

# Panchayats and Resource Allocation: A Comparison of the South Indian States\*

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Draft: April 2005

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\*Acknowledgements: We are grateful to Radu Ban, Lupin Rahman, Siddharth Sharma and Jillian Waid for research assistance, and the IMRB staff for conducting the survey. We thank the World Bank's Research Committee and the South Asia Rural Development Unit for financial support. The opinions in the report are those of the authors and do not necessarily reflect the points of view of the World Bank or its member countries.

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# 1 Introduction

The 73rd amendment to the Indian constitution, passed in 1993, has been one of the most important pieces of legislation in recent Indian history. Its goals are:

a) To systematize the functioning of Panchayati Raj Institutions (PRIs) by mandating regular elections to the three tiers of local self government, and requiring states to both increase PRI taxation and spending power, and PRIs allocation of state and central discretionary funds.

b) To ensure that disadvantaged groups within village communities are granted a voice in local deliberations, the 73rd amendment also mandated that 1/3<sup>rd</sup> of all elected positions in Panchayats, including Panchayat president, be reserved for women. Similarly elected positions in Panchayats are to be reserved for Scheduled Castes and Tribes in proportion to their population share. No elected post should be reserved for the same group for two consecutive elections.

All National governments since 1993 have been committed to the implementation of the amendment, and State governments have complied with varying degrees of commitment. The current United Progressive Alliance (UPA) government in Delhi has gone even further and asserted in its Common Minimum Program that:

”1) After consultations with States, the UPA Government will ensure that all funds given to States for poverty alleviation and rural development schemes by Panchayats are neither delayed nor diverted. Monitoring will be strict. In addition, after consultation

with States, the UPA Government will consider crediting elected Panchayats such funds directly.

2) Devolution of funds will be accompanied by a similar devolution of functions and functionaries as well. Regular elections to Panchayat bodies will be ensured and the amended Act in respect of the Fifth and Sixth Schedule Areas will be implemented.

3) The UPA Government will ensure that the Gram Sabha is empowered to emerge as the foundation of Panchayati Raj. "

Thus, there is likely to be a renewed emphasis on PRIs as a means of providing public services to the poor, and thereby ensuring that rural communities can benefit from the gains to economic growth.

This experiment in decentralization is, arguably, one of the most ambitious experiments in redesigning governance structures undertaken by a low income country. The stated aim was to improve citizens' ability to access and influence the public service delivery system and to directly tackle social exclusion by a system of political reservations. Despite the breadth of this democratic experiment, there is remarkably little quantitative evidence on how well the experiment has worked. There is, however, a large and growing qualitative and "action research" literature on Panchayats that come to a diverse set of conclusions - reflecting the difficulties of studying such a broad topic in a such a complex country. A comprehensive review of this literature is beyond the scope of this report but overviews can be found in World Bank (2000), Matthew and Buch (2000), and Manor (1998).

Qualitative work has important strengths, but it also has important weaknesses (Rao and Woolcock 2003), central among which is its relative inability

to generate generalizable findings which are essential to a policy dialogue. It is also more suited to demonstrating correlations or "affinities" rather than clear causal connections - for instance on the important question of the impact of the reservations policy. Therefore, an informed policy dialogue requires both qualitative and quantitative information.

Quantitative analysis of Panchayats using large samples are rare. An exception to this is the important work by Chattopadhyay and Duflo (2004a) on the causal impact of women's reservations on Panchayat action in Rajasthan and West Bengal. They find that reservations improve the ability of women to govern, in a way that is congruent with the desires of women in the population. Work by Alsop, Krishna and Sjoblom (2000), also on Rajasthan and Madhya Pradesh, highlights the role of reservation in reducing the systematic exclusion of women and disadvantaged groups from decision making processes at the local level. Chaudhuri and Heller (2004) have, more recently, completed a survey studying the impact of the "People's Campaign for Decentralized Planning" in Kerala showing that it increased the level of participatory planning in panchayats, had a positive impact on development performance and on social inclusion, but that levels of participation have declined in recent years - findings that are consistent with our study.

But, given the scope of the experiment and regional focus of the existing quantitative work, a large number of open questions remain. How well has decentralization worked in early adopter states such as Kerala and Karnataka? How do village Panchayats raise resources and implement policies? What is the impact of caste reservations? Do village meetings open to all citizens (Gram Sabha meetings) succeed in increasing the voice of the poor

and disadvantaged? Answering these questions are crucial in formulating Panchayat policy.

The above questions also point to a crucial need for a sound, quantitative evidentiary base to provide some answers to these questions. Quantitative data collection can also allow us to establish a baseline regarding functioning of PRIs that will permit researchers and policymakers to identify how public service delivery via PRIs changes as PRIs get more resources and more powers over time. These observations motivate the research that underlies this report.

This paper is based on survey evidence collected by the authors in conjunction with the World Bank in four Indian states (Andhra Pradesh, Tamil Nadu, Karnataka and Kerala) in 2002. The survey focussed on the local tier of elected self government – Gram Panchayats (GP).

Section 3 describes the sampling methodology and survey design in detail. Section 4 describes the institutional differences in PRIs across our four sample states, and studies the differences in the effectiveness of GP Institutions. This analysis is informative of the extent to which states differ in the provision of public services at the village level, and how GP activism differs in the four states. Section 5 summarizes findings from a research program which uses these data to conduct in-depth analysis of the political economy of GP, reservations for women, reservations for Scheduled Castes and Tribes, and the effectiveness of Gram Sabha meetings. Section 6 draws out the implications of the findings from this analysis for policy.

## 2 Methodology

Our data come from a village- and household- level survey conducted in Andhra Pradesh (AP), Karnataka (KA), Kerala (KE) and Tamil Nadu (TN). The survey was conducted between September-November 2002.

The administrative unit below the state in India is the district. Each Indian district is divided into blocks. Every block consists of multiple GPs. A GP typically consists of 1-5 revenue villages, and its demarcation is done on a population basis. The Panchayat Act of every Indian states mandates the population criteria to be followed in that state.<sup>1</sup>

Sampling was done in multiple stages, and consisted of purposive sampling up to the level of blocks and random sampling within these blocks. Our final sample consists of 527 villages belonging to 201 elected GPs. In a random sub-sample of 259 villages, 20 household surveys per village were conducted, giving a sample of 5,180 households. In addition, a household survey was also fielded to an elected member of the GP in every village (with precedence given to the GP head if he/she lived in that village) - this gives us an additional household sample of 544 elected officials. We describe the stages of our sampling below.

### 2.1 Sampling

- **District sample:** for each pair of states two districts (one per state) that shared a common boundary were selected. One district in KA

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<sup>1</sup>In Andhra Pradesh and Kerala, it is a (revenue) village irrespective of its size. In Tamil Nadu it is a revenue village with population of 500 or more. In Karnataka it is a group of villages with population between 5 and 7 thousand.

(Kolar) that shared boundaries with both AP and TN entered the sample twice. The same holds for one district in AP (Chithoor) This gives us nine unique districts - 2 districts each in AP, KE and TN and 3 in KA. The district pairs were selected, with one exception, to focus on districts that had belonged to same administrative unit during colonial rule, but had been transferred to different units when the states were reorganized in 1956. These are the districts of Bidar and Medak from the erstwhile state of Hyderabad, now in KA and AP respectively, Pallakad, Coimbatore, Kasargod, Dakshin Kanada, Dharmapuri, and Chithoor, all from erstwhile Madras state and now in KE, TN, KE, KA, TN and AP respectively.

In KA, we also sampled Kolar district. This was a part of erstwhile Mysore state, the precursor to modern KA, and thus does not follow the colonial- rule matching process described above. However, its inclusion increases variation when we compare the other three states with KA. Furthermore, Kolar has common borders with both Chithoor in AP and Dharmapuri in TN - which allows for a three part comparison within the same geographic area. Map 1 provides a graphical description of this matching.

- **Block sample:** For each district pair (which shared a common boundary) 3 pairs of blocks were selected (that is, 3 blocks in each of the two districts). If one district was matched with 2 different districts then 6 blocks were chosen from it (three per match). In one block in KE an additional block was sampled as a check on our language matching. This gave us a total of 37 blocks (12 in KA, 9 in AP and TN and 7 in

KE).<sup>2</sup>

For each pair of districts the three pairs of blocks which were the most ‘linguistically similar’, in terms of the mother tongue of individuals living in the block, were chosen. Language is a good proxy in these regions for cultural differences given the prevalence of caste and linguistic endogamy. Hence, language matching allows us to partially control for "unobservable" socio-cultural differences. Linguistic similarity was computed using 1991 census block level language data. The historical and administrative similarity of linguistically matched blocks was checked using princely state maps and the Report of the States Reorganization Committee. Details on how the linguistic and historic matching was implemented are in Appendix II.

- **GP sample:** In AP, KA and TN we randomly sampled 6 GPs per block. In KE the population per GP in KE is roughly double that in the other three states. For this reason, in KE we instead sampled 3 GPs in every block. This procedure gave a total of 201 GPs.
- **Village sample:** In every sampled GP in AP, KA and TN we sampled all villages if the GP had 3 or fewer villages. If it had more than three villages, then we selected the Pradhan’s village and randomly selected two other villages. We excluded all villages with less than 200 persons from our sampling frame. All hamlets with population over 200 were considered as independent villages in drawing the sample. In KE, we directly sampled wards instead of villages (as villages in KE

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<sup>2</sup>The additional block was sampled in Kerala as a check on our sampling strategy.

tend to be very large) - we sampled 6 wards per GP. This gave us a final village sample size of 527 villages.<sup>3</sup> For sampled villages, any associated hamlets were also included as part of the sample.

- **Household village sample:** In every block in AP, KA and TN we randomly selected 3 of our 6 sampled GPs and conducted household interviews in all sampled villages falling in these GPs. In KE we randomly selected 2 GPs in one block and one GP in the other block. Within sampled GPs we conducted household interviews in all sampled wards. Overall this gave us a final sample size of 5180 households.<sup>4</sup>
- **Choice of households within a village:** Twenty households were sampled, of which four were always SC/ST. The survey team leader in every village walked the entire village to map it and identify total number of households. This was used to determine what fraction of households in the village were to be surveyed. The start point of the survey was randomly chosen, and after that every Xth household was surveyed such that the entire village was covered (going around the village in a clockwise fashion).
- **Elected official sample:** In every village in our sample an interview was conducted with an elected Panchayat official - if the Pradhan lived in the village he/she was interviewed, otherwise a ward member was randomly selected. In some cases, the Pradhan was not available at

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<sup>3</sup>The state-wise break up is AP: 69 villages, KA: 182 villages, KE: 126 wards; TN 129 villages.

<sup>4</sup>Number of villages for household sample were: AP: 32 villages, KA: 90 villages, KE 66 villages, TN 71 villages.

first visit and a ward member was selected. However, in these cases the investigator usually went back and interviewed the Pradhan. Hence our sample of elected officials is larger than the number of sampled villages - and stands at 544.

## 2.2 Questionnaires

Four different questionnaires were used to collect data at the Village, Politician and Household level (see Appendix B for the questionnaires).

At the village level two questionnaires were used. First, we administered a questionnaire using Participatory Rapid Appraisal (PRA) techniques (Chambers 2003) to a group of men selected to represent different caste groups in the village. The PRA questionnaire assessed villagers views on problems in the village, and the work done by the GP. The PRA was also used to collect a detailed listing of castes within the village, and land distribution both within and between castes. The PRA respondents were also asked to construct an oligarchy matrix for the village - listing the extent to which prominent activities in the village were controlled by the Pradhan, former Pradhan and the Vice-Pradhan. A short PRA-based questionnaire was separately fielded to a (i) a group of women and (ii) a group of SC/ST individuals. These PRA obtained separate measures of women's and SC/ST problem ranking vis-a-vis public service delivery.

The second village-level questionnaire was an audit of all public goods in the village. This was an independent audit conducted by an investigator who visually assessed the quality of schools, clinics, roads, drinking water, and sanitation and also identified the extent of GP involvement improving

these facilities.

In 259 villages we fielded household surveys. Twenty households were surveyed per village, with 10 male and 10 female respondents. Four SC/ST households were purposively selected in every village. The household questionnaire obtained information on household's socio-economic status, household structure, views and use of public services in the village, private government benefits. Respondents were also asked to rank-order problems in the village. Since the sample is divided between male and female and SC/ST and non-SC/ST respondents this provides yet another source of information on gender and caste differences on preferences about village problems. In each of the 522 sample villages a household survey was also conducted with one elected GP official. In addition to all the questions on the household questionnaire politicians were also asked a series of questions about their conduct of GP activities.

### **3 State Comparisons**

The empirical analysis in this report focusses on comparing GPs in the four South Indian states of Andhra Pradesh, Karnataka, Kerala and Tamil Nadu. An important question that remains in understanding the relative impact of the decentralization in these four states is the extent to which their political history and social structure have affected the functioning of local governments. There is considerable evidence demonstrating that the Travancore region that is currently part of the state of Kerala has a long history of progressive policies since (Jeffrey, 1992). Similarly Mysore state which is

currently part of the state of Karnataka was also ruled by relatively autonomous rulers who placed a special emphasis on education and economic development (Bhagavan, 2003). Recent work by Banerji and Iyer (2003) has shown that there are strong path dependencies in land tenure policies - specifically whether the region of India had a zamindari or ryotwari system in place during British Rule. These systems which were established early in the 19th century are shown to have significant contemporary impacts on the a variety of indicators of development. Furthermore, scholars have argued that differences in cultural systems can have an important effect of human development (e.g. Dyson and Moore, 1983). Given these path-dependencies and the cultural differences, it is possible that Kerala is different because "Kerala is Kerala". There is something special about the state that makes it particularly hospitable to good, equitable governance. If such path -dependencies prove to be definitive, then policy options are likely to be relatively small.

The sampling strategy outlined above allows us to compare the states, controlling for differences that may come from historical or cultural path-dependencies. We will compare villages on either side of the current borders that originally belonged to the same political entity, and which have also been matched by majority language. Thus, any differences we observe between these matched villages cannot be because of different political histories prior to 1956, or because of differences langauge - which is a proxy for local kinship structure and social organization. The differences have to attributed to differences that have emerged after 1956. The comparison is particularly interesting because the states provide an excellent contrast of differences in

the implementation of the 73rd amendment. In this section, we will briefly highlight these differences.<sup>5</sup>

In the last two decades there have been important differences in how states have structured panchayats. Some of these differences are summarized in Table 1. Consider the data on village funding. The data are 1997 and likely to be considerably different today, but some differences that are consistent with the above discussion can be discerned. It is clear that the four states differ considerably in the availability of funding to GPs. Much of the funding is tied to particular programs and the level of discretionary funding differs even more across the states. Kerala clearly dominates, followed by Karnataka. These two states are the subject of an excellent recent report on fiscal decentralization (World Bank 2004) which makes clear that Kerala and Karnataka are rather different from each other in many respects. While Kerala followed a learning-by-doing strategy of progressively increasing the responsibility of GPs with a significant decentralization program, Karnataka has been more cautious in its approach with more authority in the hands of the state government. Both these states, despite being better than other Indian states, do not have good accounting systems which does not permit for much transparency in local funding decisions. An important conclusion of the report is the fact Kerala has faced significant fiscal problems in recent years. This has caused considerable strain in GP finances, with promised allocations from state governments not being sanctioned to GPs. Thus, while Kerala has over the years been leading in giving GPs considerable fiscal authority and power, in recent years this authority has suffered considerable strains. Thus,

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<sup>5</sup>The state differences are derived from a note prepared by Geeta Sethi (SASRD).

the report concludes "a necessary condition for a well-functioning system of fiscal decentralization is a healthy financial position." This suggests that shifts in the effectiveness of GPs may not entirely be because of historical and cultural factors, but because of current trends.

### **3.1 Background**

**Kerala –Strong Fiscal Decentralization** The Kerala state government has, to a large extent, embraced the principal of decentralization and has taken an active role in ensuring the effective implementation of legislation and the state’s vision in this respect. The Kerala Panchayat Raj Act (1994) introduced a three-tier PRI system with a significant element of political and fiscal decentralization – distinct from early experiments in decentralized planning in the 1970s.

In 1996 this legislation was amended according to the recommendations of the Committee on the Decentralization of Powers which took some bold steps towards creating local self-government. Unlike other states, where development decisions are taken by the state government and local government implements the works, in Kerala locally elected leaders have been given full power to prepare and implement development projects based on their functional jurisdiction, the needs of the people and the resources available to them. To ensure integration of funds allocated to sectors and schemes with the plans of local bodies at all levels, financial and taxation powers have been devolved to local government. In addition, approximately 35-40% of plan expenditure is earmarked to development projects prepared by local bodies, which makes Kerala the most fiscally decentralized state in India.

Administrative decentralization is also underway, albeit to a lesser extent. At present, there is a dual system of control over line agency staff which, together with technical complexities inherent in the structure of development planning, have meant that elected officials have yet to gain effective control over line officials. However, the state is committed to tackling these problems with initiatives for administrative reorganization and statutory changes which extend the power of elected leaders and institutionalize the process of local level planning and plan implementation.

In addition to legislation, various informal mechanisms have been promoted to encourage participation at the grass-roots level and foster development planning from below. These include informal governance structures such as neighborhood groups and beneficiary selection committees and the Campaign for Decentralized Planning. This was a drive to empower local bodies to prepare, plan and implement development projects and harness Kerala's vast human resources by forming expert advisory committees manned by qualified volunteers.

The state government has also sought to improve accountability and transparency and to stem capture of elected institutions by bureaucrats and the local elite. These structures together with state legislation have made the Kerala model of decentralization an effective tool to foster local development planning and bring about the wider goal of democratic decentralization.

**Karnataka—Strong political decentralization** Karnataka has a long history of democratic decentralization with three distinct periods of panchayat legislation and a well-organized and politically conscious rural soci-

ety. The system in place prior to 1983 was largely ineffectual with panchayats having little real power.

In 1983 the Government of Karnataka, led by the Janata Party, passed a radical decentralization act which legislated a two-tier panchayati raj system with reservations for women and SCs and STs and a local participatory institution called the Gram Sabha. This was taken as a basis for the subsequent Karnataka Panchayat Raj Act (1993) passed in order to bring state legislation in line with the 73rd and 74th Amendments to the Constitution. The Act introduced a three-tier system with the aim of empowering representative local government and fostering local participation in rural development together with the formation of the District Planning Committee (DPC) whose main function involved overseeing the development plan for the district as a whole. Particular focus was placed on distributing political power within PRIs to improve accountability and reduce elite-group capture by introducing rotation of leadership between elected members.

**Andhra Pradesh— Weak Political Decentralization** Since 1958, Andhra Pradesh has incorporated the PRI system in its state legislation, the most recent being the Andhra Pradesh Panchayat Raj Act (1994). In addition to constitutional requirements this act introduced reservation of seats for the Backward Classes and party-based elections for the top two tiers of local government.

In practice, the state vision of PRIs, and their role with respect to development planning and local governance, is mixed. While several sub-committees have been formed to examine decentralization with regards to panchayats,

the state legislator has done little to empower them. Identification of PRI functions at the local level has not fully taken place which, together with the lack of a District Planning Committee, implies that panchayats at all levels have no major role in development planning or implementation, except in beneficiary selection. This problem is amplified by a lack of fiscal decentralization. Legislated taxation powers have not been effectively devolved and the majority of PRI funds are earmarked grants for central or state sponsored schemes. Together this has led to a serious mismatch between the limited functions entrusted to panchayats and the finances available to them that has acted to compromise political decentralization and accountability.

In addition, administrative decentralization has not taken place with parallel structures at the Rural Development and Panchayat Raj departments remaining largely separate. PRIs thus form a small and marginalized component in the state's vision of rural development which has fostered local participation and community development through other means. The most prominent of these is the Janmabhoomi program which is a participatory development initiative focussing on the creation of stake-holder groups, managed and controlled by state civil servants.

The degree of government commitment and amount of local development funds channeled through such programs indicate that the Andhra Pradesh government has in effect by-passed PRIs and the concept of democratic decentralization and is undertaking rural development without significant loss of central control.

**Tamil Nadu—Weak on political, administrative and fiscal decentralization** The State of Tamil Nadu has a volatile tradition of local representative institutions dating from the 1860s, and was one of the few states to voice concern over the 73rd and 74th Constitutional Amendments. Widespread state-level reluctance to comply with this legislation is reflected in the Tamil Nadu Panchayats Act (1994) which did little to devolve state powers and empower PRIs, even to the extent that past legislation had done. Elections were delayed to such an extent that central government threatened to withdraw all funds for rural development and were finally held in 1996 when the DMK party came in power and embraced democratic decentralization as one of its political mandates.

The experience of decentralization in Tamil Nadu is therefore in flux with greater devolution of powers to local government expected in the future. Under the current legislation, political and functional decentralization is very limited. PRIs fall under the jurisdiction of state officials (who have the power to dissolve them) and there are virtually no state schemes and functionaries transferred to local government.

The Gram Sabha, till recently, was a defunct institution for community decision-making with its beneficiary selection function being carried out by line or elected officials at higher levels. However, efforts at the grass-roots level to mobilize democracy in decision-making and rural participation in development are going some way to improve its effectiveness.

The main locus of state development planning and finance is still through the District Rural Development Agency which is a registered body controlled by state bureaucrats with little connection with PRIs. Panchayats are also

bypassed in rural development planning by the growth of independent state and central schemes such as the MPs and MLAs Area Development scheme.

Lack of fiscal autonomy means that local bodies are largely dependent on the meager state and central government for their resources which are pre-assigned, state grants for local bodies being 8% of the share in tax collection. There is also insufficient administrative decentralization, which compromises accountability. Line officials working in panchayat bodies are declared government officials and do not come under the management of local bodies. As a result local elected officials cannot supervise their activities or contribute to their projects except in service delivery.

As mentioned above, it is expected that democratic decentralization will come to the forefront of rural development planning in the near future with the change in government. Already recent community training drives and capacity building for participatory planning at the village level indicate that major initiatives are underway to strengthen PRIs at all levels.

## **3.2 Evidence**

We now examine cross-state differences in public good provision as a means of examining whether these differences mirror the institutional differences that we discussed above. We also discuss whether public good outcomes vary with reservation and whether it is the Pradhan's village. Our mode of analysis is two fold. First, we present cross-tabulations. Second, we report the results from a basic regression which includes state dummies, dummy for whether the Pradhan's post is reserved, a dummy for Pradhan's village and dummies for each matched block pair. As discussed above, there is ample reason to

believe that matched blocks share common historical and cultural traits. In the following discussion we abbreviate Andhra Pradesh to AP, Karnataka to KA, Kerala to KE, Tamil Nadu to TN.

### **3.2.1 Cross Village Resource Allocation**

**Levels of public goods** As is well known, KE has long been the leading Indian state with respect to human development indicators. Table 2a reports state-wise means for our sample villages from the 1991 census to see whether this is true for our villages. Table 2b provides the regression analogue, where we include block-pair fixed effects. Here, the state dummy variables focus on differences between the states within each block pair. It is clear that on almost all indicators KE was well ahead of the other states in 1991 in our sampled villages. One important exception is schooling, but this may be entirely due to the sampling method which sampled wards in KE and villages everywhere else. Thus, it was difficult to assign census village level information to our sampled wards in KE. Since schools service large populations - and are generally available for entire villages, any missed village in the census would result in an underestimate of the number of schools. KE is also behind AP and KA on the provision of domestic electricity. This is unlikely to be due to a sampling anomaly. We find no relationship with reservations, which is consistent with the fact that choice of reserved GPs is intended to be random. There is a generally positive effect of school outcomes with Pradhan's village, but this effect disappears when you control of population size and variation within the block.

Moving to the public goods data from our survey, which was conducted

11 years after the census, we see that the patterns are both similar and different. Table 3a and 3b report information from the facilities survey with state averages and block-pair fixed effects regressions respectively. KE clearly dominates the other states on schools, health facilities and drinking water sources. But it is behind on the number of overhead tanks, bus stops in the village, and the proportion of households with electric lights. Overhead tanks are easy to explain since KE probably has different mechanisms of water delivery than the other states, but the lack of bus stops in the village and electric lights may suggest that KE has put a much greater emphasis on basic investments in education, health and water than on other services. Looking at differences between the other three states we see that generally TN lags behind AP and KA, which was not the case in 1991. This suggests that there has been reduction in investments in public services in TN in the last decade, in comparison with AP and KA. Since these results compare the variation within block pairs, geography should not play a big role in explaining the differences between states. These differences should reflect public investments made since 1956 when the states were reorganized along linguistic lines. Note again that reservations have no effect, while the current Pradhan's home village has better public services.

The fact that KE is ahead in levels of public investments should not be surprising given the size of allocation to GPs and its efforts on fiscal decentralization. But the fact that KA is no different than AP may lead one to speculate that KA's efforts on political decentralization have not translated into results on the ground. TN's distinctly worsening situation from 1991 to 2002 is also consistent with the fact that it has poorly funded PRIs that

lack authority.

**GP activism** The analysis of differences in the levels of public good availability reflect the history of investments in public services since 1956 by each state. We are unable to distinguish between investments made directly by the state government, and those made via PRIs. In order to get more insights into this, we now move to a direct examination of levels of GP activism since the last election in each of the states<sup>6</sup>. This Panchayat "activism" in our data is measured from two different sources:

a) The facilities survey: Where after making an assessment of a facility the interviewer asked households living close to the facility about changes made since the last election.

b) The PRA: Where a detailed set of questions were asked about the activities of the Panchayat since the last election.

We consider the PRA data to be more accurate than the facilities survey data on this topic, because the PRA reflects the results of a consensus view from a moderated group discussion from a representative sample of knowledgeable people, while the facilities information is more ad hoc. Nevertheless, we report results from both sources of information. Table 4 begins with the facilities survey results. The clearest result here is that TN significantly lags behind the other three states in overall activism, and in investments in schools, anganwadis, health, drinking water, roads, and street lights. AP and KA do not show any significant differences with KE in overall activism

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<sup>6</sup>Since GP elections in AP were held a few months before the survey, the AP results reflect activism from the previous election.

or in schools. But they lag behind KE in anganwadis, health and drinking water. AP does better than all the other states on roads and street lights, while KA does no differently than KE on these investments.

In the PRA data, presented in Table 5 the contrast with KE is even more striking. AP and KA do better, or no different, than KE on all investments other than health. In particular KE lags behind these two states in drinking water investments, sanitation, roads, and electricity. AP and KA are not very different from one another, and TN lags behind all three states in overall activism and road investments. Additionally, the Pradhan's village benefits from increased activism across the board - an effect that remains after several more village level controls are added. Also note that again that we observe no impact of reservations.

What can we learn from these results? First, and perhaps most importantly, KE is slipping. This is consistent with the findings from the World Bank report on fiscal decentralization showing problems with KE's financing of PRIs - which is a result of its fiscal problems at the state level. It is also consistent with the recent work by Chaudhuri and Heller (2004) on Kerala panchayats.

Our results reinforce the point TN has generally very inactive GPs. Also note that KA and AP are rather similar to one another. Since KA has been far ahead of AP in promoting democratic decentralization, with AP under the Naidu government even making attempts to entirely bypass PRIs, it is interesting that this has not led to large differences in GP activism.

### 3.2.2 Household targeting

From public goods we move the provision of private goods since an important function of Panchayats is to target poor families with schemes to provide private benefits such as housing, private water supply and toilets. The data in these tables come from the household surveys explained above. We will use the same block-pair matching structure as in the public goods analysis, but in addition to controlling for state dummies, Pradhan's village and reservations we will include household level variables - whether the respondent is female, SC/ST, whether the household is wealthy, landless, or if the respondent is a local politician. We examine six different types of investments by Panchayats in private goods, and an indicator of overall activism in Table 6.

Once again TN's relatively poor performance on this is obvious - it lags behind the other states on every indicator except water. However, we again see that KE generally lags behind both AP and KA. KA leads all the states in overall activism - particularly in the provision of toilets and electricity. While AP leads the states in providing BPL cards and public works projects. These results are similar to the public goods activism results from the PRA and again provide some teeth to the argument that KE's PRI initiatives have been slipping. It could also indicate that since KE has a lower incidence of poverty, it will have fewer potential beneficiaries of targeted schemes than the other states.

Note, however, that targeting is not entirely bad. SCSTs benefit greatly from all the schemes, as one would hope since many schemes are designed with them in mind. Wealthy households are much less likely to benefit, while landless households are more likely to benefit - particularly by receiving BPL

cards and public works programs. A worrying result is that politicians benefit with a higher incidence of overall targeting and from the provision of toilets, and public works programs - though they also receive fewer investments in drinking water. Since, controlling for SCST and indicators of wealth and land, politicians should be treated no differently than anyone else - this result suggest that there there me be some private appropriation of public schemes. This issue is examined in greater detail in Besley, Pande and Rao (2005b).

### **3.2.3 Participation, Information and Socio-Political Structure**

We now turn to an examination of some institutional dimensions of governance at the village level. The data we collected are rich in information about participation both at the village and individual level, and on measures of political and social inequality.

**Village level participation:** Table 7 reports results on village level participation beginning with whether an NGO is active in a village. NGOs have over the years become increasingly active in South India and we see that 33% of the villages in our sample have NGOs present. Controlling for block-pair fixed effects, we see that Karnataka has the highest level of NGO activity while Tamil Nadu lags behind the other states. Interestingly, we also see a high degree of CBO activity in all the states, but after controlling for block-pairs no state dominates. Gram Sabha activity also shows some interesting patterns. Looking at Gram Sabha meetings held in the last twelve months KE is behind all the other states. However, the picture changes in

looking at Gram Sabhas held in the last six months where KE is ahead of all the other states. This is partly because our survey was conducted during a drought in parts of KA, AP and TN and Gram Sabhas were not held as regularly in these states - perhaps a way of preventing villagers from voicing complaints about drought-alleviation work. The Pradhan village always does better than other villages, as in the other results and no reservations effects are observed.

**Gram Sabha Participation by households** Table 8 reports findings from some indicators of Gram Sabha participation at the individuals level. We see that individuals are far more likely to attend to Gram Sabhas in KE, and to speak in them. But, attending the Gram Sabha to seek private benefits is much more likely in the other states. This suggests two things - one that households in KE are better off and therefore do not need to seek private benefits from the government as much, and - two - that that KE has a more politically sophisticated population. KE's citizens are likely to use Gram Sabhas to have a say in decisions over public goods and services. Worryingly, the data also demonstrate social exclusion in Gram Sabhas. Women are much less likely to attend Gram Sabhas or to speak in them. And landless individuals are also less likely to speak in Gram Sabhas. Interestingly, politicians also say that they are less likely to attend Gram Sabhas possibly because they have little to gain by attending them - unless they are in office. Gram Sabhas are examined in more detail in one of the papers in the appendix. The impact of participation in Gram Sabhas is examined in more detail in Besley, Pande and Rao (2005a and 2005b).

**Household Information and participation** KE's much higher level of civic sophistication is also apparent in Table 9. Here we see that KE households are much more likely to be regular readers of newspapers and to pay taxes. But, individuals in AP and TN are more likely to know the name of the Chief Minister, possibly because of the personality cults around Chandrababu Naidu and Jayalalitha the then chief ministers of these states. All these indicators of civic sophistication are higher for the wealthy and for politicians. However, these indicators are lower for the landless and much lower for women - again demonstrating exclusion.

We further examine these themes with indicators of political participation in Table 10. Looking at various indicators - whether a member of the household is politically active, voted in GP elections, MLA elections and Parliamentary elections - we again see that KE dominates the other states. Interestingly voters in KE are more likely to vote along political lines, while in the other states they are more likely to base their decisions on the characteristics of individual politicians. This is not surprising given the level to which elections in AP and TN are based on the personalities of politicians, but the fact that KA also shows less party-based voting than KE demonstrates that KE elections are significantly more determined by party politics. Note again that women are much less likely to vote. However, other excluded groups like SC/STs are more likely to participate in political activities and the landless are also more likely to vote. This suggests that the political process could provide a means for less advantaged groups to exercise their preferences. Note that we also see a perverse effect of politicians claiming that they are likely to be affiliated with a political activity, and to participate

in politics - this suggests that the responses of politicians to the questions we asked may also be driven by political motives.

Moving to more material forms of participation we examine the extent to which households contribute in cash or kind to the provision of public goods in Table 11. Note that material participation is higher in KE for roads and health, but lower for schools and drinking water. This is consistent with the findings on panchayat activism we observed above suggesting, unsurprisingly, that household contributions may be driven by the extent of panchayat involvement in these activities. Note again that the wealthy are more likely to contribute, and politicians also say that they are more likely to contribute. Women show a lower incidence of contributions but this may be because of their lower levels of earning and lack of individual agency in making decisions.

These results can be contrasted with the results on willingness to pay for public goods, reported in Table 12. Here we see that households in KE are much more likely to say that they are willing to pay more for public services across the board. We also observe a greater willingness to pay in TN compared to the other states. Similarly wealthy households indicate a greater willingness to pay. Note also that in the means, we see that in all the states except KA close to 50% of our respondents say that they are willing to pay more for one or more public services. While willingness to pay questions have important flaws, these results do suggest a gap between the demand and supply of service provision.

**Inequality** Finally we examine various indicators of economic, social and political inequality in these villages. We examine these indicators, reported in Tables 13 and 14, merely by looking at mean differences across the states (rather than the block-pair fixed effect regressions which are less relevant here). We should note that the data for these indicators was collected entirely by using PRA methods. For indicators of caste and land inequality the PRA group was asked to list all the caste and religious groups living in the village showing how many households belonged to each group. Then, for each group, they were asked to place the households in different broad categories of land ownership. This, method, allows us to obtain not only a detailed caste listing for every village, and measures of village land inequality, but to decompose land inequality in each village to its between and within-caste components. The results of this decomposition can be observed in Table 13. Interestingly KE shows the highest level of land inequality overall with a gini of 0.66. This is probably because its higher level of economic development makes non-farm incomes more salient and land less important as a measure of overall inequality. The other three states have land ginis that are not significantly different from each other - ranging from 0.52 in KA to 0.58 in TN.

We also use the Theil entropy measure of inequality because it can be decomposed into between and within-caste components. Measuring this presents a challenge because the number of castes per village varies considerably. Villages with more castes would have artificially higher between-caste inequality. To correct for this we group all castes into three categories - high (which include "forward" castes and castes considered "dominant" in the

state, low (castes classified as SC, ST, and "backward" but not "other backward"), and middle which is the residual category. Decomposing inequality into these three groups we see that 13% of inequality can be explained by between-caste inequality in KE, which increases to 18% in AP. We should note that between-within decompositions of inequality consistently tend to hover around 15% regardless of the nature of the data and the type of group (Kanbur and Venables, 2003), so it would not be valid to contrast these results with racial or spatial inequality observed in other data. But, the comparison across states in our own data are valid and suggest that caste is a much less salient indicator of inequality in KE than in the other states. This is further demonstrated in Table 14 where we see that only 17% of land is controlled by upper castes in KE, compared with 36% in KA. Caste dominance is therefore much more prevalent in KA.

Some villages also tend to be under the control of a few families. In order to construct a measure of this type of oligarchy, we asked the PRA group to construct another matrix showing whether the Pradhan, the ex-Pradhan and the vice-Pradhan controlled some important categories of political and economic power - such as whether they were the biggest landowners, or whether they owned the largest factory in the village. The proportion of "yes" answers in this matrix, then provides us a measure of oligarchy. State level differences in this measure are reported in Table 14 where we see that TN has higher oligarchy than the other states, followed by KE.

To summarize, we see that villages are characterized by a great deal of inequality and social heterogeneity within them. It has not been possible to measure this with previous data from India, or indeed, most parts of the

world. The extent to which these variables affect public services remains an open question - which, to some extent, we examine in other papers.

## 4 Conclusions

What can we learn from these results? First, they have some relevance for our understanding of the "Kerala model." Our findings provide more flesh on the well-known fact of Kerala's sophisticated political culture. It has a more politically knowledgeable electorate that is less likely to vote for candidates on caste or religious lines. It also has a more active civic culture with active participation in gram sabhas. While levels of land inequality are high, perhaps because of the reduced salience of land as an indicator of wealth, these inequalities are less likely to be because of caste based differences than in the other states. Kerala, perhaps influenced by this active political culture, also dominates the other states in the availability of public goods. However, consistent with other recent work, we find that Kerala is slipping. All our indicators of current investments on public goods by the panchayats are lower in Kerala than in the other states. Similarly we find that Kerala lags behind the other states in the provision of BPL cards and public works programs. To some extent this is because of Kerala's higher levels of development and lower levels of poverty. But, other evidence from the World Bank's fiscal decentralization study suggests that a fiscal constraints have reduced the availability of funds to panchayats resulting in lower levels of GP activity.

Tamil Nadu GPs in our sample are at the end of the distribution. They

lag all the other states in the provision of most public goods (other than water tanks and bus stops). More importantly, current levels of activity by GPs are also behind the other states. This is also true in the provision of private benefits such as BPL cards, housing and electricity. On the other hand, villagers in Tamil Nadu, are second only to those in Kerala in their political and civic participation - they are more likely to pay taxes than villagers in AP and Karnataka, and more likely to vote.

It is interesting to note that the remaining two states, Karnataka and AP are rather similar to one another. Since KA has been far ahead of AP in promoting democratic decentralization, with AP under the Naidu government even making attempts to entirely bypass PRIs, it is interesting that this has not led to large differences in the provision of public goods, or indeed even in current GP activity in public goods provision. On private benefits Karnataka leads all the states in overall activism - particularly in the provision of toilets and electricity. But AP leads the states in providing BPL cards and public works projects. Karnataka is the most likely state to have an NGO active in the village, but it is also the least likely to have held a gram sabha in the last six months - which can largely be attributed to drought conditions in the state at the time of the survey. However, even though AP faced the same climatic conditions, it was far more likely than Karnataka to have held gram sabhas.

Finally, it is also interesting to note the strong caste influences in Karnataka. Karnataka villages have the highest proportion of land owned by upper castes (36 per cent), with 34 per cent of villages having over half their land owned by upper castes. Perhaps as a consequence, Karnataka voters

are far more likely than those in other states to vote along caste or religious lines.

## 5 References

### References

- [1] Bardhan, Pranab, [2002], “Decentralization of Government and Development,” *Journal of Economic Perspectives*, 16(4), 185-205.
- [2] Bardhan, Pranab and Dilip Mookherjee, [2000], “Capture and Governance at Local and National Levels,” *American Economic Review*, 90(2), 135-139.
- [3] Besley, Timothy and Stephen Coate, [1997], “An Economic Model of Representative Democracy,” *Quarterly Journal of Economics*, 112(1), 85-114.
- [4] Besley, Timothy, Rohini Pande, Lupin Rahman and Vijayendra Rao, [2004a], “The Politics of Public Good Provision: Evidence from Indian Local Governments,” *Journal of the European Economic Association*, 2(2-3), 416-426.
- [5] Besley, Timothy, Rohini Pande, Lupin Rahman and Vijayendra Rao, [2004b], “Decentralization in India: A Survey of South Indian Panchayats,” *mimeo, LSE*.

- [6] Besley, Timothy, Rohini Pande, Vijayendra Rao and Radu Ban, [2005a], "Participatory Democracy in Action: Survey Evidence from South India," *Journal of the European Economics Association* (forthcoming).
- [7] Besley, Timothy, Rohini Pande, and Vijayendra Rao, [2005b], "Political Selection and the Quality of Government: Evidence from South India," mimeo, LSE
- [8] Besley, Timothy, Rohini Pande, Vijayendra Rao and Radu Ban, [2004c], "Tokenism or Agency? The Impact of Women's Reservation on Panchayats in South India," *mimeo*, Development Research Group, The World Bank
- [9] Bhagavan, Manu, *Sovereign Spheres: Princes, Education and Empire in Colonial India*, Oxford University Press, New Delhi, 2003
- [10] Chattopadhyay, Raghavendra and Esther Duflo, [2004b], "Efficiency and Rent-seeking in Local Governments," mimeo *MIT*.
- [11] Chattopadhyay, Raghavendra and Esther Duflo, [2004a], "Women as Policy Makers: Evidence from a India-Wide Randomized Policy Experiment," *Econometrica*, 72(5), 1409-1444.
- [12] Chaudhuri, Shubham, [2003], "What difference does a constitutional amendment make? The 1994 Panchayati Raj Act and the attempt to revitalize rural local government in India," typescript, Columbia University

- [13] Chaudhuri, Subham and Patrick Heller, "Building Local Democracy: Evaluating the Impact of Decentralization in Kerala," Paper presented to Netsappe III, Paris, June 2004
- [14] Dyson, Tim and Mick Moore (1983) 'On Kinship Structure, Female Autonomy, and Demographic Behavior in India' *Population and Development Review* Vol.9, No. 1, pp 35-60.
- [15] Enikolopov, Ruben and Ekaterina Zhuravskaya, [2004], "Decentralization and Political Institutions," mimeo, Institute for Advanced Study, Princeton.
- [16] Faguet, Jean Paul, [2004], "Does Decentralization Increase Responsiveness to Local Needs? Evidence from Bolivia," *Journal of Public Economics*, 88: 867-894.
- [17] Foster, Andrew and Mark Rosenzweig, [2001], "Democratization, Decentralization and the Distribution of Local Public Goods in a Poor Rural Economy," mimeo, Brown.
- [18] Jeffrey, Robin (1993), *Politics, Women and Well-Being: How Kerala Became a Model*, Oxford University Press, Delhi
- [19] Kanbur, Ravi and Anthony Venables, "Spatial Inequality and Development," mimeo, Cornell University, October 2003
- [20] Manor, James, [2004], "Democratization with Inclusion: political reforms and people's empowerment at the grassroots," *Journal of Human Development*, 5(1), 5-29.

- [21] Matthew, George and Nirmala Buch, *Status of Panchayati Raj in the States and Union Territories of India 2000*, Institute for Social Studies, Delhi, 2000
- [22] Platteau, Jean-Philippe and Anita Abraham, [2002], "Participatory Development in the Presence of Endogenous Community Imperfections," *Journal of Development Studies*, 39(2), 104-136.
- [23] Rao, Vijayendra and Michael Woolcock, "Integrating Qualitative and Quantitative Approaches in Program Evaluation," Chapter 8 in Francois Bourguignon and Luiz A. Pereira da Silva (editors), *The Impact of Economic Policies on Poverty and Income Distribution: Evaluation Techniques and Tools*, World Bank and Oxford University Press, 2004.
- [24] Triesman, Daniel, [2002], "Decentralization and the Quality of Government," mimeo, UCLA.
- [25] Verba, Sidney, Kay Lehman Scholzman and Henry E. Brady, [1995], *Voice and Equality: Civic Voluntarism in American Politics*, Cambridge Mass: Harvard University Press.
- [26] World Bank, [2000], *World Development Report 2000/2001: Attacking Poverty*, Washington, DC, The World Bank
- [27] World Bank (2004), "India: Fiscal Decentralization to Local Governments," Report No. 26654-IN, Rural Development Unit, South Asia Region.
- [28] World Bank (2000), *Overview of Rural Decentralization in India*, Vol 1, 2, and 3, Rural Development Unit, South Asia Region.

Table 1: A Comparison of Gram Panchayats across the Sampled States

	Andhra Pradesh	Karnataka	Kerala	Tamil Nadu
Year of 1 <sup>st</sup> regular election	2001	1993	1995	1996
Minimum Size for a GP area	A revenue village, irrespective of size	Village(s) with population between 5000-7000	A village, irrespective of its size	A revenue village with population upwards of 500
Reservation for Backward Castes	One-third of total seats	About one-thirds of total seats	No reservation	No reservation
Election of chairman	Direct	Indirect	Indirect	Direct
Committee System	Agricultural Committee, Public Health and Sanitation Committee, Communications Committee	Production Committee, Social Justice Committee, Amenities Committee	Functional Committee, for different subjects like agriculture, sanitation, communication, public health and education	No provision for Committees
Finances: Obligatory Taxes	House Tax, Tax on produce sold in village, Property Transfer Duty, Advertisement Tax	Tax on buildings/houses, Tax on non-agricultural lands	<u>Entertainment Tax, Taxes for services, Duty on property transfer, House/Building tax, Tax on non-agricultural land, Water Tax, Lighting Tax, Conservancy fee, [1] Drainage Tax, Sanitation Tax for public latrines.</u>	House/building Tax, Surcharge on Stamp Duty, Tax on Professionals
Finances: Obligatory Non Tax Sources	Tax devolution from higher levels of government, Income from endowments, trust or panchayat investments, Income from village fisheries and woods, Unclaimed deposits, Grants from higher levels of Government, Share of fines imposed on Village, share of stamp duty	Share of land revenue, Grant of 1 lakh rupees per annum, Rent/sales proceeds	Grant-in-aid, Basic tax grants, Income from remunerative enterprises, Income from trusts and endowments, Unclaimed deposits, Fines, Income from ferries	House Tax matching grant from Government, Grants from higher Panchayat levels, income from endowments and trusts, Income from fisheries, Share of entertainment tax, Vehicle fee
Finances: Discretionary Taxes	Vehicle Tax, Tax on Agricultural Land for a specific purpose, Land tax, Tax on Education level, tax on construction of public works,	Entertainment Tax, Tax on non-motor vehicles, Advertisement Tax, Lump sum levy on factories in lieu of taxes	Special tax on construction of public works, Professional Tax, Advertisement Tax	Special tax on construction of public works, Pilgrim tax, trade and tourist bus tax
Finances: Discretionary Non-Tax Sources	<u>Fee for the use of community land and resources, fees for use of buildings and property under Panchayat or government control, street cleaning fee, [2], Market/bazaar fee (committee), lump sum levy on factories in lieu of taxes</u>	Water rate, fee on buses, taxis and auto-stands, fees for use of buildings under Panchayat control, Fee for the use of community land and resources, Market/bazaar fee (vendor), Fees on animals sold, pilgrim fee	Panchayat may raise loans, Government grants and loans, Fee for the use of community land and resources, collection from beneficiaries of institutions governed or financed by Panchayat, fees for use of buildings under Panchayat control	Income from ferries, Income from unclaimed deposits, Drainage fee, Sanitation fee for public latrines, fees for use of buildings under Panchayat or government control, Market/bazaar fee
Ability to approve schemes without External Sanction	Yes, up to Rs. 10,000	Yes, up to Rs. 10,000	Yes, no monetary limit	Yes, if scheme is financed by the panchayat's own funds
Estimated Village Panchayat Expenditure per Capita (1997) [i]	Rs. 55.71	Rs. 72.48	Rs. 198.55	Rs. 61.53
Estimated Village Panchayat Revenue per Capita (1997) <sup>1</sup>	Rs. 58.22	Rs. 69.50	Rs. 335.41	Rs. 72.35

Table compiled using data from PRIA. "The State of Panchayats," Government of India. "India Panchayati Raj Report 2001," and Government of Karnataka. "The Karnataka Panchayati Raj Report 2001," Government of Karnataka.

[1] Sanitary levy for the cleaning of privately owned latrines/cesspools

[2] For those who own a pet dog

[i] Calculated using data from Government of India documents "Population Projections for India and States 1996-2016" and the "Report of the Eleventh Finance Commission."

Table 2a: 1991 Levels of Public Goods, simple mean comparison

State	Health								
	Schools per 1000 inhabitants	facilities per 1000 inhabitants	Taps available (dummy)	Tube well available (dummy)	Bus stop in village (dummy)	Pucca approach road (dummy)	Kacha approach road (dummy)	Domestic electricity (dummy)	Fraction land irrigated
Andhra	1.457 (1.137)	0.124 (0.422)	0.091 (0.290)	0.328 (0.473)	0.508 (0.504)	0.410 (0.496)	0.635 (0.485)	0.723 (0.451)	0.023 (0.060)
Karnataka	2.009 (1.149)	0.077 (0.215)	0.214 (0.411)	0.126 (0.333)	0.747 (0.436)	0.725 (0.448)	0.269 (0.445)	0.000 (0.000)	0.136 (0.113)
Kerala	0.750 (0.405)	0.304 (0.254)	0.726 (0.448)	0.887 (0.318)	0.976 (0.154)	0.976 (0.154)	1.000 (0.000)	0.073 (0.260)	0.314 (0.231)
TamilNadu	1.093 (0.567)	0.108 (0.189)	0.178 (0.384)	0.000 (0.000)	0.876 (0.331)	0.690 (0.464)	0.349 (0.478)	0.713 (0.454)	0.196 (0.190)
All	1.390 (1.019)	0.148 (0.271)	0.320 (0.467)	0.309 (0.462)	0.808 (0.394)	0.740 (0.439)	0.518 (0.500)	0.296 (0.457)	0.181 (0.189)

Notes: standard deviations in parenthesis

Table 2b: 1991 Levels of Public Goods, regression

State	Health								
	Schools per 1000 inhabitants	facilities per 1000 inhabitants	Taps available (dummy)	Tube well available (dummy)	Bus stop in village (dummy)	Pucca approach road (dummy)	Kacha approach road (dummy)	Domestic electricity (dummy)	Fraction land irrigated
Andhra	0.340 (1.383)	-0.211 <b>(2.522)</b>	-0.498 <b>(4.484)</b>	-0.606 <b>(6.851)</b>	-0.390 <b>(4.233)</b>	-0.578 <b>(5.683)</b>	-0.395 <b>(4.002)</b>	0.352 <b>(4.108)</b>	-0.113 <b>(2.416)</b>
Karnataka	0.885 <b>(5.845)</b>	-0.223 <b>(3.926)</b>	-0.404 <b>(4.169)</b>	-0.786 <b>(12.041)</b>	-0.146 <b>(2.648)</b>	-0.111 (1.534)	-0.897 <b>(12.594)</b>	-0.286 <b>(3.935)</b>	-0.026 (0.622)
TamilNadu	0.216 (1.498)	-0.212 <b>(3.115)</b>	-0.505 <b>(4.732)</b>	-0.907 <b>(14.676)</b>	0.029 (0.495)	-0.203 <b>(2.572)</b>	-0.732 <b>(9.755)</b>	0.469 <b>(6.103)</b>	-0.031 (0.595)
Prad. Village	-0.084 (0.879)	0.031 (1.203)	0.084 <b>(2.372)</b>	0.048 <b>(1.700)</b>	0.099 <b>(3.094)</b>	0.118 <b>(3.602)</b>	-0.106 <b>(3.273)</b>	-0.018 (0.936)	0.003 (0.290)
Reserved GP	0.043 (0.503)	0.004 (0.117)	0.027 (0.582)	-0.014 (0.399)	0.054 (1.348)	0.064 (1.430)	-0.037 (0.817)	-0.008 (0.225)	-0.050 <b>(2.288)</b>
N	477	476	472	481	478	478	480	482	481
Adj R-sq	0.295	0.140	0.372	0.569	0.177	0.281	0.442	0.676	0.353

Notes:

1) absolute values of t-statistics clustered by census code in parenthesis

2) block pair fixed effects included in regression

Table 3a: Current level of public goods, simple mean comparison

State	Health						
	Schools per 1000 inhabitants	facilities per 1000 inhabitants	Number drinking water sources	Number overhead tanks	Bus stop in village (dummy)	Proportion paved road	Proportion road with light
Andhra	1.980 (1.534)	0.235 (0.512)	3.171 (2.713)	0.943 (0.931)	0.500 (0.504)	0.206 (0.213)	0.436 (0.258)
Karnataka	1.403 (1.098)	0.078 (0.210)	3.753 (2.454)	0.610 (0.748)	0.577 (0.495)	0.787 (0.182)	0.418 (0.263)
Kerala	2.120 (1.137)	2.891 (1.621)	12.397 (9.906)	0.143 (0.451)	0.024 (0.153)	0.459 (0.200)	0.396 (0.281)
TamilNadu	1.068 (1.061)	0.151 (0.529)	1.924 (1.778)	1.132 (0.821)	0.653 (0.478)	0.465 (0.301)	0.460 (0.280)
All	1.535 (1.234)	0.701 (1.386)	5.257 (6.652)	0.686 (0.825)	0.454 (0.498)	0.542 (0.302)	0.427 (0.272)

Notes: standard deviations in parenthesis

Table 3b: Current level of public goods, regression

State	Health						
	Schools per 1000 inhabitants	facilities per 1000 inhabitants	Number drinking water sources	Number overhead tanks	Bus stop in village (dummy)	Proportion paved road	Proportion road with light
Andhra	-0.625 <b>(1.806)</b>	-2.675 <b>(10.460)</b>	-9.111 <b>(5.325)</b>	0.678 <b>(2.497)</b>	0.449 <b>(6.597)</b>	-0.311 <b>(5.891)</b>	0.154 <b>(2.422)</b>
Karnataka	-1.208 <b>(5.083)</b>	-2.794 <b>(13.776)</b>	-7.714 <b>(4.785)</b>	0.506 <b>(3.675)</b>	0.576 <b>(13.091)</b>	0.248 <b>(7.070)</b>	0.148 <b>(3.098)</b>
TamilNadu	-1.332 <b>(5.419)</b>	-2.847 <b>(9.677)</b>	-11.178 <b>(7.137)</b>	0.998 <b>(6.715)</b>	0.727 <b>(18.896)</b>	-0.033 (0.721)	0.145 <b>(3.271)</b>
Prad. Village	-0.234 <b>(1.750)</b>	-0.011 (0.185)	1.190 <b>(3.101)</b>	0.345 <b>(3.830)</b>	0.173 <b>(3.814)</b>	-0.024 (1.350)	0.044 <b>(1.873)</b>
Reserved GP	0.014 (0.158)	-0.055 (0.572)	0.718 (1.120)	-0.017 (0.241)	0.049 (0.992)	-0.031 (1.138)	-0.007 (0.297)
N	495	495	504	504	504	501	488
Adj R-sq	0.232	0.659	0.450	0.246	0.275	0.475	0.184

Notes:

- 1) absolute values of t-statistics clustered by block in parenthesis
- 2) block pair fixed effects included in regression

Table 4a: GP activism, from facilities questionnaire, simple mean comparison

State	Overall GP activity (dummy)	GP activism in	GP activism in	GP activism in health (dummy)	Nr Drinking Water Sources	Proportion road	Proportion road
		schools (dummy)	anganwadi (dummy)		built/Improved	built/improved	with light built/improved
Andhra	0.871 (0.337)	0.343 (0.478)	0.014 (0.120)	0.014 (0.120)	1.157 (1.708)	0.436 (0.332)	0.820 (0.343)
Karnataka	0.901 (0.299)	0.407 (0.493)	0.253 (0.436)	0.027 (0.164)	0.407 (0.814)	0.162 (0.198)	0.254 (0.388)
Kerala	0.984 (0.125)	0.651 (0.479)	0.698 (0.461)	0.087 (0.283)	2.159 (4.787)	0.187 (0.186)	0.315 (0.324)
TamilNadu	0.243 (0.430)	0.104 (0.307)	0.042 (0.201)	0.007 (0.083)	0.083 (0.383)	0.019 (0.081)	0.053 (0.195)
All	0.736 (0.441)	0.374 (0.484)	0.270 (0.444)	0.034 (0.183)	0.841 (2.610)	0.165 (0.232)	0.287 (0.397)

Notes: standard deviations in parenthesis

2)activities are after last election

Table 4b: GP activism, from facilities questionnaire, regression

State	Overall GP activity (dummy)	GP activism in	GP activism in	GP activism in health (dummy)	Nr Drinking Water Sources	Proportion road	Proportion road
		schools (dummy)	anganwadi (dummy)		built/Improved	built/improved	with light built/improved
Andhra	0.038 (0.476)	-0.011 (0.116)	-0.560 <b>(12.771)</b>	-0.123 <b>(4.248)</b>	-1.429 <b>(1.982)</b>	0.289 <b>(5.651)</b>	0.582 <b>(6.016)</b>
Karnataka	0.057 (1.110)	0.036 (0.512)	-0.336 <b>(8.155)</b>	-0.082 <b>(3.399)</b>	-2.147 <b>(3.454)</b>	0.009 (0.321)	0.049 (0.845)
TamilNadu	-0.725 <b>(13.263)</b>	-0.421 <b>(5.449)</b>	-0.574 <b>(13.478)</b>	-0.121 <b>(4.951)</b>	-2.722 <b>(4.481)</b>	-0.209 <b>(9.643)</b>	-0.251 <b>(4.368)</b>
Prad. Village	0.057 <b>(1.924)</b>	0.089 <b>(2.062)</b>	0.045 (1.356)	0.043 <b>(2.530)</b>	0.283 (1.153)	0.024 (1.277)	0.033 (1.128)
Reserved GP	-0.099 <b>(3.287)</b>	-0.076 (1.282)	0.017 (0.581)	0.019 (1.499)	0.005 (0.018)	-0.041 (1.560)	-0.090 <b>(2.224)</b>
N	504	504	504	504	504	501	484
Adj R-sq	0.497	0.256	0.327	0.046	0.144	0.342	0.557

Notes:

1)absolute values of t-statistics clustered by block in parenthesis

2)block pair fixed effects included in regression

Table 5a: GP activity, from PRA, simple means comparison

State	GP activism in			GP activism in		GP activism in		GP activism in	
	Overall GP activity	schools (count)	GP activism in health (count)	GP activism in water (count)	sanitation (count)	transport (count)	GP activism in road (count)	electricity (count)	irrigation (count)
Andhra	0.407 (0.227)	0.529 (0.653)	0.343 (0.587)	0.529 (0.675)	0.629 (0.802)	0.214 (0.447)	0.943 (0.832)	0.714 (0.783)	0.257 (0.530)
Karnataka	0.409 (0.291)	0.418 (0.596)	0.203 (0.583)	0.484 (0.646)	0.505 (0.663)	0.132 (0.370)	0.874 (0.780)	1.011 (1.217)	0.093 (0.327)
Kerala	0.438 (0.238)	0.333 (0.537)	0.500 (0.654)	0.310 (0.513)	0.270 (0.497)	0.087 (0.283)	0.802 (0.607)	0.762 (0.774)	0.143 (0.394)
TamilNadu	0.238 (0.201)	0.313 (0.573)	0.278 (0.508)	0.396 (0.582)	0.125 (0.332)	0.049 (0.216)	0.264 (0.542)	0.549 (0.698)	0.076 (0.292)
All	0.369 (0.260)	0.383 (0.587)	0.314 (0.592)	0.423 (0.606)	0.360 (0.601)	0.109 (0.330)	0.697 (0.739)	0.784 (0.952)	0.123 (0.372)

Notes:1)standard deviations in parenthesis

2)Overall GP activity is the ratio of sectors in which GP was active, to total sectors

3)Activities are after last election

Table 5b: GP activity, from PRA, regressions

State	GP activism in			GP activism in		GP activism in		GP activism in	
	Overall GP activity	schools (count)	GP activism in health (count)	GP activism in water (count)	sanitation (count)	transport (count)	GP activism in road (count)	electricity (count)	irrigation (count)
Andhra	0.103 (1.375)	0.203 (0.824)	-0.217 (1.459)	0.336 (1.898)	0.333 (2.428)	0.050 (0.551)	0.461 (2.330)	0.059 (0.229)	0.124 (1.390)
Karnataka	0.107 (1.776)	0.117 (0.685)	-0.241 (3.048)	0.291 (2.040)	0.265 (2.537)	0.059 (1.691)	0.461 (2.978)	0.361 (2.009)	-0.049 (0.997)
TamilNadu	-0.112 (1.781)	0.018 (0.094)	-0.160 (1.551)	0.209 (1.273)	-0.140 (1.450)	-0.048 (1.349)	-0.286 (1.794)	-0.019 (0.118)	0.007 (0.122)
Prad. Village	0.092 (3.899)	0.103 (1.425)	0.125 (2.299)	0.153 (2.509)	0.110 (1.938)	0.082 (1.983)	0.279 (4.252)	0.167 (2.381)	-0.007 (0.212)
Reserved GP	-0.010 (0.273)	-0.010 (0.178)	-0.024 (0.383)	0.028 (0.398)	0.043 (0.631)	0.016 (0.476)	0.009 (0.165)	0.049 (0.381)	0.001 (0.024)
N	504	504	504	504	504	504	504	504	504
Adj R-sq	0.215	0.042	0.203	0.042	0.108	0.053	0.246	0.167	0.050

Notes:

1)absolute values of t-statistics clustered by block in parenthesis

2)block pair fixed effects included in regression

Table 6: Levels of activism, means

State	Any GP provision	House GP provision	Toilet GP Provision	Water GP Provision	Electricity GP provision	BPL received	Received money for public works
Andhra	0.046 (0.209)	0.025 (0.156)	0.006 (0.074)	0.003 (0.053)	0.013 (0.111)	0.322 (0.468)	0.127 (0.334)
Karnataka	0.122 (0.327)	0.024 (0.154)	0.032 (0.175)	0.002 (0.039)	0.073 (0.260)	0.101 (0.302)	0.051 (0.220)
Kerala	0.041 (0.199)	0.019 (0.138)	0.019 (0.135)	0.000 (0.000)	0.014 (0.117)	0.297 (0.457)	0.019 (0.136)
TamilNadu	0.023 (0.150)	0.006 (0.075)	0.006 (0.075)	0.006 (0.075)	0.007 (0.083)	0.251 (0.434)	0.020 (0.139)
All	0.065 (0.246)	0.018 (0.133)	0.018 (0.133)	0.002 (0.049)	0.032 (0.177)	0.220 (0.414)	0.044 (0.205)

Levels of activism, regression

State	Any GP provision	House GP provision	Toilet GP Provision	Water GP Provision	Electricity GP provision	BPL received	Received money for public works
Andhra	-0.004 (0.220)	0.012 (1.344)	0.008 (0.797)	0.002 (0.569)	-0.039 <b>(2.871)</b>	0.207 <b>(1.981)</b>	0.075 <b>(3.484)</b>
Karnataka	0.077 <b>(5.969)</b>	0.009 (1.610)	0.032 <b>(4.147)</b>	0.000 (0.139)	0.033 <b>(3.033)</b>	-0.032 (0.407)	0.010 (1.088)
TamilNadu	-0.032 <b>(3.063)</b>	-0.015 <b>(3.263)</b>	0.001 (0.122)	0.006 <b>(1.726)</b>	-0.035 <b>(3.732)</b>	0.088 (0.872)	-0.028 <b>(3.536)</b>
Pradhan's Village	0.008 (0.770)	0.000 (0.081)	0.007 (1.394)	0.002 (0.711)	0.001 (0.174)	-0.018 (1.195)	0.004 (0.810)
Reserved GP	-0.007 (0.942)	-0.006 (1.354)	0.000 (0.038)	0.001 (0.918)	-0.004 (0.778)	0.019 (0.602)	-0.007 (0.882)
female	0.005 (0.943)	0.006 <b>(1.769)</b>	-0.006 <b>(1.881)</b>	0.000 (0.045)	0.006 (1.440)	-0.004 (0.401)	-0.005 (0.751)
SCST	0.035 <b>(3.020)</b>	0.016 <b>(2.377)</b>	-0.001 (0.140)	0.000 (0.219)	0.025 <b>(3.103)</b>	0.128 <b>(3.930)</b>	0.043 <b>(3.886)</b>
wealthy	-0.043 <b>(5.311)</b>	-0.014 <b>(3.757)</b>	-0.006 (1.312)	0.001 (0.468)	-0.030 <b>(4.160)</b>	-0.096 <b>(4.079)</b>	-0.001 (0.171)
landless	0.019 <b>(1.914)</b>	0.005 (1.007)	0.007 (1.365)	-0.001 (0.438)	0.010 (1.554)	0.074 <b>(4.850)</b>	0.014 <b>(2.764)</b>
politician	0.033 <b>(1.889)</b>	-0.002 (0.429)	0.028 <b>(2.394)</b>	-0.003 <b>(2.467)</b>	0.018 (1.483)	0.092 (1.365)	0.059 <b>(2.363)</b>
N	5460	5460	5460	5460	5460	5460	5422
Adj R-sq	0.044	0.009	0.025	0.002	0.041	0.167	0.047

Notes:

1) absolute values of t-statistics clustered by block in parenthesis

2) block pair fixed effects included in regression

Table 7a: Village participation, simple means comparison

State	NGO active	CBO active	GS held last 6mo	GS held last12mo	Nr education comitees	Nr total comitees
Andhra Pradesh	0.686 (0.468)	0.243 (0.432)	0.710 (0.457)	0.696 (0.464)	0.557 (1.016)	0.557 (1.016)
Karnataka	0.379 (0.487)	0.819 (0.386)	0.692 (0.463)	0.538 (0.500)	0.264 (0.466)	0.330 (0.657)
Kerala	0.111 (0.316)	0.389 (0.489)	0.984 (0.125)	0.984 (0.125)	0.675 (0.470)	2.341 (1.550)
Tamil Nadu	0.292 (0.456)	0.590 (0.493)	0.672 (0.471)	0.664 (0.474)	0.021 (0.143)	0.056 (0.308)
All states	0.331 (0.471)	0.575 (0.495)	0.761 (0.427)	0.702 (0.458)	0.335 (0.578)	0.770 (1.304)

Table 7B: Village participation, regressions

State	NGO active	CBO active	GS held last 6mo	GS held last12mo	Nr education comitees	Nr total comitees
Andhra	0.103 (1.375)	0.203 (0.824)	-0.217 (1.459)	0.336 <b>(1.898)</b>	0.333 <b>(2.428)</b>	0.050 (0.551)
Karnataka	0.107 <b>(1.776)</b>	0.117 (0.685)	-0.241 <b>(3.048)</b>	0.291 <b>(2.040)</b>	0.265 <b>(2.537)</b>	0.059 (1.691)
Tamil Nadu	-0.112 <b>(1.781)</b>	0.018 (0.094)	-0.160 (1.551)	0.209 (1.273)	-0.140 (1.450)	-0.048 (1.349)
Prad. Village	0.092 <b>(3.899)</b>	0.103 (1.425)	0.125 <b>(2.299)</b>	0.153 <b>(2.509)</b>	0.110 <b>(1.938)</b>	0.082 <b>(1.983)</b>
Reserved GP	-0.010 (0.273)	-0.010 (0.178)	-0.024 (0.383)	0.028 (0.398)	0.043 (0.631)	0.016 (0.476)
N	504	504	504	504	504	504
Adj R-sq	0.215	0.042	0.203	0.042	0.108	0.053

Notes:

- 1) absolute values of t-statistics clustered by block in parenthesis
- 2) block pair fixed effects included in regression

Table 8a Gram Sabha participation, means

State	Attend GS for		
	Attend GS	beneficiary	GS speaking
Andhra	0.107 (0.309)	0.935 (0.248)	0.286 (0.455)
Karnataka	0.141 (0.348)	0.900 (0.301)	0.036 (0.186)
Kerala	0.397 (0.489)	0.686 (0.464)	0.523 (0.500)
TamilNadu	0.131 (0.338)	0.806 (0.397)	0.252 (0.435)
All	0.199 (0.399)	0.777 (0.416)	0.338 (0.473)

Table 8b Gram Sabha participation, regression

State	Attend GS for		
	Attend GS	beneficiary	GS speaking
Andhra	-0.200 <b>(5.024)</b>	0.335 <b>(9.917)</b>	-0.357 <b>(5.128)</b>
Karnataka	-0.179 <b>(5.656)</b>	0.239 <b>(11.023)</b>	-0.544 <b>(15.822)</b>
TamilNadu	-0.194 <b>(6.161)</b>	0.127 <b>(6.351)</b>	-0.247 <b>(5.927)</b>
Pradhan's Vil	0.019 (1.377)	0.017 (0.591)	0.018 (0.693)
Reserved GF	0.002 (0.108)	-0.090 <b>(2.534)</b>	-0.051 (1.182)
female	-0.187 <b>(11.768)</b>	-0.097 <b>(2.860)</b>	-0.074 <b>(2.737)</b>
SCST	0.023 (1.344)	0.014 (0.331)	-0.025 (0.553)
wealthy	-0.011 (0.527)	0.023 (0.772)	-0.028 (0.949)
landless	0.014 (1.214)	-0.035 (1.338)	-0.079 <b>(1.831)</b>
politician	-0.231 <b>(9.636)</b>		
N	5460	1054	1054
Adj R-sq	0.180	0.076	0.197

Notes:

1) absolute values of t-statistics clustered by block in parenthesis

2) block pair fixed effects included in regression

Table 9 Household information and tax payment, means

State	Read news	Knows CM	taxpay
Andhra	0.233 (0.423)	0.689 (0.463)	0.375 (0.484)
Karnataka	0.295 (0.456)	0.403 (0.491)	0.873 (0.333)
Kerala	0.550 (0.498)	0.626 (0.484)	0.912 (0.283)
TamilNadu	0.300 (0.459)	0.683 (0.466)	0.890 (0.313)
All	0.353 (0.478)	0.572 (0.495)	0.825 (0.380)

Household information and tax payment, regression

State	Read news	Knows CM	taxpay
Andhra	-0.138 <b>(3.136)</b>	0.330 <b>(7.124)</b>	-0.646 <b>(8.702)</b>
Karnataka	-0.097 <b>(2.250)</b>	0.031 (0.846)	-0.147 <b>(2.772)</b>
TamilNadu	-0.125 <b>(3.496)</b>	0.238 <b>(8.966)</b>	-0.104 (1.632)
Pradhan's Vil	0.032 <b>(2.078)</b>	0.026 <b>(1.667)</b>	0.029 <b>(1.928)</b>
Reserved GF	0.004 (0.238)	0.046 <b>(2.385)</b>	-0.014 (0.625)
female	-0.303 <b>(19.951)</b>	-0.307 <b>(17.735)</b>	-0.034 <b>(4.111)</b>
SCST	-0.068 <b>(3.179)</b>	-0.037 (1.629)	-0.016 (1.049)
wealthy	0.180 <b>(12.951)</b>	0.179 <b>(10.628)</b>	0.061 <b>(3.414)</b>
landless	-0.030 <b>(2.200)</b>	-0.033 <b>(1.738)</b>	-0.074 <b>(4.110)</b>
politician	0.266 <b>(12.337)</b>	0.258 <b>(8.656)</b>	0.057 <b>(2.519)</b>
N	5460	5460	5460
Adj R-sq	0.283	0.308	0.268

Notes:

- 1) absolute values of t-statistics clustered by block in parenthesis
- 2) block pair fixed effects included in regression

Table 10 Political participation, means

State	HH member political	HH party affiliated	Participate political	Voted GP	Voted MLA	Voted MP	Vote group	Vote party	Vote candidate
Andhra	0.054 (0.227)	0.642 (0.480)	0.253 (0.435)	0.761 (0.427)	0.865 (0.342)	0.761 (0.427)	0.063 (0.242)	0.131 (0.338)	0.377 (0.485)
Karnataka	0.050 (0.218)	0.064 (0.244)	0.053 (0.224)	0.713 (0.452)	0.782 (0.413)	0.713 (0.452)	0.142 (0.349)	0.053 (0.225)	0.370 (0.483)
Kerala	0.053 (0.223)	0.429 (0.495)	0.311 (0.463)	0.844 (0.363)	0.902 (0.297)	0.844 (0.363)	0.079 (0.270)	0.392 (0.488)	0.133 (0.339)
TamilNadu	0.052 (0.222)	0.247 (0.431)	0.093 (0.290)	0.801 (0.399)	0.811 (0.392)	0.801 (0.399)	0.091 (0.287)	0.029 (0.168)	0.598 (0.490)
All	0.052 (0.222)	0.279 (0.449)	0.154 (0.361)	0.777 (0.417)	0.831 (0.375)	0.777 (0.417)	0.102 (0.303)	0.142 (0.350)	0.373 (0.484)

Political participation, regression

State	HH member political	HH party affiliated	Participate political	Voted GP	Voted MLA	Voted MP	Vote group	Vote party	Vote candidate
Andhra	0.011 (0.809)	0.468 <b>(3.805)</b>	-0.073 <b>(2.311)</b>	-0.154 <b>(3.588)</b>	-0.082 <b>(2.754)</b>	-0.154 <b>(3.588)</b>	-0.007 (0.286)	-0.249 <b>(7.780)</b>	0.186 <b>(3.152)</b>
Karnataka	0.008 (0.944)	-0.147 (1.351)	-0.265 <b>(11.224)</b>	-0.184 <b>(6.103)</b>	-0.174 <b>(9.859)</b>	-0.184 <b>(6.103)</b>	0.073 <b>(4.810)</b>	-0.339 <b>(11.812)</b>	0.211 <b>(6.060)</b>
TamilNadu	0.006 (0.929)	0.020 (0.162)	-0.208 <b>(7.264)</b>	-0.120 <b>(3.823)</b>	-0.155 <b>(9.109)</b>	-0.120 <b>(3.823)</b>	-0.001 (0.089)	-0.332 <b>(12.261)</b>	0.382 <b>(9.741)</b>
Pradhan's Vil	0.011 (1.568)	-0.002 (0.151)	0.027 (1.601)	0.012 (1.086)	-0.005 (0.372)	0.012 (1.086)	0.021 (1.688)	0.007 (0.724)	-0.016 (0.898)
Reserved GP	-0.001 (0.149)	0.037 (1.078)	-0.006 (0.218)	-0.004 (0.183)	0.003 (0.243)	-0.004 (0.183)	0.001 (0.061)	0.016 (0.871)	-0.033 (1.889)
female	-0.014 <b>(2.249)</b>	-0.097 <b>(7.945)</b>	-0.117 <b>(7.488)</b>	-0.002 (0.163)	-0.098 <b>(11.553)</b>	-0.002 (0.163)	-0.026 <b>(2.994)</b>	-0.046 <b>(3.498)</b>	-0.103 <b>(4.952)</b>
SCST	0.009 (1.368)	0.060 <b>(2.723)</b>	0.043 <b>(2.528)</b>	0.013 (0.731)	-0.003 (0.222)	0.013 (0.731)	0.004 (0.226)	0.043 <b>(2.234)</b>	-0.006 (0.322)
wealthy	0.046 <b>(5.623)</b>	0.010 (0.722)	0.013 (1.282)	-0.090 <b>(5.051)</b>	0.036 <b>(2.913)</b>	-0.090 <b>(5.051)</b>	0.003 (0.263)	-0.006 (0.585)	0.041 <b>(2.858)</b>
landless	-0.026 <b>(2.954)</b>	-0.018 (1.170)	-0.024 <b>(1.807)</b>	0.069 <b>(4.344)</b>	-0.019 (1.504)	0.069 <b>(4.344)</b>	-0.016 <b>(1.802)</b>	-0.018 <b>(2.035)</b>	0.011 (0.564)
politician	-0.079 <b>(12.695)</b>	-0.326 <b>(6.822)</b>	-0.188 <b>(7.928)</b>						
N	5460	5460	5460	5460	5460	5460	4940	4940	4940
Adj R-sq	0.019	0.316	0.154	0.038	0.053	0.038	0.024	0.186	0.141

Notes:

- 1) absolute values of t-statistics clustered by block in parenthesis
- 2) block pair fixed effects included in regression

Table 11 Household participation in cash or kind, means

State	Provision for roads	Provision for anganwadi	Provision for Health subc	Provision for P. School	Provision for dr. water	Any provision
Andhra	0.128 (0.334)	0.033 (0.180)	0.017 (0.128)	0.060 (0.237)	0.089 (0.285)	0.208 (0.406)
Karnataka	0.072 (0.258)	0.037 (0.188)	0.002 (0.039)	0.100 (0.300)	0.055 (0.228)	0.179 (0.384)
Kerala	0.346 (0.476)	0.139 (0.346)	0.044 (0.206)	0.073 (0.260)	0.085 (0.279)	0.415 (0.493)
TamilNadu	0.059 (0.236)	0.018 (0.132)	0.010 (0.097)	0.068 (0.252)	0.104 (0.305)	0.183 (0.387)
All	0.145 (0.352)	0.057 (0.232)	0.016 (0.127)	0.079 (0.270)	0.080 (0.272)	0.244 (0.429)

Household participation in cash or kind, regression

State	Provision for roads	Provision for anganwadi	Provision for Health subc	Provision for P. School	Provision for dr. water	Any provision
Andhra	-0.130 <b>(2.823)</b>	-0.029 (1.127)	-0.037 <b>(3.289)</b>	0.121 <b>(2.575)</b>	0.124 <b>(4.313)</b>	0.079 (1.265)
Karnataka	-0.193 <b>(3.965)</b>	-0.041 (1.560)	-0.047 <b>(4.892)</b>	0.133 <b>(2.724)</b>	0.082 <b>(4.999)</b>	0.013 (0.193)
TamilNadu	-0.230 <b>(5.263)</b>	-0.067 <b>(2.779)</b>	-0.043 <b>(5.433)</b>	0.076 <b>(1.992)</b>	0.092 <b>(6.154)</b>	-0.061 (1.099)
Pradhan's Vil	0.003 (0.250)	0.008 (1.246)	0.006 (1.536)	0.012 (1.339)	-0.001 (0.121)	-0.013 (0.761)
Reserved GF	0.014 (0.672)	0.007 (0.638)	-0.001 (0.141)	0.028 (1.539)	-0.005 (0.471)	0.021 (0.781)
female	-0.033 <b>(3.305)</b>	-0.016 <b>(2.618)</b>	-0.005 (1.362)	-0.035 <b>(4.489)</b>	-0.022 <b>(2.796)</b>	-0.058 <b>(5.771)</b>
SCST	0.000 (0.007)	-0.008 (1.572)	-0.004 (1.465)	-0.030 <b>(3.055)</b>	0.010 (0.965)	-0.029 (1.538)
wealthy	0.052 <b>(4.587)</b>	0.031 <b>(3.909)</b>	0.010 <b>(4.005)</b>	0.044 <b>(3.587)</b>	0.034 <b>(2.851)</b>	0.091 <b>(6.305)</b>
landless	-0.060 <b>(3.278)</b>	-0.026 <b>(2.853)</b>	-0.005 (1.156)	-0.037 <b>(5.115)</b>	-0.007 (0.970)	-0.072 <b>(4.053)</b>
politician	0.138 <b>(5.760)</b>	0.089 <b>(4.721)</b>	0.050 <b>(2.936)</b>	0.119 <b>(4.230)</b>	0.156 <b>(4.973)</b>	0.228 <b>(6.259)</b>
N	5460	5460	5460	5460	5460	5460
Adj R-sq	0.173	0.094	0.044	0.105	0.065	0.164

Notes:

- 1) absolute values of t-statistics clustered by block in parenthesis
- 2) block pair fixed effects included in regression

Table 12: Household willingness to pay, means

State	willing provide roads	willing provide anganwadi	willing provide Health subc	willing provide P. school	willing provide dr water	Willing provide any
Andhra	0.329 (0.470)	0.210 (0.407)	0.263 (0.440)	0.228 (0.420)	0.276 (0.448)	0.485 (0.500)
Karnataka	0.103 (0.304)	0.084 (0.277)	0.021 (0.144)	0.089 (0.285)	0.090 (0.287)	0.189 (0.392)
Kerala	0.333 (0.471)	0.362 (0.481)	0.369 (0.483)	0.337 (0.473)	0.401 (0.490)	0.550 (0.498)
TamilNadu	0.352 (0.478)	0.296 (0.457)	0.291 (0.455)	0.314 (0.464)	0.338 (0.473)	0.439 (0.496)
All	0.258 (0.438)	0.228 (0.420)	0.214 (0.410)	0.231 (0.422)	0.260 (0.439)	0.386 (0.487)

Household willingness to pay, regression

State	willing provide roads	willing provide anganwadi	willing provide Health subc	willing provide P. school	willing provide dr water	Willing provide any
Andhra	0.009 (0.232)	-0.200 <b>(4.108)</b>	-0.133 <b>(2.683)</b>	-0.140 <b>(2.819)</b>	-0.168 <b>(3.741)</b>	0.027 (0.821)
Karnataka	-0.211 <b>(6.429)</b>	-0.301 <b>(8.444)</b>	-0.348 <b>(8.842)</b>	-0.251 <b>(7.458)</b>	-0.334 <b>(10.691)</b>	-0.268 <b>(12.258)</b>
TamilNadu	0.030 (0.893)	-0.066 <b>(1.908)</b>	-0.068 <b>(1.719)</b>	-0.029 (0.851)	-0.067 <b>(2.241)</b>	-0.044 <b>(1.982)</b>
Pradhan's Vil	0.010 (0.613)	0.033 <b>(2.204)</b>	0.025 <b>(2.098)</b>	0.031 <b>(2.170)</b>	0.017 (1.040)	0.032 <b>(1.747)</b>
Reserved GF	0.002 (0.171)	0.008 (0.460)	0.008 (0.502)	-0.001 (0.079)	0.025 (1.523)	0.015 (0.760)
female	-0.045 <b>(4.104)</b>	-0.046 <b>(3.871)</b>	-0.057 <b>(4.318)</b>	-0.052 <b>(4.414)</b>	-0.065 <b>(6.235)</b>	-0.085 <b>(7.324)</b>
SCST	0.001 (0.075)	0.003 (0.150)	0.006 (0.400)	0.001 (0.061)	-0.013 (0.899)	0.019 (1.071)
wealthy	0.025 (1.547)	0.038 <b>(2.482)</b>	0.032 <b>(2.401)</b>	0.038 <b>(2.912)</b>	0.015 (1.116)	0.057 <b>(3.363)</b>
landless	-0.014 (0.901)	-0.030 <b>(1.952)</b>	-0.027 <b>(1.715)</b>	-0.028 <b>(2.026)</b>	-0.026 <b>(1.712)</b>	-0.063 <b>(4.208)</b>
politician	-0.053 (1.524)	-0.039 (1.033)	-0.089 <b>(2.476)</b>	-0.033 (0.865)	-0.023 (0.589)	-0.003 (0.056)
N	5460	5460	5460	5460	5460	5460
Adj R-sq	0.077	0.097	0.150	0.084	0.099	0.116

Notes:

- 1)absolute values of t-statistics clustered by block in parenthesis
- 2)block pair fixed effects included in regression

Table 13: Simple mean comparisons, inequality variables

	Gini	GE (a=1)	GE(1) within caste groups	GE(1) between caste groups	Prop GE(1) b/w caste groups
Andhra Pradesh	0.532 (0.189)	0.734 (0.567)	0.615 (0.554)	0.120 (0.137)	0.180 (0.156)
Karnataka	0.522 (0.155)	0.629 (0.349)	0.527 (0.325)	0.102 (0.100)	0.170 (0.156)
Kerala	0.658 (0.139)	1.049 (0.569)	0.905 (0.507)	0.144 (0.198)	0.129 (0.141)
Tamil Nadu	0.580 (0.204)	0.921 (0.635)	0.768 (0.540)	0.153 (0.247)	0.135 (0.168)
All states	0.572 (0.179)	0.825 (0.550)	0.696 (0.492)	0.129 (0.180)	0.152 (0.157)

Table 14: Simple mean comparisons, caste dominance and oligarchy variables

	Nr castes	Landed percentage, 1951	Upper caste land dominance (dummy)	Upper caste land proportion	Fraction landless hhs	Oligarchy
Andhra Pradesh	11.643 (4.872)	0.658 (0.122)	0.171 (0.380)	0.255 (0.260)	0.286 (0.235)	0.057 (0.059)
Karnataka	11.192 (5.399)	0.722 (0.116)	0.335 (0.473)	0.364 (0.277)	0.232 (0.188)	0.058 (0.066)
Kerala	11.556 (3.850)	0.288 (0.082)	0.087 (0.283)	0.171 (0.201)	0.430 (0.247)	0.079 (0.118)
Tamil Nadu	7.465 (5.077)	0.670 (0.179)	0.236 (0.426)	0.244 (0.331)	0.409 (0.283)	0.096 (0.109)
All states	10.312 (5.199)	0.594 (0.218)	0.226 (0.419)	0.270 (0.284)	0.336 (0.253)	0.073 (0.094)