Political Reservations and Rural Public Good Provision in India*

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Abstract

This paper asks whether political representation for historically disadvantaged groups can serve as an effective means to redress historical inequities. The Indian Constitution mandates reservations for two such groups, Scheduled Castes (SC) and Scheduled Tribes (ST) in federal and state legislatures. While this policy has been successful in ensuring the political presence of minority legislators, evidence on their performance in serving the interests of their electorate is limited to the analysis of aggregate expenditure patters. This paper is the first to link the effect of the reservation of seats in state legislatures to rural public good provision, and to explore its implications for the inter- and within-district pattern of provision. The sample is drawn from 9 Indian states, and uses village census data aggregated to 65 districts and 610 electoral constituencies. The empirical strategy exploits features of the process of reservation to identify an exogenous source of variation that affects reservation discontinuously. I find little evidence that Scheduled Tribe legislators perform any differently than legislators elected from unreserved constituencies. However, Scheduled Caste legislators perform better, providing greater access to educational facilities, in particular, primary schools, within their constituencies. My results provide some evidence that SC legislators locate primary schools in favor of their own community. At the same time, I do find evidence that some non-SC groups benefit from SC reservation as well. Overall, these findings do not support the prediction that political reservation adversely affects electoral competition and therefore, politician quality, at least in terms of the effect of these factors on the provision of public goods.

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1 Introduction

One of the main objectives of the Constitution of India at the time of Independence was to reduce economic and social disparities through a program of affirmative action in favor of historically disadvantaged groups (Beteille, 1992). An important component of this policy consists of mandatory political reservations in federal and state legislatures for two groups, the Scheduled Castes (SC) and the Scheduled Tribes (ST)[1]. The term Scheduled Castes is intended to encompass groups isolated and disadvantaged by their low status in the Hindu caste hierarchy (Galanter, 1984). The Scheduled Tribe category includes groups distinguished by their geographic isolation from the rest of the population, as well as their linguistic and cultural distinctiveness. Scheduled Castes and Tribes make up about 16% and 8% of India's population respectively (Census of India, 2001). While this policy has been successful in ensuring the political presence of minority legislators, evidence on their performance in serving the interests of their electorate is limited to the analysis of the effect of reservations in state legislatures on state government expenditure patterns (Pande, 2003).

This paper uses a panel dataset to examine the effect of this guaranteed political representation in state legislative assemblies in India on the provision of rural public goods. It identifies the effect of reservations for Scheduled Castes and Scheduled Tribes on the allocation of public goods at two levels– the district, the most important administrative unit below the state, and the associated electoral constituency, known as the Assembly Constituency. In studying the effect of the reservation policy, this paper focuses on the following questions. First, do political reservations for under-represented and disadvantaged groups lead to greater responsiveness to the preferences of these groups in terms of public good provision? Secondly, if 'reserved' legislators do provide different kinds of or quantities of public goods relative to legislators from unreserved constituencies, are these goods located so as to favor members of their own group? Finally, by examining the effect of the policy on two levels of government, this paper aims to shed light on the ability of minority legislators to influence the inter- and intra-district allocation of resources, in terms of the provision of public goods.

My empirical strategy exploits institutional features of the process of reservation of electoral constituencies to identify the effects of mandated representation on public good outcomes. The number of constituencies deemed reserved for a group within a district is a discontinuous and non-monotonic function of past census population shares of the Scheduled Castes and Scheduled Tribes. Within a district, the constituencies deemed reserved are those where as far as feasible, the group's past census population share in the constituency

[1] Articles 330 and 332 of the Constitution of India guarantee political representation in federal and state legislatures respectively.

is the highest amongst those in the district[2]. This feature generates a potentially exogenous, non-linear source of variation at the level of the electoral constituency that can be used to estimate the effects of political reservation.

This paper contributes to the literature on the economic impact of political reservations in various ways. First, it goes beyond the current empirical work on the effect of political reservations in state legislatures in India by linking this policy of reservations to the provision of public goods rather than merely identifying its effect on aggregate expenditure patterns. Given the often tenuous link between expenditures and actual public good provision in developing country contexts, this approach provides a more meaningful measure of the impact of the policy of reservations. Secondly, the use of village census information enables me to identify the effect of reservation on the location of public goods in favor of certain groups or communities. Finally, this paper provides insights into the effect of reservation on the pattern of allocation of resources at two important units of analysis. Specifically, the district level analysis identifies the effect of political representation on the pattern of public good provision across districts within a state. Thus, it examines whether districts represented by a larger number of minority legislators provide more goods or different goods in their own district relative to districts represented by fewer minority MLAs. The analysis at the level of the assembly constituency isolates the effect of reservation on how public goods are located across different electoral constituencies within a district. This allows me to separately identify the influence of reservations on the pattern of inter- and intra-district public good provision.

In theory, mandatory representation for disadvantaged groups should lead to a shift in the distribution of public goods if the identity of the decision maker affects the distribution of public goods and if the policy maker favors members of her own group. For the latter to be true, the preferences of different groups over public goods must differ, and members of these groups must be underrepresented in the absence of reservation (Duflo, 2005). Historically, both Scheduled Castes and Scheduled Tribes have been characterized by lower literacy rates and higher poverty rates relative to the rest of the population and continue to lag behind in terms of economic and social indicators of welfare. There is also empirical evidence that in the 1970s, these groups were poorly served in terms of access to public goods (Banerjee and Somanathan, 2007). Moreover, both groups are under-represented in the absence of reservation (Galanter, 1984; Mandelsohn and Vicziany,1998). For instance, SC and ST

[2]Seats for the STs "are to be reserved in the constituencies in which the percentage of their population to the total population is the largest". The "constituencies for SCs are to be distributed in different parts of the State and seats are to be reserved for SCs in those constituencies where the percentage of their population to the total population is comparatively large". (http://www.delimitation-india.com/Constitution/ConstProv332.pdf)

representation in the upper houses of parliament, where there is no reservation of seats, is disproportionately low. In addition, candidates from these groups are rarely fielded in unreserved constituencies.

In India, the reservation policy does not involve separate electorates for disadvantaged groups. The candidates who stand for election from 'reserved' constituencies must belong to the relevant group, but the entire electorate votes to decide the winning candidate. While there is little doubt reservations have been crucial in ensuring political representation for hitherto underrepresented groups (Galanter, 1984), there is much debate on its effectiveness as a means to influence policy and reduce economic disparities. Elected members of state legislatures assemblies or MLAs (Members of Legislative Assembly) can influence rural public good provision through their role in the legislative assembly, as members of government, heads of government departments, nominated members of local government bodies and as representatives of their constituency (Singh, 1997). In light of the recent trends of increasing political participation and mobilization among the lower castes in India (Yadav, 2002; Hasan, 2002), and the accompanying demands for more widespread reservations in employment, it is important to determine the economic effects of political representation and of compensatory discrimination.

These features of the Indian experiment with guaranteed political representation generate implications for the effect of reservations on the provision of public goods. In particular, to the extent that minority groups have different preferences over public goods relative to the rest of the population and have historically suffered from poor provision of goods, one may expect that areas represented by minority MLAs get a different bundle of goods. However, the ability of SC and ST MLAs to respond to the preferences of their own community is mitigated by the incentives created by a policy of reservation that does not involve separate electorates. For instance, Scheduled Castes are a demographic minority in the constituencies that are reserved for them, and therefore, SC MLAs may have to cater to the preferences of non-SC groups as well. Another factor influencing the ability of minority legislators to respond to group specific preferences is the political mobilization and clout of these groups, which in turn has implications for the ability of minority legislators to garner resources for their constituents. Thus, the estimated effect of reservation on the actual provision of public goods reflects differences in group preferences, the political clout of minority legislators and the incentives generated by the design of political reservations in India.

My first set of results estimates the effect of political reservation on the inter-district provision of public goods, specifically the proportion of villages in the district which have a specific public good. My results indicate that the reservation of an additional constituency for Scheduled Castes in a district results in a higher proportion of villages with educational

facilities. In particular, districts represented by more SC MLAs have a higher proportion of villages with access to a primary school. In contrast, districts with a higher number of seats reserved for Scheduled Tribes have lower measures of access to public health facilities such as primary health care centres and maternal and child health care centres. However, the results on the effects of ST resevation are not very robust to specification checks. Next, I examine the effect of reservation on the pattern of public good provision across assembly constituencies within a district. These regressions confirm the district results for the effect of Scheduled Caste reservation. The reservation of a constituency for an SC candidate results in a greater proportion of villages with an educational facility, as measured by the presence of a school and and by the presence of a primary school. The results for Scheduled Tribe reservation at the constituency level show no discernible differences in the pattern or quantity of public good provision relative to unreserved constituencies.

These findings show that reservation for Scheduled Castes results in a similar pattern of inter- and intra- district provision of public goods. Districts with greater SC representation and constituencies represented by SC MLAs provide a greater proportion of villages with educational facilities.There are at least two plausible explanations for these findings. The first is that members of Scheduled Tribes have similar preferences over public goods as the rest of the population. The second explanation has to do with the lack of political mobilization of Scheduled Tribes as a whole, and the absence of an independent political leadership. The Scheduled Castes, on the other hand, have grown increasingly successful in the political arena in recent decades, and Scheduled Caste MLAs may therefore be much more effective as legislators and as representatives of the preferences of their community.

The second set of results relates to the effect of reservations on the inter-district and inter-constituency location of public goods. At the district level, the reservation of an additional constituency for Scheduled Castes leads to significant increases in the proportion of people who live in a village with an educational facility, school and primary school. It also results in significant increases in the proportion of Scheduled Castes who live in a village with an educational facility, school and primary school. These findings suggest that in districts with greater representation for Scheduled Castes, SC MLAs locate educational facilities so as to favor their own community as well. My results on the intra-district location of public goods in constituencies show that the reservation of constituencies for Scheduled Castes results in greater per capita access for Scheduled Tribes to educational facilities, including primary schools. Thus, relative to an unreserved constituency, Scheduled Tribe persons benefit from greater per capita access to educational facilities when the constituency is reserved for an SC candidate. My point estimates also consistently indicate a larger effect on SC access than on access for the population as a whole. However, the estimates on

SC access are imprecisely estimated at the constituency level, and fall short of statistical significance. Thus, political reservation for Scheduled Castes leads to a different pattern of inter-constituency location of schools, relative to the inter-district pattern of provision. While Scheduled Tribes do not seem to benefit significantly as a result of living in a district represented by a greater number of SC MLAs, they do benefit from living in an assembly constituency reserved for Scheduled Castes. Overall, these findings suggest that SC reservations do benefit members of their own community. However, such comunity targeted provision does not necesarily take place at the cost of excluding other groups. Specifically, I find that some non-Scheduled Caste groups benefit from living in a constituency reserved for Scheduled Castes.

2 Political Reservations in India

Political reservations are an important component of a policy of compensatory discrimination that as been followed in India since Independence. The Indian Constitution guarantees seats in national and state legislatures for Scheduled Castes and Tribes (Articles 330 and 332). Despite being time-bound, these provisions have been extended five times, and are currently in place until 2010[3]. Prior to elections, specified jurisdictions are deemed reserved for Scheduled Castes and Scheduled Tribes. The extent of political reservation in state legislatures reflects each group's share in the state population. The electoral unit for election to the state legislative assembly is called the Assembly Constituency (AC).

The demarcation of constituency boundaries and the designation of constituencies as reserved falls under the purview of a quasi-constitutional body, the Delimitation Commission. Constituency boundaries can be redrawn and constituency status changed only when new census population estimates become available. The aim of this exercise is to ensure as far as possible that each constituency is equal in terms of population. Since Independence, the delimitation exercise has been carried out four times, 1952, 1963, 1973, and 2002. Between 1976, when the third delimitation exercise was implemented, and 2001, there has been no change in constituency boundaries or reservation status. Thus, for the time period considered here, the decade 1991-2001, constituency boundaries and reservation status were determined based on the 1971 Census of India.

In selecting constituencies for reservation for Scheduled Tribes, the only criteria is the concentration of the Scheduled Tribe population. Since Scheduled Tribes also tend to be geographically concentrated, a large proportion of the ST population falls in constituencies

[3] Article 334, Constitution of India

reserved for ST, while a large part of the electorate in a constituency reserved for Scheduled Tribes consists of Scheduled Tribes (Galanter, 1984). This has implications for the ability of an ST MLA to reflect the preferences of his or her own community in public good provision. To the extent that ST have different preferences from the rest of the population, the design of reservation combined with their geographic concentration implies that it may be relatively easier for ST legislators to cater to the preferences of their own community.

In the case of seats reserved for SC, the Delimitation Commission uses two criteria. Constituencies in which seats are 'reserved' for these groups must be distributed in different parts of the state, and located, as far as practicable, in those areas where the proportion of their population to the total is comparatively large. Unlike the ST, SC are much more geographically dispersed, and therefore, in the constituencies reserved for them, SC comprise a relatively smaller proportion of the electorate. This implies that SC MLAs may have to cater more to the demands of the majority non-SC members of their electorate. To the extent that they do so, the pattern of public good provision in SC reserved constituencies is less likely to mirror the preferences of the SC community. This implies that the location of public goods may also be skewed towards non-SC members of the electorate.

The differing degree of political mobilization of the two groups provides another reason why the impact of reservation may be different for the two groups. Greater political clout for the group as a whole implies legislators may be more effective in parliament in acting en bloc to implement policy, and in securing resources and implementing programs within their own constituency. The political science literature and commentaries document this contrast between Scheduled Castes and Scheduled Tribes. While SC have grown increasingly successful in forging an independent social and political identity, STs have remained relatively subsumed under larger national parties. Thus, differences in the performance of SC and ST MLAs, if any, is representative of a combination of differences in preferences, political clout, and a result of the incentives generated by the design of reservation.

3 Empirical Strategy and Data

Before describing the empirical strategy, it may be useful to lay down the administrative structure within a state and how it is related to electoral units. States are divided into districts, which are the most important lower administrative unit, and each district is typically comprised of a number of assembly constituencies (Figures 1 and 2). Each district is also divided into smaller administrative units, known as tehsils, taluks or blocks (Figure 3). While most Assembly Constituencies lie completely within district boundaries, Assembly Constituencies may straddle more than one tehsil, or may be comprised of parts of more

than one tehsil.

At the district level, our equation of interest is as follows

$y_{dst} = \beta_0 + \beta_1(\#AC_d^{SC}) + \beta_2(\#AC_d^{ST}) + \beta_3 SCshare_{dst} + \beta_4 STshare_{dst} + \beta_5 X_{dst} + \beta_s State + \beta_t Time + \varepsilon_{dst}$

where y_{dst} is a measure of public good provision in district d in state s at time t, $\#AC_d^i$ $(i = SC, ST)$ is the number of constituencies deemed reserved for group i within a district d, $SCshare_{dst}$ and $STshare_{dst}$ are current group population shares, X_{dst} represents a vector of district controls, and $State$ and $Time$ represent state and time dummies respectively.

However, OLS estimates of β_1 and β_2 may be biased since the number of constituencies deemed reserved for each group within a district is not random, even after controlling for current population shares of the Scheduled Castes and Scheduled Tribes. Conditional on current group demographic shares, any two districts are not equally likely to have the same number of Assembly Constituencies deemed reserved. The number of constituencies reserved for SC and ST within a district is determined by each group's 1971 census population share in the district and the number of electoral constituencies assigned to the district. Districts with higher group population shares in the 1971 census are more likely to have a higher number of constituencies deemed reserved but are also more likely to have higher current group population shares. Thus, 1971 population estimates affect both the number of constituencies deemed reserved within a district as well as the current group population shares. To the extent that historical patterns of public good provision are related to the past demographic shares of these groups, OLS estimates of the effect of reservation will be biased even after controlling for the effect of current population shares. Banerjee and Somanathan (2007) examine the location of public goods across rural India using 1971 census data. Their results suggest that "group identities are strongly correlated with access to public goods" and that Scheduled Castes and Scheduled Tribes had poorer access to almost all goods. Thus, OLS estimates cannot separate the effect of mandated reservation on rural public good provision from the effects of past demographic shares on historical patterns of provision.

To identify the effect of reservation, my empirical strategy exploits certain features of the process of reservation. These features induce a discontinuity in the relationship between 1971 group population shares and the district level reservation variable at unit intervals (0.5, 1.5, 2.5 and so on). I estimate the equation of interest using two-stage least squares instrumental variables regressions that exploit a 'fuzzy' regression discontinuity design. I instrument for the number of constituencies reserved for each group within a district using predicted 1971 group population shares. Identification stems from the assumption that controlling for current group population shares, 1971 group population shares discontinuously

affect district-level public good provision only through the reservation variable. Current group population shares will influence outcomes in at least two ways. The first effect is indirect: to the extent that they are correlated with past population shares, and hence past provision, current population shares may explain patterns of public good provision. The second effect is direct, through the influence of government policy that is targeted on the basis of current demographic variables. The number of reserved constituencies within a district are assigned as the following discontinuous function of group census population shares and the number of Assembly Constituencies in the district.

$$\#AC_d^i = I[\frac{i\ Population_d}{Total\ Population_d} * \#AC_d]$$

where $I[.]$ is the nearest integer function, $\#AC_d$ denotes the number of Assembly Constituencies in district d, $\#AC_d^i$ denotes the number of AC reserved for group i in district d, and $i = SC, ST$.

Consider two hypothetical districts each allocated 5 Assembly Constituencies, but with different SC population shares in 1971. By applying the above rule, I predict that D1 will have a single assembly constituency deemed reserved for SC while D2 will have none.

District	Scheduled Caste Population Share	Number of AC in the district	Number of AC reserved for SC in the district
D1	0.11	5	1
D2	0.09	5	0

Had district boundaries remained unchanged between 1971 and 2001, using this rule and 1971 census population information, it would be possible to perfectly predict the number of AC reserved in each district. However, about one half of the districts in my sample have been reorganized since that time, almost entirely along pre-existing administrative boundaries (tehsil or block), but not along AC lines. Thus, while the reorganization of districts has been exogenous to AC boundaries and reservation status, we need to predict the 1971 populations of districts with 2001 boundaries. This is calculated by aggregating the 1971 populations of the tehsils belonging to the districts under the 2001 boundaries. Figure 4 shows the relationship between the predicted number of Assembly Constituencies reserved for Scheduled Castes (before the integer value is computed) and the actual number of Assembly Constituencies reserved for Scheduled Castes. Tables 1 and 2 report the number of constituencies deemed reserved within a district in my sample for SC and ST respectively. They also report the predicted number of constituencies deemed reserved.

The constituency level equation of interest is:

$y_{ACdst} = \beta_0 + \beta_1(R_{AC}^{SC}) + \beta_2(R_{AC}^{ST}) + \beta_3 SCshare_{ACdst} + \beta_4 STshare_{ACdst} + \beta_5 X_{ACdst} + \beta_d District + \beta_s State + \beta_t Time + \varepsilon_{ACdst}$

where y_{ACdst} is a measure of public good provision in constituency AC, X_{ACdst} is a vector of constituency level controls, *District*, *State* and *Time* represent a full set of district, state and time dummies respectively. However, OLS estimates of $\hat{\beta}_1$ and $\hat{\beta}_2$ may be biased since reservation status is not assigned randomly, even after controlling for current population shares. This is because the probability of reservation depends on the 1971 census population shares of each group, which is correlated with past provision of public goods. The identification strategy for the analysis at the constituency level exploits the rule for the selection of constituencies for reservation within a district. Reservation of a constituency for Scheduled Tribes depends on the census population share of Scheduled Tribes in the Assembly Constituency and on the number of ST reservations allocated to the district. In the case of Scheduled Caste reservations, an additional standard is also applied–the geographical dispersal of reservations. Consider a hypothetical district with 6 Assembly Constituencies, ranked in terms of the share of say, ST in the AC population. Then, if two constituencies within the district are to be reserved for ST, the two with the highest concentrations of ST will be reserved. The following table illustrates this example.

Assembly Constituency	Scheduled Tribe share in AC Population	Rank	Reservation Status
AC1	0.4	3	G
AC2	0.5	1	ST
AC3	0.35	4	G
AC4	0.23	6	G
AC5	0.45	2	ST
AC6	0.28	5	G

Thus, 1971 census population shares affect both the probability of being deemed reserved as well as the outcomes of interest through their influence on historical pattern of provision. To identify the effect of reservation, my empirical strategy isolates the discontinuous effect of these past population shares on the reservation variable, while simultaneously controlling for the smooth effects of current population shares. To my knowledge, AC census population shares for 1971 not publicly available. Therefore, I predict 1971 group population shares in each constituency, and use predicted reservation to instrument for reservation status. This is done as follows. An Assembly Constituency generally falls in more than one tehsil. This is the lowest level of disaggregation for which 1971 census figures were available to me. Tehsil boundaries are drawn by District and State administrations, whereas AC boundaries are decided by the Delimitation Commission and have been fixed since 1971 and throughout my period of analysis. I calculate the population growth rates for each tehsil, and attribute the tehsil growth rate to that part of the population of the AC that currently lies in the tehsil.

Using these predicted 1971 AC population and group shares, a constituency is predicted as reserved for group i if

$$Rank\ AC_{within\ district}\ [Predicted\ share\ of\ group\ i\ in\ AC\ population] \leq Number\ of\ AC\ reserved\ for\ group\ i\ in\ the\ district$$

Thus, my reservation variable is a discontinuous, non-linear and non-monotonic function of past census population shares. Tables 3 and 4 report the reservation status of constituencies and their predicted reservation status.

The dataset for this analysis has been compiled from various sources. Districts selected in my sample are from 9 Indian states, Andhra Pradesh, Kerala, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Tamil Nadu, and Uttar Pradesh. Districts corresponding to the ARIS- REDS household panel were chosen, to facilitate an extension of this work to analyze the effect of reservations on rural household welfare. The final sample consists of 65 districts, and 610 Assembly Constituencies. Data on district and constituency level controls, as well as information on public good outcomes is from a panel of rural villages (1991and 2001) from the decennial Indian censuses, treated as a pooled cross-section. Dependent variables on the availability of various public goods are aggregated to district and constituency level using village-level information. The aggregation of village-level information to the level of the electoral constituency uses GIS information that maps census villages to their Assembly Constituencies[4]. Information about constituency boundaries and reservation status of each constituency is from various orders of the Delimitation Commission.

I examine the effect of political reservations on a range of public good outcomes, including education facilities, public health facilities, roads and drinking water facilities. In this paper, I report results for measures of public provision of education and health. Reserved constituencies do not show a consistently different pattern of provision as far as roads and drinking water facilities are concerned. Regression results for these variables are available upon request.

The dependent variables considered are the proportion of villages within the district or constituency that have the relevant public good. Measures of location of public goods considered are as follows. Per capita access variables measure the proportion of people who live in a village with the public good relative to the rural population of the district or constituency. Per capita group access variables measure the proportion of people belonging to group i who live in a village with the public good relative to the population of group i in

[4]This data has been obtained from Geographic Enterprises, LLC, based on GIS information (http://www.geo-e.com/products/india-gis-data/)

the district or the constituency. Tables 5–8 report descriptive statistics for education and public health facilities as well as controls at the district level for each year, by the number of constituencies reserved within the district. Tables 9–12 report descriptive statistics at the level of the assembly constituency for each year, by the reservation status of the constituency.

4 Results

4.1 District Level Outcomes

To examine the effect of reservation on district level outcomes, we estimate equations of the following form by 2SLS:

$y_{dst} = \beta_0 + \beta_1(\#AC_d^{SC}) + \beta_2(\#AC_d^{ST}) + \beta_3 SCshare_{dst} + \beta_4 STshare_{dst} + \beta_5 X_{dst} + \beta_s State + \beta_t Time + \varepsilon_{dst}$

where the "first-stage" relationship of interest is:

$\#AC_d^i = \pi_0 + \pi_1(\#\widehat{AC}_d^i) + \pi_2(\#\widehat{AC}_d^j) + \pi_3 SCshare_{dst} + \pi_4 STshare_{dst} + \pi_5 X_{dst} + \pi_s State + \pi_t Time + \zeta_{dst}$

and $\#\widehat{AC}_d^i$ are the predicted number of constituencies reserved for group i $(i, j = SC, ST; i \neq j)$ in district d, the instruments generated by the reservation rule.

Tables 13 and 14 report the first stage regressions for each of the endogenous reservation variables. Tables 15–18 report the estimated effect of reservation on the percentage of villages in the district that have access to various measures of education and health facilities. All regressions include state and time dummies, and standard errors are clustered at the district level.

The dependent variable in Table 15 is the percentage of villages with an educational facility. A village is reported as having an educational facility if it has a school, a college, an adult literacy centre, or a vocational or industrial training school. Columns 1 and 2 report OLS estimates while Column 3 and 4 report IV 2SLS estimates. Columns 2 and 4 add additional controls and quadratic and cubic group population share terms. The IV estimates show that a unit increase in the number of constituencies reserved for Scheduled Castes within a district increases the proportion of villages with access to an educational facility by 8%. Table 16 reports the effect of reservation on the percentage of villages with a school. A village is reported to have a school if it has a primary school, middle school, or a high school (secondary and senior secondary schools). Instrumental variable estimates indicate that most of the results in terms of the presence of an educational facility are explained by the presence of a school. Table 17 estimates the effect of reservation on the average distance to the nearest educational facility from a village. IV estimates show that in districts with a higher number of AC reserved for SC, the average distance to the

nearest educational facility is significantly lower. In table 18, the dependent variable is the percentage of villages that have a primary school. Columns 3 and 4 show that the positive effects of reservation for SC in terms of public education is manifested in terms of greater per village access to a primary school.

My data set also includes measures of access to public health facilities, roads and drinking water. Reservation for SC and ST have no consistent or robust effect on access to roads or drinking water. Tables 19a and 19b report OLS and IV estimates of the effects of reservation on measures of access to public health facilities. Dependent variables include the proportion of villages with access to a maternal and child health care facility, to some primary health care facility (primary health centres, primary health sub-centres and health centres), to a primary health sub-centre, and to a health center. For each of these measures, districts with an additional constituency deemed reserved for Scheduled Tribes have a lower proportion of villages with access to the public health facility.

Tables 20 through 23 present estimates of the effects of reservation in terms of the location of educational facilities in terms of different groups, as well as the implied distance to the nearest educational facility. These include measures of per capita access–the proportion of the district rural population that lives in a village with the public good, and measures of per capita group access– the proportion of the district rural SC, ST and non SC/ST population that lives in a village with the public good. For each of the dependent variables considered, the results confirm the pattern of per village access. The reservation of a constituency for Scheduled Castes increases the proportion of the district population with access to the good, and reduces the distance to the nearest educational facility. Reservation for Scheduled Castes also lead to greater access per SC person in the constituency.

4.2 Constituency Level Results

To examine the effect of reservation status on assembly constituency level outcomes, we estimate equations of the following form by instrumental variables 2SLS:

$y_{ACdst} = \beta_0 + \beta_1(R^{SC}_{AC}) + \beta_2(R^{ST}_{AC}) + \beta_3 SCshare_{ACdst} + \beta_4 STshare_{ACdst} + \beta_5 X_{ACdst} + \beta_d District + \beta_s State + \beta_t Time + \varepsilon_{ACdst}$

where R^i_{AC} is instrumented for by the instrument generated by the reservation rule, $\hat{R}^i_{AC}$ $(i = SC, ST)$.

Tables 24 and 25 report the first stage regressions for both reservation variables. Tables 26–27 report the estimated effect of reservation on the percentage of villages in the constituency with three measures of education facilities, as well as the average distance to the nearest educational facility. In each case, columns 1 and 3 report OLS estimates while Column 2 and 4 report IV 2SLS estimates. All regressions include state, district and time

dummies, and standard errors are clustered at the level of the assembly constituency. Column 2 of Table 26 shows that the reservation of a constituency for SC results in an increase in the proportion of villages having access to an educational facility by eleven percent. Table 27 reports regression results for the effect of reservation on the proportion of villages with a primary school. The reservation of a constituency for SC results in an eleven and a half percent increase in the proportion of villages with a primary school. While these results confirm the findings of the district regressions for the effect of SC reservations, the results for the effects of ST reservation on public health are not robust to the inclusion of district dummies.

Tables 28–31 report OLS and IV 2SLS estimates for the effect of reservation on the location of public education facilities and the implied access to different groups. For all four measures, reservation of an assembly constituency increases the proportion of Scheduled Tribes who live in a village with the facility, and reduces the distance to the nearest educational facility. There is also some evidence that constituencies reserved for Scheduled Castes have a higher proportion of people served by an educational facility, in particular, a primary school, relative to an unreserved constituency. In all four regressions, IV point estimates are consistently higher for SC access than for per capita access measures. However, the former are imprecisely estimated and fall short of statistical significance.

4.3 Robustness Checks

This section reports a set of robustness checks for both the district and the constituency level analysis. Table 32 reports IV estimates for the district level education outcomes from a $-15/+15$ discontinuity sample for SC reservation. Since the discontinuity in the district reservation variable occurs at unit intervals of 0.5, 1.5 and 2.5, districts in this sample are restricted to those for which the predicted number of AC reserved for SC (before applying the integer rule) fall in the intervals $[0.35, 0.65]$, $[1.35, 1.65]$ and $[2.35, 2.65]$. While these estimates are imprecisely estimated (standard errors are about three times as large as in the full sample), the point estimates of the effects of the number of AC reserved of SC have the same sign and a similar magnitude as in the full sample. Table 33 reports IV estimates for public health measures at the district level from a $-20/+20$ discontinuity sample for ST reservation. Since the discontinuity in the district reservation variable occurs at unit intervals of 0.5, 1.5 and 2.5, districts in this sample are restricted to those for which the predicted number of AC reserved for SC (before applying the integer rule) fall in the intervals $[0.3, 0.7]$, $[1.3, 1.7]$, $[2.3, 2.7]$ and so on. For two of the four measures, the coefficient on the ST reservation variable changes sign from negative in the full sample to positive in the discontinuity sample. Thus, the results on the effect of an additional assembly constituency

being reserved for Scheduled Tribes are not very robust.

Tables 34 and 35 present additional robustness checks for the district education variables. Since my main specification involves a relatively small number of clusters, and relatively few observations within each cluster, table 34 presents IV estimates that allow for random district effects. Table 35 shows IV estimates when the specification includes quartic population share terms. The effects of reservation for Scheduled Castes at the district level is robust to both these specifications.

The next set of tables report robustness checks for the assembly constituency results. Table 36 shows IV estimates for a discontinuity sample for assembly constituency reservation for Scheduled Castes. The sample is restricted to those constituencies for which the rank of the AC is equal to the number of AC reserved for Scheduled Castes in the district, and to those for which the rank is one higher than the number of AC reserved for Scheduled Castes in the district. While the estimates are imprecisely estimated, the point estimates of the effect of reservation are higher in magnitude and have the same sign as in the full sample. Table 37 presents IV estimates that allow for random assembly constituency effects, and table 38 includes squared and cubic population share terms.

5 Discussion

This paper asks whether political representation for historically disadvantaged groups can serve as an effective means to redress historical inequities. While the presence of Scheduled Castes and Scheduled Tribes in legislative bodies is largely explained by mandated political reservations, evidence on the performance of these legislators in serving the interests of their electorate is limited. This paper provides evidence that Scheduled Caste MLAs provide greater access to educational facilities, in particular, primary schools, within their constituencies. Moreover, we find little evidence that Scheduled Tribe MLAs perform any differently than legislators elected from unreserved constituencies. These findings do not support the theoretical prediction that political reservation adversely affects electoral competition and therefore, politician quality, at least in terms of the effect of these factors on the provision of public goods.

In theory, political reservations for hitherto under-represented communities may also lead to differences in the pattern of public good provision, by reflecting the relative preferences of different groups over these goods. In the Indian context, differences in the characteristics of the two groups, combined with the design of reservation, imply that the effect of reservations may be different for the two groups. MLAs elected from ST reserved constituencies face a majority ST electorate, while SC MLAs must satisfy the needs of the

majority non SC electorate, as well as of their own community. Our results indicate that ST legislators do not provide a set of public goods that is significantly different from that provided by an MLA elected from an unreserved constituency. On the other hand, the SC legislator, who is far more dependent upon a constituency made up of members not from his own group, performs relatively better in terms of village access to primary schools. This very dependence on a non-SC electorate explains our result on the location of educational facilities. A randomly selected person or a randomly selected Scheduled Tribe person in a constituency reserved for Scheduled Castes is more likely to belong to a village with a primary school, relative to one in an unreserved constituency. In addition, my point estimates consistently indicate larger SC access to educational facilities compared to per capita access measures, but fall well short of statistical significance. Overall, these results suggest that SC MLAs may be locating public goods in villages so as to cater to a broad set of voters.

This paper also provides indirect evidence of the differences in the degree of political mobilization of the two groups. Unless we assume that members of the Scheduled Tribes have the same preferences over public goods as the rest of the population, the performance (or lack thereof) of ST MLAs may be representative of their lack of political clout. In contrast, the 1990s has seen an increase in the political participation and political voice of the lower castes, and this may be reflected in the performance of SC legislators. While reservation for Scheduled Castes in state legislatures in India may not necessarily have led to better access to public goods for their own community, it has led to better provision of public primary education to their constituency as a whole.

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A Appendix

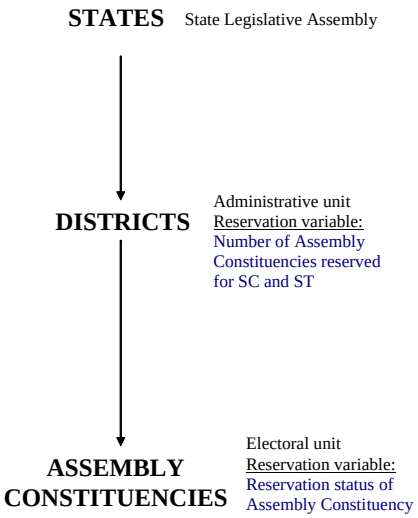

Figure 1: Administrative and Electoral units

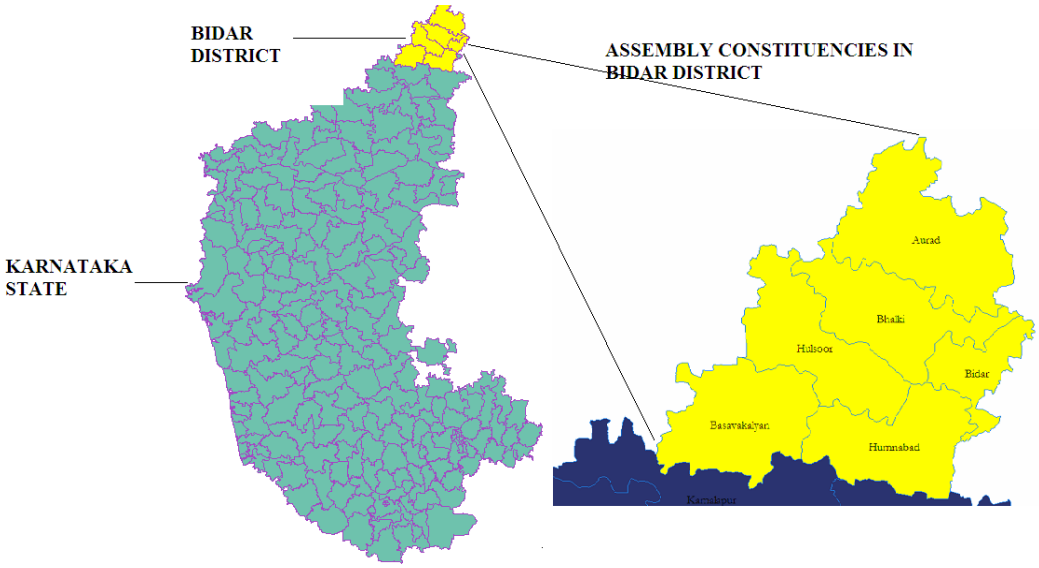

Figure 2: Administrative and Electoral Divisions–An Example

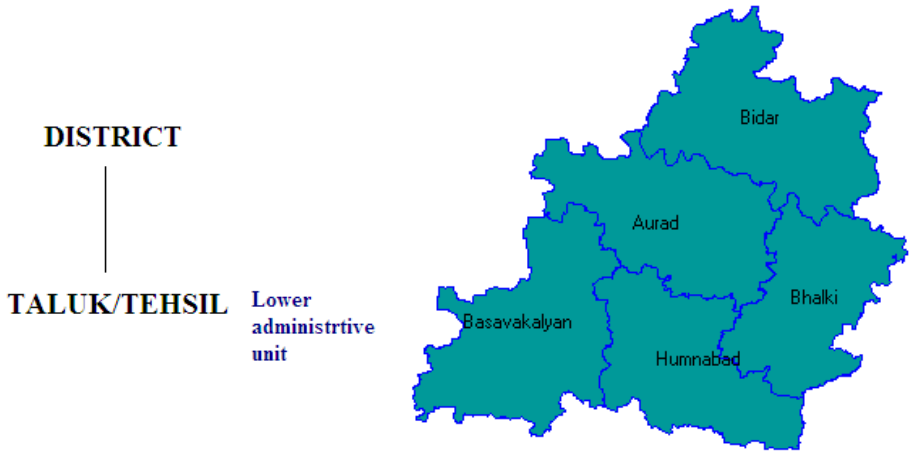

Figure 3: Administrative Divisions Taluks of Bidar District

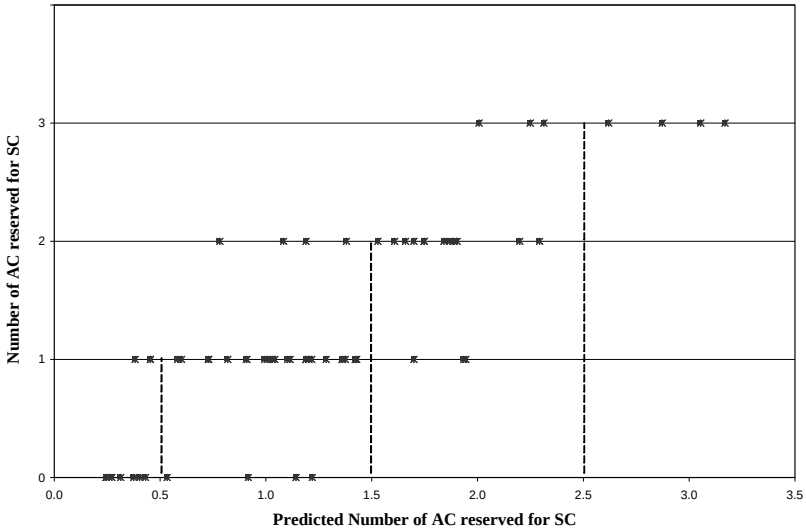

Figure 4: Predicted # of AC reserved for SC and Actual # of AC reserved for SC

Number of Assembly Constituencies reserved for Scheduled Castes in a District						
Number		**Frequency**	**Percent**	**Predicted Number**	**Frequency**	**Percent**
	0	12	18.46	0	11	16.92
	1	30	46.15	1	32	49.23
	2	16	24.62	2	18	27.69
	3	7	10.77	3	4	6.15
Total		65	100		65	100

Table 1: Number and Predicted Number of Assembly Constituencies reserved for Scheduled Castes in a District

Number of Assembly Constituencies reserved for Scheduled Tribes in a District						
Number		**Frequency**	**Percent**	**Predicted Number**	**Frequency**	**Percent**
	0	52	80	0	48	73.85
	1	7	10.77	1	13	20
	2	3	4.62	2	2	3.08
	3	1	1.54	3	1	1.54
	4	1	1.54	4	1	1.54
	7	1	1.54			
Total		65	100		65	100

Table 2: Number and Predicted Number of Assembly Constituencies reserved for Scheduled Tribes in a District

Reservation Status of Assembly Constituencies	Predicted Reservation Status of Assembly Constituencies		
	Not reserved for SC	Reserved for SC	Total
Not reserved for SC	482	47	529
Reserved for SC	47	34	81
Total	529	81	610

Table 3: Reservation and Predicted Reservation of Assembly Constituencies for Scheduled Castes

Reservation Status of Assembly Constituencies	Predicted Reservation Status of Assembly Constituencies		
	Not reserved for ST	Reserved for ST	Total
Not reserved for ST	574	8	583
Reserved for ST	9	19	27
Total	583	27	610

Table 4: Reservation and Predicted Reservation of Assembly Constituencies for Scheduled Tribes

Descriptive Statistics: District Level Outcomes and Controls, 1991								
Number of AC reserved for SC	**0**		**1**		**2**		**3**	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Outcomes (1991)								
% of villages with an educational facility	0.82	0.11	0.81	0.15	0.85	0.14	0.81	0.09
% of villages with a school	0.81	0.14	0.79	0.17	0.84	0.14	0.81	0.09
Average distance to nearest educational facility	0.61	0.38	0.72	0.89	0.47	0.51	0.61	0.36
% of villages with a primary school	0.81	0.14	0.79	0.17	0.83	0.15	0.80	0.09
% of villages with a MCH facility	0.07	0.19	0.11	0.13	0.08	0.12	0.05	0.05
% of villages with a PHC, HC or PHS	0.09	0.08	0.18	0.21	0.14	0.17	0.10	0.07
% of villages with a HC	0.02	0.05	0.02	0.03	0.01	0.01	0.01	0.01
% of villages with a PHS	0.04	0.05	0.10	0.14	0.09	0.12	0.06	0.08
District Controls (1991)								
Current share of SC in district population	0.12	0.05	0.17	0.05	0.19	0.05	0.26	0.08
Current share of ST in district population	0.16	0.17	0.08	0.14	0.06	0.08	0.06	0.06
Ratio of males to females in the district	1.04	0.04	1.04	0.07	1.07	0.07	1.06	0.08
Rural population density of the district	3.09	2.78	3.69	2.82	3.01	1.85	2.67	0.79
Observations	12		30		16		7	
MCH-Maternal and child health care; PHC-Primary health centre;HC-health centre;PHS-primary health sub-centre								

Table 5: Descriptive Statistics: District Outcomes and Controls, 1991, by SC reservation

Descriptive Statistics: District Level Outcomes and Controls, 2001								
Number of AC reserved for SC	**0**		**1**		**2**		**3**	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Outcomes (2001)								
% of villages with an educational facility	0.86	0.10	0.84	0.15	0.90	0.11	0.87	0.07
% of villages with a school	0.86	0.11	0.83	0.15	0.90	0.11	0.87	0.07
Average distance to nearest educational facility	0.44	0.28	0.43	0.38	0.30	0.35	0.36	0.16
% of villages with a primary school	0.86	0.11	0.83	0.15	0.90	0.11	0.86	0.07
% of villages with a MCH facility	0.08	0.12	0.16	0.17	0.09	0.15	0.12	0.17
% of villages with a PHC, HC or PHS	0.21	0.18	0.26	0.27	0.26	0.21	0.20	0.11
% of villages with a HC	0.02	0.02	0.05	0.07	0.03	0.05	0.02	0.01
% of villages with a PHS	0.19	0.19	0.20	0.19	0.23	0.17	0.18	0.10
District Controls (2001)								
Current share of SC in district population	0.12	0.05	0.17	0.05	0.19	0.06	0.26	0.08
Current share of ST in district population	0.16	0.17	0.09	0.15	0.07	0.09	0.06	0.06
Ratio of males to females in the district	1.04	0.04	1.03	0.07	1.06	0.07	1.05	0.07
Rural population density of the district	3.48	3.32	4.37	3.12	3.79	2.40	3.19	1.08
Observations	12		30		16		7	
MCH-Maternal and child health care; PHC-Primary health centre;HC-health centre;PHS-primary health sub-centre								

Table 6: Descriptive Statistics: District Outcomes and Controls, 2001, by SC reservation

Descriptive Statistics: District Level Outcomes and Controls, 1991								
Number of AC reserved for ST	**0**		**1**		**2 or 3**		**>=4**	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Outcomes (1991)								
% of villages with an educational facility	0.82	0.15	0.87	0.07	0.83	0.07	0.73	0.04
% of villages with a school	0.81	0.16	0.87	0.06	0.82	0.07	0.72	0.05
Average distance to nearest educational facility	0.66	0.75	0.38	0.22	0.56	0.19	0.85	0.17
% of villages with a primary school	0.80	0.16	0.86	0.07	0.81	0.08	0.70	0.08
% of villages with a MCH facility	0.11	0.14	0.01	0.01	0.02	0.01	0.02	0.02
% of villages with a PHC, HC or PHS	0.17	0.19	0.06	0.02	0.06	0.01	0.08	0.04
% of villages with a HC	0.02	0.03	0.01	0.01	0.01	0.01	0.01	0.02
% of villages with a PHS	0.10	0.13	0.02	0.02	0.03	0.02	0.04	0.04
District Controls (1991)								
Current share of SC in district population	0.19	0.06	0.14	0.05	0.15	0.05	0.06	0.01
Current share of ST in district population	0.05	0.06	0.15	0.09	0.27	0.14	0.58	0.03
Ratio of males to females in the district	1.05	0.07	1.03	0.05	1.05	0.05	1.03	0.01
Rural population density of the district	3.64	2.60	2.11	0.54	1.87	0.94	1.47	0.02
Observations	52		7		4		2	
MCH-Maternal and child health care; PHC-Primary health centre;HC-health centre;PHS-primary health sub-centre								

Table 7: Descriptive Statistics: District Outcomes and Controls, 1991, by ST reservation

Descriptive Statistics: District Level Outcomes and Controls, 2001								
Number of AC reserved for ST	**0**		**1**		**2 or 3**		**>=4**	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Outcomes (2001)								
% of villages with an educational facility	0.85	0.13	0.94	0.03	0.86	0.13	0.89	0.01
% of villages with a school	0.85	0.14	0.94	0.03	0.86	0.13	0.88	0.01
Average distance to nearest educational facility	0.41	0.36	0.19	0.09	0.46	0.41	0.35	0.05
% of villages with a primary school	0.84	0.14	0.94	0.03	0.86	0.13	0.88	0.01
% of villages with a MCH facility	0.14	0.17	0.05	0.05	0.04	0.02	0.08	0.07
% of villages with a PHC, HC or PHS	0.26	0.25	0.21	0.08	0.19	0.07	0.23	0.03
% of villages with a HC	0.04	0.06	0.01	0.01	0.01	0.01	0.03	0.01
% of villages with a PHS	0.21	0.20	0.20	0.09	0.17	0.08	0.21	0.05
District Controls (2001)								
Current share of SC in district population	0.19	0.07	0.13	0.05	0.15	0.05	0.06	0.01
Current share of ST in district population	0.05	0.07	0.15	0.08	0.30	0.15	0.60	0.03
Ratio of males to females in the district	1.04	0.07	1.03	0.05	1.04	0.06	1.02	0.01
Rural population density of the district	4.33	3.01	2.58	0.94	2.21	0.82	1.82	0.05
Observations	52		7		4		2	
MCH-Maternal and child health care; PHC-Primary health centre;HC-health centre;PHS-primary health sub-centre								

Table 8: Descriptive Statistics: District Outcomes and Controls, 2001, by ST reservation

Descriptive Statistics: AC Level Outcomes and Controls, 1991				
AC reservation status	**Not reserved for SC**		**Reserved for SC**	
	Mean	**Std. Dev.**	**Mean**	**Std. Dev.**
Outcomes (1991)				
% of villages with an educational facility	0.86	0.15	0.83	0.18
% of villages with a school	0.85	0.16	0.82	0.19
Average distance to nearest educational facility	0.48	0.67	0.61	1.04
% of villages with a primary school	0.84	0.16	0.81	0.19
District Controls (1991)				
Current share of SC in AC population	0.17	0.08	0.24	0.09
Current share of ST in AC population	0.08	0.15	0.05	0.07
Ratio of males to females in the AC	1.04	0.07	1.07	0.08
Rural population density of the AC	0.43	0.30	0.79	3.13
Observations	**529**		**81**	

Table 9: Descriptive Statistics: Constituency Outcomes and Controls, 1991, by SC reservation

Descriptive Statistics: AC Level Outcomes and Controls, 2001				
AC reservation status	**Not reserved for SC**		**Reserved for SC**	
	Mean	**Std. Dev.**	**Mean**	**Std. Dev.**
Outcomes (2001)				
% of villages with an educational facility	0.90	0.13	0.88	0.14
% of villages with a school	0.89	0.13	0.88	0.14
Average distance to nearest educational facility	0.28	0.34	0.33	0.38
% of villages with a primary school	0.89	0.13	0.88	0.14
District Controls (2001)				
Current share of SC in AC population	0.17	0.08	0.24	0.09
Current share of ST in AC population	0.08	0.15	0.05	0.07
Ratio of males to females in the AC	1.04	0.07	1.05	0.07
Rural population density of the AC	0.37	0.25	0.96	5.32
Observations	**529**		**81**	

Table 10: Descriptive Statistics: Constituency Outcomes and Controls, 2001, by SC reservation

Descriptive Statistics: AC Level Outcomes and Controls, 1991				
AC reservation status	**Not reserved for ST**		**Reserved for ST**	
	Mean	**Std. Dev.**	**Mean**	**Std. Dev.**
Outcomes (1991)				
% of villages with an educational facility	0.86	0.15	0.81	0.12
% of villages with a school	0.85	0.16	0.81	0.13
Average distance to nearest educational facility	0.50	0.74	0.60	0.45
% of villages with a primary school	0.84	0.16	0.79	0.13
District Controls (1991)				
Current share of SC in AC population	0.18	0.09	0.09	0.06
Current share of ST in AC population	0.06	0.09	0.53	0.22
Ratio of males to females in the AC	1.05	0.08	1.03	0.05
Rural population density of the AC	0.47	1.20	0.64	0.21
Observations	**582**		**28**	

Table 11: Descriptive Statistics: Constituency Outcomes and Controls, 1991, by ST reservation

Descriptive Statistics: AC Level Outcomes and Controls, 2001				
AC reservation status	**Not reserved for ST**		**Reserved for ST**	
	Mean	**Std. Dev.**	**Mean**	**Std. Dev.**
Outcomes (2001)				
% of villages with an educational facility	0.89	0.13	0.90	0.08
% of villages with a school	0.89	0.13	0.89	0.08
Average distance to nearest educational facility	0.29	0.35	0.35	0.27
% of villages with a primary school	0.89	0.13	0.89	0.08
District Controls (2001)				
Current share of SC in AC population	0.18	0.09	0.09	0.06
Current share of ST in AC population	0.06	0.09	0.53	0.22
Ratio of males to females in the AC	1.04	0.07	1.02	0.05
Rural population density of the AC	0.44	1.99	0.52	0.17
Observations	**582**		**28**	

Table 12: Descriptive Statistics: Constituency Outcomes and Controls, 2001, by ST reservation

Number of Assembly Constituencies reserved for SC in a district	Coefficient	Standard Error	t-statistic	P-value
Current SC share in district population	11.99	10.14	1.18	0.24
Current ST share in district population	3.43	2.79	1.23	0.22
Square of current SC share in district population	-58.29	54.33	-1.07	0.29
Square of current ST share in district population	-9.21	12.66	-0.73	0.47
Cube of current SC share in district population	95.63	84.47	1.13	0.26
Cube of current ST share in district population	7.81	15.19	0.51	0.61
Ratio of males to females in the district	0.96	1.16	0.83	0.41
District population density	-0.03	0.04	-0.76	0.45
Predicted number of AC reserved for SC	0.88	0.09	10.18	0.00
Predicted number of AC reserved for ST	0.00	0.14	-0.03	0.98
Observations	130			
R-squared	0.75			
Adjusted R-squared	0.71			
Regressions include state and time dummies, and a constant term				

Table 13: First Stage regressions– #AC reserved for SC

Number of Assembly Constituencies reserved for ST in a district	Coefficient	Standard Error	t-statistic	P-value
Current SC share in district population	-11.57	9.32	-1.24	0.22
Current ST share in district population	-1.91	2.56	-0.75	0.46
Square of current SC share in district population	51.52	49.90	1.03	0.30
Square of current ST share in district population	23.05	11.63	1.98	0.05
Cube of current SC share in district population	-71.13	77.59	-0.92	0.36
Cube of current ST share in district population	-20.56	13.95	-1.47	0.14
Ratio of males to females in the district	-0.13	1.06	-0.13	0.90
District population density	-0.01	0.03	-0.18	0.85
Predicted number of AC reserved for SC	0.01	0.08	0.07	0.95
Predicted number of AC reserved for ST	0.74	0.13	5.67	0.00
Observations	130			
R-squared	0.87			
Adjusted R-squared	0.85			
Regressions include state and time dummies, and a constant term				

Table 14: First Stage regressions– #AC reserved for ST

Percentage of villages with an educational facility				
	(1) OLS	(2) OLS	(3) IV	(4) IV
Number of AC reserved for SC	0.044***	0.042***	0.080***	0.069***
	(0.014)	(0.012)	(0.025)	(0.025)
Number of AC reserved for ST	0.017	0.026	-0.053	-0.033
	(0.020)	(0.020)	(0.040)	(0.049)
Current SC share in district population	-0.696**	-2.094	-1.198***	-3.038
	(0.308)	(2.143)	(0.378)	(2.540)
Current ST share in district population	-0.277	-0.766	0.272	-0.605
	(0.209)	(0.527)	(0.374)	(0.581)
Square of current SC share in district population		10.985		13.207
		(11.549)		(13.231)
Square of current ST share in district population		1.887		2.534
		(2.537)		(2.825)
Cube of current SC share in district population		-22.042		-24.157
		(17.525)		(20.036)
Cube of current ST share in district population		-2.003		-2.186
		(3.067)		(3.161)
Ratio of males to females in the district		0.404		0.335
		(0.296)		(0.317)
District population density		-0.006		-0.006
		(0.005)		(0.005)
State dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	0.963***	0.619*	0.985***	0.758*
	(0.039)	(0.352)	(0.046)	(0.408)
Observations	130	130	130	130
R-squared	0.56	0.61	0.46	0.55
Robust standard errors in parentheses, clustered at the district level * significant at 10%; ** significant at 5%; *** significant at 1%				

Table 15: District regression– % of villages with an educational facility

Percentage of villages with a school				
	(1) OLS	(2) OLS	(3) IV	(4) IV
Number of AC reserved for SC	0.049***	0.047***	0.081***	0.071***
	(0.015)	(0.013)	(0.026)	(0.025)
Number of AC reserved for ST	0.017	0.026	-0.054	-0.033
	(0.021)	(0.020)	(0.040)	(0.050)
Current SC share in district population	-0.733**	-1.917	-1.208***	-2.864
	(0.304)	(2.143)	(0.380)	(2.552)
Current ST share in district population	-0.289	-0.786	0.266	-0.627
	(0.214)	(0.536)	(0.381)	(0.594)
Square of current SC share in district population		9.591		11.959
		(11.484)		(13.135)
Square of current ST share in district population		1.870		2.526
		(2.573)		(2.899)
Cube of current SC share in district population		-19.734		-22.075
		(17.374)		(19.794)
Cube of current ST share in district population		-1.939		-2.138
		(3.110)		(3.234)
Ratio of males to females in the district		0.489		0.419
		(0.300)		(0.317)
District population density		-0.007		-0.007
		(0.005)		(0.005)
State dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	0.955***	0.519	0.979***	0.662
	(0.040)	(0.364)	(0.047)	(0.418)
Observations	130	130	130	130
R-squared	0.58	0.63	0.49	0.58
Robust standard errors in parentheses, clustered at the district level * significant at 10%; ** significant at 5%; *** significant at 1%				

Table 16: District regressions– % of villages with a school

Average distance to the nearest educational facility				
	(1) OLS	(2) OLS	(3) IV	(4) IV
Number of AC reserved for	-0.125**	-0.119**	-0.213***	-0.167**
SC	(0.052)	(0.046)	(0.077)	(0.079)
Number of AC reserved for	-0.045	-0.070	0.068	-0.012
ST	(0.060)	(0.062)	(0.112)	(0.168)
Current SC share in district	1.339	7.307	2.398	8.175
population	(1.318)	(9.896)	(1.468)	(9.575)
Current ST share in district	0.685	1.939	-0.195	1.771
population	(0.587)	(1.819)	(0.989)	(1.907)
Square of current SC share		-48.142		-49.104
in district population		(56.603)		(54.938)
Square of current ST share		-4.664		-5.201
in district population		(8.904)		(8.442)
Cube of current SC share in		94.467		94.686
district population		(88.519)		(86.594)
Cube of current ST share in		4.383		4.432
district population		(10.729)		(10.231)
Ratio of males to females		-0.731		-0.670
in the district		(1.585)		(1.708)
District population density		-0.014		-0.014
		(0.020)		(0.021)
State dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	0.278	0.914	0.259	0.810
	(0.172)	(1.608)	(0.187)	(1.859)
Observations	130	130	130	130
R-squared	0.46	0.49	0.44	0.49
Robust standard errors in parentheses, clustered at the district level				
* significant at 10%; ** significant at 5%; *** significant at 1%				

Table 17: District regressions– Average distance to the nearest educational facility

Percentage of villages with a primary school				
	(1) OLS	(2) OLS	(3) IV	(4) IV
Number of AC reserved for	0.049***	0.047***	0.080***	0.071***
SC	(0.015)	(0.012)	(0.026)	(0.025)
Number of AC reserved for	0.016	0.026	-0.053	-0.032
ST	(0.021)	(0.020)	(0.040)	(0.049)
Current SC share in district	-0.727**	-1.925	-1.190***	-2.842
population	(0.291)	(2.127)	(0.371)	(2.518)
Current ST share in district	-0.282	-0.791	0.264	-0.637
population	(0.213)	(0.520)	(0.378)	(0.574)
Square of current SC share		9.420		11.710
in district population		(11.390)		(12.937)
Square of current ST share		1.941		2.576
in district population		(2.514)		(2.833)
Cube of current SC share in		-19.235		-21.497
district population		(17.209)		(19.473)
Cube of current ST share in		-2.028		-2.221
district population		(3.047)		(3.171)
Ratio of males to females		0.537*		0.469
in the district		(0.294)		(0.310)
District population density		-0.007		-0.007
		(0.005)		(0.005)
State dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	0.950***	0.471	0.975***	0.609
	(0.039)	(0.358)	(0.045)	(0.410)
Observations	130	130	130	130
R-squared	0.59	0.64	0.51	0.59
Robust standard errors in parentheses, clustered at the district level				
* significant at 10%; ** significant at 5%; *** significant at 1%				

Table 18: District regression– % of villages with a primary school

Dependent Variable	% of villages with a maternal and child health care center		% of villages with a primary health center, health center or primary health sub-center	
	(1) OLS	(2) IV	(3) OLS	(4) IV
Number of AC reserved for SC	0.004	0.017	0.008	0.018
	(0.007)	(0.019)	(0.012)	(0.030)
Number of AC reserved for ST	-0.013	-0.048**	-0.029*	-0.099**
	(0.010)	(0.023)	(0.017)	(0.044)
Current SC share in district population	-3.659	-4.219*	-5.093*	-6.250**
	(2.251)	(2.173)	(2.704)	(2.468)
Current ST share in district population	-0.127	-0.034	-0.861**	-0.683
	(0.223)	(0.302)	(0.410)	(0.542)
Square of current SC share in district	19.018*	20.509*	24.197*	27.992**
	(10.379)	(10.372)	(13.261)	(13.073)
Square of current ST share in district	1.001	1.394	4.180**	5.030**
	(1.112)	(1.387)	(1.887)	(2.366)
Cube of current SC share in district	-31.086**	-32.617**	-36.789*	-41.090**
	(15.078)	(15.220)	(19.655)	(20.028)
Cube of current ST share in district	-1.117	-1.245	-4.431**	-4.775*
	(1.354)	(1.572)	(2.112)	(2.715)
Ratio of males to females in the district	0.125	0.084	0.058	-0.029
	(0.119)	(0.125)	(0.253)	(0.252)
District population density	0.008	0.008	-0.000	0.000
	(0.006)	(0.006)	(0.007)	(0.007)
State dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	0.105	0.191	0.529	0.724**
	(0.152)	(0.164)	(0.326)	(0.318)
Observations	130	130	130	130
R-squared	0.80	0.79	0.82	0.79
Robust standard errors in parentheses, clustered at the district level				
* significant at 10%; ** significant at 5%; *** significant at 1%				

Table 19a: District regressions– Public health facilities

Dependent Variable	% of villages with a health center		% of villages with a primary health sub-center	
	(1) OLS	(2) IV	(3) OLS	(4) IV
Number of AC reserved for SC	0.001	-0.002	0.003	0.006
	(0.002)	(0.004)	(0.013)	(0.029)
Number of AC reserved for ST	-0.007*	-0.018**	-0.026	-0.088**
	(0.004)	(0.009)	(0.016)	(0.041)
Current SC share in district population	-1.639**	-1.819***	-5.153*	-6.178**
	(0.623)	(0.619)	(2.639)	(2.460)
Current ST share in district population	-0.085	-0.061	-0.548	-0.394
	(0.073)	(0.094)	(0.382)	(0.500)
Square of current SC share in district	7.705***	8.488***	24.685*	28.314**
	(2.764)	(2.795)	(13.069)	(12.919)
Square of current ST share in district	0.692*	0.835*	2.712	3.479
	(0.372)	(0.449)	(1.804)	(2.163)
share in district population	-11.311***	-12.288***	-37.037*	-41.272**
	(3.880)	(3.956)	(19.509)	(19.830)
Cube of current ST share in district	-0.885*	-0.959*	-2.884	-3.218
	(0.459)	(0.520)	(2.000)	(2.498)
Ratio of males to females in the district	-0.023	-0.037	0.022	-0.055
	(0.065)	(0.065)	(0.220)	(0.221)
District population density	0.005	0.005	-0.008	-0.008
	(0.003)	(0.003)	(0.007)	(0.007)
State dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	0.122	0.157*	0.550*	0.728**
	(0.074)	(0.080)	(0.301)	(0.289)
Observations	130	130	130	130
R-squared	0.70	0.68	0.63	0.60

Robust standard errors in parentheses, clustered at the district level
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 19b: District regressions– Public health facilities

Dependent Variable	% of district rural population living in a village with an educational facility	% of district rural SC population living in a village with an educational facility	% of district rural ST population living in a village with an educational facility	% of district rural non SC/ST population living in a village with an educational facility
Number of AC reserved for SC	0.024***	0.023**	0.023	0.024***
	(0.009)	(0.009)	(0.022)	(0.009)
Number of AC reserved for ST	-0.014	-0.017	0.068	-0.017
	(0.020)	(0.022)	(0.049)	(0.020)
Current SC share in district population	-0.521***	-0.567***	0.124	-0.522***
	(0.138)	(0.145)	(0.502)	(0.136)
Current ST share in district population	0.045	0.101	-0.425	0.102
	(0.199)	(0.212)	(0.347)	(0.188)
Ratio of males to females in the district	0.220*	0.254**	1.138**	0.204
	(0.126)	(0.117)	(0.482)	(0.127)
District population density	-0.002	-0.003	-0.004	-0.002
	(0.002)	(0.002)	(0.009)	(0.002)
State dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	0.814***	0.791***	-0.261	0.830***
	(0.130)	(0.122)	(0.528)	(0.130)
Observations	130	130	128	130
R-squared	0.43	0.39	0.28	0.45
Robust standard errors in parentheses, clustered at the district level				
* significant at 10%; ** significant at 5%; *** significant at 1%				

Table 20: District regressions– Location of educational facilities

Dependent Variable	% of district rural population living in a village with a school	% of district rural SC population living in a village with a school	% of district rural ST population living in a village with a school	% of district rural non SC/ST population living in a village with a school
Number of AC reserved for SC	0.025**	0.024**	0.023	0.025**
	(0.009)	(0.010)	(0.022)	(0.010)
Number of AC reserved for ST	-0.011	-0.015	0.069	-0.014
	(0.021)	(0.023)	(0.049)	(0.020)
Current SC share in district population	-0.542***	-0.590***	0.126	-0.543***
	(0.143)	(0.149)	(0.501)	(0.141)
Current ST share in district population	0.016	0.079	-0.439	0.075
	(0.206)	(0.216)	(0.351)	(0.193)
Ratio of males to females in the district	0.292**	0.324**	1.148**	0.276**
	(0.135)	(0.127)	(0.480)	(0.135)
District population density	-0.003	-0.003	-0.004	-0.003
	(0.003)	(0.003)	(0.009)	(0.003)
State dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	0.741***	0.721***	-0.275	0.757***
	(0.141)	(0.134)	(0.526)	(0.140)
Observations	130	130	128	130
R-squared	0.50	0.46	0.29	0.51
Robust standard errors in parentheses, clustered at the district level				
* significant at 10%; ** significant at 5%; *** significant at 1%				

Table 21: District regressions– Location of schools

Dependent Variable	**Average distance to the nearest educational facility per person**	**Average distance to the nearest educational facility per SC person**	**Average distance to the nearest educational facility per ST person**	**Average distance to the nearest educational facility per non SC/ST**
Number of AC reserved for SC	-0.070**	-0.068**	-0.066	-0.071**
	(0.027)	(0.027)	(0.120)	(0.027)
Number of AC reserved for ST	0.032	0.039	-0.353	0.044
	(0.056)	(0.060)	(0.221)	(0.054)
Current SC share in district population	1.352***	1.487***	-3.157	1.389***
	(0.469)	(0.484)	(3.119)	(0.459)
Current ST share in district population	-0.086	-0.236	2.126	-0.302
	(0.524)	(0.557)	(1.417)	(0.500)
Ratio of males to females in the district	-0.577	-0.690*	-2.049	-0.538
	(0.421)	(0.389)	(1.614)	(0.424)
District population density	0.002	0.004	0.039	0.001
	(0.007)	(0.006)	(0.045)	(0.007)
State dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	0.519	0.598	2.773*	0.472
	(0.443)	(0.417)	(1.650)	(0.443)
Observations	130	130	128	130
R-squared	0.44	0.41	0.27	0.44
Robust standard errors in parentheses, clustered at the district level * significant at 10%; ** significant at 5%; *** significant at 1%				

Table 22: District regressions– Distance measures of location of educational facilities

Dependent Variable	**% of district rural population living in a village with a primary school**	**% of district rural SC population living in a village with a primary school**	**% of district rural ST population living in a village with a primary school**	**% of district rural non SC/ST population living in a village with a primary school**
Number of AC reserved for SC	0.025***	0.024**	0.020	0.025***
	(0.009)	(0.009)	(0.022)	(0.009)
Number of AC reserved for ST	-0.012	-0.017	0.073	-0.015
	(0.021)	(0.022)	(0.048)	(0.020)
Current SC share in district population	-0.544***	-0.591***	0.167	-0.549***
	(0.135)	(0.142)	(0.481)	(0.135)
Current ST share in district population	0.019	0.085	-0.463	0.082
	(0.206)	(0.216)	(0.346)	(0.193)
Ratio of males to females in the district	0.339**	0.370***	1.216**	0.323**
	(0.131)	(0.123)	(0.467)	(0.131)
District population density	-0.003	-0.003	-0.003	-0.003
	(0.003)	(0.003)	(0.009)	(0.003)
State dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	0.690***	0.670***	-0.352	0.707***
	(0.135)	(0.128)	(0.511)	(0.135)
Observations	130	130	128	130
R-squared	0.52	0.48	0.31	0.53
Robust standard errors in parentheses, clustered at the district level * significant at 10%; ** significant at 5%; *** significant at 1%				

Table 23: District regressions– Location of primary schools

AC reserved for SC	Coefficient	Standard Error	t-statistic	P-value
Current SC share in district population	0.87	0.19	4.61	0.00
Current ST share in district population	-0.14	0.15	-0.94	0.35
Ratio of males to females in the district	0.44	0.33	1.34	0.18
District population density	0.03	0.01	4.31	0.00
Number of AC in the district	0.01	0.01	0.65	0.51
AC predicted to be reserved for SC	0.22	0.03	7.00	0.00
AC predicted to be reserved for ST	-0.03	0.07	-0.45	0.65
Observations	1219			
R-squared	0.17			
Adjusted R-squared	0.12			
Regressions include state, district and time dummies, and a constant term				

Table 24: First Stage regressions– AC reserved for SC

AC reserved for ST	Coefficient	Standard Error	t-statistic	P-value
Current SC share in district population	-0.06	0.08	-0.73	0.47
Current ST share in district population	1.19	0.06	19.62	0.00
Ratio of males to females in the district	-0.25	0.13	-1.87	0.06
District population density	0.00	0.00	-0.87	0.38
Number of AC in the district	0.00	0.00	0.51	0.61
AC predicted to be reserved for SC	0.02	0.01	1.51	0.13
AC predicted to be reserved for ST	0.20	0.03	7.45	0.00
Observations	1219			
R-squared	0.64			
Adjusted R-squared	0.62			
Regressions include state, district and time dummies, and a constant term				

Table 25: First Stage regressions– AC reserved for ST

Dependent Variable	% of villages with an educational facility		% of villages with a school	
	(1) OLS	(2) IV	(3) OLS	(4) IV
AC reserved for SC	-0.008	0.111**	-0.008	0.110**
	(0.010)	(0.056)	(0.010)	(0.056)
AC reserved for ST	0.009	-0.116	0.010	-0.112
	(0.022)	(0.151)	(0.022)	(0.152)
Current SC share in AC population	-0.093	-0.266**	-0.087	-0.259**
	(0.098)	(0.113)	(0.100)	(0.116)
Current ST share in AC population	-0.139***	0.061	-0.141***	0.055
	(0.052)	(0.221)	(0.053)	(0.221)
Ratio of males to females in the AC	0.067	-0.042	0.070	-0.038
	(0.213)	(0.214)	(0.215)	(0.216)
AC Population density	-0.006***	-0.010***	-0.006***	-0.010***
	(0.002)	(0.003)	(0.002)	(0.003)
Number of AC in the district	0.018***	0.018***	0.018***	0.018***
	(0.002)	(0.002)	(0.002)	(0.002)
State dummies	Yes	Yes	Yes	Yes
District dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	0.669***	0.790***	0.658***	0.780***
	(0.206)	(0.213)	(0.208)	(0.215)
Observations	1219	1219	1219	1219
R-squared	0.63	0.55	0.65	0.57
Robust standard errors in parentheses, clustered at AC level				
* significant at 10%; ** significant at 5%; *** significant at 1%				

Table 26: AC level regressions– % of villages with an educational facility and a school

Dependent Variable	**Average distance to the nearest educational facility**		**% of villages with a primary school**	
	(1) OLS	(2) IV	(3) OLS	(4) IV
AC reserved for SC	0.027	-0.373*	-0.008	0.115**
	(0.037)	(0.206)	(0.010)	(0.057)
AC reserved for ST	-0.027	0.759	0.008	-0.118
	(0.078)	(0.748)	(0.022)	(0.152)
Current SC share in AC population	0.015	0.594	-0.087	-0.267**
	(0.310)	(0.388)	(0.100)	(0.117)
Current ST share in AC population	0.577***	-0.627	-0.138***	0.066
	(0.192)	(1.062)	(0.053)	(0.222)
Ratio of males to females in the AC	1.088	1.554	0.067	-0.046
	(0.983)	(1.022)	(0.215)	(0.216)
AC Population density	0.056***	0.070***	-0.006***	-0.010***
	(0.009)	(0.011)	(0.002)	(0.003)
Number of AC in the district	-0.057***	-0.057***	0.018***	0.018***
	(0.007)	(0.008)	(0.002)	(0.002)
State dummies	Yes	Yes	Yes	Yes
District dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	-0.223	-0.647	0.658***	0.785***
	(0.949)	(1.014)	(0.208)	(0.215)
Observations	1219	1219	1219	1219
R-squared	0.55	0.47	0.65	0.57
Robust standard errors in parentheses, clustered at AC level				
* significant at 10%; ** significant at 5%; *** significant at 1%				

Table 27: AC regressions– Average distance to the nearest educational facility and % of villages with a primary school

Dependent Variable	**% of AC rural population living in a village with an educational facility**	**% of AC rural SC population living in a village with an educational facility**	**% of AC rural ST population living in a village with an educational facility**	**% of AC rural non SC/ST population living in a village with an educational facility**
AC reserved for SC	0.065*	0.087	0.123**	0.006
	(0.039)	(0.064)	(0.051)	(0.023)
AC reserved for ST	-0.060	-0.068	-0.069	-0.033
	(0.063)	(0.071)	(0.100)	(0.036)
Current SC share in AC population	-0.239**	-0.354	-0.410***	0.003
	(0.120)	(0.225)	(0.096)	(0.051)
Current ST share in AC population	0.057	0.091	0.070	0.050
	(0.093)	(0.111)	(0.146)	(0.058)
Ratio of males to females in the AC	0.048	0.044	0.012	-0.117
	(0.205)	(0.178)	(0.203)	(0.129)
AC Population density	-0.011***	-0.012***	-0.041***	-0.008***
	(0.002)	(0.003)	(0.003)	(0.001)
Number of AC in the district	0.004***	0.003***	0.005	0.004***
	(0.001)	(0.001)	(0.003)	(0.001)
State dummies	Yes	Yes	Yes	Yes
District dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	0.926***	0.959***	0.916***	1.064***
	(0.196)	(0.165)	(0.207)	(0.125)
Observations	1219	1217	1112	1218
R-squared	0.33	0.25	0.31	0.46
Robust standard errors in parentheses, clustered at AC level * significant at 10%; ** significant at 5%; *** significant at 1%				

Table 28: AC regressions– Location of educational facilities

Dependent Variable	% of AC rural population living in a village with a school	% of AC rural SC population living in a village with a school	% of AC rural ST population living in a village with a school	% of AC rural non SC/ST population living in a village with a school
AC reserved for SC	0.062	0.086	0.128**	0.001
	(0.039)	(0.064)	(0.053)	(0.023)
AC reserved for ST	-0.057	-0.069	-0.060	-0.027
	(0.062)	(0.071)	(0.100)	(0.035)
Current SC share in AC population	-0.234*	-0.349	-0.401***	0.009
	(0.121)	(0.225)	(0.098)	(0.053)
Current ST share in AC population	0.051	0.091	0.062	0.041
	(0.093)	(0.112)	(0.145)	(0.057)
Ratio of males to females in the AC	0.054	0.058	0.088	-0.109
	(0.205)	(0.179)	(0.204)	(0.130)
AC Population density	-0.011***	-0.012***	-0.042***	-0.008***
	(0.002)	(0.003)	(0.003)	(0.001)
Number of AC in the district	0.004***	0.003***	0.005	0.004***
	(0.001)	(0.001)	(0.003)	(0.001)
State dummies	Yes	Yes	Yes	Yes
District dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	0.915***	0.942***	0.831***	1.053***
	(0.197)	(0.166)	(0.208)	(0.126)
Observations	1219	1217	1112	1218
R-squared	0.39	0.32	0.31	0.51
Robust standard errors in parentheses, clustered at AC level * significant at 10%; ** significant at 5%; *** significant at 1%				

Table 29: AC regressions– Location of schools

Dependent Variable	Distance to the nearest educational facility for a person in the AC	Distance to the nearest educational facility for an SC person in the AC	Distance to the nearest educational facility for an ST person in the AC	Distance to the nearest educational facility for a non SC/ST person in the AC
AC reserved for SC	-0.189*	-0.223	-0.373**	-0.024
	(0.111)	(0.173)	(0.169)	(0.075)
AC reserved for ST	0.302	0.219	0.437	0.127
	(0.269)	(0.218)	(0.516)	(0.124)
Current SC share in AC population	0.570*	0.847	1.144***	-0.068
	(0.336)	(0.614)	(0.347)	(0.247)
Current ST share in AC population	-0.275	-0.259	-0.518	-0.171
	(0.389)	(0.336)	(0.736)	(0.201)
Ratio of males to females in the AC	0.503	0.460	0.137	0.875
	(0.961)	(0.935)	(0.547)	(0.908)
AC Population density	0.071***	0.073***	0.282***	0.063***
	(0.009)	(0.010)	(0.012)	(0.008)
Number of AC in the district	-0.009**	-0.006**	-0.003	-0.009**
	(0.004)	(0.003)	(0.011)	(0.004)
State dummies	Yes	Yes	Yes	Yes
District dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	-0.435	-0.488	0.066	-0.738
	(0.932)	(0.897)	(0.593)	(0.873)
Observations	1219	1217	1112	1218
R-squared	0.29	0.27	0.42	0.37
Robust standard errors in parentheses, clustered at AC level * significant at 10%; ** significant at 5%; *** significant at 1%				

Table 30: AC regressions– Location of educational facilities, distance measures

Dependent Variable	% of AC rural population living in a village with a primary school	% of AC rural SC population living in a village with a primary school	% of AC rural ST population living in a village with a primary school	% of AC rural non SC/ST population living in a village with a primary school
AC reserved for SC	0.066*	0.092	0.130**	0.003
	(0.039)	(0.065)	(0.053)	(0.023)
AC reserved for ST	-0.052	-0.058	-0.061	-0.017
	(0.061)	(0.070)	(0.099)	(0.038)
Current SC share in AC population	-0.245**	-0.361	-0.403***	-0.001
	(0.120)	(0.224)	(0.099)	(0.055)
Current ST share in AC population	0.044	0.077	0.052	0.033
	(0.092)	(0.111)	(0.145)	(0.060)
Ratio of males to females in the AC	0.034	0.030	0.070	-0.129
	(0.205)	(0.178)	(0.204)	(0.132)
AC Population density	-0.011***	-0.012***	-0.042***	-0.008***
	(0.002)	(0.003)	(0.004)	(0.001)
Number of AC in the district	0.004***	0.003***	0.005	0.004***
	(0.001)	(0.001)	(0.003)	(0.001)
State dummies	Yes	Yes	Yes	Yes
District dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	0.931***	0.966***	0.847***	1.069***
	(0.197)	(0.166)	(0.208)	(0.128)
Observations	1219	1217	1112	1218
R-squared	0.39	0.32	0.31	0.51

Robust standard errors in parentheses, clustered at AC level
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 31: AC regressions– Location of primary schools

Dependent Variable	**% of villages with an educational facility**	**% of villages with a school**	**Average distance to the nearest educational facility**	**% of villages with a primary school**
Number of AC	0.062	0.068	-0.188	0.076
reserved for SC	(0.066)	(0.066)	(0.175)	(0.071)
Number of AC	-0.122	-0.153	0.045	-0.177
reserved for ST	(0.226)	(0.214)	(0.643)	(0.232)
Current SC share in	8.285	8.969	-19.920	9.632
district population	(6.817)	(6.824)	(17.825)	(7.336)
Current ST share in	-0.731	-0.887	-0.382	-0.768
district population	(2.587)	(2.435)	(7.814)	(2.533)
share in district	-58.074	-62.954	143.656	-67.988
population	(45.904)	(45.576)	(123.224)	(49.149)
share in district	4.666	5.962	5.821	5.676
population	(16.442)	(15.116)	(48.926)	(15.582)
share in district	86.725	93.406	-229.225	101.051
population	(68.346)	(68.351)	(181.885)	(73.700)
share in district	-4.076	-5.261	-8.397	-4.694
population	(18.386)	(17.064)	(54.834)	(17.635)
females in the	-0.709	-0.789	1.331	-0.851
district	(0.646)	(0.648)	(1.862)	(0.703)
District population	-0.050	-0.056	0.113	-0.060
density	(0.049)	(0.047)	(0.141)	(0.050)
State dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	1.586**	1.669**	-0.782	1.723**
	(0.653)	(0.645)	(1.895)	(0.706)
Observations	36	36	36	36
R-squared	0.92	0.92	0.93	0.91
Robust standard errors in parentheses, clustered at the district level * significant at 10%; ** significant at 5%; *** significant at 1%				

Table 32: District Education variables– 15% discontinuity sample for SC reservation

Dependent Variable	% of villages with a maternal and child health care center	% of villages with a primary health center, health center or primary health care sub-center	% of villages with a primary health sub-center	% of villages with a health center
Number of AC	-0.002	-0.094	-0.082	-0.028***
reserved for SC	(0.031)	(0.097)	(0.112)	(0.005)
Number of AC	-0.416*	0.006	0.043	-0.040
reserved for ST	(0.224)	(0.907)	(1.044)	(0.053)
Current SC share in	15.583	-1.792	-0.947	6.301
district population	(21.959)	(71.031)	(80.600)	(5.832)
Current ST share in	-0.354	-3.246	-2.235	-0.891**
district population	(1.654)	(5.089)	(5.905)	(0.375)
share in district	-134.901	21.960	20.155	-50.734
population	(169.601)	(572.022)	(649.960)	(44.180)
share in district	17.649	13.333	6.913	6.311*
population	(11.532)	(38.822)	(44.726)	(3.542)
share in district	318.629	-50.789	-52.178	124.087
population	(391.947)	(1,367.350)	(1,554.117)	(100.726)
share in district	-27.915	-16.799	-7.617	-9.646
population	(19.202)	(63.489)	(73.202)	(5.946)
females in the	-2.711*	-1.477	-0.838	-0.772
district	(1.470)	(5.819)	(6.672)	(0.439)
District population	0.008	-0.061	-0.053	-0.016***
density	(0.012)	(0.035)	(0.039)	(0.005)
State dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	2.530*	2.156	1.300	0.709*
	(1.175)	(4.841)	(5.553)	(0.362)
Observations	28	28	28	28
R-squared	0.32	0.79	0.75	0.76

Robust standard errors in parentheses, clustered at the district level
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 33: District Public Health measures– 20% discontinuity sample for ST

Dependent Variable	**% of villages with an educational facility**	**% of villages with a school**	**Average distance to the nearest educational facility**	**% of villages with a primary school**
Number of AC reserved for SC	0.062**	0.063**	-0.159	0.065**
	(0.027)	(0.028)	(0.099)	(0.028)
Number of AC reserved for ST	-0.007	-0.009	-0.026	-0.013
	(0.048)	(0.049)	(0.190)	(0.049)
Current SC share in district population	0.481	0.660	5.792	0.214
	(2.686)	(2.770)	(10.447)	(2.745)
Current ST share in district population	-0.400	-0.422	1.746	-0.471
	(0.683)	(0.704)	(2.621)	(0.696)
Square of current SC share in district population	-5.471	-6.510	-37.410	-4.401
	(13.673)	(14.105)	(53.897)	(14.013)
Square of current ST share in district population	-0.643	-0.549	-4.142	0.044
	(3.256)	(3.357)	(12.518)	(3.323)
Cube of current SC share in district population	5.595	7.226	76.488	4.060
	(20.788)	(21.447)	(82.755)	(21.350)
Cube of current ST share in district population	2.097	2.049	2.903	1.265
	(3.847)	(3.967)	(14.750)	(3.924)
Ratio of males to females in the district	0.173	0.252	-0.520	0.324
	(0.297)	(0.306)	(1.154)	(0.303)
District population density	-0.005	-0.002	-0.024	-0.003
	(0.009)	(0.009)	(0.035)	(0.009)
State dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	0.723*	0.618	0.829	0.575
	(0.372)	(0.384)	(1.461)	(0.381)
Observations	130	130	130	130
Number of Districts	65	65	65	65
Standard errors in parentheses				
* significant at 10%; ** significant at 5%; *** significant at 1%				

Table 34: District Education variables– Random effects specification

Dependent Variable	**% of villages with an educational facility**	**% of villages with a school**	**Average distance to the nearest educational facility**	**% of villages with a primary school**
Number of AC reserved for SC	0.067**	0.069**	-0.171**	0.069**
	(0.027)	(0.027)	(0.082)	(0.027)
Number of AC reserved for ST	-0.032	-0.031	-0.018	-0.028
	(0.050)	(0.051)	(0.177)	(0.049)
Current SC share in district population	-0.940	-0.418	9.857	-0.705
	(6.929)	(6.882)	(26.682)	(6.779)
Current ST share in district population	-0.728	-0.855	2.283	-0.967
	(1.352)	(1.391)	(4.314)	(1.353)
Square of current SC share in district population	-4.724	-8.896	-63.844	-6.420
	(59.255)	(58.993)	(226.131)	(58.080)
Square of current ST share in district population	3.688	4.654	-9.928	5.646
	(12.026)	(12.321)	(35.701)	(12.095)
Cube of current SC share in district population	37.555	49.582	146.259	40.613
	(204.805)	(204.344)	(761.804)	(201.034)
Cube of current ST share in district population	-5.767	-8.680	18.657	-11.601
	(33.964)	(34.777)	(100.945)	(34.106)
Quartic term: current SC share in district population	-72.768	-84.432	-61.268	-73.084
	(242.255)	(241.931)	(881.889)	(237.865)
Quartic term: current ST share in district population	3.306	5.976	-12.678	8.507
	(29.076)	(29.754)	(86.736)	(29.165)
Ratio of males to females in the district	0.325	0.408	-0.682	0.461
	(0.329)	(0.330)	(1.801)	(0.324)
District population density	-0.006	-0.007	-0.014	-0.007
	(0.005)	(0.005)	(0.021)	(0.005)
State dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	0.693*	0.587	0.754	0.545
	(0.396)	(0.405)	(1.637)	(0.399)
Observations	130	130	130	130
R-squared	0.56	0.59	0.49	0.60
Robust standard errors in parentheses, clustered at the district level * significant at 10%; ** significant at 5%; *** significant at 1%				

Table 35: District Education variables– Specification includes quartic group population shares

Dependent Variable	**% of villages with an educational facility**	**% of villages with a school**	**Average distance to the nearest educational facility**	**% of villages with a primary school**
AC reserved for SC	0.187	0.163	-0.857	0.177
	(0.281)	(0.255)	(1.381)	(0.270)
AC reserved for ST	0.266	0.209	-1.638	0.222
	(0.474)	(0.433)	(2.297)	(0.460)
Current SC share in AC population	0.794	0.746	-2.961	0.805
	(0.807)	(0.731)	(4.033)	(0.772)
Current ST share in AC population	-0.723	-0.638	3.529	-0.665
	(0.872)	(0.796)	(4.239)	(0.846)
Ratio of males to females in the AC	-0.546	-0.598	4.124	-0.569
	(0.820)	(0.752)	(4.024)	(0.801)
AC Population density	-0.123	-0.131	0.289	-0.138
	(0.115)	(0.109)	(0.581)	(0.113)
Number of AC in the district	0.038***	0.038***	-0.098*	0.038***
	(0.012)	(0.012)	(0.059)	(0.012)
State dummies	Yes	Yes	Yes	Yes
District dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	0.920	0.982	-2.497	0.937
	(0.994)	(0.902)	(4.900)	(0.965)
Observations	207	207	207	207
R-squared	0.51	0.59	0.33	0.55
Robust standard errors in parentheses, clustered at AC level				
* significant at 10%; ** significant at 5%; *** significant at 1%				

Table 36: AC Education variables– Discontinuity sample

Dependent Variable	**% of villages with an educational facility**	**% of villages with a school**	**Average distance to the nearest educational facility**	**% of villages with a primary school**
AC reserved for SC	0.108**	0.107**	-0.373*	0.113**
	(0.053)	(0.054)	(0.199)	(0.054)
AC reserved for ST	-0.113	-0.109	0.759*	-0.116
	(0.118)	(0.120)	(0.449)	(0.121)
Current SC share in AC population	-0.246**	-0.240**	0.594	-0.251**
	(0.099)	(0.100)	(0.374)	(0.101)
Current ST share in AC population	0.052	0.047	-0.627	0.058
	(0.179)	(0.182)	(0.678)	(0.183)
Ratio of males to females in the AC	-0.087	-0.092	1.554***	-0.109
	(0.117)	(0.119)	(0.489)	(0.121)
AC Population density	-0.006**	-0.006**	0.070***	-0.006**
	(0.003)	(0.003)	(0.010)	(0.003)
Number of AC in the district	0.018***	0.018***	-0.057***	0.018***
	(0.003)	(0.003)	(0.012)	(0.003)
State dummies	Yes	Yes	Yes	Yes
District dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	0.829***	0.828***	-0.647	0.843***
	(0.129)	(0.132)	(0.532)	(0.133)
Observations	1219	1219	1219	1219
Number of AC	610	610	610	610
Standard errors in parentheses				
* significant at 10%; ** significant at 5%; *** significant at 1%				

Table 37: AC Education variables– Random effects specification

Dependent Variable	**% of villages with an educational facility**	**% of villages with a school**	**Average distance to the nearest educational facility**	**% of villages with a primary school**
AC reserved for SC	0.086	0.081	-0.347	0.090
	(0.068)	(0.068)	(0.302)	(0.071)
AC reserved for ST	-0.193	-0.188	1.272	-0.209
	(0.292)	(0.289)	(1.639)	(0.304)
Current SC share in AC population	-0.790**	-0.841**	2.072	-0.834**
	(0.364)	(0.370)	(1.572)	(0.381)
Current ST share in AC population	-0.589*	-0.596*	2.799	-0.568*
	(0.313)	(0.311)	(1.772)	(0.327)
Square of current SC share in AC population	2.236	2.484*	-5.983	2.385
	(1.406)	(1.403)	(5.262)	(1.458)
Square of current ST share in AC population	2.339	2.340	-12.191	2.239
	(1.767)	(1.754)	(10.052)	(1.842)
Cube of current SC share in AC population	-2.054	-2.283*	5.265	-2.176
	(1.285)	(1.279)	(4.693)	(1.331)
Cube of current ST share in AC population	-1.810	-1.819	8.803	-1.649
	(1.126)	(1.129)	(6.202)	(1.169)
Ratio of males to females in the AC	-0.073	-0.069	1.750	-0.081
	(0.228)	(0.229)	(1.178)	(0.232)
AC Population density	-0.009***	-0.009***	0.066***	-0.009***
	(0.003)	(0.003)	(0.014)	(0.003)
Number of AC in the district	0.020***	0.020***	-0.064***	0.020***
	(0.002)	(0.002)	(0.010)	(0.002)
State dummies	Yes	Yes	Yes	Yes
District dummies	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes
Constant	0.859***	0.851***	-0.994	0.861***
	(0.238)	(0.237)	(1.215)	(0.242)
Observations	1219	1219	1219	1219
R-squared	0.57	0.59	0.44	0.58
Robust standard errors in parentheses, clustered at AC level * significant at 10%; ** significant at 5%; *** significant at 1%				

Table 38: AC Education variables– Specification includes squared and cubic group population share terms