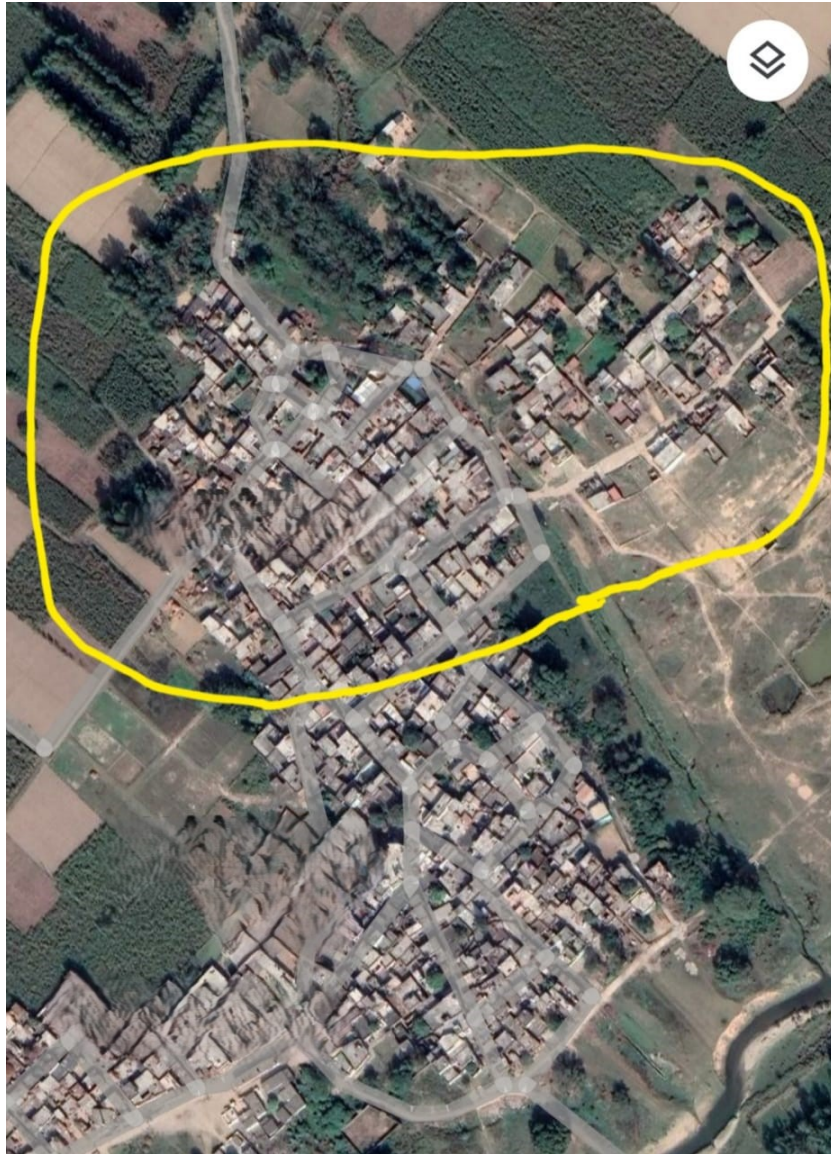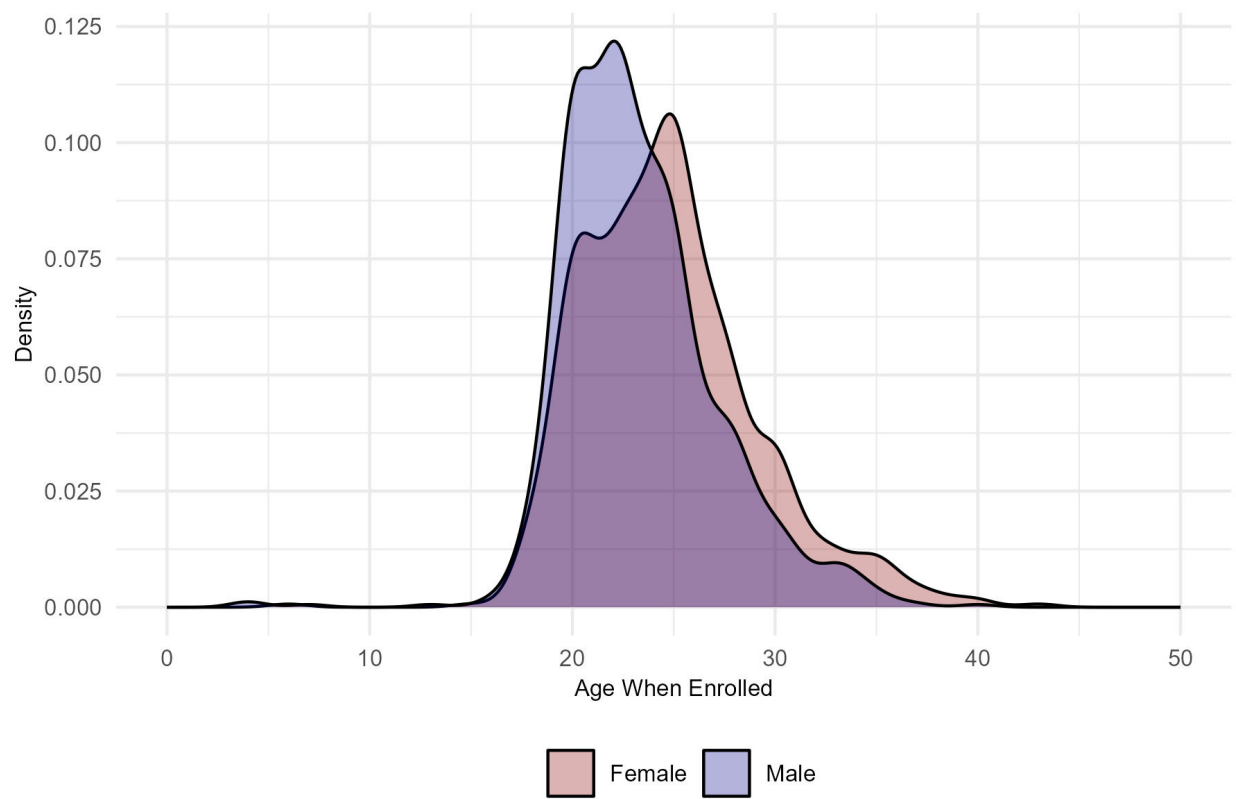Figure 1: Village Census Coverage in Village A

Figure 2: Age When Women Vs. Men Registered to Vote

References

Alizada, N., Cole, R., Gastaldi, L., Grahn, S., Hellmeier, S., Kolvani, P., Lachapelle, J., Lührmann, A., Maerz, S. F., and Pillai, S. (2021). Democracy report 2021: Autocratization turns viral.

Ansolabehere, S. and Konisky, D. M. (2006). The introduction of voter registration and its effect on turnout. *Political Analysis*, 14:83–100.

Braconnier, C., Dormagen, J. Y., and Pons, V. (2017). Voter registration costs and disenfranchisement: Experimental evidence from france. *American Political Science Review*, 111:584–604.

Brulé, R. E. (2020). *Women, Power, and Property: The Paradox of Gender Equality Laws in India*. Cambridge University Press.

Burns, N., Schlozman, K. L., and Verba, S. (2001). *The Private Roots of Public Action: Gender, Equality, and Political Participation*. Harvard University Press.

Das, S. (2024). Democratic backsliding in the world's largest democracy.

Dube, L. (1997). *Women and Kinship: Comparative Perspectives on Gender in South and South-East Asia*. United Nations University Press.

Gaikwad, N. and Nellis, G. (2021). Overcoming the political exclusion of migrants: Theory and experimental evidence from india. *American Political Science Review*, pages 1–18.

Green, D. P. and Gerber, A. S. (2006). Can registration-based sampling improve the accuracy of midterm election forecasts? *Public Opinion Quarterly*, 70:197–223.

Highton, B. (2004). Voter registration and turnout in the united states.

Highton, B. and Wolfinger, R. E. (1998). Estimating the effects of the national voter registration act of 1993.

House, F. (2023). Freedom in the world 2023: India.

Jackman, S. and Spahn, B. (2021). Politically invisible in america. *PS: Political Science & Politics*, 54:623–629.

Jejeebhoy, S. J. and Halli, S. S. (2005). *Marriage Patterns in Rural India: Influence of Sociocultural Context*, pages 172–199. National Research Council of the National Academies.

Joshi, R., McManus, J., Nagpal, K., and Fraker, A. (2023). Are voter rolls suitable sampling frames for household surveys? evidence from india. *Field Methods*, 35:333–348.

Kumar, S. and Banerjee, S. (2017). Low levels of electoral participation in metropolitan cities. *Economic and Political Weekly*, LII:82–86.

Lijphart, A. (1997). Unequal participation: Democracy's unresolved dilemma (presidential address, american political scinece association, 1996). *The American Political Science Review*, 91:1–14.

Majumdar, R. (2024). Reducing prejudice and support for religious nationalism through conversations on whatsapp.

Nickerson, D. W. (2015). Do voter registration drives increase participation? for whom and when? *Journal of Politics*, 77:88–101.

of India, E. C. (2023). Manual on electoral rolls.

Pryor, B., Herrick, R., and Davis, J. A. (2019). Voter id laws: The disenfranchisement of minority voters? *Political Science Quarterly*, 134:63–83.

Quraishi, S. (2019). *An Undocumented Wonder: The Great Indian Election*. Rupa Publications, second edition edition.

Quraishi, S. Y. (2023). *India's Experiment With Democracy*. HarperCollins.

Retnakumar, J. (2009). How far are the electoral rolls in india ideal for a democracy? *Journal of South Asian Development*, 4:137–160.

Retnakumar, J. and Kurup, K. H. (2021). Quality of the electoral rolls in kerala: Issues, concerns and prospects. *Journal of Polity and Society*, 13:153–160.

Roscher, F. (2023). Why women vote: When and how clientelism closes the gender turnout gap.

Rosenberg, J. S. and Chen, M. (2009). Expanding democracy: Voter registration around the world.

Roy, P. and Sopariwala, D. R. (2019). *The Verdict: Decoding India's Elections*. Penguin Random House India.

Rugeley, C. and Jackson, R. A. (2009). Getting on the rolls: Analyzing the effects of lowered barriers on voter registration. *State Politics and Policy Quarterly*, 9:56–78.

Schumacher, S. and Connaughton, A. (2020). From voter registration to mail-in ballots, how do countries around the world run their elections?

Shani, O. (2017). *How India Became Democratic: Citizenship and the Making of the Universal Franchise*. Cambridge University Press.

Shariff, A. and Saifullah, K. (2018). Electoral exclusion of muslims continues to plague indian democracy. *Economic and Political Weekly*, 53.

Singh, U. K. and Roy, A. (2019). *Election Commission of India: Institutionalising Democratic Uncertainties*. Oxford University Press.

Stewart, C. (2019). Too large, too small, or just right? assessing the growth of voter registration rates since the nvra.

Thachil, T. (2017). Do rural migrants divide ethnically in the city? evidence from an ethnographic experiment in india. *American Journal of Political Science*, 61:908–926.

Tumbe, C. (2018). *India Moving: A History of Migration.* Penguin Random House India.

Verma, R., Gupta, P., and Chhibber, P. (2019). Not just political apathy, faulty electoral rolls to blame for lower lok sabha poll turnout. *The Print.*