Participatory Governance and Pro-Poor Targeting: Evidence from Central India

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Abstract

This paper examines the impact of a poverty alleviation program called the District Poverty Initiatives Project (DPIP), which is being implemented in the second largest state in India. DPIP is a World Bank project based on the community-driven development approach, wherein control of development decisions, resources and projects are given to the community groups. Funds are allocated to the village for various income generating subprojects, which are popularly selected in village meetings conducted by the DPIP personnel. These meetings are similar to and run parallel to the traditional village council meetings - the gram sabhas. The focus of this paper is threefold. First, it examines whether the project has indeed "empowered" the disadvantaged. Is it the case that treatment villages have greater information flows that translate into higher participation in village affairs? Second, it studies the role played by the parallel institution. Does attending the DPIP village meeting substitute or compliment attendance at the traditional village council meeting? Finally, this paper analyzes the spillover effects in terms of better targeting of other welfare programs. We use a unique data set that combines Indian census data for 300 villages and survey data of 6000 households spread over those villages. Findings confirm positive spillovers of the program on village governance issues.This paper adds to the growing literature on decentralization and community-driven development.

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1 Introduction

A central question in the political economy of development is how to structure democratic institutions that ensure a fair and efficient allocation of public funds. The top down approach towards development has often failed to cater to needs of the local people and to instill a feeling of ownership. The decentralization revolution in most part of the developing world is in response to this growing need for greater participation by people at the local levels. This paper focuses on the impact of a poverty alleviation program in the second largest state in India, called District Poverty Initiatives Project(DPIP), which is participatory in nature and promotes democratic institutions at the local level. This program orients the rural poor towards the concept of a group meeting and familiarizes them with its benefits. In other words, it helps build "social capital"². The main analysis focuses on whether having such a program has spill-overs in terms of greater information flows which translate into greater political participation in the local village governance and/or more efficient targeting in other poverty alleviation programs.

Why do we care about these questions? It is not only the material deprivation, but the more subtle aspects of poverty that are gaining significance in the development world. The United Nations Capital Development Fund defines poverty as a lack of power "...the lack of a voice in decision-making and public policy choices or in the access to resources required to rise out of poverty; lack of basic political freedoms; social exclusion and lack of social rights; and limited capacity to access and influence state institutions and/or social processes."³ Such powerlessness is pervasive in the rural areas throughout the developing world and points to the shortcomings of the decentralization process. Some communities were taken over by the elite, who diverted development funds to match their needs as against that of the local people. Other communities were not ready for such an institutional change because such democratic institutions were new to them. In the face of these teething problems of decentralization, community-driven development(CDD) projects offer a means of reinforcement of the process. CDD projects are community based projects in which communities have direct control over key project decisions.⁴ These projects are equipped with project facilitation teams that help in their proper implementation by providing technical and institutional assistance. These projects are in most cases implemented in close coordination with local governments, giving them greater strength and emphasizing their role in local development. CDD projects are said to achieve all this "...by reducing information problems, expanding the resources available to the poor, and strengthening the civic capacities of the communities by nurturing organizations that represent them.⁵

Mansuri and Rao(2004) evaluate projects based on the community-driven development approach being implemented in various countries across the world. They emphasize the potential gains from CDD projects, viz. reversal of power relations that creates voice for the rural poor, allowing them to have greater control

²Woolcock and Narayan (2000)

³UNCDF 2003)

⁴Masuri-Rao(2004)

 $^{^{5}}$ Masuri-Rao(2004)

over development assistance thereby improving targeting of poverty programs. They conclude by saying that even though such projects create effective community infrastructure, targeting is poor and the right design is largely context specific. They also point to the lack of a study that establishes a causal relationship between any outcome and the participatory elements of a CDD project. This paper fills this gap in the literature.

Specifically we try to analyze the spillovers of the program on knowledge about and participation at the village council meetings. These are meetings called by the elected representatives to discuss resource allocation and are intended to be a platform for greater transparency and awareness about local governance issues. All individuals above the age of 18 are eligible to participate, however, attendance rates at these meetings are as low as 20 per cent in South India⁶ and according to a survey⁷ of two northern states in India about 65 per cent of the villagers have never attended such meetings. Most people do not even know of these meetings, or when and where they are held. For these meetings to be important instruments of decentralization they first need to function properly. We argue that DPIP helps in better functioning of these village council meetings

- 1. by increasing flow of information- so that people know about them
- 2. by familiarizing them with the concept of a village meeting- so people realize the benefits of attendance and therefore decide to attend
- 3. by organizing the village into a well functioning group- thereby leading them to make more effective and efficient decisions

Therefore, we focus on identifying the effects of DPIP on knowledge about the village council meeting, awareness and participation at the village meeting as well as a broader concept of political awareness. In addition, we examine the spillover effects of the program in terms of greater targeting efficiencies in another poverty alleviation program. In order to do the above analysis and to attribute the impact solely to the program we designed a survey based on a quasi-experimental technique which is described in detail in section three. We use data from this primary survey of 6000 households across 300 villages. The analysis that follows confirms the hypothesis that DPIP has a significant and positive effect on information flows that lead to greater participation. Attendance at village council meetings is possibly crowded out by attendance at the DPIP village meetings. Lastly, we find that DPIP has a significant positive impact on targeting in another poverty alleviation program.

This paper is organized as follows. In the next section, we give a brief description of the background for our study. Sections three and four describe the method and the data used, respectively. Section five contains the analysis, followed by some robustness checks in section six and section seven concludes.

 $^{^{6}}$ Besley et al(2005)

⁷Krishna and Alsop()

2 Background

The program under consideration is called District Poverty Initiatives Project (DPIP). It was launched in March 2001 in 2932 villages, spread over 14 districts of the second largest state in India, called Madhya Pradesh(MP). The objective of this program was to improve the economic well-being of the poor by providing them a means of livelihood and building social capital. The strategies of DPIP are based on the Communitydriven development approach, which provide for people's participation and decentralized decision-making. Under this project untied funds are provided to self-formed groups for *any* income generating activity called a *subproject*. An electrical repair shop, a brick making kiln, dairy are some examples of a typical subproject.

At the village level the project approach is participatory in nature. The target group within the village is identified by way of a participatory wealth ranking where the villagers ranked themselves and each other as very poor, poor, not so poor, rich and very rich. Such a process help build a consensus about who is poor and who is not, thus have a check on elite capture. Funds are allocated to groups as against individuals for any income generating activity called a subproject. This promotes greater information exchange. The most interesting aspect of this project, however, is the way the various subproject are approved. There is a DPIP village meeting wherein all groups have to put forth their subproject proposal. Only those subproject that are popularly selected are implemented. These village meetings are administered by the DPIP officials and all villagers can be a part of these. The DPIP village meetings orient the villagers towards the concept of a village meeting and familiarizes them with its benefits especially among the disadvantaged. These meetings are similar to the traditional village council meetings called by the elected local government. So, the way the project is set up it organizes the entire village into a well functioning group that selects its own development path.

The decentralization revolution in India was still in its embryonic stage when the DPIP began. It was nine years since the 73rd amendment was passed which gave constitutional status to village governmentcalled the *Panchayati Raj* system. This is a three-tiered system with the gram panchayat (GP)at the village level, (ii) block panchayat at the block level and (iii) *zilla pachayat* at the district level. We focus on the lowest tier- the *Gram Panchayat* or the village council. It was for the first time that the village governments were popularly elected in MP. The DPIP provided a positive influence on the this revolution by stimulating greater information flows in these village economies, organizing the village as a well functioning group and familiarizing the people with the concept of a village meeting. The feature of the village government that is under study is the *Gram Sabha* or the village council meeting. This is a village meeting in which the entire electorate can participate and are called to discuss resource allocation decisions and select beneficiaries for various government schemes. These meetings can improve the working of the government by better reflecting citizens' preferences on issues and providing a platform to monitor the actions of elected representatives. Besley, Rao and Pandey (2005) study four southern states in India to examine the nature of participation in the village council meetings and how it helps in targeting the disadvantaged. They find that the disadvantaged are more likely to attend these meetings and occurrence of these meetings improves targeting of poverty alleviation programs.

This paper examines spillover effects of DPIP in terms of greater participation in these village council meetings. The argument for such a spillover is threefold. Firstly, it increases the flow of information in the village economy and reduces the informational asymmetry. Secondly, it familiarizes the villagers with the concept of a village meeting. This benefit is greater for the underprivileged who in the absence of such a program are inhibited to attend village meetings. Attending the project meeting and coming to a consensus about which development subproject to implement is an accomplishment in itself. In other words, it organizes the village as a well functioning group which is the last and the most important argument for having positive spillovers to village governance.

3 Identification Technique

3.1 Limitation of Project Design and Border Identification Technique

We would like to estimate the impact of DPIP on program villages or in other words to estimate the average treatment effect by comparing the outcome of interest for the treatment and the control villages. However, the DPIP treatment was not randomly assigned. In fact, DPIP explicitly states that they have a pro-poor bias. Program status was often decided on the basis of which villages were "ready" for intervention⁸, this renders the standard approach, of measuring the treatment effect, futile because it brings in selection bias. Poorest blocks from the selected districts were first chosen. Within these blocks, pockets of poverty were identified from which *some* villages were selected to be project villages. This brings in the first kind of bias, i.e. poor village would also be the ones that are more underprivileged and thus have worse developmental indicators compared to a control village that is not as poor. The second kind of bias comes in from the fact that not all villages in the identified pockets of poverty were chosen- it was left to the discretion of the project officials. So it could be the case that of the poorest villages, those that had active leaders got DPIP due to their efforts or alternatively, that the really backward villages were picked. Both these sort of stories lead to a bias (in the opposite direction).

This sort of selection, though totally sound in logic, creates problems for econometricians trying to estimate the treatment effect. Therefore, a differences-in-differences based on a baseline and follow-up survey data will not be able to isolate the effect of DPIP alone on the change in the outcome variable. To address this issue of endogeneity, we propose a survey design that brings an exogenous source of variation in treatment. DPIP was implemented in MP that shares boundaries with four other states. Uttar Pradesh(UP) is the only bordering state that does not have DPIP, so we use the state boundary as an exogenous source of variation in program selection. We conduct a survey in villages that are located on the state border of UP and MP. We then compare non-DPIP village pairs with DPIP village pairs to isolate the impact of DPIP

 $^{^{8}\}mathrm{DPIP}$ operations manual

on household and village outcomes.

The precondition for selection into the DPIP program is that the village must be in MP. Now, suppose conditional on being in MP there are certain other characteristics, P, of a village that determine selection into the program. Some of these characteristics are observable, P^{obs} , and therefore can be controlled for. There are, however, some other characteristics that are unobservable, P^{unobs} , and directly affect the variable of interest. viz.

$$Y_{sv} = \alpha^M \cdot \chi_{(s=M)} + \alpha^U \cdot \chi_{(s=U)} + \beta \cdot DPIP_{sv} + \gamma P_{sv}^{obs} + \lambda P_{sv}^{unobs} + \epsilon_{sv}$$
(1)

where χ is an indicator variable for the state, $cov(DPIP_{sv}, P_{sv}^{unobs}) \neq 0$ and λ is significant because P_{sv}^{unobs} affects Y_{sv} , our outcome variable, directly. This leads to an estimate of β which is biased.

To control for these characteristics, P, we choose villages that are across state borders. These villages must be very similar in terms of observable and unobservable characteristics. The effect of being in one political entity rather than the other must get reflected in the state fixed effects. We choose our sample villages in 9 clusters. A cluster of villages is defined by a set of villages that share a portion of the inter-state border. These are shown in figure 8. For example, Table 1.1 compares village characteristics across the state border for one of the clusters (also the largest cluster) and we find that the villages are very similar in terms of land area, population, gender ratio, literacy and other development indicators like availability of schools, medical facilities and drinking water. We repeat this exercise for all the clusters and find that the average characteristics are similar across the state border.

If we choose two villages, one in MP with DPIP treatment and one across the border in UP (and therefore no DPIP treatment). These villages would be similar in terms of observable and unobservable characteristics, so we can say that the vector P would be identical across these village pairs. Assuming that P is identical in these villages simply implies that if these UP villages were in MP they would have been selected in DPIP. For the sake of convenience we will refer to these village pairs as "treatment-pairs". We will get the following two regressions from these villages(the controls(X_{vs}, Z_{ivs}) are suppressed just for the sake of brevity) :

$$Y_{Mv} = \alpha^M + \beta.DPIP_{Mv} + \gamma P^{obs} + \lambda P^{unobs} + \epsilon_{Mv}$$
⁽²⁾

$$Y_{Uv} = \alpha^U + \gamma P^{obs} + \lambda P^{unobs} + \epsilon_{Uv} \tag{3}$$

Taking a difference gives:

$$Y_{Mv} - Y_{Uv} = \alpha^M - \alpha^U + \beta . DPIP_{Mv} + \epsilon_{Mv} - \epsilon_{Uv}$$

$$\tag{4}$$

From the above we can see that the effect of DPIP cannot be identified by a single difference. The reason is that we are comparing villages across state borders and being in one state rather than the other has implications at the village level that would confound the DPIP effect. To take care of the "state-effects", we select a "control-pair" in the following way. Select a village in MP that was not a part of DPIP and

select its neighbor in UP- we call this, a "control-pair". These villages will also have similar socio-economic characteristics, observable and unobservable, and therefore an identical P. From these we will get the following equations:

$$Y_{Mw} = \alpha^{M} + \gamma P^{'obs} + \lambda P^{'unobs} + \epsilon_{Mw}$$
⁽⁵⁾

$$Y_{Uw} = \alpha^U + \gamma P^{'obs} + \lambda P^{'unobs} + \epsilon_{Uw} \tag{6}$$

Taking a difference gives:

$$Y_{Mw} - Y_{Uw} = \alpha^M - \alpha^U + \epsilon_{Mw} - \epsilon_{Uw} \tag{7}$$

The difference between (15) and (19) gives:

$$[Y^{Mv} - Y^{Uv}] - [Y^{Mw} - Y^{Uw}] = \beta.DPIP_{Mv} + (\epsilon_{Mv} + \epsilon_{Uv}) + (\epsilon_{Mw} + \epsilon_{Uw})$$
(8)

This gives a β , effect of DPIP, that is closed to the true β or unbiased.

3.2 Justification for Border Identification

"Good natural experiments are studies where there is a transparent exogenous source of variation in the explanatory variables that determine the treatment assignment. A natural experiment induced by policy changes, government randomization or other events may allow a researcher to obtain exogenous variation in the main explanatory variables. This occurrence is especially useful in situations where estimates are ordinarily biased because of endogenous variation due to omitted variables or selection. The natural experiment approach emphasizes the general issue of understanding the sources of variation used to estimate the key parameters."⁹

According to Meyer(1994) there should be three main goals of research design...

- 1. Finding variation in the key explanatory variables that is exogenous
- 2. Finding comparison groups that are comparable
- 3. Probing the implications of the hypotheses under test

"Absent the ability to experimentally vary the relevant variables, one should seek to find variation that is driven by factors that are clearly identified and understood. One can then make an informed decision about the exogeneity of that variation and rule out other explanations."¹⁰ The above mentioned border identification technique satisfies these conditions. What follows is a brief history of the inter-state border under study.

MP was part of a province of British India called Central Provinces and Berar which was formed in 1861. This province covered much of present day MP, Chhatisgarh and Maharashtra. After Indian independence

 $^{^{9}}$ Meyer (1994)

 $^{^{10}}$ Meyer (1994)

in 1947, Central Provinces became the new state of MP. Political boundaries of MP have not changed much since then. Except in 2001 when the state was bifurcated into two states-MP and Chhatisgarh. The northern boundary of the state that is shared with UP has remained the same for over 150 years. Even though the states are linguistically, ethnically and geographically similar¹¹, they have been under different administrations and land revenue systems. However, the factors that determined the formation of these state boundaries that existed 150 years ago are independent of state politics today and this is the basis on which we propose to use political boundaries as an identification strategy.

Last couple of years have seen a number of papers that use political boundaries as a means of identification. Pandey (2005) in her paper uses land tenure systems and district boundaries to find evidence on mechanisms through which past institutions can impact teacher effort in rural public schools. There is a series of papers by Besley, Pande and Rao(2005) that use state boundaries to identify state specific effects. They study the performance of village governments in four southern states, which were part of the Madras Presidency during the British rule. As a result of the States Reorganization Act of 1950, Madras Presidency was broken up into states on linguistic lines. Besley et al identify villages across state borders that are "linguistically similar" and use the state boundary as an exogenous source of variation. What we are proposing to do is different from the above papers. We are using state boundaries to identify the effect of a program that was administered only on one side of the boundary.

4 Survey Design and Data

The data for this study is drawn from a primary survey based on the quasi-experimental survey design suggested by the identification technique. This survey was conducted in 2006 covering 6000 households across 300 villages in Madhya Pradesh and Uttar Pradesh.

Following the border identification technique treatment districts in MP that were on the northern border of the state were chosen to be in the sample. These districts are: Rewa, Chhatarpur, Shivpuri, Panna, Tikamgarh and Sagar. The districts on the other side of the border in UP were chosen to be the comparison group, viz. Allahabad, Mahoba, Lalitpur, Jhansi, Mirzapur and Banda. We also surveyed non-DPIP dirstricts in MP to have an alternative comparison group. These were chosen on the basis of human development indicators from the Human Development Report for MP. The gender-related development index and the human development index of the DPIP districts in the sample were compared with the non-DPIP districts in MP and the closest two were chosen to be in the sample. The non-DPIP districts in the sample are Satna and Umaria. The data, therefore, consists of five set of villages. The first set comprises treatment villages in the treatment state. These were chosen from the set of treatment villages in the chosen districts that were closest to the inter-state border. Their counterparts in the control state were chosen on the basis of minimum distance from the border following the survey design. The control villages in the treatment

 $^{^{11}}$ Figures 4-6.

state were chosen from the set of villages that were close to the state border and that were similar to the treatment villages in terms of caste composition, population and gender ratio. The counterparts of these control villages in the control state were also chosen on the basis of proximity to the border. The last set of villages were chosen in the interior of the treatment state as an alternative comparison group. These villages were chosen by matching village characteristics with treatment villages. Figure 1 shows the location of MP in India and figure 3 shows the sampled clusters on either side of the inter-state border. In each sample village we conducted twenty household surveys. Household selection was random, but subject to the requirement that half of the sampled households in the DPIP treatment villages be direct beneficiaries of DPIP, i.e. those that got funds for a subproject.

Since the intervention is at the village level and we are interested in looking at household outcomes, two sets of questionnaires were administered. One at the village level and the other at the household level. The village questionnaire had questions relating to village demographics, amenities, centrally sponsored schemes, village council characteristics, etc. The household schedule had questions relating to the households primary occupation, annual income and expenditure, landholdings and dwellings details and political awareness and activeness. Primary Census Abstract and the village directory from the Census of India 2001 is combined to get village level variables.

The descriptive statistics are given in Table 1.2. The sample consists of fairly large villages with average area of about 450 hectares and an average population size of about a 1000-1500. Literacy rates are low of the order of 30 per cent of the population being literate and are worse for the female population. The gender ratio, defined as number of women per 1000 men, is about 850. Almost all the villages have access to educational facilities. Access to medical facilities and electrification is low, being 26-40 per cent and 15-22 per cent respectively. Average household size is about 5 persons, which is on the lower side for rural areas in this part of the country. About half of the households are landless and majority live in mud homes. The average years of education of the highest educated household member is about 7 years, which means that most households do not even have a single member who went to high school.

5 Analysis

The analysis is in three parts. We first study the impact of DPIP in terms of greater knowledge about the occurrence of the village council meeting and how it affects attendance behavior. Then we examine if there is an impact on people's political awareness in general, as a result of the program and finally we look for evidence that having DPIP affects targeting in other poverty alleviation programs.

5.1 Knowledge and Participation at the Village Council Meeting

The village council meetings are viewed as an instrument to greater transparency and awareness about village governance. These meetings are meant for discussing resource allocation and beneficiary selection. In our survey, about 90 per cent of the households agreed that infrastructure issues- like road maintenance, medical facilities etc- are discussed in these meetings. About a half agreed that beneficiary selection and budget related issues are discussed. 97 per cent of the villagers thought these meetings were useful. In the survey we asked questions about why or why not households attended the village council meetings. About 75 per cent of them said that they attended because important issues are discussed in these meetings, about a half said that they attend because it is a social meeting place where they can exchange information. The reasons for attendance are fairly similar across the four samples. What is more interesting are the reasons for non-attendance. "Not having enough time is the top answer for the treatment sample whereas "Not knowing about the meeting is the top answer for the other three samples. The top answer for the treatment villages is interesting because it highlights, among other things, the substitution of time towards the DPIP village meeting. Other reasons for non-attendance include inability to make a difference at the meeting. This too is least probable in the treatment villages. These imply that villagers perceive these meetings as important, non-attendance is either due to lack of information about these meetings or inability to make a difference and reasons for non-attendance in the treatment villages imply that the concept of a village meeting is better understood there.

Table 5 gives the summary statistics of the outcome variables. It shows that knowledge of the occurrence of the village council meeting is the greatest amongst the households in the treatment group in the treatment state, where 97 per cent of the households know of it. The attendance at these meetings, however, is the lowest amongst these households. Participation, defined as speaking, voting or objecting to something in the village council meeting, among those who attend is similar across the samples.

An interesting aspect of knowledge flows and political participation at the village level is how household characteristics affect these. Are some households more likely to hear about certain things than others? Does the social group of a household have an implication for its political behavior? To get a sense of this we compare average characteristics of households for each of the outcome variables with the average household characteristics in the subsample. ¹²The average household characteristics of the group that has heard of the meeting are same as that of the entire subsample. It implies that information is fairly dispersed in these villages and that on average all households seem to have equal probability of knowing about the village council meeting. Looking at those who attend and participate in these meetings we find that low caste, landless and those living in mud homes are underrepresented. High caste, literate and households with electricity connections are overrepresented. These trends are similar across the subsamples.

The above indicates that there are significant differences across groups and across samples in their

 $^{^{12}\}mathrm{t}\text{-statistics}$ in Table 6.

information about and behavior towards the village council meeting. We estimate the following linear probability models to determine the significance of various characteristics and to estimate the effect of DPIP. The first specification is, what we call the "OLS", estimated for the two subsamples in the treatment state. In this specification we do not exploit the border identification technique and simply compare outcomes in treatment and control villages within the treatment state only. The second specification is, what we call the "D-I-D", estimated for the entire sample exploiting the border identification and therefore gives the difference-in-difference estimate. The OLS specification is given by:

$$y_{iv} = \alpha + \beta T_v + X_{iv}\delta + \epsilon_{iv} \tag{9}$$

where y_{iv} is the outcome variable for household *i* in village *v*, T_v is the dummy for treatment and X_{iv} is the vector of household and village characteristics. The D-I-D specification is given by:

$$y_{ivs} = \alpha + \beta T_v + \gamma S + \eta P + X_{ivs}\delta + \epsilon_{ivs}$$
(10)

where y_{ivs} is the outcome variable for household *i* in village *v* and state *s*, T_v is the dummy for treatment to isolate the effect of DPIP, *S* is the dummy for treatment state to separate the state effect, *P* is the dummy for treatment pair this is to capture the difference between the treatment pair and the control pair and X_{ivs} is the vector of household and village characteristics.

Table 7 gives the results for regression of knowing of the occurrence of the village council meeting. The DPIP treatment dummy is positive and significant in the OLS as well as the D-I-D specification. DPIP increases knowledge about the occurrence of the village meeting by 15.6 percentage points. Concentrating on column (4) which includes all controls, we find that low caste households have a lower probability of knowing. Probability of knowing is negatively affected by number of years of education and literacy in the village. This is a surprising finding since literacy figures have been associated with better information flows. Female literacy, on the other hand, has a positive effect but the magnitude is half as that of the negative effect of literacy in general. Living in the Council head's village also increases the probability of knowing about the meeting by 7.3 percentage points.

Then we examine behavior of those who know of the village meeting. From table 5, we know that attendance at these meetings is about 40 per cent and the attendance varies by sample. When we regress attendance on village and household characteristics, we find that DPIP in fact has a negative effect which is not very precisely measured. The results are reported in Table 8. This may be because of substitution of time between the village council meeting and the DPIP village meeting. Households in the DPIP villages have two prospective meetings to attend. They can choose to go to both, one of them or neither of them depending on what their expected benefits and costs are from attendance. For those households that are constrained by time, attending the DPIP village meeting may turn out to be more beneficial because the costs are equal but the gain from the DPIP meeting is clearer and quantified. About 97 per cent of the households that knew of the DPIP meeting attended it, whereas the corresponding figure for the village council meeting is only 38 per cent. And only 35 per cent attended both the meetings. So, the substitution story may be a possible explanation for the negative impact on attendance.

At the household level, we find that the landless and households living in mud homes are less likely to attend (16.7 percentage points) and those who have an electricity connection are more likely to attend (4.5 percentage points). Female literacy increases attendance by 50 percentage points. One reason for this could be that only literate women attend these meetings, so villages that have high female literacy also have high turnouts at the council meeting. But living in the council head's village reduces attendance. This could be because people may know the council head personally and therefore feel that they can get information about what happened at the meeting without actually attending it.

Lastly, we are interested in looking at active participation at the village council meetings. Active participation is defined as speaking, voting by show of hands and/or objecting to something that one may disapprove of. The DPIP dummy, as shown in column (4) of Table 9, is positive and significant. DPIP increases the probability of participation at the village council meeting by 11.9 percentage points. This is a significant effect. The household characteristic that seems to matter is whether the household has an electricity connection which increases participation by 4.8 percentage points. Literacy rate has a large (36 percentage points) negative impact, this is very surprising.

5.2 Overall Political Awareness

To get a more comprehensive measure of political activeness and awareness, we construct an index of political activeness. The index comprises of ten questions about political activity and knowledge- like voting, knowing of, attending and participating at the GS; affiliation to a political party, etc- at the household level. This index goes from 0 to 10, where zero means no political activeness and 10 implies very high political activeness. The treatment sample has the highest average for this political index. Comparing household characteristics of households that have a political index greater than 5 with the sample average, we find that this group is overrepresented by households from high caste, that are literate and have an electricity connection. Households that are landless and those belonging to the lower castes have a low political index. As indicated by Table 10, it follows that the index of political activeness is responsive to social groups and the relationships vary across the subsamples.

We run an ordered logit regression to determine the relationship between this index and household and village characteristics. The results are shown in Table 11. These indicate that being landless, low caste and living in a mud home decreases the index. Having an electricity connection and living in a village with higher female literacy increases the index. As for the DPIP village dummy, it is very highly significant and positive. This implies that DPIP has had a positive impact on people's political behavior.

5.3 Improved Targeting of BPL cards

The village governments are responsible for beneficiary selection for government welfare programs. We focus on one of the most important of these programs, the targeting of "Below Poverty Line" (BPL) cards. Receipt of a BPL card entitles households to subsidized food via the Indian public distribution system and makes them eligible for multiple welfare schemes. To identify BPL households the Indian government requires Indian states to conduct BPL surveys every five years. The state sets the objective criteria for identifying the BPL eligible households but the total number of BPL card holders is constrained by total number allocated to that state by the centre. The state determines how to allocate these across the various districts. At the village level, the village council bears the responsibility of allocating the BPL cards. They decide who does the survey and have discretionary powers over the resulting preliminary list of beneficiaries. Once this list is constructed it is ratified in the village council meeting. We find that DPIP has a significant impact on participation in these meetings. Also, the participatory wealth ranking done by the DPIP officials helps build a consensus in the village about who is poor and who is not. These two things can serve as a check on elite capture and lead to better targeting of BPL cards.

We cannot perfectly predict which households should get a BPL card because we do not observe all characteristics that go into the selection. Since these cards are targeted to the disadvantaged groups, we construct three proxy measures for targeting. These are (i) Percentage of BPL card holders that are landless, (ii) Percentage of BPL card holders that belong to low castes and (iii) Percentage of BPL card holders that live in mud homes. Table 12 shows that about 35-40 per cent households in the sample have a BPL card. And when we look at the percentage of households holding the card in the various categories, we find that more than half of the card holders are landless and low caste and majority of them live in mud homes. This is reasonable since these cards are targeted to the backward households.

If the targeting is efficient each of these percentages would be high. We run village level regressions to see if DPIP does in fact lead to greater targeting efficiency. The DPIP village dummy is significant and positive for the first two targeting measures reported in Table 13. This implies that DPIP increases targeting among the landless(4.7%) and the low caste(17.6%). The exact mechanism through which this happens is difficult to decipher. In a series of paper by Besley et al(2005) they show that occurrence of a gram sabha meeting increases the probability of the disadvantaged getting these cards. In this study we find that participation in these meetings increases due to DPIP, so if the same mechanism is in force here we can infer that DPIP leads to greater political participation which in turn leads to greater efficiency in terms of targeting of BPL cards. It would be interesting to study this relationship in greater detail.

6 Robustness Checks

In this section we provide some robustness checks for the results in the analysis section.

6.1 Selection on Observables

We use the nearest-neighbor matching technique proposed by Abadie and Imbens (2002) to estimate the sample average treatment effect. This method matches control villages to treatment villages on the basis of observable characteristics. The sample average treatment effects are reported in Table 14. We find that the sign and significance of the program impact on all the outcome variables is unaffected.

6.2 Knowledge About Other Schemes

From our survey we have information about knowledge of the household about other government sponsored schemes. We run regressions to estimate the DPIP impact on knowledge about these programs. As seen in Table 15, being in the DPIP village significantly increases knowledge about all the schemes.

6.3 Does the BPL Score Affect Allocation?

The BPL survey was conducted in 2002 to identify households that were below poverty line. This survey had 13 questions which got a score from 0-4 depending on the answer. So the minimum score could be 0 and the maximum could be 52. The lower the score the more likely is the household to be selected as BPL. From our survey we have information about 9 out of those 13 questions. We use the same scoring system and generate BPL scores for all households in the sample. We regress the indicator variable showing whether or not the household received the BPL card less than four years ago on the BPL score and some village characteristics. The coefficient on the score should be negative and if the magnitude is the greatest for the treatment sample then it will further support the argument that DPIP was better able to target these cards. However, as seen from Table 16 this impact is the least in the treatment group and when we add controls it becomes insignificant. This gives a conflicting result. One reason for this could be the way the BPL score is estimated. The arbitrariness of the scoring system and the resulting targeting losses are currently under debate in India. It could be the case that the wealth ranking conducted in the DPIP villages overcomes such arbitrariness by identifying the beneficiary households on the basis of this ranking rather than the survey questions. If this is the case then the difference between the results in section 5 and here is due to the way selection is made in the DPIP villages. However, these are only speculations and need further examination.

7 Concluding Remarks and Future Work

We have shown that the community-driven development program in question, DPIP, has a positive impact on information flows and political behavior of the villagers. DPIP villages are better able to target BPL cards to the disadvantaged sections of the village. This points to the success of the project approach which is participatory in nature. Even though local governments were popularly elected and were required to hold village council meetings, there were social barriers to truly participatory governance that were broken by this external influence. The DPIP personnel provided institutional and technical support. The DPIP village meetings were conducted very frequently and helped in breaking social tensions between different social groups- differentiated on the basis of class, gender and caste. A fallout of this design, however, was that the DPIP village meeting was run parallel to the village council meeting. This lead to substitution of time between the DPIP and the traditional village council meeting.

Design of DPIP is context specific and cannot be replicated as it is in other regions of the country, let alone the world. However, it gives an insight into effects of a program that is participatory in its approach, introduces people to the concept of participation and facilitates effective participation. The project design can be improvised in any community that is differentiated on the basis of social groups that are characterized with informational asymmetry. Equal but very backward communities that are unfamiliar with democratic institutions or at risk of coordination problems, can also benefit greatly from such programs.

Our second paper compares the impact of mandated political reservations at the village government level and the DPIP treatment on the outcome variables studied in this paper. Preliminary results show that DPIP and political reservations act as compliments in increasing information flows. But the impact on active participation in the village council meeting is affected only by program treatment and not by reservation. Next, we propose to examine if the DPIP effect differs by household characteristics. In other words, if DPIP has differential effect on different households or is it "social" in the sense that it affects all villagers in a village in the same way. And also to test if it helps in building social capital, which indeed is "capital" in the sense that it increases household income.

References

Abadie, Alberto and Guido Imbens, [2002], "Simple and bias-corrected matching estimators." Technical report, Department of Economics, University of California, Berkeley.

Banerjee, Abhijit and Lakshmi Iyer, [2002], "History, Institutions and Economic Performance: The Legacy of Land Tenure Systems in India".

Bardhan P. and D. Mookherjee (2000), "Capture and Governance at Local and National Levels," *American Economic Review*, Papers and Proceedings, May 2000, 135-139.

— (2004a), "Poverty Alleviation Effort of West Bengal Panchayats," *Economic and Political Weekly*, February 28 2004.

— (2004b), "Ideology versus Electoral Competition in Redistributive Politics: Land Reform in West Bengal," working paper, Boston University.

— (2006b), "Pro-Poor Targeting and Accountability of Local Governments in West Bengal," Journal of Development Economics, 79, 303-327.

Besley T. and S. Coate (1997), "An Economic Model of Representative Democracy," *Quarterly Journal of Economics*, Vol. 112, No. 1, February 1997, 85-106

Besley, Timothy, Rohini Pande and Vijayendra Rao, [2005a], "Participatory Democracy in Action: Survey Evidence from India," *Journal of the European Economics Association*, 3(2-3): 648-657.

— (2005b), "Political Selection and the Quality of Government: Evidence from South India".

Chattopadhyay, Raghabendra and Esther Duflo, [2004a], "Women as Policy Makers: Evidence from an India-wide Randomized Policy Experiment," *Econometrica*, 72(5), 1409-1443.

Chaudhuri, Shubham, [2003], "What difference does a constitutional amendment make? The 1994 Panchayati Raj Act and the attempt to revitalize rural local government in India," typescript, Columbia University.

Grossman G. and E. Helpman, "Electoral Competition and Special Interest Politics," *Review of Economic Studies*, 63, 265-286, 1996.

Khwaja, Asim Ijaz, [2001], "Can Good Projects Succeed in Bad Communities", Working Paper

Khwaja, Asim Ijaz, [2005], "Measuring Empowerment at the Community Level: An Economist's Perspective", in Deepa Narayan ed. Measuring Empowerment : Cross-Disciplinary Perspectives. World Bank.

Mansuri, Ghazala and Vijayendra Rao, [2004], "Community-Based and -Driven Development: A Critical Review", *The World Bank Research Observer*, Vol. 19, No.1

Matthew, George and Nirmala Buch, [2000] Status of Panchayati Raj in the States and Union Territories of India, Institute for Social Studies, Delhi

Meyer, Bruce D., [1994], "Natural and Quasi-Experiments in Economics", Technical Working Paper No. 170, NBER

Pandey, Priyanka, [2005], "Service Delivery and Capture in Public Schools: How Does History Matter and Can Mandated Political Representations Reverse Effects of History?"

Pitt, Mark M. and Shahidur R. Khandker, [1998], "The Impact of Group-Bsed Credit Programs on the Poor Households in Bangladesh: Does the Gender of Participants Matter?", *The Journal of Political Economy*, Vol. 106, No.5 Rao, Vijayendra and Maria Ibanez, [2005], "The Social Impact of Social Funds in Jamaica: A 'Paricipatory Econometric' Analysis of Targeting, Collective Action, and Participation in Community-Driven Development", *The Journal of Development Studies*, Vol. 41, No.5

UNCDF, [2003], "Empowering the Poor: Local Governance for Poverty Reduction", Angelo Bonfiglioli, November 2003.

Varshney, Ashutosh, [2000], "Is India Becoming More Democratic?", *The Journal of Asian Studies*, Vol. 59, No. 1

Woolcock, Michael and Deepa Narayan, [2000], "Social Capital: Implications for Development Theory, Research and Policy", *The World Bank Research Observer*, Vol. 15 No. 2, pp.225-49. Figure 1: Map of India showing location of Madhya Pradesh



Figure 2: Maps of India showing climatic zones, average temperatures, average annual rainfall and language regions











Figure 3: Map of Madhya Pradehs showing the sampled clusters across the inter-state border.

	Treatment State	Control State	t
Total Area	523.8	546.4	-0.26
	(272)	(356)	
Total Population	1457.1	1139.8	1.26
	(764)	(1065)	
Literacy	40.9	35.65	2.17
	(6.6)	(10.71)	
Female Ratio	881.84	872.59	.69
	(41.9)	(55.1)	
Female Literacy	26.8	20.7	2.68
	(7.2)	(9.4)	
% of Population belonging to low castes	35.9	23.5	2.59
	(18.5)	(16.7)	
Distance from nearest town (in km)	10.5	17.4	2.19
	(5.44)	(15.44)	
Availability of Educational facilities	100	92.59	0.45
	(0)	(26.6)	
Availability of Medical facilities	40.74	29.62	0.85
	(50.07)	(46.53)	
Availability of Post and telegraph facilities	37.03	40.74	0.27
	(49.21)	(50.07)	
Availability of Drinking water	100	100	0
	(0)	(0)	
Sample size 54, critical $t = 2.7$ at 1%			

Table 1.1 Comparing observable characteristics across the state border for one cluster

Table 1.2 Descriptive Statistics				
	Treatment Pair-	Treatment Pair-	Control Pair in	Control Pair-
	Treatment State	Control State	Treament State	Control State
Area (hectares)	463.85	554.39	437.7	536.58
	(302.1)	(502.3)	(390.9)	(413.32)
Population	1370.3	1599.38	936.36	1089.21
	(970.74)	(1781.79)	(757.45)	(606.86)
Literacy	39.4	37.36	35.08	36.18
	(9.07)	(9.67)	(7.44)	(8.19)
% low caste	42.51	37.9	47.06	44.61
	(20.36)	(13.03)	(18.4)	(16.28)
Female ratio	892.1	879.6	870.5	858.9
	(61.67)	(56.11)	(84.46)	(76.54)
Female Literacy	26.5	25.58	21.03	21.91
-	(8.51)	(8.48)	(7.33)	(7.92)
Average household size	4.6	4.7	4.5	5.2
•	(1.8)	(1.4)	(1.8)	(2.3)
Average annual income	25143	24279	27279	30501
(in INR, approx 41 INR=1USD)	(14772)	(19291)	(15699)	(17540)
% of villages having educational facilities	91.66	89.83	78.33	80
	(27.87)	(30.48)	(41.54)	(40.33)
% of villages having medical facilities	40	35.5	26.66	26.66
	(49.4)	(48.29)	(44.59)	(44.56)
% of villages where the village council head resides	71.66	75	60	75
	(45.08)	(43.31)	(49.01)	(43.31)
Average % of households that have electricity connections	22.58	20.16	15.41	20.16
	(41.83)	(40.14)	(36.12)	(40.14)
Average % of households living in mud homes	85.25	80.85	87.16	81.93
	(13.54)	(17.64)	(12.8)	(15.75)
Average % of households that are landless	58.41	54.75	60.83	56.65
	(22.27)	(15.35)	(19.42)	(17.3)
Average number of years of schooling for a household	7.5	7.6	6.7	7.3
	(4.01)	(3.65)	(3.8)	(3.88)
No. of Villages	60	60	60	60
No. of households	1200	1200	1200	1200

Standard Deviations are reported in the parentheses.

(Percentage of Households)				
	Treatment Pair	Treatment Pair	Control Pair	Control Pair
	Treatment State	Control State	Treatment State	Control State
Selection of beneficiaries	53.33	30.00	46.67	30.00
	(49.9)	(45.8)	(49.9)	(45.8)
Budget Related	41.67	35.00	26.67	33.33
	(49.3)	(47.7)	(44.2)	(47.1)
Dispute Resolution	35.00	26.66	25.00	38.33
	(47.71)	(44.24)	(43.31)	(48.64)
Infrastructure	91.67	88.33	91.67	90.00
	(27.65)	(32.11)	(27.65)	(30.0)
Organization of events	13.33	5.00	21.67	6.66
	(34.0)	(21.8)	(41.2)	(24.9)

Table 2:What happens at the GS

standard deviations in the parentheses

Table 3:Reasons for attending the village Council meeting (Percentage of Households)

	(1 01 000		(iac)	
	Treatment Pair	Treatment Pair	Control Pair	Control Pair
	Treatment State	Control State	Treatment State	Control State
Important Issues	75.63	70.13	85.33	80.46
Discussed	(30.29)	(26.63)	(20.32)	(25.3)
Budget Discussed	4.96	3.19	2.38	8.52
	(11.05)	(8.36)	(6.17)	(13.94)
Social Meeting	49.83	44.21	45.7	45.52
	(34.3)	(25.6)	(32.4)	(30.1)
Resolve fights	4.87	9.29	1.83	4.72
	(11.64)	(18.04)	(4.39)	(11.63)

standard deviations in the parentheses

	(Fercent	age of Househol	us)	
	Treatment Pair	Treatment Pair	Control Pair	Control Pair
	Treatment State	Control State	Treatment State	Control State
Had no time	8.28	12.01	2.3	11.08
	(25.41)	(19.16)	(6.35)	(21.16)
Had no interest	0.27	1.5	2.06	2.63
	(1.48)	(4.73)	(7.43)	(8.09)
Makes no difference	1.41	6.49	14.26	8.92
	(9.72)	(13.59)	(23.65)	(18.9)
Unimportant Issues	1.16	5.14	10.19	5.26
discussed	(8.09)	(10.04)	(22.92)	(12.69)
Did not know	5.34	22.38	20.01	20.87
	(15.25)	(30.14)	(30.94)	(28.35)

Table 4:Reasons for not attending the village Council meeting (Percentage of Households)

standard deviations in the parentheses

Table 5:Summary Statistics

Outcome Variables (reported as average percentage of households in the village)

	Treatment Pair	Treatment Pair	Control Pair	Control Pair
	Treatment State	Control State	Treatment State	Control State
Knowledge of occurrence [*]	97.08	92.58	91.08	86.08
	(16.83)	(26.21)	(28.51)	(34.62)
Attendance*	38.62	45.27	43.00	50.72
given knowledge	(48.71)	(49.79)	(49.53)	(50.01)
Participate*	88.68	86.65	86.40	87.67
given attendance	(31.71)	(34.04)	(34.31)	(32.90)
* of/at the village council n	neeting			

, 0 0

standard deviations in the parentheses

	Know of the meeting	Attend the meeting	Participate at the meeting
Low caste	0.38	1.81	3.30
High Caste	-0.04	-4.87	-5.61
Landless	-0.51	3.84	4.18
Literate	0.21	-4.24	-5.51
Live in Mud Home	-0.31	2.03	2.26
Electricity Connection	-0.07	-2.00	-2.93

Table 6:Comparing Household Characteristics

for different Outcome Variables(reported as t-statistics)

The t-statistics are computed for the difference between the average fraction of households in the subsample and the group within that subsample that knew/attended/particated at the meeting that belonged to a particular type, viz. lowcaste, highcaste, etc.

For example, the first t-stat in column 1 implies that the difference between the average fraction of low caste households in the subsample and the average fraction of low caste households that knew of the meeting within that subsample is statistically insignificant and so on. critical t value= 1.96

	Council Meeting			
	OLS		D-I-D	
	(1)	(2)	(3)	(4)
Treatment	0.074***	0.113***	0.159***	0.156***
	(0.014)	(0.018)	(0.030)	(0.031)
Treatment State			-0.190***	-0.213***
			(0.031)	(0.030)
Treatment Pair			-0.078***	-0.074***
			(0.027)	(0.027)
Landless	-0.001	-0.036	-0.021***	-0.035
	(0.010)	(0.028)	(0.008)	(0.021)
Low caste	-0.011	-0.031	-0.013*	-0.041**
	(0.010)	(0.024)	(0.008)	(0.021)
Years of schooling	-0.004**	-0.005**	-0.001	-0.003**
c	(0.002)	(0.002)	(0.001)	(0.002)
Household size		0.008***		0.005**
		(0.003)		(0.002)
All household controls	No	Yes	No	Yes
Village Variables				
Female Ratio	0.176***	0.190***	0.050	0.032
	(0.057)	(0.060)	(0.049)	(0.048)
% population low caste	-0.256***	-0.278***	-0.136***	-0.116***
	(0.033)	(0.036)	(0.027)	(0.029)
% female popn low caste	0.193***	0.165***	0.175***	0.148***
	(0.029)	(0.033)	(0.024)	(0.027)
Literacy rate	-0.087	-0.110	-0.205***	-0.319***
2	(0.091)	(0.097)	(0.063)	(0.070)
Female literacy	0.176*	0.239**	0.082	0.162**
-	(0.097)	(0.097)	(0.064)	(0.067)
GP Head's village		0.050***		0.073***
-		(0.012)		(0.010)
All Village Controls	No	Yes	No	Yes
Observations	2400	2400	4780	4780
R-squared	0.05	0.10	0.16	0.18

 Table 7. Regression Results for Knowledge of Occurrence of the Village Council Meeting

Standard errors in parentheses clustered at village level. * significant at 10%; ** significant at 5%; *** significant at 1%

	OLS		D-I-D	
	(1)	(2)	(3)	(4)
Treatment	-0.017	0.006	-0.117**	-0.089
	(0.028)	(0.039)	(0.051)	(0.056)
Treatment State			-0.043	-0.004
			(0.073)	(0.073)
Treatment Pair			0.089**	0.111**
			(0.043)	(0.044)
Landless	-0.103***	-0.224***	-0.093***	-0.167***
	(0.021)	(0.063)	(0.015)	(0.042)
Low caste	-0.037*	-0.056	-0.010	0.014
	(0.021)	(0.057)	(0.015)	(0.041)
Literate	0.042	0.003	0.050*	0.040
	(0.039)	(0.061)	(0.029)	(0.044)
Electrified	0.010	0.021	0.044**	0.045**
	(0.028)	(0.028)	(0.020)	(0.020)
Mud Home	-0.020	-0.007	-0.034*	-0.035*
	(0.031)	(0.032)	(0.019)	(0.019)
All household controls	No	Yes	No	Yes
Village Variables				
Female ratio	-0.346**	-0.340**	-0.168	-0.109
	(0.143)	(0.147)	(0.107)	(0.108)
Literacy rate	-0.447**	-0.279	-0.269*	-0.042
-	(0.217)	(0.228)	(0.145)	(0.152)
Female literacy	0.773***	0.717***	0.539***	0.497***
2	(0.226)	(0.229)	(0.152)	(0.155)
Total population (in 1000)	-0.037***	-0.034**	-0.006	-0.016*
• • • • •	(0.014)	(0.017)	(0.006)	(0.009)
Village of the village		0.006		-0.058***
council head				
		(0.024)		(0.017)
All village controls	No	Yes	No	Yes
Observations	2258	2258	4382	4382
R-squared	0.11	0.12	0.12	0.13

Table 8. Regression Results for Attendance at the Village Council Meeting

Standard errors in parentheses clustered at village level. * significant at 10%; ** significant at 5%; *** significant at 1%

	OLS		D-I-D	
	(1)	(2)	(3)	(4)
Treatment	0.080*	0.116**	0.097**	0.119**
	(0.043)	(0.048)	(0.047)	(0.051)
Treatment State			-0.234**	-0.232**
			(0.093)	(0.093)
Treatment Pair			-0.029	-0.029
			(0.025)	(0.025)
Landless	0.018	0.027	0.053	0.055
	(0.080)	(0.081)	(0.053)	(0.053)
Total land	-0.001	-0.001	0.004*	0.004*
	(0.006)	(0.005)	(0.002)	(0.002)
Lowcaste	-0.085	-0.090	-0.036	-0.044
	(0.099)	(0.100)	(0.068)	(0.068)
Electrified	0.005	0.007	0.046***	0.048***
	(0.025)	(0.025)	(0.018)	(0.018)
All household Controls	No	Yes	No	Yes
Village Variables				
GP Head's Village	-0.055*	-0.052*	-0.015	-0.014
	(0.031)	(0.031)	(0.021)	(0.021)
% hh living in mud homes	0.125	0.132	-0.125**	-0.118**
	(0.108)	(0.109)	(0.054)	(0.055)
Literacy rate	-0.232	-0.273	-0.346**	-0.364**
	(0.249)	(0.245)	(0.153)	(0.153)
Female literacy	0.262	0.279	0.010	0.015
	(0.248)	(0.245)	(0.153)	(0.152)
Constant	0.389*	0.395*	0.989***	0.999***
	(0.220)	(0.219)	(0.156)	(0.157)
All village controls	No	Yes	No	Yes
Observations	851	851	1778	1778
R-squared	0.11	0.11	0.06	0.06

Table 9. Regression Results for Participation at the Village Council Meeting

Standard errors in parentheses clustered at the village level. * significant at 10%; ** significant at 5%; *** significant at 1%

	Treatment Pair	Treatment Pair	Control Pair	Control Pair	
	Treatment State	Control State	Treatment State	Control State	
Average	5.28	5.22	4.98	5.26	
	(1.94)	(1.89)	(2.11)	(2.11)	
Low caste*	-	0	0	-	
High Caste [*]	+	-	0	0	
$Landless^*$	-	-	-	-	
Literate*	+	+	0	0	
Live in Mud Home*	0	-	0	-	
Electricity Connection*	+	+	+	+	

Table 10:Index of Political Awareness/Activeness

* The signs indicate whether the social group is overrepresented(+) or underrepresented(-) in the group of those whose political index is greater than 5. Zero implies no significant misrepresentation. This is based on a t-test with critical value of t=1.96

Standard deviations in the parentheses.

	OLS		D-I-D	
	(1)	(2)	(3)	(4)
Treatment	0.486***	0.613***	0.962***	1.035***
	(0.098)	(0.144)	(0.184)	(0.202)
Treatment State			-1.149***	-1.220***
			(0.245)	(0.252)
Treatment Pair			-0.454***	-0.507***
			(0.154)	(0.158)
Landless	-0.288***	-0.957***	-0.386***	-0.728***
	(0.081)	(0.242)	(0.055)	(0.157)
Lowcaste	-0.119	-0.434*	-0.036	-0.171
	(0.078)	(0.225)	(0.054)	(0.154)
Literate	0.259*	-0.176	0.270**	-0.034
	(0.148)	(0.240)	(0.107)	(0.162)
Electrified	0.317***	0.361***	0.171**	0.181**
	(0.099)	(0.103)	(0.071)	(0.073)
Mud home	-0.079	-0.018	-0.178**	-0.176**
	(0.116)	(0.122)	(0.071)	(0.072)
Household Size		0.043**		0.025
		(0.022)		(0.017)
All household controls	No	Yes	No	Yes
Village Variables				
% popn low caste	-0.543*	-0.840***	-0.032	-0.005
	(0.295)	(0.323)	(0.277)	(0.288)
Literacy rate	-0.876	-0.144	-0.616	-0.819
	(0.773)	(0.840)	(0.511)	(0.563)
Female literacy	1.635**	1.259	1.057**	1.225**
	(0.816)	(0.838)	(0.527)	(0.547)
All village controls	No	Yes	No	Yes
Observations	2400	2400	4780	4780

Table 11. Results for the ordered logit of Index of Political Activeness	
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Standard errors in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%

Table 12 Percentage of households Holding the BPL card

	Treatment Pair-	Treatment Pair-	Control Pair in	Control Pair-
	Treatment State	Control State	Treament State	Control State
% households having a BPL card	35.45	36.22	38.41	39.36
	(47.85)	(48.08)	(48.66)	(48.87)
% BPL card holders that are landless	64.16	59.53	64.35	61.55
	(48.87)	(49.14)	(47.95)	(48.7)
% BPL card holders that are lowcaste	63.07	43.29	56.93	56.06
	(48.32)	(49.61)	(49.57)	(49.68)
% BPL card holders that live in a mud home	87.94	69.58	88.75	72.76
	(32.59)	(46.06)	(31.62)	(44.56)

Standard deviations are reported in the parentheses.

	OLS	D-I-D	OLS	D-I-D
	% BPL	% BPL	% BPL	% BPL
	cardholders	cardholders	cardholders	cardholders
	landless	landless	lowcaste	lowcaste
Treatment village	0.023**	0.047***	0.107***	0.176***
	(0.011)	(0.016)	(0.020)	(0.024)
Treatment State		-0.184***		-0.147***
		(0.020)		(0.031)
Treatment Pair		-0.006		-0.052***
		(0.013)		(0.016)
Population density	0.008**	-0.005***	0.024***	0.005**
	(0.004)	(0.002)	(0.004)	(0.003)
Female ratio	-0.047	-0.124***	-0.138	-0.157**
	(0.058)	(0.044)	(0.091)	(0.064)
% population low caste	0.249***	0.154***	0.226***	0.272***
	(0.046)	(0.037)	(0.060)	(0.050)
% female population low caste	-0.094*	-0.131***	0.207***	0.204***
	(0.050)	(0.037)	(0.060)	(0.048)
Literacy rate	0.777***	0.097*	0.007	0.160**
	(0.090)	(0.055)	(0.117)	(0.077)
Female literacy	-0.638***	0.060	0.386***	0.390***
	(0.104)	(0.061)	(0.122)	(0.082)
% population landless	0.830***	0.837***	0.042	0.188***
	(0.028)	(0.019)	(0.038)	(0.026)
Constant	-0.072	0.357***	0.364***	0.400***
	(0.063)	(0.047)	(0.095)	(0.067)
Observations	114	233	114	233
R-squared	0.45	0.41	0.09	0.16

Table 13. Regression results for different Targeting measures

Standard errors in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%

Outcome variable	$SATE^1$	No. of Obs.
$Knowledge of occurrence^2$.1612***	2400
	(.016)	
$Attendance^2$	0248	2258
	(.027)	
$Participate^2$.0569*	889
	(.030)	
Index of	.5112***	2400
Political Activeness	(.108)	

Table 14: Results from Matching on Observables

1. This is the Sample Average Treatment Effect matched on village characteristics.

2. of/at the village council meeting

 * significant at 10%, ** significant at 5%, *** significant at 1%

Standard deviations in the parentheses.

Table 15: Knowledge About Other Poverty Alleviation Schemes				
Scheme	DPIP	No. of Obs.		
Indira Awaas Yojana	.187***	4700		
	(.045)			
Mid-day Meal	.066***	4700		
	(.016)			
Employment Guarantee	.5497***	4700		
	(.028)			
Education Guarantee	.513***	4700		
	(.042)			
Integrated Child Development	.060***	4700		
	(.015)			

Table 15: Knowledge About Other Poverty Alleviation Scheme	Table 15:	Knowledge	About	Other	Povertv	Alleviation	Scheme
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These regressions include the state dummy, the treatment pair dummy and other village characteristics.

 \ast significant at 10%, $\ast\ast$ significant at 5%, $\ast\ast\ast$ significant at 1%

Standard deviations in the parentheses.

Sample	BPL score	Controls
Treatment Pair-Treatment State	010**	No
	(.003)	
Treatment Pair-Control State	017***	No
	(.004)	
Control Pair-Treatment State	015**	No
	(.005)	
Control Pair-Control State	025***	No
	(.004)	
Treatment Pair-Treatment State	004	Yes
	(.004)	
Treatment Pair-Control State	016***	Yes
	(.005)	
Control Pair-Treatment State	016**	Yes
	(.006)	
Control Pair-Control State	012**	Yes
	(.005)	

Table 16: Significance of BPL Score in allocation of BPL cards

Controls included are household characteristics

 \ast significant at 10%, $\ast\ast$ significant at 5%, $\ast\ast\ast$ significant at 1%

Standard deviations in the parentheses.