

## **Gender-sharing between local leaders and frontline workers: Implications for Public Services**

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### **Project overview**

There is strong evidence that the gender of village heads in rural India affects the provision of locally-provided public goods (see Chattopadhyay and Duflo 2004; Besley et al. 2007). Differing preferences over the provision of public goods lead village heads to invest more in those goods they prefer, and which are more relevant to their own gender. But politicians do not act in a vacuum and instead must work with frontline workers to implement local policies. So, while we know that their gender identity has implications for the provisions of local public goods, we lack an understanding of how and when politicians from different genders succeed (Gajwani and Zhang 2015, Andersen et al. 2008, Sathe et al. 2013). In addition to preferences, there is at least one additional key reason for such differences to exist.

Since local public goods are provided by frontline workers, the identity of the frontline worker is also likely to shape outcomes. A shared gender identity between politicians and frontline bureaucrats may facilitate the provision of public goods each gender prefers for a variety of reasons, while differing gender identities may impede the implementation of politicians' preferences. Research from different disciplines has shown the importance of shared identity for coordination due to co-identity favoritism (Eifert et al. 2010; Sharan and Kumar 2019), shared networks, technologies, preferences (Habyarimana et al. 2007; Fearon and Laitin 1996), and shared experiences of socialization and stereotyping that affect their behavior (Eagly 1987). The presence of such mechanisms has clear implications on the two-way interaction between village heads and frontline workers and their gender identity. Yet we know little about how identity facilitates or impedes politician-bureaucrat relations. We, therefore, ask: Does a shared gender identity between village heads (*sarpanch*) and frontline workers yield different outcomes and enable greater representation of politicians' interests and, if so, how does this impact local public service provision?

This research question is of particular importance in a country like India, where at least one-third of village head positions are reserved for women and where local services are typified by the gender of frontline workers. Additionally, frontline workers are responsible for the delivery of nearly all local policies and programs.

We will use the information on shared gender identity between village heads and frontline workers and the leadership attributes of village heads to understand their impacts on:

1. Cooperation between village heads and frontline workers for service delivery, such as joint problem-solving efforts related to service delivery, regularity of visits made by village heads to service centers, or discretionary village support in service delivery.
2. Quantity and quality of service delivery, such as the number of beneficiaries, and observational data on the quality and the presence of various public goods.

Answering our research question requires comparing public service outcomes, such as schooling, across villages where village heads and frontline workers share gender identity and those where they do not. Our identification strategy will rely on two sources of variation. First, we will leverage the random assignment of reservations in political office for the village head position. Second, we will evaluate variation in the gender of service providers for specific public-provided services such as schooling, where service providers are chosen at higher levels than local governments. While the latter can be endogenous in-theory to the village head's identity, in practice, village heads have little power to influence their appointment. To corroborate this, we will collect data on their appointment details, such as the date of appointment which should be prior to village heads' election date for identification purposes.

## **Review of the relevant literature**

While much research has studied the impact of gender quotas on policy outcomes and demonstrated their efficacy, why gender differences manifest in different policies remains a black box. One aspect of this black box regards how male and female politicians work with frontline workers to efficiently provide local public goods (Gajwani and Zhang 2015, Andersen et al. 2008, Sathe et al. 2013). We hope to begin to unpack the entire political ecosystem within which male and female politicians operate to understand how and when they are able to execute their gender's preferred policies. We, therefore, ask: does a shared gender identity with village heads (sarpanch) affect the performance of frontline workers, and if so, how does this impact local public service provision? By studying the importance of shared gender identity between politicians and bureaucrats, we, therefore, expand the existing literature in the following ways:

First, in their seminal paper by Chattopadhyay and Duflo (2004) argue that politicians' gender identities affect policy implementation primarily because of differences in preferences over different public goods. They show that male and female village heads invest in public goods most in line with the preferences of their gender. Others have shown similar effects of caste reservations (Pande 2003; Dunning and Nilekani 2013; Jensensus 2015). However, these services are provided by frontline workers who operate in a local political economy environment and require coordination and cooperation for delivering services effectively (Ruducho et al., 2019). Our study will aim to understand one particular link in the local political economy environment, i.e. that between the frontline workers and their village heads, and how it conditions the substantive representation of gender in policy outcomes. A shared gender identity between the village head

and the bureaucrat likely corresponds to more closely aligned preferences over how public services are delivered, thus, enabling more effective service delivery in line with group preferences.

Second, Beaman et al. (2016) discuss the negative bias of villagers towards the effectiveness of women leaders. The prevalence of such taste-based discrimination against women leaders could affect how these leaders are perceived by their frontline workers, potentially resulting in differential cooperation and support (Purohit, 2021). This suggests that frontline workers with greater bias against women's competence as political leaders may be more likely to impede the policy implementation process or align their behavior with other political stakeholders in the community. Again, a shared gender identity between female village heads and their frontline workers may minimize taste-based discrimination and facilitate village heads' preferred service delivery.

Finally, evidence suggests that the collective action capacity for public good provision is higher where the gender of the leader aligns with the gender composition of the general population (Macarthy and Kilic, 2015). Since a majority of social welfare schemes are implemented through frontline workers, coordination of female leadership with female frontline workers may foster greater support from the wider community of women. These shared gender networks within the community may legitimize and support female leaders in achieving their agendas.

## **Research design**

A key challenge to estimating the effect of shared gender identity between village heads and frontline workers on public service delivery is the need for exogenous variation in the gender of both across villages. Additionally, frontline workers are often responsible for the implementation of only one policy or program. As a result, unpacking whether a shared gender identity enables politicians to implement their preferred policies requires variation in the gender of frontline workers across many different programs.

First, we rely on random variation in the gender of village heads induced by the random allocation of gender reservations in India. As of 1992, the 73rd Amendment of the Indian Constitution mandated women's reservation on at least one-third of all village head seats. The state of Gujarat has further imposed that at least 50% of village head seats be reserved for women. Reservation for women in villages is determined by the state election commission and is as-if random. We will analyze both the reservation status of the village head position and the gender of the village head, instrumented by reservation status.

Second, we rely on two non-random sources of variation in the gender of frontline workers. For many programs, there is little gender variation within positions for frontline workers. For example, nearly all Anganwadi workers or AWW (who provide nutrition services), and all Self-Help Group

or SHG members (who support women empowerment in villages) are women, while nearly all Gram Rozgar Sewak or GRS (who coordinate the village employment program) and contractors of the Public Distribution System or PDS (who provide subsidized food and grains) are men. This makes it challenging to determine whether any observed effects are due to the shared identity between politicians and frontline workers or gendered differences in preference across policies that correlate with frontline worker gender. This does, however, minimize concerns that frontline worker gender is endogenous to politician gender. Holding constant frontline worker gender within various positions, we will compare the effect of politician gender on service delivery. To account for politician preferences, we will evaluate how effects vary based on politicians' filed action plans at the very start of their terms, for which we already have data.

One position, however, exhibits substantial variation in frontline worker gender: that of school teachers and heads. Education is a policy where men and women have shown near-identical preferences over its delivery (Gottlieb et al. 2015). Additionally, most school teachers and heads are hired from outside of the village, for instance, by government bodies such as the Staff Recruitment Selection Committee. So, politicians have a limited role in their selection. Holding constant the type of service being delivered, we will evaluate the impact of shared gender identity on the implementation and delivery of education within villages.

Our work will be focused on the Indian state of Gujarat because of our ability to connect with state policymakers. Two of the PIs in the research team reside in Gujarat and belong to a well-connected institution with the State government. This will ensure our ability to ground the research in the local context and to generate buy-in for data collection and policy feedback.

To measure outcomes, we propose a mixed-methods approach that will enable us to develop a theory of politician-bureaucrat interactions and the process of policy implementation and also evaluate on a larger scale how shared identity shapes these interactions and ultimately service delivery. We, therefore, propose first to conduct a series of qualitative focus groups and interviews to build a theory of politician-bureaucrat interactions and second conduct a large-scale survey of frontline workers and village heads to evaluate the role of shared identity.

## I. Qualitative data collection for theory development

We will qualitatively document the formal and informal interactions between village heads and frontline workers to understand better how gendered relations manifest in the process of service delivery. We will conduct a focus group discussion (FGD) with frontline workers and the village head in each of 20 randomly sampled villages, stratifying on the gender of the village head. These FGDs will aim to uncover the nature of interaction and document the dynamics between frontline workers and village heads. FGDs will be recorded and analyzed both for content and for the exhibited relational dynamics demonstrated during group discussion and deliberation (Karpowitz, Mendelberg, and Shaker 2012). We will also conduct separate in-depth interviews with village heads and 5-6 frontline workers in each village. FGDs and interviews will be transcribed and coded

using thematic analysis (Braun et al., 2019; Braun & Clarke, 2006). We will use the findings from the qualitative data analysis to inform the survey instruments for the subsequent large-scale survey.

Some sample questions to be included in our interview guide focused on frontline workers are:

1. To fulfill your responsibilities as \_\_\_\_ (*insert profession*), who in your village do you collaborate with? What do you usually discuss? How does this collaborative work help? How often do you interact with the Gram Pradhan and for what reasons? Do you feel that your interactions with them are positive and supportive? (Probe: Is there any fixed protocol to follow to manage such interactions?)

2. What are the different ways in which you receive support from Gram Pradhan? (administrative/managerial/execution etc.)

Probe: communication, execution, releasing orders, organizing events, on-service orientation, feedback. Any *other*?

*Does it sometimes differ from the way it is described in program documents? (Ask for examples.)*

*Is the support received enough? Is it timely? Is it helpful?*

*Is there any other kind of support that you wish you could get?*

## II. Evaluating the role of shared gender identity on public service implementation

Following the qualitative data collection, we will conduct a survey of frontline workers and village heads in 130 villages to measure implementation and delivery outcomes and statistically analyze the impact of shared gender identity between village heads and frontline workers using the aforementioned empirical strategy. Specifically, we will randomly sample 130 villages, stratifying on the gender of village heads and of the educator, from a representative sample of five districts across five administrative divisions of Gujarat.<sup>1</sup>

In each village, we will survey the village head and five frontline workers. The five frontline workers will include one educator, the gender of which will vary across villages, two female frontline workers in female-dominated domains including the AWW and SHG members, and two male frontline workers in male-dominated domains including the GRS and the PDS contractor. This yields a total sample of 780 respondents across 130 villages.

In our survey, we will focus on the following sets of outcomes:

(a) The nature of interactions between frontline workers and village heads: Purohit (2021) highlights that higher-level bureaucrats treat village politicians differently as a result of their gender. It is not difficult to imagine that politicians might, in turn, treat frontline workers differently based on gender or vice versa. We, therefore, seek to understand the relationship

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<sup>1</sup> Given that this is a pilot project, we plan to further expand our study through additional funds from other sources.

between shared gender identity and the ways that village heads and frontline workers interact. For instance, the frequency of interaction, the role of the village head in policy implementation, and the structure of communication about program implementation.

(b) The processes of service delivery: The design of some services, while involvement in others is more discretionary on behalf of village heads. We will document detailed processes of service delivery at the village level and the involvement of village functionaries, including administrative barriers to implementation on both sides, the process of procurement and fund access, and a mapping of all individuals involved in the implementation process. This will help us clearly understand and distinguish between formal and informal processes of service delivery and the roles played by different individuals locally.

(c) The outputs of service delivery as observed by frontline workers and village heads: We will ask village heads and frontline workers to report on their actual delivery of services. For instance, for schooling outcomes, we will collect data on the number of school children enrolled and attendance. We will collect this information from frontline workers for their respective services. Where possible, we will validate these reports with administrative data.

(d) Quality of services: Finally, we will train enumerators to use observational methods to collect additional objective measures of service delivery such as the upkeep of health centers and schools, or availability of resources such as food and water. We will also aim to collect administrative data on village-level outcomes in sampled villages from the village government. Examples of such outcomes are the number of beneficiaries served by Anganwadi centers, school attendance and enrollment rate, and the number of job cards created under the Employment Guarantee Scheme.

Drawing on the framework developed in Habyarimana et al. (2007), we will additionally collect data to better understand the mechanism underlying the impact of shared gender identity, including shared preferences, shared networks, and bias against women. More specifically, we will measure:

(a) Shared preferences: Chattopadhyay and Duflo (2004) have established that preferences for public goods vary across village head genders. We will map the preferences of village heads and frontline workers with regards to both their desired outputs and their desired processes of governance using both direct survey questions and conjoint survey experiments.

(b) Shared networks: Common networks may enable more effective collaboration as a result of either easier information flows or more likely social sanctioning. If female politicians are better connected outside of their official positions, then they may be more likely to cooperate in their official roles. We will measure the village networks of village heads and frontline workers through a series of name generators to understand how their network overlaps.

(c) Gender bias: Shared gender identity might improve the delivery of services when men hold biased views against women's competence as bureaucrats. To test for this, we will conduct an

implicit association test with frontline workers and village heads to measure the degree to which each reveals implicitly biased attitudes against women's competence.

### **Relevance of the proposed study**

In general, this study will fill the missing gap in the literature on the dynamics between sarpanch and FLWs and the implications for public service delivery. The findings from this study will be useful to policymakers through the identification of how to most effectively navigate relational dynamics between sarpanch and FLWs in the delivery of public services. We will also search for on-the-ground examples for policy learning.

A key objective behind the reservation for women in the Indian village councils in 1993 was to promote gender inclusion into local politics and governance. The intended outcome of the policy was to ensure that local service delivery better reflected the needs and interests of women. Evidence on the efficacy of the reservation policy is mixed. Sufficient studies have been carried out to understand the role of elected women heads as effective leaders. But we lack an understanding of how they function in a village setting, particularly when it involves service providers. It is time to incorporate the local politics and the local service provision, in the same frame to assess them jointly in their local contributions. This aspect of convergence across different village actors is important to determine their role in contributing to local growth through local governance.

Our study's aim is to understand the role of gender in the interactions between village heads and frontline workers. The findings from our study will be helpful in generating evidence on these dynamics and thereby informing policies to ensure effective interactive processes between local politicians and the frontline workers. Furthermore, these findings will be important to add to our understanding of ways in which the gender gap in service provision can be addressed and women's substantive representation ensured. We will explore examples of what works and what doesn't in the politician-bureaucrat relationship. In the future, we plan to take our findings to policymakers and help them make decisions to improve local service delivery. Our research team is associated with a public-funded university and has a good presence in Gujarat state. That will help us establish relationships with local policymakers.

## Project Timeline and Expected Outcomes

| Expected outcomes/milestones                                     | Date (Date, month, year) |
|--|--------------------------|
| IRB approval from IIT Gandhinagar institutional ethics committee | 30-Aug-22                |
| Training of field assistants                                     | 01-10 November 2022      |
| Start of qualitative data collection                             | 15-Nov-22                |
| Start of survey data collection                                  | 15-Jan-23                |
| Interim report   | 25-Mar-23                |
| End of data collection   | 30-Apr-23                |
| Data analysis and results  | 15 June 2023             |
| Submission of the final report                                   | 30-Jun-23                |

## Revised budget (period-wise)

| Sl no | Item group details               | Item head details   | Budget period 1 | Budget period 2 | Budget period 3 | Total  | Rationale   |
|-------|----------------------------------|---------------------|-----------------|-----------------|-----------------|--------|---|
| 1     | Salary/Payment to research staff | RA                  | 0               | 75000           | 0               | 75000  | For supporting surveys and data cleaning, 1 RA for 3 months                               |
| 2     | Salary/Payment to research staff | Field investigators | 0               | 245000          | 0               | 245000 | Salary for surveyors for qualitative and quantitative data collection for 260 person-days |



|    |                           |                          |             |               |              |               |  |
|----|---------------------------|--------------------------|-------------|---------------|--------------|---------------|--|
| 3  | Fieldwork                 | Accommodation and food   | 0           | 240000        | 0            | 240000        | Stay and meal charges for surveyors, in lieu of per diem. 260 survey-days              |
| 4  | Fieldwork Data collection | Outstation travel        | 0           | 60000         | 0            | 60000         | Conveyance for traveling from district headquarters to villages. Rs 240 per survey day |
| 5  | Data entry                | Transcription            | 0           | 0             | 35000        | 35000         | Qualitative data transcription   |
| 6  | Data entry                | Translation              | 0           | 0             | 35000        | 35000         | Qualitative data translation   |
| 7  | Fieldwork                 | Others                   | 0           | 24500         | 0            | 24500         | Training of surveyors  |
| 8  | Fieldwork                 | Honorarium               | 6000        | 6000          | 0            | 12000         | PI travel  |
| 9  | Overhead                  | Institutional researcher | 600         | 65050         | 7000         | 72650         | Overhead   |
| 10 | <b>Total</b>              |                          | <b>6600</b> | <b>715550</b> | <b>77000</b> | <b>799150</b> |  |

## References

Andersen, S., Bulte, E., Gneezy, U., & List, J. A. (2008). Do women supply more public goods than men? Preliminary experimental evidence from matrilineal and patriarchal societies. *American Economic Review*, 98(2).

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*.

Braun, V., Clarke, V., Hayfield, N., & Terry, G. (2019). Thematic analysis. In *Handbook of Research Methods in Health Social Sciences*.

Chattopadhyay, R., & Duflo, E. (2004). Women as Policy Makers: Evidence from a Randomized Policy Experiment in India. *Econometrica*, 72(5), 1409–1443.

Beaman, L., Chattopadhyay, R., Duflo, E., Pande, R., & Topalova, P. (2009). Powerful Women: Does Exposure Reduce Bias? *The Quarterly Journal of Economics*, 124(4), 1497–1540.

Besley, T., Pande, R., & Rao, V. (2007). Political Economy of Panchayats in South India. *Economic and Political Weekly*, 42(8), 661–666

Dunning, T., & Nilekani, J. (2013). Ethnic quotas and political mobilization: Caste, parties, and distribution in Indian village councils. *American Political Science Review*, 107(1).

Eagly, A.H. (1987). *Sex Differences in Social Behavior: A Social-role interpretation* (1st ed.). Psychology Press.

Eifert, B., Miguel, E., & Posner, D. N. (2010). Political competition and ethnic identification in Africa. *American Journal of Political Science*, 54(2).

Fearon, J. D., & Laitin, D. D. (1996). Explaining Interethnic Cooperation. *The American Political Science Review*, 90(4), 715–735.

Gajwani, K., & Zhang, X. (2015). Gender and public goods provision in Tamil Nadu's Village Governments. *World Bank Economic Review*, 29(2).

Gottlieb, J., Grossman, G., & Robinson, A. L. (2015). Do men and women have different policy preferences, and if so, why? Determinants and implications of 'good' and 'bad' gender gaps in Africa. *Afrobarometer Working Paper*, No. 153.

Habyarimana, J., Humphreys, M., Posner, D., & Weinstein, J. (2007). Why Does Ethnic Diversity Undermine Public Goods Provision? *American Political Science Review*, 101(4), 709-725.

Jensenius, F. R. (2015). Development from representation? A study of quotas for the scheduled castes in India. *American Economic Journal: Applied Economics*, 7(3).

Karpowitz, C. F., Mendelberg, T., & Shaker, L. (2012). Gender inequality in deliberative participation. In *American Political Science Review* (Vol. 106, Issue 3).

Mccarthy, N., & Kilic, T. (2015). The nexus between gender, collective action for public goods and agriculture: Evidence from Malawi. *Agricultural Economics (United Kingdom)*, 46(3).

Pande, R. (2003). Can mandated political representation increase policy influence for disadvantaged minorities? Theory and evidence from India. *American Economic Review*, 93(4).

Purohit, B (2021). Can Female Politicians Get Work Done? Evidence of Implicit and Explicit Bias from Bureaucrats in India. *Working paper*  
([https://www.dropbox.com/s/lbh99lfkmhbe74w/Purohit\\_Can%20Female%20Politicians%20Get%20Work%20Done\\_20210702.pdf?dl=0](https://www.dropbox.com/s/lbh99lfkmhbe74w/Purohit_Can%20Female%20Politicians%20Get%20Work%20Done_20210702.pdf?dl=0))

Ruducha, J., Hariharan, D., Potter, J., Ahmad, D., Kumar, S., Mohanan, P. S., Irani, L., & Long, K. N. G. (2019). Measuring coordination between women's self-help groups and local health systems in rural India: A social network analysis. *BMJ Open*, 9(8).

Sathe, D., Klasen, S., Priebe, J., & Biniwale, M. (2013). Can the female sarpanch deliver?: Evidence from Maharashtra. *In Economic and Political Weekly* (Vol. 48, Issue 11).

Sharan, M., & Kumar, C. (2019) Something to Complain About: How Minority Representatives Overcome Ethnic Barriers. Job Market Paper  
([https://scholar.harvard.edu/files/mrsharan/files/something\\_to\\_complain\\_kumar\\_sharan\\_ethnic\\_div\\_3\\_2.pdf](https://scholar.harvard.edu/files/mrsharan/files/something_to_complain_kumar_sharan_ethnic_div_3_2.pdf))