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**THE PLASTICITY OF PARTICIPATION: EVIDENCE FROM A PARTICIPATORY
GOVERNANCE EXPERIMENT**

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**The plasticity of participation:
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Abstract

Under the “People’s Campaign for Decentralised Planning,” initiated by the government of the Indian state of Kerala in 1996, significant planning and budgetary functions that had previously been controlled by state-level ministries, were devolved to the lowest tier of government—municipalities in urban areas, and gram panchayats (village councils) in rural areas. A key element of the campaign was the requirement that every gram panchayat organize open village assemblies—called Gram Sabhas—twice a year through which citizens could participate in formulating planning priorities, goals and projects. Using data from the first two years of the campaign, on the levels and composition of participation in the Gram Sabhas in all of Kerala’s 990 gram panchayats we empirically assess the explanatory power of the dominant existing paradigms of participation—social capital, rational choice, and social-historical. The basic patterns we document, as well as our more detailed analyses of the impact that a range of spatial, socioeconomic and political factors had on the levels and social depth of participation, provide broad support for a dynamic and contingent view of participation, a perspective that recognizes the “plasticity of participation.”

1. Introduction

In 1996, the government of the Indian state of Kerala initiated “The People’s Campaign for Decentralised Planning,” perhaps the boldest experiment in participatory decentralization every undertaken in the subcontinent. Under this initiative, significant planning and budgetary functions, which had previously been controlled by state-level ministries, were devolved to the lowest tier of government—municipalities in urban areas, and gram panchayats (village councils) in rural areas. Moreover, a complex set of procedural and institutional reforms were introduced to maximize citizen input into the planning and budgeting process. Key among these was the requirement that every gram panchayat organize open village assemblies—called Gram Sabhas—twice a year through which citizens could express their “felt needs” and participate in formulating planning priorities, goals and projects.

In this paper, we use data on participation rates in the Gram Sabhas in all of Kerala’s 990 gram panchayats to examine the patterns of participation in the first and second year of the decentralization campaign and to assess the impact that a range of spatial, socioeconomic and political factors had on the level and social depth of participation in individual panchayats. We use our findings to explore the explanatory power of three important theories of participation—social capital, rational choice, and social-historical.¹

The debate on democracy has shifted from the study of transitions to formal democratic rule, to the study of democratic deepening (Linz and Stepan, 1996).² Of the many conceptual reformulations this has called for, none has been more central than a reexamination of the question of political participation. In the policy world, and in particular among development organizations and NGOs operating in the developing world, more “participation” has become the policy prescription of choice. In the academic world, the definition and understanding of participation has been treated from a range of disciplinary and paradigmatic perspectives and has produced widely divergent positions. Across the board the common denominator has however been a perceived malaise with traditional representative democracy. In mature democracies this concern emerges from an observed decline in levels of associational life (Putnam, 2000; Skocpol, 1999) and the increased influence of narrow, sectoral groups (Olson, 1965; Cohen, 1992). In the developing world, participation has come to be seen not only as critical to increasing the overall capabilities of citizens (Dreze and Sen, 1995) and strengthening fragile democracies, but also as a means of improving the quality of governance.

Detailed quantitative research on participation has a long history, and has produced a rich and diverse empirical literature.³ With respect to the debate on democratic deepening however, this literature suffers from a critical conceptual shortcoming: it more or less takes for granted the basic associational autonomy of individuals. In focusing on individual determinants of participation, the traditional participation literature assumes that individuals are equally endowed

¹ We borrow this basic schematization of paradigms from Skocpol and Fiorina (1999), though we make a slight terminological departure from their scheme by re-labeling what they call the historical-institutional approach, the social-historical approach. We do this because, as we note below, rational choice perspectives do take institutions into account and thus what distinguishes the social-historical approach is the emphasis the latter places on history and on the role of political and social agency.

² Linz and Stepan provide a useful conceptualization of the new research agenda: “Within the category of consolidated democracies there is a continuum from low to high quality democracy; an urgent political and intellectual task is to think about how to improve the quality of most consolidated democracies” (1996:6).

³ Important recent contributions include Brady, Verba and Lehman Schlozman (1995), Oliver (2000), and Alesina and La Ferrara (1999).

with the basic *opportunity* to associate, and specifically to voluntarily engage in political activities. Such an assumption more or less ignores social relations *between* individuals and groups, and fails to recognize that there are significant social and institutional barriers or costs to participation that arise from asymmetrical relations between groups. If this is problematic in any less-than-perfect democracy (and there are no perfect democracies) it is especially problematic in developing democracies where the basic rights of association are circumscribed and distorted by pervasive vertical dependencies (clientelistic relationships), routinized forms of social exclusion (e.g. the caste system, *purdah*), the unevenness and at times complete failure of public legality, and the persistence of pre-democratic forms of authority. As O'Donnell has argued, in non-institutionalized democracies (which can even include redoubts within mature democracies), the public authority of the modern state radiates out unevenly, and "the components of democratic legality and, hence, of publicness and citizenship, fade away at the frontiers of various regions and class, gender and ethnic relations (1993:1361)." Under conditions of "low-intensity citizenship" the right of all citizens to invoke legality is circumscribed by the exercise of pre-democratic sources of authority and social control.

Any theory of participation in non-institutionalized democracies must as such explicitly take into account unequal social relations⁴ and uneven institutional environments as a cost of participation. Yet while this point has been broadly acknowledged in the literature on democratic deepening in the developing world (O'Donnell, 1993; Vilas, 1997; Fox, 1994; Huber et al., 1999) the empirical literature remains very thin. There are a number of reasons for this. First, quality aggregate data about participation, and notably survey data, is hard to come by. Second, the institutional terrain in developing countries has not been particularly hospitable to democratic forms of participation. Political participation, as classically defined by Verba et al. consists of "those legal activities by private citizens that are more or less directly aimed at influencing the selection of governmental personnel and/or the actions they take" (1978:46). Most post-colonial democracies have comparatively centralized states, with few, if any local arenas in which citizens can meaningfully participate.⁵ This institutional problem has been compounded by the predominance of oligarchical parties and less-than-Weberian bureaucracies that have favored vertical, back-door and elite-based forms of participation, over horizontal, transparent and citizen-based forms of participation. Thus even in the developing world's most consolidated and electorally vibrant democracy—India—civic-based participation remains poorly developed, resulting in what Chibber (1999) has described as "democracy without associations".

The case of Kerala presents a unique opportunity in this respect. The state-wide decentralization of resources and authority that took place in 1996 in effect created 1214 new local level institutions for development planning and budgeting. The reforms were explicitly designed to increase local level participation. Over a two-year period at two different intervals, the State Planning Board collected detailed data on who participated in local Grama Sabhas, the

⁴ This point is not to be confused with SES models of participation, which argue, quite correctly, that socio-economic status determines the assets that different individuals have for participation. Our point is that socio-economic conditions also matter because they imply unequal power relations that directly impede – independently of individual attributes – the capacity of certain groups to engage in public life.

⁵ E.M.S. Namboodiripad made this point succinctly for India when he noted that "if at the level of center-state relations the constitution gave us democracy, at the level of state-panchayat relations the constitution gave us bureaucracy" (As cited by V.K. Ramachandran at the International Conference on Democratic Decentralisation, Trivandrum, May 27, 2000) Indeed, it was not until the passage of the 73rd and 74th amendments to the Constitution of India in 1993 that state governments were mandated to hold regular local government elections. And even when local governments have been electorally accountable, they have enjoyed few if any substantive decision-making powers.

local ward-level general assemblies that were held at the beginning of every annual planning and budgeting cycle. Since the Gram Sabhas established detailed development and budgeting priorities they represented genuine and substantial instances of democratic participation. Our analysis is based on the full sample of 990 (rural) panchayats, with participation data in the first Gram Sabha meetings of the first and second year (1996-96 and 1997-98).

We organize our empirical analysis into two parts. In the first stage, we document some basic patterns in the data. In particular, we note the significant heterogeneity across panchayats in levels of participation, as well as the significant fluctuations in the levels of participation from the first year to the second year, including a dramatic shift in the social composition of participation. Given that the triggering event—the creation of new opportunities for participation—is identical in all our cases, this variation provides an important explanatory challenge to each of the contending paradigms of participation. How does each of our paradigms—social capital, rational choice and social-historical—fare in explaining the fact of variability in the levels and social composition of participation?

In the second stage of our analysis, we evaluate the impact of a range of factors in explaining the observed spatial and temporal variation. We find that social structure, and in particular, patterns of social exclusion significantly shape the pattern of participation, but that these structures are not as rigid as often assumed, and are in fact subject to transformation through political and social agency. We review what these findings imply about the relative importance of the causal mechanisms emphasized by each paradigm and argue that these findings support a dynamic and contingent view of participation, a perspective that recognizes the “plasticity of participation.”

2. Participation paradigms

In this section we briefly summarize the basic explanatory logic of each of the three dominant paradigms of participation. These are of necessity highly stylized presentations.

In recent years the most influential paradigm in studies of participation has been the social capital approach. If parsimonious rational choice theory takes the a-social individual actor as the basic unit of analysis, social capital theorists argue that it is the relations *between* individuals—and in particular the degree of trust and willingness to engage in cooperative forms of behavior—that shapes the individual’s orientation to political life. As is true of any social science concept that gains rapid popularity, the idea of social capital has been put to many usages, and has, in the process, often been stretched well beyond its original analytical insight. We define it here in Putnam’s (1993) sense, which along “neo-Durkheimian lines ... stress[es] the socialization of individuals into shared norms and cooperative societal action” (Skocpol and Fiorina, 1999:13). In Putnam’s treatment, higher levels of participation emerge are a result of the quality of associationalism in society, and in particular the presence of dense, voluntary and horizontal forms of social interaction. These attributes are stock variables in that they are explained with respect to deep, path-dependent histories of civicness. Thus Putnam argues that the greater degree of trust and mutual respect demonstrated by citizens in Northern Italy, as compared to their southern compatriots, can be dated back to cultural developments that have their roots “mist of the dark ages” (1993:180). To the extent that Putnam argues that people are civic minded and more likely to participate in public life because of the extent and degree to which they have been normatively integrated into their communities and the corresponding extent to which they have internalized those norms, it follows that as an attribute social capital is spatially bounded.

The point of departure for all rational choice theory is the utility maximizing behavior of individuals or households. In its most parsimonious form, rational choice theory is reductionist in that it abstracts from social and institutional settings and construes individual decision-making as an autonomous process (i.e. “preferences” are treated as exogenous). As it has been developed by economic historians (North, 1989) and many political scientists (Bates, 1989), an influential sub-set of rational choice theory has begun to treat institutions as endogenous, and a range of analysts have explored how institutions shape incentives and configure choice horizons. Though the definition of institutions can be extended almost infinitely to encompass all arenas of human action, the literature by and large has dealt mostly with formal institutions of governance, and has not, for the most part, taken social relations into account.⁶ We however believe that there is no a-priori reason why rational choice insights cannot be extended to include social structures and relations of power in explaining individual’s choices. As we use it, the key insight of rational choice is to recognize that participation in public affairs represents both a cost and an opportunity. In our usage, costs and opportunities would include the full range of direct and indirect costs of participation, which would include time, opportunity costs and material costs (that have conventionally been taken into account) but would also recognize that formal institutions (the rules of the game) as well as social structures differentially impact the choice sets of individuals. For example, in patriarchal societies that exert social control over women’s access to public spaces, women will incur significant costs of ostracism, loss of reputation and status, and even various psychological and physical punishment from male guardians should they chose to participate.

The social-historical approach begins by acknowledging that democratization (which includes increasing the capacity of citizens to effectively engage the state, i.e. participate) takes place through conflict and struggle. “Democracy ... grew up historically out of century-long struggles among social groups and between state authorities and their subjects.” (Skocpol, 1999:14). Democratization is, after all, about shifting the balance of power. The opportunity to participate is as such not given, but rather the result of iterated social conflicts. As Fox notes that “the right to associational autonomy... is constructed gradually and unevenly through cycles of conflict that leave nascent democratic forces with political resources to draw on in successive rounds” (Fox, 1994:155). This approach is very much *historical* in that it recognizes both the contingency of these outcomes, but also that possibilities in the present are very much conditioned by the past. Social structure, as it has congealed historically, thus matters. The approach is *social* in that it recognizes that collective agency matters, and that in particular the propensity to participate can be critically impacted by mobilizational initiatives. Thus movements can impact choice sets by changing the distribution of power in a community (thus reducing social barriers to participation) reducing information asymmetries and introducing non-instrumental incentives to participate (e.g. solidarity).

⁶ Because the more parsimonious versions of rational choice tend to be so deeply invested in equating human behavior with individual rationality, they are undersocialized in Granovetter’s (1985) sense of the term, and tend to underestimate or entirely ignore the degree to which social relations and social structure (whether in the negative form of domination, power etc or the positive form of networks) condition the range of choices that a given individual can make. For an interesting exception that combines anthropological insights with rational choice assumptions about interests, see Platteau and Abraham (2000).

3. The setting and the data

3.1. Kerala and the People's Campaign for Decentralised Planning

Located in the south-western corner of the Indian subcontinent, Kerala is a state of 31 million inhabitants best known for having achieved some of the highest indicators of social development in the developing world. The state was formed in 1956 by combining the region of Malabar, which was under direct British rule as part of the Madras Presidency, with the two princely states of Travancore and Cochin. Since then, successive governments have aggressively implemented wide-ranging land reforms, provided universal education and health care, and extended social protection to a range of socio-economically disadvantaged groups. Diverse commentators have attributed the efficacy of government intervention to the demand-side dynamics of highly organized opposition parties, mass-based organizations of workers and landless laborers and a vibrant civil society (Ramachandran, 1996; Dreze and Sen, 1995; Kannan, 1998; Herring, 1983; Tornquist, 1997; Heller, 1999).⁷ If, by Indian standards, the state in Kerala has been highly responsive and has effectively provided a range of public goods, it is nonetheless a highly centralized state, plagued by many of the problems associated with top-down, insulated, command and control bureaucracies. Local governments in Kerala, as is true throughout India, have very limited powers, and have historically done little more than act as conduits for schemes designed and funded by state-level ministries. In 1993, the Indian government passed two constitutional amendments that mandated greater powers and responsibilities for local governments. The task of decentralization however fell to state governments, most of which implemented reforms that had little substantive impact. The most notable exception was Kerala.

In 1996, the Left Democratic Front (LDF) coalition returned to power in Kerala and the Communist Party of India–Marxist (CPM)—led government immediately fulfilled one of its most important campaign pledges by launching the “People’s Campaign for Decentralized Planning”. All 1,214 local governments in Kerala—municipalities and the three rural tiers of district, block and gram panchayats (the all-India term for village councils)—were given new functions and powers of decision-making, and were granted discretionary budgeting authority over 40% of the state’s developmental expenditures. The Campaign however went well beyond the devolution of governance functions. As structured by the implementing agency—the Kerala State Planning Board—the campaign was designed to create an active role for local citizens in shaping local development policy-making and budgeting. Thus, not only were local governments charged with designing and implementing their own development plans (which included designing and financing projects across the full range of development sectors), but were mandated to do so through an elaborate series of participatory exercises. The building block of this process was the holding of 2 annual Grama Sabhas (ward-level assemblies), one at the beginning of the planning cycle and one at the end of the budgeting process.

The first grama sabha (from which our data are derived) serves as an open forum in which residents identify local development problems, generate priorities and form sub-sector development seminars in which specific proposals first take shape. The Gram Sabhas are open meetings, presided by local elected officials, and facilitated by “key resource persons” trained by the State Planning Board. They are always held on weekdays, and in public buildings (usually

⁷ The two dominant parties in Kerala are the Indian National Congress (the Congress) and the Communist Party of India–Marxist (CPM) which respectively head up the United Democratic Front and the Left Democratic Front. Since Kerala’s first election in 1957, the two have (with a minor exception) rotated in power, creating a dynamic of competitive mobilization that has helped fuel Kerala’s social movements.

schools). Preparations for the assemblies include extensive publicity, and the distribution of various planning documents. Minutes are kept, and each sub-sector group presents a report of its deliberations and produces a list of “felt needs”. These are in turn translated into specific projects by Task Forces and submitted to the elected Panchayat council for final budgetary approval.⁸

Beyond its institutional design, there are two critical features of the campaign that need to be highlighted. The first is that in addition to providing the fiscal resources, the procedural templates, the enabling regulations and laws, key oversight functions and administrative capacity, the Kerala state government—and specifically the SPB—also orchestrated a massive training exercise, described by one observer as “the largest non-formal education program ever undertaken in India.” In the first year, in seven rounds of training at state, district and local level, some 15,000 elected representatives, 25,000 officials and 75,000 volunteers were given training. About 600 state level trainees—called Key Resource Persons (KRP)—received nearly 20 days of training. Some 12,000 district level trainees—District Resource Persons (DRP)—received 10 days of training and at the local level more than a 100,000 persons received at least five days of training. In subsequent years these training programs were extended, and were more specifically targeted at women and Scheduled Castes and Scheduled Tribes (SC/STs).⁹ The second point is that at every stage of this process, a range of civil society organizations have played an active role. Most notable has been the role of the Kerala Sastra Sahitya Parishad (KSSP)—the People’s Science Movement. With its 50,000 strong membership recruited predominantly from the white-collar professions of civil servants and school teachers, the KSSP has an organized presence in almost every village in Kerala, and is by far the most active and influential non-party affiliated, secular organization in the state. In addition to playing an active role in the campaign itself (supplying for example many of the local Key Resource Persons) it is important to emphasize that in designing the campaign the SPB relied heavily on a stock of practical knowledge, ideas and experiences drawn from twenty-five years of local-level experiments in sustainable development conducted by the KSSP.

3.2. The data

Our data on participation come from attendance registers that were maintained at all of the ward-level gram sabhas. From these registers, which were collected, coded, and summarized by the Kerala State Planning Board (KSPB), we obtained data, not only on the total number of participants in the Gram Sabhas in each panchayat, but also on the number of female participants as well as the number of participants from Schedule Castes and Tribes. Moreover, because the KSPB merged in data from the 1991 Census of India and from other official surveys, we also have data on a limited number of characteristics of each gram panchayat.

⁸ The design and politics of the campaign created a wide range of mechanisms that make elected panchayat councilors de facto—if not de jure—accountable to the Gram Sabha mandates. Needless to say, the degree of accountability varied widely, and calls for further research. However, previous field work, other research and some simple but significant aggregate shifts in expenditure leave little doubt that popular mandates significantly impacted budgetary outcomes.

⁹ “Schedule Castes” are those caste groups (more specifically “Jatis”) that have been officially recognized as having been historically disadvantaged through their socially ascribed status as “untouchables”. “Schedule Tribes” are those groups that are officially recognized as belonging to traditional tribal communities. As of the 1991 Census, individuals from SCs and STs represented 11.9% of Kerala’s rural population.

These data on participation are unique in a number of respects. First, the data set encompasses the entire universe of gram panchayats in Kerala and measures a much more substantial form of participation than voting. Information on forms of political participation other than voting has generally come from surveys of randomly selected individuals spread across a number of different communities. Even with clustered sampling, in most such surveys, the number of individuals residing in the same community tends to be small, both in absolute terms and more importantly, as a fraction of the overall population of the community. Because of this, inferences about levels of participation at the community level from individual-level survey data are likely to be quite noisy.

Second, unlike with most other data on forms of participation other than voting, in our data there is no ambiguity about the nature of the forum in which the individual is participating. Nor is there any concern about multiple memberships in different groups understating or overstating the actual level of participation.

Third, because our data are based on records of actual attendance rather than retrospective self-reported indicators of participation, there is perhaps less reason to be concerned about possible upward biases in the estimated extent of participation.¹⁰ And fourth, unlike most aggregate data on voting and voter-turnouts at the community (e.g., precinct or county) level, our data provide direct information on two crucial (in this context) characteristics of the participants, namely, gender and caste affiliation. This additional information is exactly what is needed to get around the ecological inference problem (King, 1997) that would otherwise have arisen in trying to answer questions about the participation of subordinate groups such as women or Schedule Castes and Tribes.

In our analysis of the participation data we focus on the levels and changes (over time) in five separate measures of participation. The first is the overall participation rate, which we define simply as the percentage of the population that participated (i.e., attended the gram sabha). This measure ranges from 0 to 100. The remaining four measures capture the absolute and relative levels of participation by two traditionally subordinate groups, namely members of Scheduled Castes and Tribes (SC/STs) and women. We measure absolute levels of participation in these two groups in the same way that we do for the population at large, i.e., we calculate participation rates for SC/STs and (separately) for women, defined respectively as the fraction of the SC/ST population that participated and the fraction of women who participated. To assess the relative intensity of participation by each of the two groups, we calculate the relative participation propensity for each group as the ratio of the participation rate of the group to the overall participation rate. So, for instance, if the participation rate of SC/STs was 10% and the overall participation rate was 5%, the relative participation propensity of SC/STs would be 2. In general, a value below 1 would indicate that SC/STs are under-represented among the participants in the gram sabhas, relative to their share in the overall population (that is they are less likely to participate) and a value above 1 would indicate that they are over-represented (more likely to participate).

¹⁰ Of course, one might have concerns about the accuracy of the attendance registers as well. But as there were no explicit incentives linked to attendance levels in the gram sabhas, it seems unlikely that panchayat officials deliberately manipulated these records.

4. Basic Findings

Four broad patterns emerge from our analysis of the data on participation in the planning Gram Sabhas held in all 990 panchayats in the first two years of the campaign (there have been 3 subsequent rounds). First, in the aggregate, rates of participation were high, and persisted from the first year of the campaign to the second. Second, the aggregate statistics on participation mask significant variation across the panchayats in participation levels. Though some of this variation can be attributed to historically important regional differences, intra-regional heterogeneity—i.e., localized variation—in participation rates was far more pronounced. Third, in contrast to the relative stability of participation rates in the aggregate, there was substantial variation across panchayats in the extent and direction of changes in participation over time. And fourth, and most strikingly, there was a dramatic increase, from the first to the second year, in the social depth of participation. Not only did the participation rates of two traditionally subordinate groups, women and members of SC/STs, increase substantially, in the case of SC/STs, participation rates in the second year were higher than those of the general population in 80% of the panchayats. These patterns are documented in Tables 1 and 2 and in Figures 1 through 3. We refer to these figures and tables as we discuss the findings in more detail below.

4.1. Overall Participation

In the first year of the campaign, nearly 7% of Kerala's rural population participated in the planning Gram Sabhas held in each ward of each panchayat. With those eligible to vote representing about 67% of the population (from the 1991 census), this suggests that over 10% of the rural electorate participated. Furthermore, with about 3.5 voters on average per household in rural Kerala, it is possible that close to a third of the households had an adult member who attended the gram sabha.¹¹ The aggregate participation rate in 1997, the second year of the campaign was, at over 7%, actually higher than in the first year, though the increase was admittedly small. We do not have data for more recent years, but observers report that participation levels in Kerala's gram sabhas remain comparable to that in our data. Given the level and intensity of effort involved—gram sabhas last between 5 and 7 hours, and in addition to formal presentations, involve elaborate small groups discussions of the full range of developmental issues—these seem to us to be very significant levels of participation. Identifying an appropriate benchmark is difficult given the lack of reliable comparable data, but there is little doubt that this represents the highest level of participation in any Indian state (World Bank, 2001) and compares favorably with the city of Porto Alegre and the province of Rio Grande du Sul in Brazil, the most celebrated and carefully documented case of direct participation in budgeting (Baiocchi, 2001; Schneider and Goldfrank, 2001).

4.2 Intra-regional heterogeneity

The aggregate statistics mask significant variation in participation rates across the panchayats in both years. The extent of variation is apparent in Figure 1, which plots the overall participation rate in the first year (on the horizontal axis) against that in the second year (on the vertical axis) for each of the 990 gram panchayats. Participation rates in both years ranged from a low close to zero to a high near 25%.

¹¹ According to the 1991 Census there were 5,513,200 households in Kerala and 19,659,444 individuals eligible to vote. Note that the latter number does not exactly match that reported in Table 1 because the number in Table 1 is an estimate of the size of the *rural* electorate.

The statistics we report in Table 2 suggest that this cross-sectional variation is primarily due to intra-regional heterogeneity in participation rates. While there are significant differences in average participation rates across the three historically important regions of Kerala (see Table 2), with the highest average rate of participation in the first year being in Malabar (7.88%), and the lowest in Cochin (6.01%), a simple analysis of variance indicates that less than 5% of the inter-panchayat variation in participation rates is explained by the historical-region effects.

To the extent that a common “blueprint” was applied statewide in structuring the institutional aspects of the participatory planning process, the observed intra-regional heterogeneity highlights the need to take into account local contextual influences on participation. We cannot, given these data, determine whether the localized variation we observe stems from differences in the degree to which the “blueprint” was faithfully implemented on the ground, or whether it reflects differences in the ways in which a common “blueprint” interacted with locally varying circumstances. But whichever the case, the point remains that local context appears to matter, and any explanatory paradigm must be able to account for this localized variation.

4.3 Inter-temporal variation

Participation rates, both in the aggregate and on average across the 990 panchayats were remarkably stable over the two years for which we have data, hovering in each year around 7% (see the first row of the second and third panels of Table 1). In contrast, as is apparent from Figure 1, at the level of individual panchayats, there were large swings in participation in both directions, with the magnitude and direction of the changes varying substantially from panchayat to panchayat. Had overall participation rates remained unchanged between the first and the second year in most panchayats, the scatter-plot in Figure 1 would have been clustered around the diagonal (45-degree line). That is clearly not the case.

Of course, some fluctuation in participation rates from year to year is to be expected. For instance, the gram sabha in one of the years may have fallen on a particularly rainy day, discouraging attendance. What is striking about Figure 1 is the proportion of panchayats in which the change in the overall participation rate was, in absolute terms, larger than what one might plausibly attribute to such natural (unsystematic) variation. In particular, in 502 (or 51%) of the 990 panchayats, there was a 2 *percentage point* (or larger) change in the participation rate; on the other hand, in only 276 (or 28%) of the panchayats was the change less than 1 percentage point.¹² Moreover, as we document below, these shifts had a very pronounced social character.

4.4. Increase in participation by subordinate groups

The most striking feature of the data is the dramatic increase in the social depth of participation between the first and the second year. Kerala has a long and well-documented history of subordinate group movements, and ranks first in India on all indicators of social development. Nonetheless, patterns of caste-based inequality and gender inequality persist. Landless households in Kerala are disproportionately from lower caste groups, and occupational status is also closely correlated with caste. If the more severe practices of caste exclusion and “untouchability” such as segregated public spaces practiced in many parts of India are now quite rare in Kerala, lower caste groups by all accounts still find themselves at a significant social and political disadvantage in public life. Though women enjoy the highest literacy rates and the

¹²Given an average participation rate of about 7%, a 2 percentage point change (to 5% or 9%) represents a 30% increase or decrease in the number of participants.

highest life expectancy in India, the practice of “social purdah”—various forms of patriarchal control over women’s access to public spaces remains pronounced (Mukherjee, 2002). The associational autonomy and basic capacity that is often taken for granted in mature democracies, is in sum very unevenly distributed in Kerala. As such, one might readily predict that socially subordinate groups would have lower levels of participation, especially in a civic-intensive function such as Gram Sabhas.

And indeed this is borne out by the figures for 1996, the first year of the campaign. For the state as a whole, individuals from SC/STs were, with a relative participation propensity of 0.53, only half as likely to participate as the population at large. The degree of exclusion is apparent in Figure 2. In over a third of the panchayats (those clustered along the vertical axis), there were no SC/ST participants at all in the first year, and in only 27% of the panchayats was the relative participation propensity of SC/ST individuals greater than one. Women, too, were only half as likely to participate as the population at large. While there were female participants in all the panchayats, only in 1% of the panchayats was the female participation rate greater than that of men.

By 1997, however, participation rates for both these groups had risen dramatically. For the state as a whole, SC/ST participation rates were nearly one and a half times that of the general population, whereas the relative participation propensity of women had risen to 0.82. Moreover, the gains were widespread. The relative participation propensity of women rose in 83% of the panchayats. And in the case of SC/STs, not only did relative participation propensities increase in 78% of the panchayats, the magnitude of the increase was such that participation rates of SC/ST individuals were, in 1997, actually higher than that of the general population in 80% of the panchayats.

5. Reconciling the findings with the dominant paradigms of participation

On the basis of the broad patterns we document above, we present, in this section, a preliminary assessment of the three paradigms of participation. The assessment is a preliminary one in that we consider only the extent to which these findings can *potentially* be explained within each of the paradigms. A more complete evaluation of the paradigms would go beyond what we do in this section to directly test the competing hypotheses implied by each paradigm.

5.1. Social capital

The social capital approach has only limited success in explaining our basic findings. If the variation in participation rates is to be explained in terms of variation in the social and cultural attributes that produce social capital—attributes that coincide with shared histories and are hence, regionally bounded—then levels of participation ought to vary across the historical regions of Kerala—Travancore, Cochin and Malabar—which have very distinct colonial experiences and historical trajectories. And indeed, there are significant regional differences in participation rates; and, campaign activists and observers attribute the higher levels of participation observed in Malabar to the stronger community ties that prevail in this region of Kerala.

But these regional differences are swamped by the inter-panchayat variation in participation rates within regions. Because panchayats in Kerala are political jurisdictions that were created by lumping together in fairly arbitrary fashion various contiguous settlements, for this variation to be attributable to differences in social capital, the spatial domain of social capital would need to be redefined to correspond to much more *localized* historical attributes of civiness

than is usually implied in the literature. And even with such a redefinition, it would be difficult to explain the fact that the more participatory panchayats are scattered in various parts of the state.

The social capital paradigm runs into even further trouble when confronted with the last two observations. If social capital is a “stock variable” in that it inheres in entrenched social practices, how then can one explain the degree of inter-temporal variation in participation rates we observe at the level of individual panchayats? Presumably, communities with high levels of social capital would have maintained relatively higher levels of participation than communities with lower levels of social capital, but that is not the observed pattern. And the social capital approach would have great difficulty explaining the sudden and dramatic increase of subordinate group participation. If anything, a theory of social exclusion (following for example Bourdieu’s (1986) very different definition of social capital) would provide far greater analytical leverage, since it argues that different intra-group levels of participation must be actively reproduced through mechanisms of discrimination or disempowerment (which would explain 1996 patterns), but are, as such, subject to change (which would explain 1997 patterns). In sum, the social capital approach has great difficulty explaining the observed plasticity of participation.

5.2. Rational Choice

Rational choice perspectives emphasize the tradeoffs that individuals face between the costs and opportunities associated with participation, where these costs and opportunities are influenced by a range of features of the socioeconomic environment in which individuals are located. For instance, the marginal returns to individual effort clearly decline with the population of the community, while the direct costs of participation plausibly rise with the geographical size (and distance to meetings) of the community. The opportunity costs of participation could be correlated with the nature of the local economy—for example, in areas with a higher percentage of non-agricultural workers (who, in Kerala, are likely to have higher incomes) one might expect to find less participation. Insofar as these community-level attributes vary significantly from panchayat to panchayat within a region, a rational choice approach would be able to explain the observed level of intra-regional heterogeneity in participation rates.

Parsimonious rational choice approaches would however have difficulty explaining the degree of inter-temporal variation we observe and the increase in the social depth of participation. Because the community characteristics emphasized in the more static rational choice approaches tend to be stock variables that are unlikely to change much in the short term, such approaches would not predict dramatic changes in the level or social composition of participation.

To explain these changes, one would need a less narrowly construed rational choice framework, one which explicitly considers possible dynamic effects and takes account of how social structures influence the cost/opportunity tradeoffs perceived by individuals. For instance, it is conceivable that institutional changes between 1996 and 1997 might have shifted the distribution of costs and opportunities between groups, and in particular, may have produced higher relative returns to participation for subordinate groups. New incentives for SC/STs and women—such as the increased budgetary allocations targeted at these groups in 1997—may have increased the potential returns to participation.¹³ Similarly, active interventions by social movements to capacitate subordinate communities might have significantly reduced information

¹³ In interviews with campaign organizers, the increased likelihood that SC/STs and women would directly receive benefits in the second year of the campaign was often offered as an explanation of increased participation.

barriers and increased civic skills. In this manner a rational choice approach would be able to logically explain the changed behavior we observe, but to do so it would have to cross into unfamiliar territory more generally associated with social-historical approaches.

5.3. Social-historical

A social historical approach would generally explain levels of participation as a function of on the one hand the existing institutional structures, and on the other hand local political configurations, which might themselves be explained in terms of past histories of social conflict and mobilization. None of our findings are incompatible with a social-historical approach. The fact of high participation in 1996, would be attributed to the new incentives for political action that more decentralized and open modes of governance provided. Additional emphasis might also be placed on the political agency of the CPM, as well as the role of civil society organizations such as the KSSP that have a proven track record of mobilization in Kerala. The approach would not predict significant inter-regional variation unless social structures, or political configurations varied dramatically between regions, which is not the case. The variation between panchayats could be attributed to the local political party in control with CPM or LDF panchayats displaying greater organizational effort, or to the differing mobilizational histories of different communities.

But it is with respect to the inter-temporal variation and the increase in subordinate group participation that the social historical approach appears to have the most comparative leverage. After the first year of the campaign, the State Planning Board and the KSSP engaged in an extensive review of the campaign, and in particular of the level and composition of participation. Noting the disappointing levels of female and SC/ST participation, the Board made some significant changes. This included increasing the transparency and accuracy with which funds reserved for women and SC/STs were actually targeted, stepping-up training programs for these groups and changing some procedural rules. Similarly, the KSSP and women's groups increased their efforts to mobilize these groups. Most notably, hundreds of panchayats witnessed the formation of women's neighborhood groups. These were designed to mobilize and capacitate women in preparation for Gram Sabhas. By definition these efforts were organizationally intensive, and presumably had an impact only where existing networks of activists were strong. Though we have no aggregate data from this round of research, accounts by researchers and scholars have linked these mobilizational efforts with increased participation in the 1997 (Manjula 2000; Thomas Isaac and Franke, 2000).

6. Understanding the variation in participation across panchayats

Having considered the relative extent to which the three dominant paradigms of participation can provide plausible explanatory frameworks for our base-line findings, we turn in this section to a more detailed investigation of the local contextual determinants of participation. The aim is to better understand some of the sources of the striking variation in participation that we document across Kerala's 990 panchayats. We use multivariate regression techniques to explore the panchayat-level correlates of the initial levels and subsequent change in each of our five measures of participation. Recall that the five measures are: (1) the overall participation rate in the panchayat; (2) the participation rate of individuals from Scheduled Castes and Tribes; (3) the participation rate of women; (4) the relative participation propensity of SC/STs; and (5) the relative participation propensity of women.

We report the results from two sets of regressions. In the first set (Table 4) we try to explain the variation across panchayats in the levels of participation in the initial year of the

campaign. The dependent variable in the second set of regressions (Table 5) is the change in the relevant measure of participation between the first and the second year. In both tables, the reported estimates are from ordinary least squares regressions, in which we allow for district-level cluster effects in the disturbance terms and adjust the standard errors of the coefficients accordingly.¹⁴

Two important caveats are in order. The first is that because the mapping from the analytic constructs emphasized by various theories to the specific observable variables available in the data is necessarily an imperfect one, the extent to which the empirical results help us distinguish the causal mechanisms highlighted by the different paradigms is quite uneven. The second is that even though the panchayat characteristics that we include are all inherited or pre-determined—in the sense that they pre-date the start of the campaign—and hence there are no concerns about endogeneity stemming from the influence of the campaign itself, there still remains the possibility that these variables are simply serving as proxies for unobserved (to us) features of the local context, features that are the real “causal” drivers of the observed variation in participation.

6.1 The explanatory variables

We describe below each of the explanatory variables we include in the regressions, and provide the rationale for its inclusion. Table 3 displays summary statistics for all the variables.

Population and area

The average population of a panchayat in Kerala is 25,150, with anywhere between 10-15 wards (the level at which Gram Sabhas are convened) in each panchayat. We include population because the size of the community can have a direct impact on the marginal returns to participation for individuals and groups. We include area because this can impact the actual costs of participation. The inclusion of population and area also allows us to capture the effects of population density.

Fraction of Scheduled Castes/Scheduled Tribes and Women

The fraction of the population in the panchayat that belongs to Scheduled Castes or Tribes (SC/ST) is included primarily to gauge the impact that the size of a minority community has both on its own participation rate as well as that of the larger community. Though SCs in Kerala have a long history of social mobilization and have achieved social and economic gains that have no parallel in India (Alexander, 1989) patterns of social exclusion remain significant. Cross-caste marriages are still rare, and SCs are disproportionately concentrated in low-skill, low-status occupations.

¹⁴ We also calculated maximum-likelihood Tobit estimates that explicitly take account of the fact that in some cases, the dependent variables are, in principle, censored, both below (at zero) and above (at one). These estimates did not differ significantly from the least-squares estimates, either qualitatively or in magnitude. Because the Tobit model is highly non-linear, the interpretation of the estimated coefficients is somewhat more complicated than in the case of a linear least-squares model. For ease of interpretation, we therefore report and discuss only the least-squares estimates. McDonald and Moffitt (1980) provide a very useful discussion of the uses and interpretation of Tobit estimates.

Literacy rate

We include the literacy rate because literacy has an obvious bearing on the capabilities of individuals and social groups to effectively enter the public arena.¹⁵ We should note however that the average literacy rate across Kerala's panchayats is 89% and that in contrast to the modal India picture, literacy is well distributed across caste and gender lines (Franke and Chasin, 1989). Given that the average participation rate is around 7%, it seems implausible that deviations from the average literacy rate would have much impact on the participation rate. There are already many literate individuals who are not participating. On the other hand, if we recognize that literacy has historically been a key source of differentiation in the caste system, and that literacy may have broader social ramifications, the possibility arises that even modest differences in literacy rates may translate into large differences in participation rates.

Characteristics of the labor force

To capture the potential influence of the composition of the labor force in a panchayat, we include as separate regressors, the fraction of workers engaged in non-agricultural activities, and the fraction of workers whose primary source of income is agricultural labor (on farms other than their own). The excluded categories are the fraction who are agricultural cultivators and the fraction of workers who derive their livelihood from animal husbandry and fisheries activities.

Gender-relevant characteristics

We have included female labor force participation rates because women's entry into the labor market is often a source of significant social change. It is important to note the complex ways in which gender and work can interact in shaping women's participation in civic life. On the one hand, in a culture that exercises "social purdah" (that is patriarchal control over women's public life) work can represent a singularly transformative experience, empowering women with greater civic skills and a "capacity to aspire" (Appadurai, 2001). On the other hand, labor force participation can disproportionately increase the opportunity costs of participation in local governance activities since in Kerala's deeply patriarchal culture all domestic tasks are reserved for women, and political participation for working women represents a triple burden (Mukherjee, 2002).

Given the barriers to female participation, many have argued that having role models can have a dynamic demonstration effect. This is indeed part of the rationale behind the constitutional provision of reserving 33% of all panchayat council seats, including the position of panchayat president, for women. We allow for this possibility by including a binary indicator of whether the panchayat president was female. We should note, however, that the interpretation of the coefficient on this variable is complicated by the fact that though the panchayats in which the presidency was reserved for female candidates were, in principle, meant to be randomly selected—which would have permitted clear inferences regarding the strength of the demonstration effect (see Chattopadhyay and Duflo (2001))—our interviews in the field indicated that in practice, political considerations played a role in the selection.

¹⁵ The resource model of participation put forward by Brady, Schlozman and Verba (1995) establishes a positive link between education and participation at the individual level by emphasizing the role that education plays in enhancing civic skills, and lowering the informational and transaction costs of participation.

Political configuration

The final set of variables we include are all binary indicators of the party in power (meaning the party with a majority of seats on the panchayat council) in the panchayat. There are over 20 separate parties that controlled at least one panchayat. We grouped the parties into six mutually exclusive categories: a separate category for each of the three parties with the highest number of panchayats under their control, i.e., the CPM, the Congress(I) and the Muslim League, a fourth for other parties in the CPM-led Left Democratic Front (LDF) coalition, a fifth for other parties in the Congress(I)-led United Democratic Front (UDF) coalition, and a sixth and final category for parties outside both these coalitions. The breakdown of the number of panchayats that fall into each of these six categories is presented in the middle panel of Table 3. In our regressions, we leave out the dummy variable for Congress(I) control, which implies that the coefficients on the remaining dummy variables capture effects relative to the Congress(I). The inclusion of these party variables permits us to assess whether the differences across localities in the identity of the party in power are systematically associated with differences in observed participation rates.

6.2 Results and interpretations: estimated elasticities of participation

Table 4 presents the results regarding the panchayat-level correlates of the initial levels of participation. The dependent variables corresponding to the five columns are the initial (i.e., 1996) levels of our five measures of participation.

Except for the binary indicator variables for the gender of the panchayat council president and the political party in control of the panchayat council, all the variables in Table 4 are in logs. The reported coefficients may therefore be interpreted as “elasticities”—i.e., the percentage change in the relevant measure of participation associated with a 1 percent change in the relevant explanatory variable, everything else being held constant.

Literacy effects

Perhaps our most striking finding is the dramatic impact that the literacy rate in the panchayat appears to have on the participation rates and relative participation propensities of women and individuals from Scheduled Castes or Tribes (SC/ST). The point estimates (fourth row, second and third columns of Table 4) indicate that a 10% increase in the literacy rate in a panchayat translates into nearly a 30% increase in the SC/ST participation rate, and over a 5% increase in the female participation rate. Moreover, higher levels of literacy appear to also increase the relative participation propensity of members of subordinate groups, suggesting that the channels through which literacy rates affect participation are highly differentiated socially.

If, in keeping with parsimonious rational choice models, we treat literacy as an individual attribute, it is not clear why it would have had such a dramatic effect on participation. Given the high literacy rates that prevail among subordinate groups in Kerala, within any panchayat, the availability of individuals from subordinate groups with the basic civic skills to participate is many times greater than the actual level of participation. Moreover, if members of subordinate groups are more likely to participate as representatives of their social category, rather than as individuals, it is not at all clear why the presence of small percentages of illiterates would impact the rate of participation for these groups.

To explain the marked and differential impact of the panchayat literacy rate on participation rates, we must therefore go beyond viewing literacy as a purely individual asset.

Here, extensions are possible in two directions. First, the literacy rate in a panchayat may provide a proxy measure of the degree of social inclusion/exclusion in the panchayat. Literacy rates in Kerala are high because of a long history of mobilization by subordinate groups. In some communities, adult literacy is close to 100%. Where literacy is comparatively low, say 80%, this might indicate either that local movements have been weak, or that a segment of the population has remained socially excluded for one reason or another. For example, this would clearly be the case in Tribal areas, since Tribals have been the least mobilized of all groups in Kerala, and as is true in much of India, Tribals often remain outside the dominant culture.¹⁶ In other words, comparatively lower rates of literacy might be indicative of more stubborn forms of social exclusion, and might as such be associated with lower rates of participation within that community.

A second and related possibility is that marginal increases in literacy, by expanding even slightly the pool of literate individuals from subordinate groups, might spawn significant spillover or multiplier effects in terms of participation if these individuals play a prominent mobilizing role. Krishna (2001) makes a related argument based on fieldwork in the Indian states of Madhya Pradesh and Rajasthan.

Population and area effects

The estimated elasticity of the overall participation rate with respect to the population of the panchayat—see the first row of the first column of Table 4—is -0.354 , indicating that a 10% increase in the panchayat population is associated with a 3.54% decrease in the overall participation rate, all else equal. The effect, moreover, is highly significant.

The participation rate of women is also negatively influenced by the overall population of the panchayat, though the estimated elasticity, at -0.268 , is lower (in absolute value) than that for the population as a whole. And whereas the geographical area covered by the panchayat appears to have little impact on the overall participation rate, an increase in area does significantly dampen female participation rates. A 10% increase in the area of the panchayat is estimated to lower female participation rates by nearly 1%, and the estimated impact is significant.

The first two rows of the last column of Table 4 indicate that these differences in the sensitivity of the overall participation rate and the female participation rate to the population and area of a panchayat are statistically significant. The *relative* participation propensity of women goes up as the population of the panchayat increases (holding area constant), while it declines with the area of the panchayat (holding constant population size), and both these effects are statistically significant.

What does one make of these differences? Two lines of reasoning are possible. The first is that the direct effects of an increase in population or area are substantially different for women. The fact that an increase in population matters less to women than men suggests that purely instrumental calculations of the declining returns to participation with population size are less important to women than men. The fact that an increase in area has a much more negative effect on women's participation suggests that the costs associated with distance (either in monetary or social terms) are higher for women than men.

¹⁶ Across the 990 gram panchayats, the simple correlation coefficient between the literacy rate in the panchayat and the percentage of SC/STs in the population, is -0.42 with a p-value of 0.000.

In the second line of reasoning, the differential impact of population and area would be attributed to the differential impact of population density, stemming from the differing mobilizational dynamics at work in the case of women. Assuming that the direct disincentive effects of an increase in population are the same for men and women, the increase in the relative participation propensity of women associated with an increase in population suggests that the density of population within a community matters more for women, with greater population density having more of a positive impact on the participation rates of women than it does for men. The decline in the relative participation propensity of women with the geographical area of the panchayat is consistent with this differential effect of population density. If we assume that women's participation is more socially mediated than men's in that women face greater social barriers to participation, the differential impact of population density might reflect the fact that these barriers are more likely to be overcome in more densely populated communities where the "social transaction costs" (Tarrow, 1994) of efforts to mobilize women (either through their own initiative or interventions by activists) are lower.

Whichever interpretation one subscribes to, the point that needs to be highlighted is that the channels through which population size and area influence participation rates are in fact socially mediated. The determinants of female participation, even with respect to these very basic factors—which are commonly treated in the literature as simply having neutral effects (in terms of shifting costs and opportunities to individuals)—are quite different from those of men. And, as Agarwal (2001) has eloquently argued, this has often been overlooked by proponents of participatory institutions.

The insignificance of the coefficient reported in the first row of the second column of Table 4 suggests that the overall population of the panchayat does not influence the participation rate among individuals from Scheduled Castes or Tribes (SC/ST), though SC/ST participation rates do decline appreciably with the geographical area covered by the panchayat. This would appear to contradict the findings above that an increase in population drives down participation. However, given the importance of caste identities in the Indian context, the appropriate reference group for SC/ST individuals should be the SC/ST population. And indeed, as the third row of the second column of Table 4 indicates, the SC/ST participation rate in a panchayat declines with the fraction of the panchayat population that belongs to a Scheduled Caste or Tribe. Thus, a 10% increase in this variable—which, with the overall population of the panchayat held constant, is equivalent to a 10% increase in the SC/ST population—lowers the SC/ST participation rate by almost 4%. This finding is then consistent with the earlier observation that there are increasing disincentives to participation with increased population, though the reasons may be slightly different than for women and the overall population. If for the latter the explanation has to do with the diminishing return to effort associated with larger populations, the SC/ST finding probably has more to do with a free-rider problem. In those communities where the SC/ST population is relatively larger, the SC/ST community's political clout is no doubt much greater given the intense local party competition in Kerala. In such political contexts, that is where SC/STs already have a voice, individuals might be more inclined to delegate participation to community leaders.

Labor force effects

The percentage of the labor force in non-agricultural activities has a mild negative effect on overall participation. In Kerala's fairly unique continuous settlement pattern, many rural areas are in fact in close proximity of urban centers. A high percentage of non-agricultural workers roughly captures the degree of urbanization, and with it the degree of commercialization. In keeping with a Durkheimian interpretation it might be argued that individualization weakens the social ties of

reciprocity and trust that social capital theorists have argued enhances civic participation. An alternative explanation is that the fraction of non-agricultural workers captures the size of the “middle class” in the panchayat, which from a rational choice perspective would imply both higher opportunity costs and lower benefits to participation, since middle-class jobs in Kerala are largely in the public sector, which is associated with higher incomes and more stable employment. It is not possible to adjudicate between these explanations, but in any event the effect is fairly weak.

A much stronger relationship is indicated by the estimated effects of the labor force characteristics on SC/ST participation rates. The effects of both the labor force characteristics we include are pronounced and are mutually consistent in suggesting that the greater the role of agriculture in the community, the higher the SC/ST rate of participation (Table 4, second column, 5th & 6th rows). Specifically, a 10% increase in the share of workers engaged in non-agricultural activities is associated with over a 4% decrease in SC/ST participation rates, while a 10% increase in the fraction who are agricultural laborers is associated with over a 3% increase.

In interpreting this very robust result we first note that given that SC/STs are almost by definition landless and represent the overwhelming majority of landless laborers, the association is clearly one between the proportion of SC/STs that work as agricultural laborers and participation. And this association in turn has a very clear logic. Agricultural laborers in Kerala have a long history of militant mobilization and high levels of unionization. The KSKTU—the CPM affiliated agricultural laborers union—claims a membership of over 1 million, out of a total of roughly 2 million. Moreover, district level union membership data clearly points to higher levels of organization in the areas with the highest proportion of laborers, most notably the rice-growing regions of Kuttanad and the district of Palghat (Heller, 1999, Kannan, 1988). Because union activity involves among other things maintaining a complex and sophisticated system of wage negotiations and labor market controls, areas with high concentrations of agricultural laborers and hence union activity, are likely to be those where a sizable segment of the SC/ST community is well-organized. In sum, the existing level of SC/ST organization facilitated participation in Grama Sabhas. This finding is powerfully reinforced by the observed effects of female labor force participation.

Though there appears to be no association between the female labor force participation rate in a panchayat and the overall participation rate (which can be attributed to the low levels of female participation in the initial year in most panchayats), the female labor force participation rate is positively and significantly associated with the SC/ST participation rate. On the other hand, female labor force participation rates do not appear to influence the participation of women in gram sabhas. This paradoxical finding can be unraveled if we again consider how caste, gender and class converge in Kerala to create distinct political profiles.

Three facts are relevant here. The first is that women from SC/STs have higher labor force participation rates than do women from majority castes, though, as a fraction of female workers, SC/STs still constitute a minority. It is possible therefore that high rates of participation by working SC/ST women are reflected in the SC/ST participation rate but not in the overall female participation rate. The second is that the entry of SC/ST women into the labor force is qualitatively different than for women in general because the former are concentrated in low-skill, low status manual labor (agricultural labor, and various agro-processing industries) where the rate of unionization is high, and where the CPM in particular has been very active (Kannan, 1988). SC/ST women may have therefore disproportionately benefited from the enhancement of civic skills and increased solidarity associated with workplace political activism, which in turn might have increased their capacity and willingness to participate in Grama Sabhas. The third is

that, in contrast to non-agricultural labor (where high caste women are clustered), agricultural labor is concentrated in peak seasons, and most laborers are underemployed during the rest of the year. And this might plausibly reduce the opportunity costs of participation in gram sabhas, which are never scheduled during periods of peak agricultural activity.

Political party effects

Overall participation rates in the initial year of the campaign were significantly higher in panchayats controlled by the CPM, the ruling party at the state level and the one that had initiated the campaign. CPM-ruled panchayats recorded participation rates that were, on average, 15% higher than those in panchayats controlled by the Congress (I)—the main opposition party in the state—and were higher than those in panchayats controlled by other parties, including parties within the CPM-led Left Democratic Front coalition. The gap between CPM-ruled panchayats and other panchayats was even more pronounced in terms of female participation rates.

These results are consistent with what we know of the campaign as a whole, and what one might expect in light of Kerala's political history. The campaign was designed, promoted and launched with much fanfare by a CPM-led LDF government. The campaign was enthusiastically championed by E.M.S. Namboodiripad, the CPM's most influential and highly respected elder statesmen. CPM elected officials were encouraged by the party to promote participation, and as a disciplined, centralized, cadre-based party, the CPM is far more likely to effectively translate programmatic positions into grass-roots mobilization than other more loosely organized parties. Moreover, anecdotal evidence indicates that opposition parties in Kerala's highly polarized political environment were reluctant, initially, to lend their support to an LDF government initiative. Finally, given a long history of party-based patronage in Kerala, citizens in opposition-controlled panchayats may have expected to receive lower budgetary allocations, and may have had, as a consequence, less incentive to participate.¹⁷

6.3. Results and interpretations: correlates of changes in participation

Table 5 displays our results on the panchayat-level correlates of the changes in the levels of participation between the first and second year of the campaign. Again, except for the binary indicator variables, the explanatory variables are all in log form. However, unlike in the case of Table 4, the dependent variables are simply the changes in our participation measures between the first and second year of the campaign. The coefficients may therefore be interpreted as semi-elasticities, indicating the increase or decrease in the dependent variable—which, itself, is the change in the relevant measure of participation between the first year and the second year—associated with a 1% change in the relevant explanatory variable.¹⁸

The most notable aspect of the results in Table 5 is the fact that the estimated coefficients are, uniformly, quite small, and for the most part, insignificant. And yet, the descriptive statistics we documented earlier indicate that there were indeed dramatic and pronounced

¹⁷ In retrospect this expectation turns out to have been incorrect as funds were, by all accounts, distributed on a strict population and poverty-based formula.

¹⁸ For instance, the estimate of 0.0177 in the first row of the first column implies that a 10% increase in population is associated, everything else equal, with a 0.1 *percentage point* increase in *the change in* the overall participation rate. So, if the overall participation rate had increased by 2 percentage points, say from 6% to 8%, a 10% increase in population would have implied a change of 2.1 percentage points from 6% to 8.1%.

changes in the level and social composition of participation. The fact that the variables we observe and include in our regressions appear to have such limited explanatory power then suggests that the variation must stem from phenomena that we do not capture in our data. We know from previous research and general accounts of the campaign that both the State Planning Board and grass roots movements targeted their efforts towards mobilizing women and SC/STs in 1997. And thus, political and movement agency seem to us to be plausible candidates for the unobserved variable. This hypothesis is supported by the patterns of significance that did emerge from the regressions in table 5.

Everything else constant, panchayats with larger populations appeared to have experienced larger increases in female participation rates and relative participation propensities. Independent accounts have emphasized the role of the KSSP and women's groups in creating neighborhood groups that helped women overcome social obstacles to participation (Manjula 2000; Seema and Mukherjee, 2000; Mukherjee 2002). Though we do not have data about where these efforts were focused, it is quite possible that organizations targeted mobilization efforts in areas of greater population density, where the returns to the efforts of social movement activists would plausibly be higher because network ties are shorter, and mobilizing efforts are likely to have a higher diffusion effect. Stated somewhat differently, because social movement entrepreneurs must overcome "social transaction costs" (Tarrow, 1994) in successfully organizing participants, they are far more likely to be successful in communities characterized by dense ties. Second, and perhaps not surprisingly given the across-the-board increase in the participation rates of individuals from Scheduled Castes and Tribes that we documented earlier, panchayats with a higher fraction of SC/ST individuals had larger increases in overall participation rates. However, the size of the coefficient—the point estimate (third row, first column of Table 5) indicates that a 10% increase in the fraction of SC/ST is associated with only a 0.1 percentage point increase in the change in the overall participation rate—suggests that the increase in the participation rates of SC/STs was largely, though not completely, offset by a decrease in the participation rates of individuals from the majority castes.

On the political front, there does not appear to have been larger increases in participation rates in CPM-ruled panchayats relative to Congress(I)-ruled panchayats. In other words, the gap in participation rates between the two that was evident in the initial year of the campaign neither increased nor decreased between the first and the second year. That the CPM was unable to build on its initial advantage is probably related to the significant dissent within the party about the political value of the campaign. The initial year of the campaign came on the coattails of the Party's return to power and party unity was at its height. By 1997, however, factionalism had re-emerged, and party support was not as pronounced. Much of the resulting mobilizational slack was taken up by non-partisan organizations, especially the KSSP. The effects of CPM rule were thus not magnified relative to the initial year, though neither did they diminish.

The impact of the Muslim League is also worth remarking upon. The change in the female participation rate in Muslim League controlled panchayats was, on average, 1.5 percentage points lower than in Congress(I)-ruled panchayats and was lower as well than that in panchayats controlled by the other parties. Note that this does not imply that female participation rates fell in Muslim League panchayats, only that they increased less than they did in other panchayats. Whereas for the sample as a whole the average female participation rate rose from 4.2% in 1996 to 6.0% in 1997 (see Table 1), in Muslim League panchayats the corresponding change was from 3.3% to 3.6%. The difference stems no doubt from the greater restrictions placed on women's activity outside the home in Muslim communities.

6.4. Evaluating the paradigms

Though the limitations of our data permitted only an uneven test of our three paradigms of participation, the base-line trends we observed (the spatial and temporal variability of participation) and some of the associations we identified through the regression analysis are sufficiently robust to allow us to evaluate some of the causal stories associated with each paradigm.

First, it is important to reiterate that insofar as the social capital and parsimonious rational choice paradigms emphasize stock phenomena as the core determinants of participation—respectively the degree to which a “civic culture” has taken root and the utilitarian calculus and resources of atomistic individuals—neither paradigm sits comfortably with the degree of inter-temporal variation we have documented in both the rate and social composition of participation.

With the exception of the political party variables we included in our analysis, all the variables we evaluated have the quality of stock variables, and while none was a direct measure of social capital, many of these capture socio-economic and environmental phenomena that should have some relationship (either as determinants or effects) on the quality of associational life. Yet none of the associations that we found could be interpreted along lines that would support a social capital argument. Thus even when we found that social ties matter (as in the case of the impact of population density, or SC/ST womens' labor force participation) the specifically bounded social and political character of the relevant populations suggests that the significance of ties stems more from political factors and histories of mobilization, than long-term acculturation factors. The one possible exception was our finding that the degree of urbanization/commercialization (as measured by the percentage of the non-agricultural labor force) does adversely impact participation, possibly indicating the negative effect of weakening social ties. The association however was weak.

A rational choice perspective does provide important explanatory leverage for a number of our observed associations. Most notably, the negative impact of population on participation is consistent with a declining-marginal-return argument. Similarly, the positive effect that density has on participation might point to the significance of the transaction costs associated with participation. What is most interesting about these findings however, is that the explanations work best when some of the rational choice paradigm's parsimony is relaxed and its insights about instrumental behavior are viewed through a social historical lens. We found for example that declining marginal returns matter less for women than for men and that the free-riding impulse among SC/STs is conditioned by their identity (and possibly political capacity) as SC/STs.

Finally, the social historical view provides some very compelling interpretive schemes for explaining both observed and unobserved associations. These can be moreover grouped into two interrelated sets of explanatory variables. The first set emphasizes the significance of social structure. The observation about population, as already noted, works best when the social characteristics of specific populations are taken into account. We also attributed the significance of various labor force characteristics to the dynamic effect that results from the overlay of occupational position and caste. We thus found that SC/STs and women who are agricultural laborers are much more likely to participate, and tied this to the particular mobilizational history of agricultural laborers in the Kerala. A third finding was that the rigidity of social exclusion, as measured through illiteracy rates, has a very adverse effect on participation.

The second set of variables captures the effects of political and social agency. The most direct evidence was the observation that rates of participation in 1996 were strongly associated with CPM controlled panchayats. Indirectly, the fact that the presence of the CPM cannot explain increases in participation between years points to the agency of other actors, especially grass roots organizations. We also argued that given that only one of our stock variables (population) had an appreciable impact on the variation between 1996 and 1997, the observed increase in women's and SC/ST participation has to be attributed to unobserved causes. We claim that state intervention and grass roots activism played the critical role.

The above analysis underscores the very fruitful ways in which the rational choice and social historical paradigms can be combined. There are a large number of possibilities here, but we would like to close by highlighting one particular hybrid formulation that calls for further research.

Participation of the kind we have explored here is difficult to achieve. The costs of participation are high, the returns are uncertain, and the obstacles significant. If the social historical paradigm is in all likelihood correct in emphasizing the agency of political and social actors, the reason why this matters can best be explained by drawing on a hybrid notion of what we call the transaction costs of participation. If we recognize that there are both costs and opportunities to participation, and that many of these costs and opportunities have specifically social characteristics (e.g. there are more social costs to women participating) it follows that intervention by social and political actors can significantly reduce the costs of transaction either by creating new institutions that shift the existing distribution of costs and opportunities (e.g. making the budgeting process more open to public intervention) or by reducing the costs of collective action.

7. The plasticity of participation

The possibility of more participatory forms of democracy has often been met with skepticism by democratic theorists.¹⁹ Even those inclined to support the idea of participation on normative grounds alone have argued that gains are difficult to come by. In any democracy the power of entrenched interests represents a significant obstacle to expanding the scope and depth of participation. In the context of developing democracies the problem is compounded by poorly developed and unevenly distributed basic capabilities (in Sen's sense of the term) and social barriers to association that are pervasive. Not surprisingly, most theories of participation, including social capital and rational choice, more or less assume that favorable conditions for participation can only develop through long-term processes.

The empirical findings documented in this paper suggest otherwise and point to the need for a more dynamic and contingent view of participation, one that recognizes the "plasticity of participation." The very strong evidence of spatial and temporal variation we have documented suggests that pre-determined local factors do shape the nature of participation, but that the influence of these factors can be shaped—magnified or mitigated—through political or social agency.

The variability of participation we documented is manifested along two dimensions. From a cross-sectional perspective, our findings highlight the extent to which certain local stock

¹⁹ See for example Cohen and Arato's (1995) review of the debate between representative and participatory theories of democracy.

variables mould the magnitude and the social composition of participation. Thus within the same statewide institutional context of decentralization of resources and decision-making, levels of participation varied significantly across panchayats. Moreover, the fact that subordinate group participation in the first year of the campaign fell well below the average confirms the view that categorical social inequalities (Tilly, 1999) severely constrain the quality and depth of associational life.

Yet the temporal dimension of our analysis, which explored variation in participation between 1996 and 1997, yields findings that appear to be paradoxical. The very durable social structures—specifically those of social exclusion—that had such a strong effect on participation in 1996 turn out to be extremely malleable in 1997, as evidenced by the dramatic rise in the participation of subordinate groups. While our data do not allow us to statistically identify the causal factors at work, analytical inference does point in the direction of the mobilizational efforts of grass roots organizations and interventions by the state. Thus in contrast to many studies that treat the determinants of participation as stock variables—that is, as variables that change only very slowly over time—our empirical findings suggest that the level (absolute numbers) and social depth (participation of historically excluded social categories) of participation are highly variable, and are not likely to be explained by adhesion to a single paradigm, especially paradigms that make parsimonious assumptions about human behavior. Certainly, stock variables matter. But our findings indicate that the actual determinants of participation are multiplex, and require a configurational analysis that takes into account stock variables, institutional factors and political contingencies (including the agency of parties and social movements).

These findings broadly support an emerging body of theory that has made the case for the “constructability” of collective capacities for participation (Evans 1996, 2002; Fung and Wright, 2002). What distinguishes these approaches is a central concern with understanding how specific institutional arrangements interact with social and political factors in determining the role that historically marginalized groups might play in effectively shaping public policies. These configurational models (for lack of a better label) however present only a very general elaboration of the problem. More research is clearly needed, on the one hand, to flesh out the empirical details of the causal mechanisms at work, and on the other, to develop a positive explanatory framework—within which to organize and interpret empirical work—of why and how a favorable configuration would result in higher levels of democratic participation.

References

- Abraham, Anita, and Jean-Philippe Platteau. 2001. "Participatory development in the presence of endogenous community imperfections," mimeo, University of Namur.
- Agarwal, Bina. 2001. "Participatory exclusions, community forestry, and gender: an analysis for South Asia and a conceptual framework," World Development, Vol.29, No.10, pp.1623-1648.
- Alesina, Alberto and Eliana La Ferrara. 1999. "Participation in heterogeneous communities," National Bureau of Economic Research Working Paper #7155, (forthcoming, Quarterly Journal of Economics).
- Alexander, K.C. "Caste Mobilization and Class Consciousness: The Emergence of Agrarian Movements in Kerala and Tamil Nadu," in Frankel, Francine and M.S.A. Rao (eds.). *Dominance and State Power in Modern India: Decline of a Social Order*. Vol. 1. Delhi: Oxford University Press, 1989.
- Appadurai, Arjun. 2001. *Deep Democracy*. Unpublished MS.
- Baiocchi, Gianpaolo. 2001. "Participation, Activism, and Politics: the Porto Alegre Experiment and Deliberative Democratic Theory," pp. 43-72, *Politics and Society*, 29:1, (March).
- Bates, Robert. 1989. *Beyond the Miracle of the Market: The Institutional Foundations of Agrarian Development in Kenya*. Cambridge: Cambridge University Press.
- Blair, Harry. 2000. "Participation and Accountability at the Periphery: Democratic Local Governance in Six Countries," World Development, January, 28(1).
- Bourdieu, Pierre. 1986. "The Forms of Capital," pp. 241-258, in John Richardson (ed.) *Handbook of Theory and Research for the Sociology of Education*. New York: Greenwood Press.
- Brady, Henry E., Sidney Verba and Kay Lehman Schlozman. 1995. "Beyond SES: a Resource Model of Political Participation," American Political Science Review, 89(2), pp. 271-294.
- Cohen, Jean and Andrew Arato. 1995. *Civil Society and political Theory*. Cambridge: MIT Press, 1995.
- Chattopadhyay, R. and E. Duflo. 2001. "Women's leadership and policy decisions: evidence from a nationwide randomized experiment in India," mimeo, Department of Economics, MIT, March.
- Chaudhuri, Shubham, Patrick Heller and Chandan Mukherjee. 2001. "Does decentralized planning improve the quality of local public expenditures? A proposal for a study of the "People's Campaign for Decentralized Planning" in the Indian state of Kerala," mimeo, Department of Economics, Columbia University.
- Chibber, Pradeep. 1999. Democracy without Associations: Transformation of the Party System and Social Cleavages in India. Ann Arbor: University of Michigan Press.

- Cohen, Joshua and Rogers, Joel. 1992. "Secondary Associations and Democratic Governance," Politics and Society, 20(4), pp. 393-472.
- Crook, Richard Charles and James Manor. 1998. Democracy and decentralisation in South Asia and West Africa : participation, accountability, and performance. Cambridge ; New York: Cambridge University Press.
- Dahl, Robert. 1967. "The City in the Future of Democracy," American Political Science Review, LXI(4), pp. 953-970.
- Dreze, Jean and Amartya Sen. 1995. India: Economic Development and Social Opportunity. Delhi: Oxford University Press.
- Evans, Peter. 2002. "Looking for Agents of Urban Livability in a Globalized Political Economy," in Peter Evans, ed., Livable Cities? Urban Struggles for Livelihood and Sustainability. Berkeley, CA: University of California Press.
- Fox, Jonathan. 1994. "The Difficult Transition From Clientelism to Citizenship," World Politics, 46(2), pp. 151-184.
- Franke, Richard and Barbara Chasin. Kerala: Radical Reform as Development in an Indian State. Food First Development Report No. 6, October 1989.
- Fung, Archon, and Erik Olin Wright (forthcoming). "Thinking About Empowered Participatory Governance," in Deepening Democracy: Institutional Innovations in Empowered Participatory Governance, eds. Archon Fung and Erik Olin Wright, London: Verso Press, 2001.
- Herring, Ronald. 1983. Land to the Tiller: the Political Economy of Agrarian Reform in South Asia. New Haven: Yale University Press.
- Huber, Evelyne, Dietrich Rueschemeyer and John D. Stephens. 1999. "The Paradoxes of Contemporary Democracy: Formal, Participatory, and Social Dimensions," in Transitions to Democracy, edited by Lisa Anderson, New York: Columbia university Press.
- Kannan, K.P. 1988. Of Rural Proletarian Struggles: Mobilization and Organization of Rural Workers in South-West India. Delhi: Oxford University Press.
- Krishna, Anirudh. 2001. "Decentralization on fallow and fertile ground: preparing the population for democratic self-governance," mimeo, Sanford Institute of Public Policy, Duke University.
- King, Gary. 1997. A Solution to the Ecological Inference Problem: Reconstructing Individual Behavior from Aggregate Data. Princeton: Princeton University Press.
- Linz, Juan J. and Alfred Stepan. 1996. Problems of Democratic Consolidation. Baltimore: John Hopkins University Press.
- Mamdani, Mahmood. 1996. Citizen and Subject: Contemporary Africa and the Legacy of Late Colonialism. Princeton: Princeton University Press.

- Manjula, B. 2000. "Voices From the Spiral of Silence: A Case Study of Samatha Self Help Groups of Ulloor," Paper presented at the International Conference on Democratic Decentralisation, Thiruvananthapuram, May 23-27.
- Mukherjee, Vanita. 2002. "Democratic Decentralisation and Associative Patterns," Unpublished paper, Trivandrum.
- McDonald, John F. and Robert A. Moffitt. 1980. "The Uses of Tobit Analysis," (in Notes), The Review of Economics and Statistics, Vol. 62, No. 2. (May, 1980), pp. 318-321.
- North, Douglas. 1989. "Institutions and Economic Growth: and Historical Introduction," pp. 1319-32, World Development, 17:9.
- O'Donnell, Guillermo. 1993. "On the State, Democratization and Some Conceptual Problems: A Latin American View with Glances at Some Postcommunist Countries," World Development 21(8):1355-1359.
- Oliver, Eric J. 2000. "City Size and Civic Involvement in Metropolitan America," American Political Science Review, 94(2), pp. 361-373.
- Putnam, Robert. 1993. Making Democracy Work: Civic Traditions in Modern Italy. Princeton: Princeton University Press.
- Putnam, Robert D. 2000. Bowling alone: the collapse and revival of American community. New York : Simon & Schuster.
- Schneider, Aaron and Ben Goldfrank. 2001. "Budgets and ballots in Brazil: participatory budgeting from the city to the state, mimeo, Department of Political Science, University of California, Berkeley.
- Seema, T.N. and Vanitha Mukherjee. 2000. "Gender Governance and Citizenship in Decentralised Planning," paper presented at the International Conference on Democratic Decentralisation, Thiruvananthapuram, May 23-27.
- Skocpol, Theda, and Morris P. Fiorina. 1999. "Making sense of the civic engagement debate," in Civic Engagement in American Democracy, eds. Theda Skocpol and Morris P. Fiorina, Washington, D.C.: Brookings Institution Press and New York: Russell Sage Foundation.
- Tarrow, Sidney. 1994. Power in Movement. Cambridge: Cambridge University Press.
- Thomas Isaac, T.M. (with Richard Franke) 2000. Local Democracy and Development: People's Campaign for Decentralised Planning in Kerala. New Delhi: Leftword.
- Thomas Isaac, T. M. 1999. "The Socio-Economic and Political Context of People's Planning Campaign," National Workshop on Decentralised Governance, Organised by Kerala Institute of Local Administration and Swiss Agency for Development and Co-operation, Thrissur.
- Tornquist, Olle. 1997. "Making Democratisation Work: From Civil Society and Social Capital to Political Inclusion and Politicisation. Theoretical Reflections on Concrete Cases in Indonesia,

Kerala, and the Philippines," Research Programme on Popular Movements, Development and Democratisation, University of Oslo.

Varshney, Ashutosh. 1998. Civic Life and Ethnic Conflict: Hindus and Muslims in India. New Haven: Yale University Press.

Varshney, Asutosh. 2000. "Is India Becoming More Democratic," Journal of Asian Studies, February.

Verba, Sidney, Kay Lehman Schlozman, and Henry E. Brady. 1995. Voice and Equality: Civic Voluntarism in American Politics, Cambridge: Harvard University Press.

Verba, Sidney, Norman H. Nie and Jae-On Kim. 1978. Participation and Political Equality: a Seven-Nation Comparison. New York: Cambridge University Press.

Vilas, Carlos. 1997. "Democracy and the Whereabouts of Participation." in The New Politics of Inequality in Latin America, edited by Chalmers, Doug et al. New York: Oxford University Press, 1997.

Weyland, Kurt. 1996. Democracy Without Equity: Failures of Reform in Brazil. Pittsburgh: University of Pittsburgh Press.

World Bank. 2000. "Volume I: Overview of Rural Decentralization in India." Washington D.C.: World Bank.

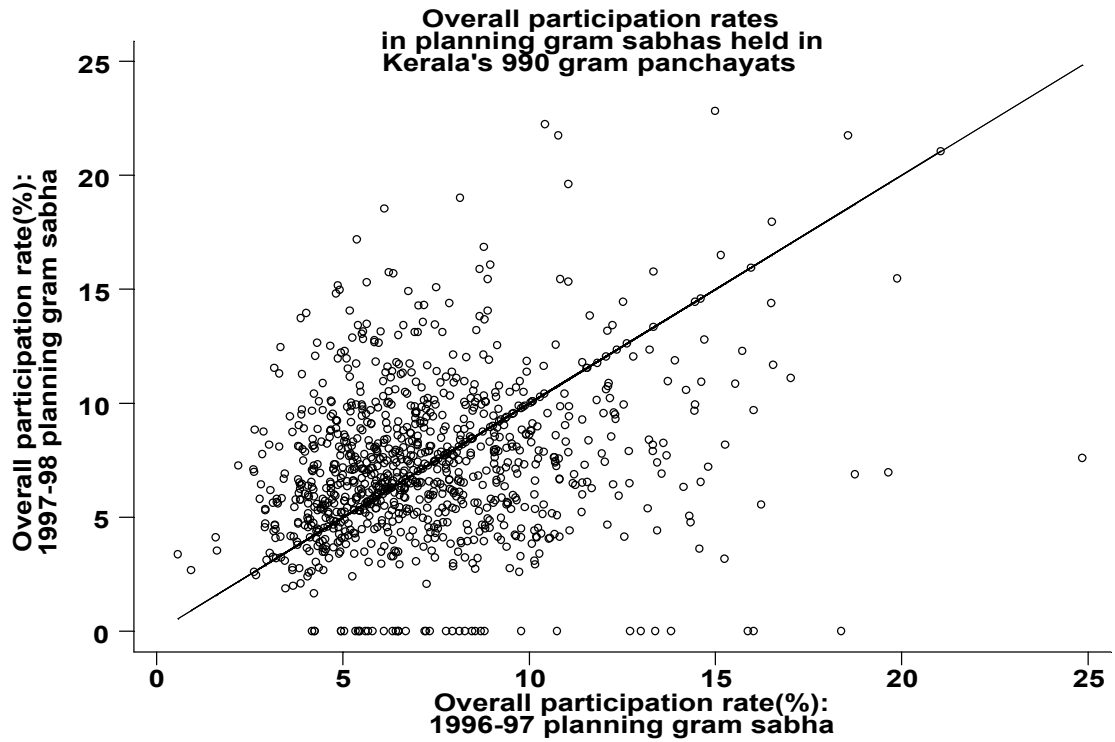


Figure 1

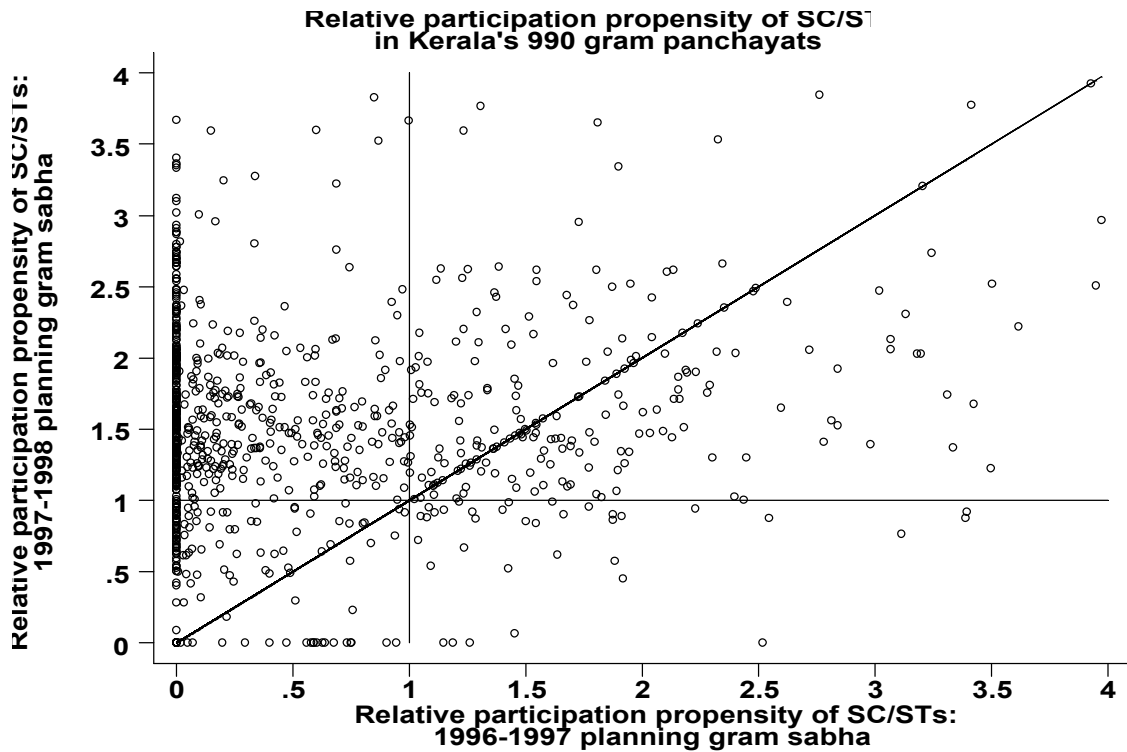


Figure 2

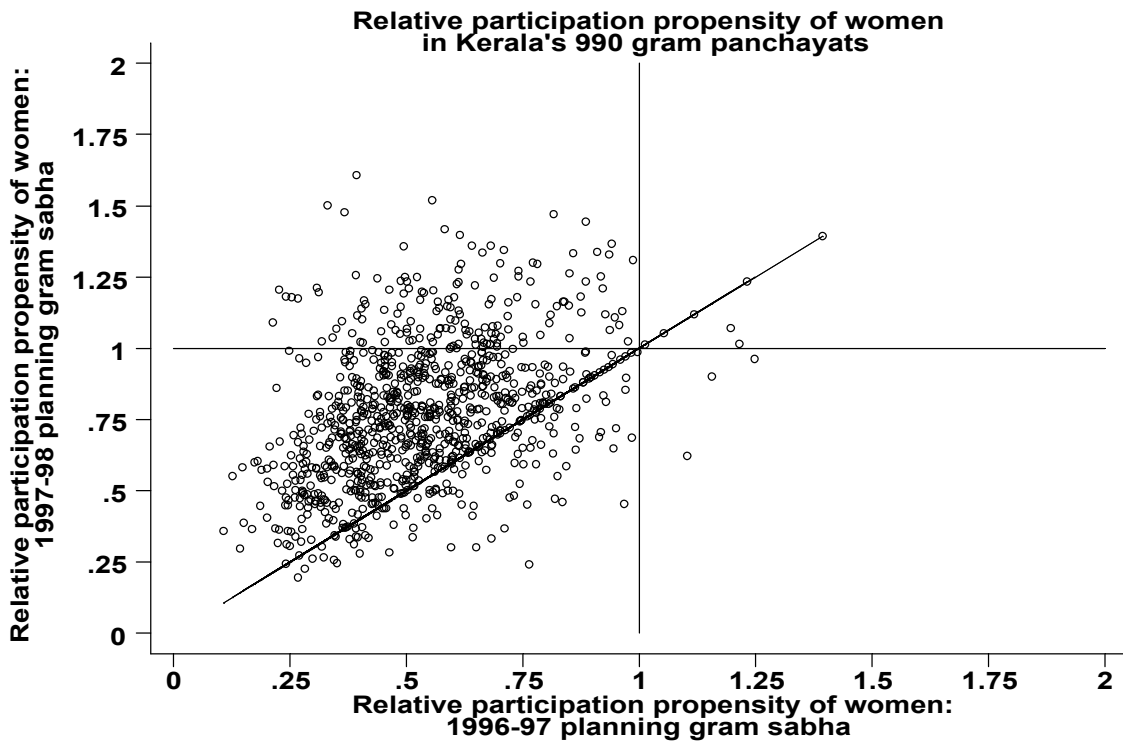


Figure 3

Table 1
Participation in Kerala's gram sabhas: the aggregate picture

(a) Basic facts

Variable	
Total population of Kerala's 990 gram panchayats	24,898,930
Percentage of population members of Scheduled Castes (SC) or Scheduled Tribes (ST)	11.9
Total electorate (no. of voters) in Kerala's 990 gram panchayats (estimate)	16,822,130
Number of gram panchayats	990
Fraction of panchayats where SC & ST constitute less than 25% of the population	0.96
Average population per gram panchayat	25150
Average number of wards per gram panchayat	11
Average area per gram panchayat (sq.km)	37.5

(b) Aggregate figures on participation

Variable	Planning Gram Sabha	
	1996-1997	1997-1998
Overall number of participants	1,736,865	1,784,847
Aggregate overall participation rate (%)	7.0	7.2
Percentage of electorate that participated (estimate)	10.3	10.6
Number of SC/ST participants	110,105	306,014
Percentage of participants SC/ST	6.3	17.2
Aggregate participation rate of SC & ST (%)	3.7	10.3
Aggregate relative participation propensity of SC & ST	0.53	1.44
Number of female participants	493,442	727,986
Percentage of participants women	28.4	40.8
Aggregate participation rate of women (%)	4.0	5.9
Aggregate relative participation propensity of women	0.57	0.82

(c) Summary statistics on overall participation at the panchayat level

Variable	Planning Gram Sabha	
	96-97	97-98
Average overall participation rate (%)	7.3	7.4
Fraction of panchayats in which overall participation rate went up	0.49	
Fraction of panchayats in which overall participation rate changed by more than 2 % pts.	0.51	
Fraction of panchayats in which overall participation rate changed by less than 1 % pt.	0.28	

(d) Summary statistics on participation by SC/STs and women at the panchayat level

Variable	Planning Gram Sabha	
	96-97	97-98
Average participation rate of SC & ST (%)	4.6	11.1
Fraction of panchayats in which SC & ST participation rate went up	0.76	
Fraction of panchayats in which SC/ST participation rate changed by more than 2% pts.	0.80	
Average relative participation propensity of SC & ST	0.66	1.57
Fraction of panchayats in which relative participation propensity of SC & ST went up	0.78	
Fraction of panchayats in which relative participation propensity of SC & ST more than 1	0.27	0.80
Average participation rate of women	4.2	6.0
Fraction of panchayats in which female participation rate went up	0.67	
Fraction of panchayats in which female participation rate changed by more than 2 % pts.	0.54	
Average relative participation propensity of women	0.54	0.77
Fraction of panchayats in which relative participation propensity of women went up	0.83	
Fraction of panchayats in which relative participation propensity of women more than 1	0.01	0.16

Table 2
Regional variation in participation in gram sabhas

Historical regions	Participation rate in 1st gram sabha (%)		
Travancore	7.33		
Cochin	6.01		
Malabar	7.88		
P-value from F-test of significance of historical region dummies:			(0.000)
Percentage of inter-panchayat variation in participation rates explained by historical region dummies:			4.7
	Number of panchayats	Fraction of panchayats	
Travancore	402	0.41	
Cochin	184	0.18	
Malabar	404	0.41	

Table 3
Summary statistics on dependent and independent variables

	Mean	Min	Max	Percentile	
				25th	75th
Dependent variables					
Overall participation rate in 1st gram sabha	7.3	0.6	24.9	5.2	8.9
Participation rate of SC & ST in 1st gram sabha	4.6	0.0	44.8	0.0	7.3
Participation rate of women in 1st gram sabha	4.2	0.2	21.3	2.2	5.4
Relative participation propensity of SC & ST	0.66	0.00	6.33	0.00	1.09
Relative participation propensity of women	0.54	0.02	1.39	0.40	0.66
Change in overall participation rate (% points)	0.1	-18.4	12.4	-1.9	2.2
Change in participation rate of SC & ST (% points)	6.6	-31.0	39.4	0.1	11.3
Change in participation rate of women (% points)	1.9	-12.6	15.5	-0.2	3.9
Change in relative participation propensity of SC & ST	0.90	-4.13	6.45	0.15	1.54
Change in relative participation propensity of women	0.23	-0.52	1.21	0.06	0.38
Independent variables					
Population of panchayat	25150	4588	78343	18541	30019
Area of panchayat (sq.km)	38	2	817	17	34
Percentage of population belonging to SC or ST	12.0	0.0	63.0	6.0	14.3
Literacy rate	89.0	28.0	98.0	87.3	93.1
Percentage of labor force in non-agricultural activities	10.0	0.0	55.0	4.2	12.8
Percentage of labor force in agricultural labor	26.0	0.0	82.0	16.4	35.0
Female labor force participation rate	17.0	3.0	51.0	11.2	21.0
	No. of panchayats		Fraction		
Female president of panchayat council	362		0.37		
Political party in control	Congress-I	242		0.24	
	Muslim League	89		0.09	
	Other UDF party	73		0.07	
	CPI-M	434		0.44	
	Other LDF party	110		0.11	
	Others	42		0.04	

Table 4
Estimated elasticities of participation in Kerala's 990 gram panchayats

Independent variables	Dependent variable				
	Participation rate in 1996 Planning Gram Sabha (%)			Relative participation propensity in 1996 Planning Gram Sabha	
	Overall	SC & ST	Women	SC & ST	Women
Population	-0.354 (0.000)	0.099 (0.809)	-0.268 (0.000)	0.448 (0.405)	0.086 (0.025)
Area	0.021 (0.332)	-0.725 (0.003)	-0.099 (0.008)	-0.999 (0.002)	-0.120 (0.000)
Percentage of population SC & ST	-0.014 (0.449)	-0.398 (0.082)	0.020 (0.513)	-0.417 (0.164)	0.034 (0.070)
Literacy rate	0.178 (0.088)	2.988 (0.010)	0.572 (0.001)	3.441 (0.022)	0.395 (0.000)
Percentage of labor force in non-agricultural activities	-0.062 (0.002)	-0.437 (0.048)	-0.121 (0.000)	-0.510 (0.077)	-0.059 (0.004)
Percentage of labor force in agricultural labor	0.018 (0.309)	0.348 (0.079)	0.018 (0.540)	0.447 (0.083)	0.000 (0.986)
Female labor force participation rate	-0.001 (0.961)	1.210 (0.000)	-0.029 (0.574)	1.689 (0.000)	-0.028 (0.380)
Female panchayat council president	-0.014 (0.573)	-0.249 (0.363)	0.006 (0.877)	-0.316 (0.376)	0.020 (0.422)
Political party in control: Muslim League	-0.038 (0.439)	-0.411 (0.454)	-0.119 (0.157)	-0.512 (0.475)	-0.080 (0.116)
Political party in control: other UDF party	0.005 (0.922)	-0.662 (0.238)	-0.009 (0.917)	-0.905 (0.217)	-0.014 (0.789)
Political party in control: CPI-M	0.145 (0.000)	-0.013 (0.969)	0.186 (0.000)	-0.100 (0.818)	0.041 (0.182)
Political party in control: other LDF party	0.070 (0.101)	0.095 (0.842)	0.076 (0.295)	0.089 (0.886)	0.005 (0.904)
Political party in control: others	-0.041 (0.515)	0.024 (0.972)	-0.043 (0.680)	-0.036 (0.968)	-0.003 (0.965)
Constant	-0.226 (0.722)	-22.939 (0.001)	-3.173 (0.003)	-27.171 (0.003)	-2.948 (0.000)

Notes: p-values indicating the (two-sided) significance level of the t-statistic associated with each explanatory variable appear in parentheses. The standard errors used to calculate the t-statistics were adjusted to allow for district-level cluster effects. Variables that are significant at a level of 10% or less are indicated in bold. Except for the binary indicator variables for the gender of the panchayat council president and the political party in control, all variables are in logs. The reported coefficients may therefore be interpreted as “elasticities”—e.g., the estimate of -0.354 for population in the first column implies that a 10% increase in the population of a panchayat is associated with a 3.54% decline in the overall participation rate, everything else being held constant.

Table 5
Determinants of changes in participation in Kerala's 990 gram panchayats

Independent variables	Dependent variable				
	Change in participation rate between 1996 & 1997 Planning Gram Sabha			Change in relative participation propensity between 1996 & 1997 Planning Gram Sabha	
	Overall	SC & ST	Women	SC & ST	Women
Population	0.0177 (0.000)	0.0039 (0.657)	0.0115 (0.008)	-0.0071 (0.951)	0.0757 (0.006)
Area	-0.0041 (0.135)	-0.0116 (0.032)	-0.0059 (0.026)	-0.0131 (0.858)	-0.0395 (0.023)
Percentage of population SC & ST	0.0112 (0.000)	0.0141 (0.003)	0.0113 (0.000)	-0.0811 (0.189)	0.0391 (0.003)
Literacy rate	-0.0020 (0.874)	-0.0130 (0.586)	0.0113 (0.339)	-0.4987 (0.119)	0.1186 (0.119)
Percentage of labor force in non-agricultural activities	0.0015 (0.520)	0.0076 (0.104)	-0.0014 (0.553)	0.1881 (0.003)	-0.0135 (0.361)
Percentage of labor force in agricultural labor	0.0000 (0.998)	0.0093 (0.072)	-0.0011 (0.660)	0.1005 (0.141)	-0.0205 (0.205)
Female labor force participation rate	-0.0006 (0.855)	-0.0072 (0.313)	0.0013 (0.708)	-0.1492 (0.111)	-0.0052 (0.814)
Female panchayat council president	0.0071 (0.012)	0.0125 (0.025)	0.0038 (0.169)	0.0636 (0.387)	-0.0292 (0.094)
Political party in control: Muslim League	-0.0095 (0.096)	-0.0071 (0.525)	-0.0148 (0.008)	0.3404 (0.023)	-0.1100 (0.002)
Political party in control: other UDF party	-0.0046 (0.429)	0.0210 (0.070)	-0.0048 (0.403)	0.3548 (0.021)	-0.0290 (0.427)
Political party in control: CPI-M	-0.0042 (0.218)	0.0048 (0.484)	0.0017 (0.612)	0.1369 (0.127)	0.0499 (0.019)
Political party in control: other LDF party	-0.0037 (0.450)	-0.0017 (0.865)	-0.0022 (0.644)	0.0226 (0.860)	0.0166 (0.584)
Political party in control: others	-0.0016 (0.826)	0.0051 (0.715)	-0.0069 (0.324)	0.1910 (0.296)	-0.0470 (0.280)
Constant	-.1268 (0.083)	0.0039 (0.657)	-0.1187 (0.097)	4.1666 (0.031)	-0.9809 (0.032)

Notes: p-values indicating the (two-sided) significance level of the t-statistic associated with each explanatory variable appear in parentheses. The standard errors used to calculate the t-statistics were adjusted to allow for district-level cluster effects. Variables that are significant at a level of 10% or less are indicated in bold. Except for the binary indicator variables for the gender of the panchayat council president and the political party in control, all the independent variables are in logs.

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