

WHY POLITICAL RESERVATIONS?

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Abstract

Many countries are amending their political systems to set aside positions to groups, such as women and racial or religious minorities, that are perceived as being disadvantaged. Using evidence from India, this article assesses the case for these reservations. (JEL: H4, O15)

Several countries have introduced procedures—either explicit quotas or forms of gerrymandering—to ensure political representation of disadvantaged groups, such as women or ethnic minorities. In 2001, quotas for women in parliaments were in force in more than 30 countries.

In India, seats are reserved for historically disadvantaged groups (Scheduled Castes, or SC, and Scheduled Tribes, or ST) in federal or state legislative assemblies and for both historically disadvantaged groups and women at all levels of the Panchayat system, the system of decentralized decision making.

On the basis of evidence accumulated about the Indian experience, this paper reviews the case for reservation.

1. Institutions: The Panchayat System, and Reservations

The Panchayat is a system of village-level (Gram Panchayat), block-level (Panchayat Samiti), and district-level (Zilla Parishad) councils, whose members are elected by the people, that are responsible for the administration of local public goods. Each Gram Panchayat (GP) encompasses between 1,000 and 10,000 individuals in a group of villages (between 1 and 15). The GPs do not have jurisdiction over urban areas, which are administered by separate municipalities. Voters elect

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a council and, either directly or indirectly, a Pradhan (chief) and an Upa-Pradhan (vice-chief). Candidates are generally nominated by political parties but must be residents of the villages they represent. The council makes decisions by majority voting (the Pradhan does not have veto power). The Pradhan, however, is the only member of the council with a full-time appointment. The GP administers local public goods in the area, monitors civil servants, and is responsible for identifying the beneficiaries of various transfer programs.

In 1992, the 73rd Amendment of the Constitution of India (which gave new powers to the Panchayats) provided that one-third of the seats in all Panchayat councils, as well as one-third of the Pradhan positions, must be reserved for women. Seats and Pradhan positions were also reserved for the two disadvantaged minorities in India, Scheduled Castes and Scheduled Tribes, in the form of mandated representation proportional to each minority's population share in each district. Reservations have been fully implemented in all major states except Bihar and Uttar Pradesh.

A key feature of the reservation policy in the Panchayat is that the seats to the reserved were randomly allocated. Since GPs were randomly selected for reservation, differences between investment decisions by reserved versus unreserved GPs can be confidently attributed to the policy rather than to other differences—in the types of villages that decide to elect women, for example.

The reservation policy was expected to alter the distribution of public goods in favor of the disadvantaged groups. Three conditions are necessary for this to happen: first, the preferences of the different groups must differ. Second, the identity of the policymaker must affect the distribution of public goods, and policymakers favor members of their groups. Third, without reservation, members of weaker groups must be underrepresented. We consider these three factors in turn.

2. Preferences over Public Goods Differ

If the preferences of members of the group that are the potential beneficiaries of reservations and that of the rest of the population do not differ on average, then there will be no effect of reservation.

Many goods whose allocation is influenced by political decision makers are what Besley et al. (2004) call “low spillover goods”. These are goods such as transfers, ration cards, and water connections that benefit only their direct beneficiaries. It is safe to assume that, *ceteris paribus*, most groups will prefer a higher probability of receiving these transfers themselves. Therefore, SCs and STs will have a stronger preference for transfers targeted to them than the rest of the population. To the extent that SCs and STs are poorer, they will probably also have a stronger desire for nontargeted transfers than the non-SC population.

Another set of decisions the GP makes concerns the types of public goods that should be built or repaired and where they should be located. The list of

these goods includes drinking water and irrigation wells, education and health infrastructure, and roads. Since the SC, ST, and the rest of the population often live in separate hamlets, and since the benefits of these goods are quite localized (a well located in a hamlet a kilometer or so away is not quite so useful), there is also little doubt that each group will prefer to have the goods localized in their hamlet rather than in one inhabited by another group.

The case of women is a priori less clear. A large literature focusing on decision making within the household has shown that women and men do different things and have different preferences. However, a household where members could promise to each other that they would vote in a certain way ought to cast their votes in such a way as to maximize the expected value of the bundle of policies chosen for the household as a whole. A member who benefits more from the policy can supply compensation for the other's vote. In this world, there would be no difference in the expressed policy preferences of (married) women and men.

However, this model is probably not an accurate representation of the world. There is ample evidence showing that the household does not behave as an efficient unit (see Udry 1994; Duflo and Udry 2004). In particular, household members appear to be reluctant to make investments that may be efficient *ex ante* but would result in a reduction in their share of household income *ex post*.

Empirically, women and men seem to have different policy preferences. A large literature focusing on the United States discusses the "gender gap", whereby women are more liberal than men (Lott and Kenny 1999; Edlund and Pande 2001). In West Bengal and Rajasthan, we collected a proxy of political preferences, collecting data on issues formally raised to the Pradhan by both men and women in the previous six months (Chattopadhyay and Duflo 2004c). We found that women and men are concerned about very different types of public goods. For example, in 31% of the villages, women asked a question about drinking water, but only in 17% of the villages did men ask such a question. Women are also more likely than men to ask about roads (31% versus 25%). Conversely, 12% of the men asked about education, but only 6% of the women. In Rajasthan, 54% of the women and 43% of the men asked about water. In contrast, 13% of the women and 23% of the men asked about roads.

3. Leader's Group Identity Affects Public Goods Allocation

Even if the potential beneficiaries of reservations have different political preferences than the majority, this would not itself be sufficient to ensure that reservations have any impact as long as candidates can commit to a policy platform in advance. The elected candidate would be the one who commits to the policy that the median voter prefers (Downs 1957).

In practice, reservations do lead to a shift in the allocation of public expenditures. Further, this shift appears to be in the direction of the preferences expressed by the member of the group that benefits from the reservation.

Pande (2003) found that reservations of seats for SC and ST in the state legislative assemblies led to an increase in transfers targeted to these groups. After controlling for the direct impact of the fraction of the population that is SC and ST in the state, a 1% rise in the fraction of seats that is reserved to SC in the state legislature is associated with a 0.6% increase in job quotas for SC. A 1% rise in the fraction of seats that is reserved to ST in the state legislature is associated with an increase of 0.8 percentage points in the share of total state spending that is devoted to welfare programs targeted to ST.

At the Panchayat level, Besley et al. (2004) found that reservation of a leadership position for a SC or ST increases (by about 7 percentage points) the chance that a SC or ST household in that village would have access to a toilet, an electricity connection, or a private water connection via a government scheme.

Chattopadhyay and Duflo (2004a, 2004b) used a survey that maps where public goods are located within a village. Using this data, they were able to compute the share of goods built in the SC hamlet. They found that, out of all repair or construction of public goods in a given village, the share going to SC hamlets is on average 11% larger when the village is located in a hamlet reserved for SC, and this difference is highly significant (the *F*-statistic for the joint difference across all public goods is 7.146).

Chattopadhyay and Duflo (2004c) used the same survey to examine the impact of reservations for women on the types of public goods provided. If the issues that were brought to the Panchayat are a reasonable proxy for women's and men's preferences, then one would expect that, in West Bengal, there would be more investment in water and roads in Panchayats where the position of Pradhan is reserved for women and less investment in schools. In Rajasthan (where schools are not under the purview of the Panchayat), one would expect more investment in water in GPs reserved for women and less investment in roads. Table 1 shows the results for five broad classes of public goods. As expected, there is more investment in water and roads in West Bengal and less in schools (though this number is not significant at the village level). In Rajasthan, there is more investment in water but less in roads. A formal test showing that the investments in different kinds of public goods shift in the direction indicated by the highest difference between the number of complaints brought by men and women is presented in Chattopadhyay and Duflo (2004c).

These results all go in the same direction: reservation of a seat affects public goods allocation to the favor of the group that benefits from the reservation. Of course, all these comparisons are made between reserved and unreserved constituencies in a system where reservations exist. It is still possible that, overall, reservations lead to a "cycling" of public goods provision, so that the group

TABLE 1. Effect of women's reservation on public goods investment.

Dependent variables	West Bengal			Rajasthan		
	Mean, reserved GP (1)	mean, unreserved GP (2)	Difference (3)	Mean, reserved GP (4)	mean, unreserved GP (5)	Difference (6)
VILLAGE LEVEL						
Number of drinking water facilities newly built or repaired	23.83 (5.00)	14.74 (1.44)	9.09 (4.02)	7.31 (0.93)	4.69 (0.44)	2.62 (0.95)
Condition of roads (1 if in good condition)	0.41 (0.05)	0.23 (0.03)	0.18 (0.06)	0.90 (0.05)	0.98 (0.02)	-0.08 (0.04)
Number of Panchayat-run education centers	0.06 (0.02)	0.12 (0.03)	-0.06 (0.04)			
Number of irrigation facilities newly built or repaired	3.01 (0.79)	3.39 (0.8)	-0.38 (1.26)	0.88 (0.05)	0.90 (0.04)	-0.02 (0.06)
Other public goods (ponds, biogas, sanitation, community buildings)	1.66 (0.49)	1.34 (0.23)	0.32 (0.48)	0.19 (0.07)	0.14 (0.06)	0.05 (0.09)
Test statistics: difference jointly significant (p. value)			4.15 (0.001)			2.88 (0.02)

Notes:

1. Standard errors in parentheses.
2. In West Bengal, there are 322 observations in the village level regressions, and 161 in the GP level regressions. There are 100 observations in the Rajasthan regressions.
3. Standard errors are corrected for clustering at the GP level in the village level regressions, using the Moulton (1986) formula, for the West Bengal regressions.

currently in power grabs as much as they can while it lasts. However, these results do establish that the group identity of the decisionmaker matters. To the extent that this is the case, and since reservation clearly has led to a sharp overall increase in the number of SCs, STs, and women who are elected, the net effect of the reservation policy on the share of public goods going to these must be positive—even if it is actually somewhat less pronounced than what these results might suggest.

4. Without Reservations, Weaker Groups Are Not Represented

Given that women, SCs, and STs all have a right to run for elections and to vote, and given that a politician's identity matters for public goods provision, why is government intervention needed to make sure that each group is adequately represented in the Panchayat?

In practice, very few women, SCs, or STs are elected without reservations. In the GP of the two districts in West Bengal and Rajasthan that are not reserved for women, 6.5% and 1.7% of Pradhans are women, respectively. In West Bengal, 7.5% of the GPs that are not reserved for SCs have a SC Pradhan. Further, in the district we surveyed in Rajasthan, at the second Panchayat election (in 2000) not one of the women who was elected on a reserved seat in 1995 was reelected.

Part of this is clearly due to their reluctance to run for office: 33% of the female Pradhans in West Bengal say that they will not run again at the next election. In rural areas in India, literate women (who can run for office) come from middle-class backgrounds, where it is frowned upon for a woman to work outside the home, let alone to run for office.

Another factor is whether or not political parties will field candidates from disadvantaged groups if nothing forces them. In West Bengal, 26% of women say they will run “if their party asks them”. As it turns out, their party is not likely to ask women, SCs, or STs to run for unreserved seats. Members of the lower castes and women are underrepresented in political parties in India (Chhibber 1999). Pande (2003) shows that, if a candidate's identity matters for public allocation, then political parties where minorities are underrepresented will also tend to field a small number of minority candidates.

The voters constitute the last factor. They may be biased in their evaluation of the performance of women and minorities. Experimental evidence has shown that discrimination against women and minorities is pervasive. For example, Goldin and Rouse (2000) found that there was a substantial increase in the evaluation of the performance of female musicians at a symphonic orchestra after a screen was introduced that concealed the musician from the judge. Bertrand and Mullainathan (2004) found that people with Black-sounding first names are significantly less likely to be called back for interviews than people with White-sounding names.

In a study of 53 village Panchayats in Rajasthan and Madhya Pradesh that focused on the effect of affirmative action on political participation, Krishna (2003) suggests that respondents in reserved village councils express lower satisfaction with public services, though his finding is not statistically significant. In ongoing work with Petia Topalova (Topalova and Duflo 2000), we use a data set collected by the Public Action Center that combines objective data on the quantity and quality of available public goods with household-level data on bribes and on the satisfaction level regarding different public goods. We matched this data with data reservation for women at the Panchayat level.

The results are presented in Table 2. Columns 1 to 4 focus on quantity and quality of public goods. For India as a whole, we replicate the results found in West Bengal and Rajasthan: there are significantly more public water sources available when the GP is reserved for women. They are also in better repair in Panchayats that are reserved for women, though this difference is not significant. Consistent with the earlier results, we find no other significant pattern in terms of the quantity of public goods. Overall, women provide more public goods, and those goods are of better quality. In this study we also find that women take significantly fewer bribes: on average, villages are 1.6 percentage points less likely to pay a bribe for obtaining a service or to the police when the Pradhan is a woman.

In summary, women policymakers provide goods whose quality and quantity match that of men, and they appear to be less likely to ask for bribes in return. Despite this, villagers are less satisfied with the performance of female leaders than with the performance of male leaders. Column 3 in Table 2 shows the level of satisfaction about each type of service. For all types of service—including water, for which the quantity of service is objectively better in female-headed GPs—respondents are less satisfied if their leader is a woman than if he is man. Overall, villagers are 2 percentage points less satisfied about the public goods in question when their leader is female, and this difference is significant at the 95% confidence level. Although not reported here, this is true both for male and female respondents.

There seems to be a significant cultural barrier to women being recognized as competent policymakers. This may explain why there are so few elected women at the local level in India (despite the existence of a few charismatic female leaders at the top) and thus provides a strong argument for reservation.

5. Do Reservations Adversely Affect the Political System?

Reservations appear to be effective in redistributing goods to disadvantaged groups. However, by restricting the electors' choice set, a reservation policy introduces distortions. Does this appear to adversely affect decision making?

First, if members of disadvantaged groups did not face specific barriers to becoming candidates for public office and if voters systematically selected the

TABLE 2. Effect of female leadership on public goods quality, quantity, and satisfaction.

Dependent variable	Quantity		Quality		Satisfaction	
	Mean (1)	Effect of reservation (2)	Mean (3)	Effect of reservation (4)	Mean (5)	Effect of reservation (6)
Water	20.11 (33.46)	6.393 (3.287)	0.392 (0.189)	0.020 (0.014)	0.835	-0.024 (0.018)
Education	2.51 (1.24)	0.096 (0.085)	0.892 (0.242)	0.015 (0.021)	0.855	-0.013 (0.011)
Transportation	2.26 (1.02)	-0.021 (0.083)	0.306 (0.292)	0.006 (0.025)	0.891	-0.007 (0.016)
Fair price shops	0.77 (0.42)	0.012 (0.029)	0.688 (0.289)	0.023 (0.027)	0.747	-0.022 (0.015)
Public health facilities	1.24 (1.45)	0.100 (0.150)	0.654 (0.352)	0.017 (0.036)	0.803	-0.063 (0.033)
Weighted average (normalized)		0.069 (0.039)		0.016 (0.012)		-0.020 (0.010)

Notes:

1. Standard errors are corrected for clustering at the village level.
2. Controls include state fixed effects and village class dummies.

best candidate for the job, candidates elected under reserved seats would be, on average, worse than those elected under unrestricted seats. The mechanical effect of voters now choosing from a smaller pool of candidates might be reinforced by the fact that these groups have been historically disadvantaged, meaning that the pool from which to choose candidates is, on average, less educated and less experienced. If those characteristics matter, a reservation system may be costly in terms of the competency of potential candidates.

Indeed, data from a survey of all 165 GPs of the Birbhum district in West Bengal (see Chattopadhyaya and Duflo (2004c) for a description) suggests that female Pradhans elected on reserved seats have almost three fewer years of education than men, are less likely to have any political experience, are less likely to have been trained, and so forth. They also come from poorer households and smaller villages than their male counterparts. Likewise, SC Pradhans have less education than non-SC Pradhans, are twice as likely to be poor, and have less political experience.

As we have already shown, however, there is no evidence of fewer or worse public goods in Panchayats headed by women elected on reserved seats.

Second, the reservation system may affect the incentives faced by elected representatives. A Pradhan whose seat is going to be reserved at the next election is a “lame duck”. Because there are rotating reservations both at the Panchayat and the village levels, the reservation system creates many such lame ducks. In Chattopadhyay and Duflo (2004a) we estimate that 75% of former male Pradhans who are neither SC nor ST were prevented from running again because their seat (at the village or Panchayat level) became reserved for a SC, a ST, or a woman. In a system where reelection is otherwise common (37% of Pradhans who can run again have been reelected and where elections are actively used to punish unsatisfactory incumbents (Linden 2004), this could affect the incentives of politicians and lead them to act differently.

In practice, lame-duck incumbents do not appear to behave differently from others. In Chattopadhyay and Duflo (2004c), we showed that the allocation of public goods is virtually identical in GPs where the Pradhan is a lame duck and in GPs where the Pradhan is not. This may have been in part because the system was only in its early days: Pradhans who were lame ducks were as likely to plan on running again as those who were not, suggesting that they did not understand the constraints they were facing.

Third, there is always the danger that, prior to the reservation system, members of disadvantaged groups did not run for election because they really did not want to—for example, because running for office was costly for them. If this cost is so high that running is not worth the trouble, even when they know they will run essentially unopposed, then the reservation system may undermine the democratic system.¹ Many skeptics of the reservation system in India reckon that

1. Chattopadhyay and Duflo (2004c) outline a model in which this can happen.

most women and SC/ST Pradhans are only “shadows” and that some other force is running the show on their behalf. This person can be a woman’s husband (43% of female Pradhans in Birbhum report being “helped” by their husband, and in 17% of the cases their spouses had been a Panchayat member before them), in which case the system may simply be ineffective (though not harmful). The lack of transparency may also mean that an unelected leader (for example, a member of the local elite) just takes the reins. The reservation system would then have the perverse effect of weakening village democracy, potentially leading to situations where the disadvantaged group is actually worse off as a result of the reservation.

However, our results that public goods allocation is shifted in favor of disadvantaged groups in reserved villages suggests that, on average, villages are not captured by the elite.

6. Conclusion

Reservation significantly increases the access of disadvantaged groups to political decision making. Although this brings to power a group of relatively inexperienced and less-educated politicians, there is no evidence that this comes at the expense of the quality of decision making. The quality and quantity of public goods do not seem to be affected overall, and at least one group (women) is less likely to take bribes. There is also a significant reallocation of the goods toward the preferred allocation of the group in power. A social welfare function would be necessary to determine whether this is, on balance, welfare enhancing, but reservation clearly emerges as a powerful redistribution tool.

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