Who speaks for the poor?
Public participation in decision-making in Karnataka*

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Abstract

Whose preferences are aligned with people's preferences: elected leaders or local officials employed by the state to administer programs for their benefit? Using a baseline survey for a study to evaluate a project that gives untied grants to local governments in the poorer areas of Karnataka, we find that elected leader's priorities over alternatives for spending public money are much closer to those of villagers, especially of poorer villagers, than are those of the state representatives. They are also very much closer than those found by focus groups done by NGO's employed for the task. This paper develops measures of agreement and explanations for differences in agreement across pairs based on the characteristics of the household or the representative or official. We find that scheduled castes are well-represented by their elected representatives but not scheduled tribes.

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Contents

1 Introduction

Skepticism of decentralization in India as well as in many other countries is frequently based on the fear of "elite capture" or the undue influence of powerful local people who are believed to dominate village decisions. Therefore, the state has an interest in directing spending decisions so that such elites do not hold sway in local public expenditure allocations. The state also has an interest in countering the possible "tyranny of the majority" where the interests of the poor or marginalized may be ignored, or by the majority in a village even if they are not the elites. These fears are also behind the involvement of organizations in civil society such as NGOs who may enter villages and make assessments of what people, especially the poor, really want.

We use data from a baseline survey in 2007 for administering the World Bank's Gram Swaraj Project in Karnataka[1]. Untied funds were disbursed to local governments to circumnavigate the long chain of approvals and subsequent delays that are associated with tied funds. The districts picked for the disbursal of tied funds are located in the poorest and most remote taluqs of Karnataka, far from the district center. Not only was there a household survey in the baseline analysis but there were also surveys of Gram Panchayat members (elected members of the local government), GP Secretaries (state appointed officials to oversee Gram Panchayat functioning) and "Participatory Rural Assessment" or focus group discussions at both Ward and Gram Panchayat (GP) level.

The baseline surveys asks each of the stakeholders to list their priorities for the village. It is possible, then, to look at the majority preferences of the population using the household survey and also at how preferences vary among different groups within the population by demographics. These can be compared to the priorities expressed by the other stakeholders, whose priorities would be important in different institutional settings. First are the elected Gram Panchayat members (GPM), whose preferences are most likely to be reflected in a purely democratic system. Second, the Gram Panchayat Secretaries (GPS) whose preferences would be influential without the Gram Swaraj Project, since the budgets are frequently made in close consultation between Secretaries and GP members in order to reflect state government requirements. Third, we compare the priorities of people who attend Gram Sabha meetings with those who do not.

We categorize the survey responses to the question "What are the top 3 priorities you have for the village" into 20 broad common categories for all types of stakeholders. We construct the dyads or pairs of all households with all elected representatives and the government official within the locality (the Gram Panchayat here). Then for each combination of three priorities of the household and the three priorities of the GP in a dyad, we construct an agreement score. The key characteristics of the match underlying the score are that we desire are cohesiveness and quality. Cohesiveness refers to the representation of the priorities of the household in the priorities for the village listed by the GPM or GPS. Quality captures the ordering of the preferences of the household in the ordering of the preferences of the GPM or GPS. Preferences across the matchings of priorities are subjective, and there is an inherent tension between achieving cohesiveness and achieving quality while assigning the ranking, and multiple such rankings are followed. By Arrow's Theorem, it is not possible to aggregate the various rankings satisfying standard conditions, and thus we proceed with a ranking that we believe fairly represents cohesiveness and quality. To examine whether our results are robust to the agreement score, we construct two other agreement scores, one lexicographic, entirely focusing on quality, and another one incorporating both elements but with the cohesiveness dimension taken first through cardinality, which is then followed by the quality dimension.

Using these scores, we study some descriptive statistics of the scores. Preferences of SCs and STs are more in line with each other than the preferences of OBCs or Others, while there are also gendered differences in preferences. The GPM preferences are more in line with the preferences of the households in the village relative to the GPS. In terms of what determines preferences, we find that caste is significant, whereas wealth is not significant, noting that even what we define as "wealthy" in the sample is defined relatively.

We can also use the scores and demographic characteristics to study what factors explain/drive agreement between households and elected representative or government officials. Given the preliminary results, our focus is on caste and gender affinities. Using the dyadic regression framework, we find our initial results to be supported.

These findings suggest the lack of elite capture. The elected representatives are able to represent the

[1]The survey was designed to be a baseline survey but was conducted in 2007 while the project ran from 2006-2014 See: Min, Saw Young. 2016. India - Strengthening Governance and Service Delivery in Karnataka Panchayats Project : environment management framework.

preferences of people (minorities and vulnerable groups especially) better than the appointed officials. The appointed officials do not have any marked overlap in priorities with the marginalized groups in the gram panchayat.

This paper proceeds as follows. In section 2 we provide the background of the Gram Swaraj Project. Section 3 describes the data along with a few summary statistics. Section 4 describes the construction of the agreement score and summary statistics around this. Section 5 describes the dyadic regression and corresponding results. Section 6 describes additional results. Section 7 concludes.

2 Literature Review

There exists a large body of literature on decentralization, taking largely two stands, either for or against decentralization (political decentralization). The arguments against political decentralization are based on the possibility of elite capture (capture of funds and decision making by powerful local elite). Blanchard and Shleifer (2001) are of the view that decentralization can cause elite capture and rent competition without political centralization. Literature on decentralization in the context of India has mixed results, with political decentralization becoming an effective tool in the presence and with the support of certain other institutional arrangements. Besley, Pande, and Rao (2005) survey the four southern states of India, and find that Gram Sabhas are attended more by socially disadvantaged groups and holding Gram Sabhas makes the targeting of beneficiary selection by Gram Panchayats more effective. Besley et al. (2004) survey the southern states and find that for provisioning of high spillover public goods (roads, electricity etc.) residential proximity to the Pradhan/Sarpanch (chief elected councilor) mattered while for low spillover households goods (like toilets) group identity made a difference (with reserved GPs targeting SCs and STs better). On the other hand, Besley, Pande, and Rao (2011) study political opportunism in local governments and find evidence for elite capture, with elected councilors more likely to be beneficiaries of targeted programs and the Pradhan's village obtaining a larger share of public goods in the GP. Chattopadhyay and Duflo (2004) find that women leaders invest more in public goods relating to women's concerns in both West Bengal and Rajasthan, making the provision of 33% reservation for women in local bodies essential to improve the lot of women. The authors studied preferences of men and women using revealed preferences through data of complaints by people with the panchayats, while we are able to directly elicit their stated preferences. Galasso and Ravallion (1999) study the relative performance of the central and local governments to target beneficiaries for Bangladesh's Food for Education program (which distributes food rations to poor households conditional on their children attending school) and find that in general, local level targeting is better than the center's targeting, although targeting at the local level improves with fall in inequality.

3 Background

In 1993, the 73rd and 74th Amendments to the Indian Constitution made the Panchayat structure (local government) mandatory in all states across the country, with provisions for regular elections and direct participation of people in the decision making at the local level through Gram Sabhas, which among other things are required to discuss the budget of the Panchayats.

Despite the amendment, the hands of the local governments are tied in most states as they do not receive enough discretionary funds to channel into building infrastructure at the local level. The irregular funding received is largely tied or conditional on specific schemes of the center and the States.

The Grama Swaraj Project (GSP) of the Government of Karnataka was intended to give discretionary funding to the Grama Panchayats (GP's) of the thirty seven poorest taluqs in the state, a large number of them in northern districts. It was to guarantee that at least Rs. 5 lakhs were available to the GPs without restrictions on how the funds were to be used. While small in relation to other budget items in the GP budget, this money represents a very large amount of the discretionary spending of the GPs. While much money is putatively spent by GPs, the use of virtually all of it (education, health, road funds, etc.) is established by the state government and the GPs have almost no say on how the money is spent (refer to the State Finance Commission devolution formulas across the past decade). For GPs with no independent source of income such as taxes, pond fees or fees from local industry, money from the Gram Swaraj Project money is virtually the entirety of discretionary funds. Even when National Rural Employment Guarantee

Act (NREGA) funds are included, the use of Grama Swaraj money is much more flexible – not having to be labor intensive or to follow other NREGA rules. The goal is to build the essential infrastructure the community deems necessary, not simply to create jobs. As an adjunct to the creation of infrastructure, however, the project intended to increase the participation of people, particularly of poor and marginalized groups, in the deliberative process over the use of these funds. It was hoped that when Grama Panchayats were given genuine choice concerning its money and when the budget meeting of the GPs were necessarily preceded by a Grama Sabha in which budget issues were discussed (as per the project requirements) that more people in the villages would become active – both attending such meetings and in expressing their preferences over the allocation of resources. For these reasons, the project tracked both the decisions GP's made over the use of funds and the participation of villagers.

4 Data and summary statistics

The data used in the paper is from baseline surveys conducted by the social sector branch of IMRB International as specified by the World Bank project requirements. It is supplemented by data generated by a parallel study done in 2007 and 2009 in which a very similar survey instrument was also carried out by IMRB. The final study was delayed due to lack of funding and approval, however the survey was informative in the political awareness and priorities of households, GP members as well as the Gram Panchayat secretaries, which we will exploit in our analysis.

From the Gram Swaraj Project design, which selected the thirty-seven poorest taluqs in Karnataka, Gram Panchayats were sampled in the following way for the survey. The sampling design was to choose Grama Panchayats and villages within the GPs that were on the border with taluqs that were not eligible for GSP funds. For each of these villages, a matched village was chosen directly across the border in the ineligible taluqs. Both of these villages and their Panchayats are included in the survey[2].

In all, there were two hundred villages chosen with twenty households selected at random from the poorest villages across taluqs. These give a household sample of approximately 4000. For each village, the Gram Panchayat Secretary was interviewed as were sampled elected members of the Panchayat. In addition, a facility survey was carried out to determine what infrastructure was available (and some dimensions of service quality) in the village.

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4.1 Demography and standard of living

A key issue is whether the sampled villages represent their respective taluqs, given that they are chosen to be at the taluq border. On this issue, there is more to debate since more than 5% of the many coefficients are different. However, the differences show few consistent patterns. It is not at all obvious that the "remote" villages are poorer or less politically knowledgeable or active. There are some differences in the kinds of things people want, but not very many. Indeed, there is reason to doubt that the villages on the edges of poor taluqs are more "remote" at all. If they are on the border with richer, ineligible, taluqs, frequently those that include the district headquarters, they are likely to be closer to centers of economic activity than the interior GP's of the poorest taluqs.

Indeed, some of the differences detected find them slightly better off in terms of education and socio-economic status. On the objectives of the project, few systematic differences appear. Further, there are two meanings of "significantly different". One is "statistically, significantly different", a purely technical concept and the other is "significantly different in any interesting or meaningful" way which is more in line with common usage. So, for example, in the taluq-wide sample, 27% of the people had attended Grama Sabhas at some time in their lives. In the sample of border villages the number is 29.7% (note it is larger in the more

[2]Since taluq borders are essentially arbitrary (rarely corresponding to historical, cultural, social or linguistic differences), it was thought that such villages would provide reasonable "controls" for the "treatment" villages covered by the GSP. If the project had had significant effects, then the participation rates in Grama Sabhas (meant to be of central importance in the project), degree of political knowledge and awareness of GP procedures, budgets and responsibilities among other goals of the project would be higher in the GSP villages compared to the paired or matched "controls". Villages that were similar to participating villages but were ineligible would not have the GSP as an explanation for levels of political awareness or concern over GP activities. The markers of "treatment" and "control" are inconsequential for our purposes.

"remote" villages) and the difference is (barely) statistically significant. On the other hand, it is unclear whether the 2-3 percentage point would influence our opinion on whether one was "significantly" (in the common sense use of the term) more politically active than the other.

Tables 1 shows some demographic variables for households in the survey sample. Almost half the population (43.49%) of households have heads of households as illiterate. About 70% of households own land, but only 25% of them are able to irrigate the land. Ownership of television sets and radios (termed as "luxury" goods in the sense that ownership increases with household wealth) remain low at 38% and 15% respectively. In terms of water sources, very few households have access to private water sources through pipes (9%) or private wells (3.5%). Most households are sourcing water from public sources such as public taps (68%) and public hand pumps and bore wells (13.8%).

Most households are Hindu (92.6%), followed by Muslim (6.7%). In terms of caste, the majority of households in the survey sample belong to Other Backward Castes (38%), followed by "Other" castes, which often refers to the upper castes (27.3%). This is followed by Scheduled Castes (23.2%). Finally, scheduled tribes are 11.4% of households in the sample.

Table 1: Demographic variables of households

Variable	**Percent of the sample**
Education (household head):	
Illiterate	43.49%
Literate but no schooling	21.37%
Education up to class 10	29.23%
Education above class 10	5.28%
Asset Ownership:	
Owns land	72.79%
The land is irrigated	25.07%
Owns a TV	38.02%
Owns a radio	14.98%
Water Sources:	
Private piped	9.23%
Private well	3.45%
Public tap	67.98%
Public hand-pump/ Bore-well	13.87%
Public well	1.67%
Spring/Pond	2.39%
Electricity:	
Households receive 2-12 hours of electricity every day	86.54%
Caste:	
Scheduled Caste (SC)	23.18%
Scheduled Tribe (ST)	11.36%
Other Backward Castes (OBC)	38.02%
Others	27.43%
Religion:	
Hinduism	92.66%
Islam	6.67%
Christianity	0.33%
Jainism	0.11%

4.2 Wealth

To assess the representation of economically weaker sections of the society, we used a measure focused on asset ownership and food consumption to construct a wealth index.

Asset ownership is represented using the following variables: whether the household had a "kaccha" or "pukka" flooring, the number of rooms in the house, whether or not households owned assets like pressure cookers, fan, bicycle, pressure lamps, watches, sewing machine, radio, television set, two-wheeler, car, three wheeler, fridge/washing machine, phone, computer, cooler etc. Even questions like availability of bedding and shoes for everyone were included in the wealth index.

The variables on food intake included consumption of items like milk and dairy products, fruits, whole vegetables, leafy vegetables, bajra, rice, wheat, dal, sweets etc. Variables regarding meat consumption were not included because many households in India do not consume meat because of religious and cultural restrictions and not because of differences in income or wealth as in many other countries. Additionally, consumption of jowar and ragi was not included as the two grains are considered as substitutes across different regions of Karnataka. Another important variable included was whether members of the households ever went hungry to capture the extent of poverty and deprivation properly. Table 2 shows descriptive statistics for food consumption variables.

Table 2: Food Consumption

Variable	**Response**	**Percent of the sample**
Do you ever go hungry?	Yes	9.75%
	No	90.25%
How often do you consume milk products?	Daily	82.017%
	3-4 days a week	8.31%
How often do you consume fruits?	Daily	43.77%
	3-4 days a week	20.98%
How often do you consume whole vegetables?	3-4 day a week	44.1%
	Weekly	29.07%
How often do you consume leafy vegetables?	Daily	28.07%
	3-4 days a week	44.1%
How often do you consume dal?	Daily	67.95%
	3-4 days a week	25.4%

Additional variables included in the wealth index are whether every individual in the household has their own separate bed and their own shoes.

The wealth index is formulated by using principle component analysis. The first principal component in figure 1 shows how much of a particular asset is owned by/ how much of food is eaten by households and assigns weights respectively (in that sense wealth captures the "more is better" principle). On the other hand, the second principal component looks at given you are eating a particular amount and own a particular amount of assets, then how much of the difference comes because of quality; i.e. leafy vegetables and fruit receive a higher weight (summarizing the quality aspect of wealth).

The wealth index thus obtained as shown in figure 2ais built is different from the NFHS-style wealth index based on assets in figure 2a, using the variables included on food consumption to get a more comprehensive view of wealth. As shown in the figure, the wealth index with the food questions lengthens the tail of the wealth CDF, showing the extent of poverty better.

4.2.1 Wealth and caste

Wealth and caste, as expected, are highly correlated. Mean wealth for "Others", i.e. the "higher castes" is the highest, followed by OBCs (the most numerous cohort in the sample). SCs form the poorest group, followed by STs, as shown in figure 3

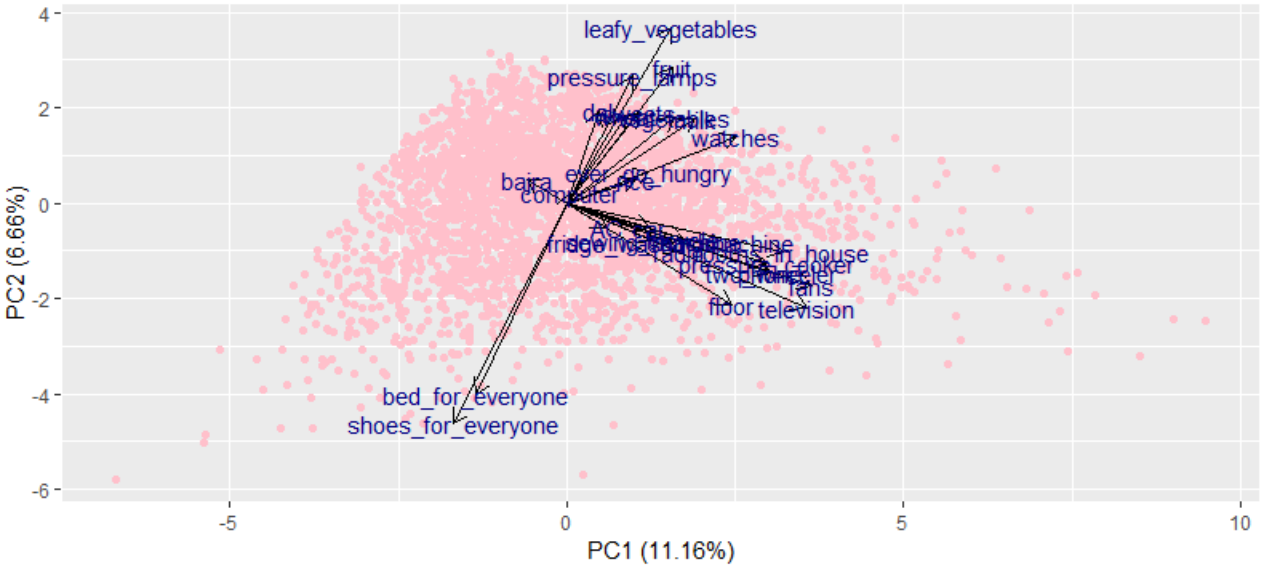


Figure 1: Scree plot for wealth PCA

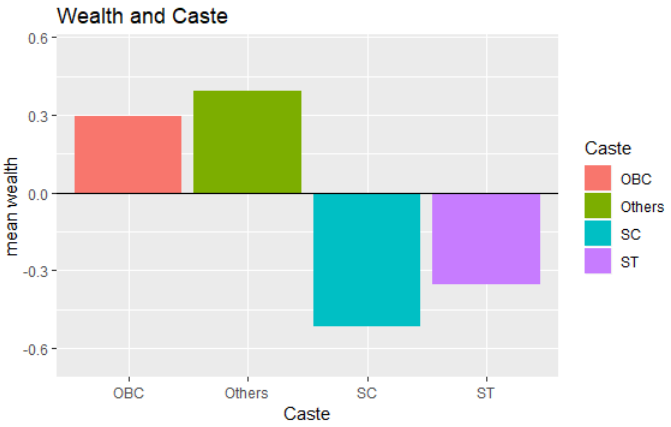
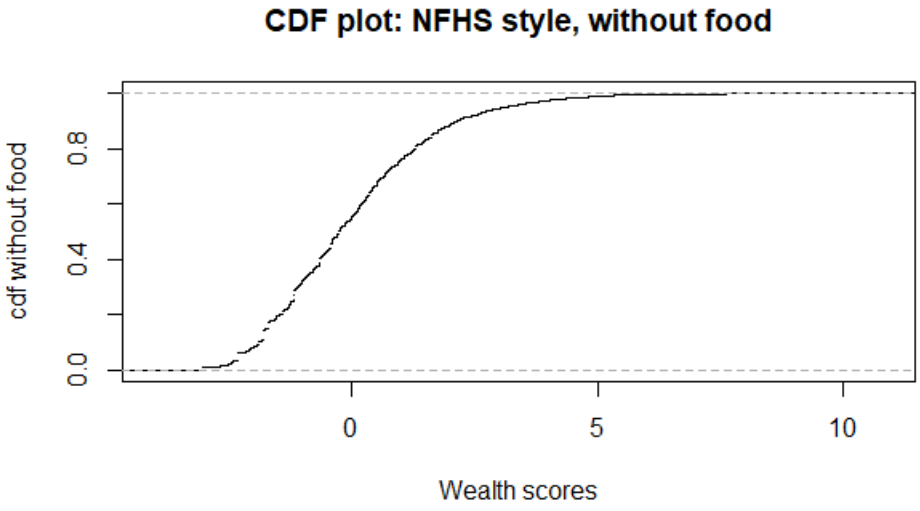


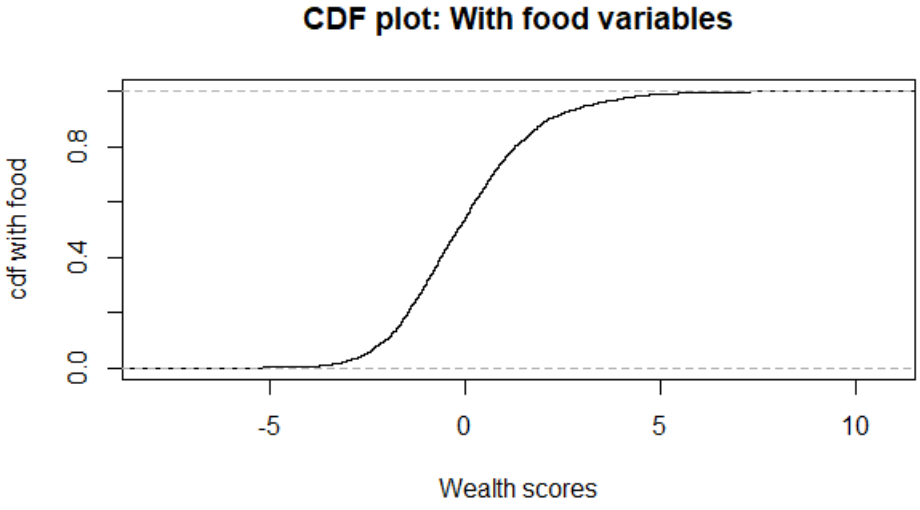
Figure 3: Wealth and caste

4.2.2 Wealth and literacy

Figure 4 shows the relationship between wealth and literacy in the sample. As expected, the mean wealth is higher for households where the head is literate vs where the head is illiterate, where literacy is defined as people who can read and write (with or without formal education).



(a) Wealth index: Without food



(b) Wealth index: With food

Figure 2: Wealth Index with and without food consumption

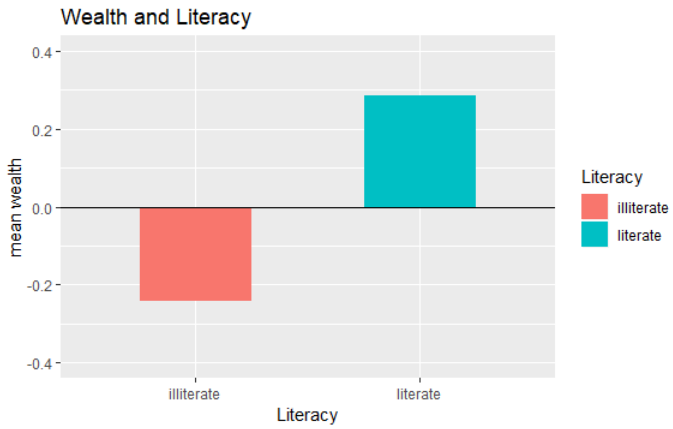


Figure 4: Wealth and literacy

4.2.3 Literacy and caste

Caste and literacy are also highly correlated as seen in figure 5. Percentage of literate people from within a caste group is the lowest in SCs, followed by STs, OBCs and Others. This, again is in line with what was expected, the caste system in India deying certain castes all opportunities available to people, including education and literacy.

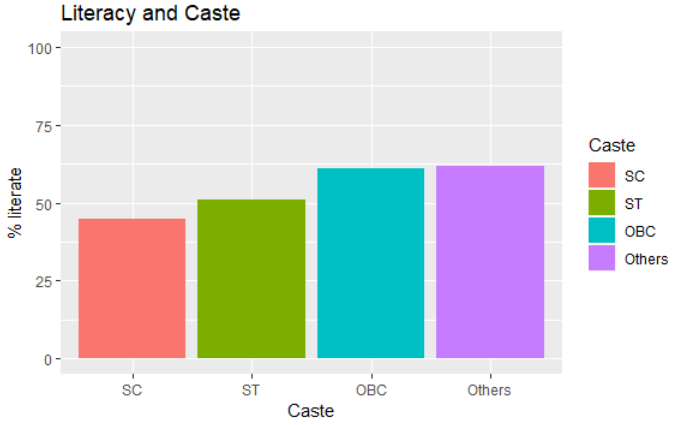


Figure 5: Literacy and Caste

Table 3: Levels of political activity and knowledge

Variable	Percent answering in affirmative
Ever heard of a Gram Sabha?	56.45%
Ever attended a Gram Sabha?	30.6%
Are budgets discussed in Gram Sabhas?	18.06%
Ever heard of Ward Sabha?	8.58%
Ever heard of NREGA?	52.3%
Ever seen a muster roll?	7.36%
Ever heard of Jama Bandhi?	9.5%

Caste	Adhyaksha is responsive to our needs	Adhyaksha is always available	Adhyaksha shows concern	Adhyaksha tries to solve our problems	Adhyaksha is effective in solving problems
SC	48.96%	21.71%	8.85%	8.85%	2.62%
ST	47.23%	21.82%	12.98%	4.97%	1.65%
OBC	54.19%	24.75%	9.62%	12.5%	1.23%
Others	47.46%	22.1%	7.72%	8.09%	3.26%

Table 4: Attitudes towards Adhyaksha (among those who have heard of him)

4.3 Political knowledge and civic engagement

Table 3 compares the same set of villages on variables related to their knowledge of political processes and officials, their voting habits and attendance at Grama Sabhas. The latter could potentially measure interest in how GP money is spent though it might also just be another measure of socio-economic status or administrative capability of GPs. Several of the results are worth noting because they are of inherent interest.

The most obvious candidate was the expansion of the NREGA in the years of the survey. With sums of money much larger than that of the GSP and with eligibility determined by Grama Sabhas, it is not surprising that people would be more likely to have heard of Grama Sabhas and to have attended them. This was the only way to participate in a program that is very attractive in these dry and poor areas of the state. Indeed, knowledge of the NREGA increased over the time period rapidly throughout the area. The increase was so rapid, in fact, that even though there is a difference of ten percentage points (61 versus 51%) of knowledge of the NREGA between the border sample and the whole taluq sample, this is very likely due to the difficulty of getting an accurate measure of a rapidly moving target.

For example, in Andhra Pradesh, where the NREGA had a much faster start, the proportion of people who had heard of it was only 40% in 2007 though it is now almost universally known. The difference at any one moment of a variable that is changing by the day should not be accorded too much importance.

It is still striking that only 55% of adults had ever heard of a Grama Sabha even after two year of the NREGA program (and appalling that it had been as low as 15% only two years ago). It is quite likely that such meetings were never held, or, if they were, were not especially important to people. One reason they would not be important is that little if anything that seriously affected their lives would have been discussed. The prime goal of the project was to let people have more of a stake in such processes as the GS's by giving more influence to the GP's. While NREGA has given a reason to attend GS's independently of the GP meetings (for beneficiary selection), the GSP is supposed to increase the amount of money over which the GP has control and, hence, to give a reason to attend GS's to have a say in how it is spent.

That GPs might not have had this sort of attraction to date can be seen in attitudes of people to their ward members and their adyakshas. While 45% say the Adyaksha is always available, only 19% say he tries to solve problems and 4% say he is successful at it. This is undoubtedly due to the fact that the Adyaksha really has no discretionary power over spending and can't solve many problems if they involve money. An

Presence of facilities	Percent of villages within a GP
Health facilities	
Sub-Centre	10.4%
Primary Health Centre (PHC)	10.4%
Hospital	1%
None	77.2%
Absentee rate (as a percent of filled positions at the time of visit)	
Teachers	25.8%
Doctors	40%
Visits (days per week) of a Rural Medical Practitioner	
0	27.1%
1	45.8%
2-6	19.6%
7	7.5%

Table 5: Presence of facilities

interesting pattern of responses is that just over 40% of the people (OBC's first at 47%, upper caste at 39) think the Adhyaksha is responsive to their needs. This isn't a great number but it is interesting that there is no bias towards upper caste residents. OBC's as the majority or plurality in most places are most satisfied but others seem to be treated fairly even handedly.

As far as attendance in GSs is concerned, this could well follow the assessment of effectiveness of one's intervention. OBCs (usually the majority or plurality of people in the village) have heard of GSs more than anyone else at 63%. Interestingly, the lowest proportion is among the upper castes (47%). This is consistent with an interpretation that higher caste people can obtain services through means other than public meetings (it is also consistent with not wanting to attend such meetings with people of lower caste). Why this shows up as "never heard of the GS" as opposed to "heard of but never attended" is not clear. However, over time, if it is not customary to go to such events, this information may not be common knowledge in one's community. It is also possible that the question is dismissed by upper caste people. In the same way, voting among high caste people is lower than among others as well. It has been pointed out (Mehta, 2017) that voting is one way for lower caste people to express their opinions in the first place and thus one would expect more participation by them.

4.4 Service provision

How well are services in these villages working? The purpose of the survey was not really to measure the quality of current services, however some questions can be used to draw a few conclusions. First, while visiting each village and taking an inventory of facilities such as schools, health centers, roads, etc., the functionality of services and the presence of essential personnel – teachers, health workers- were noted. The relevance of how these services work is that while untied funds could probably fix relatively minor problems with services such as replacing bulbs in streetlights or fixing roofs of schools, the amounts of money involved would not be sufficient to solve larger problems like the absence of workers or establishing an expensive-to-provide and maintain facility such as a school or health center.

4.4.1 Presence of facilities

In the table 5, of seemingly special note is the small number – 23% - of villages with any health facility at all. Few of the villages are large enough to warrant a health facility of their own, but the GPs of which they are a part generally do have health facilities of some sort. Therefore while the numbers seem alarming, they simply reflect the fact that the sample was of villages within the GP, not the GP as a whole. The result that one percent have a hospital is probably wrong – if there is any facility larger than a PHC in these villages, it is likely that it is a Community Health Center. As is true in most of India, even if there is no formal health facility, Rural Medical Practitioners (which are of very varying but generally low quality)

Frequency of RMP visit (days per week)	Village has public facility	Village has no public facility	Total
0	8%	37.8%	27.1%
1	39.5%	49.3%	45.8%
2-6	34.1%	11.4%	19.6%
7	18.4%	1.5%	7.5%
Total	100% (35.5% of villages)	100% (65.5% of villages)	100%

Table 6: Presence of health Centres and RMP visits

are generally available. On top of this are non-registered medical care providers ranging from herbalists, shopkeepers and others.

Table 6 shows the cross-tabulation of frequency of medical care providers and whether there is a public facility in the village. If RMPs are filling in gaps in public coverage, then those villages that don't have a public facility should have more visits. However, while an RMP will visit at least once a week in 92% (100-8.0%) of the villages with a formal facility, they only visit 62.2% of those without one. Conversely, they are present every day of the week in 18.4% of the villages that have a formal facility and only in 1.5% of the villages without one. So, rather than being a complement to public provision, the RMPs are available in the same places (usually denser or richer) as public facilities. Of course, this is all within a given GP so the welfare effect is probably not very large – most people can get around the GP without much difficulty.

4.4.2 Absentee rates of teachers and medical personnel

The number of teachers employed in each government school and the number of doctors employed at each public health facility (for PHC's and larger clinics) were compared to the number who were observed to be at the facility when visited (during opening hours). 25.8% of teachers were absent at the time of the visit. For doctors, the absentee rates are 40%. Absenteeism is an entrenched problem in India, and remains largely out of the purview of local governments, those employed being state servants.

4.4.3 NREGA

One area of concern is the functioning of NREGA. 53% of the people in the sample did not have a job card for NREGA. While some chose not to have or apply for one, 31% of those without a card said they were "unlikely to get a job card even if they applied for one. Not correct according to the law, it is interesting to note how this response varies by caste. People of SC say that the reason they don't have a card is 42.7% which drops to 24.8% for higher caste people with ST's and OBC' in between. Therefore, over a fifth of SC people ($.53 \times .427$) believe they will not be allowed work on NREGA schemes, one of the main groups that the program was supposed to serve.

Also on fairness of government schemes, about 13% of people in both samples feel they should have a BPL card but have not received one. Most interesting is that this number is much lower than in 2007 (on the basis of the "interior" surveys). It appears that the state has made significant progress on these grounds, possibly as a result of more Grama Sabha attendance and another side-effect of the NREGA program.

4.5 Perception of people: Comparison of villages

5 Patterns of preferences

The core goal of this paper is to examine how well elected and appointed officials (GPM and GPS respectively) can represent the preferences and concerns of the people, specifically of the marginalized cohorts. Naturally, it is important to find out what people really want. We asked all respondents to rank their priorities concerning different problems that could be solved with public money. We also asked Grama Panchayat Members and Grama Panchayat Secretaries about their preferences. Later in the paper we will examine the representativeness of the household decisions by these various possible representatives but we are also interested in which priorities are held in different villages. First, we discuss simply what people said they wanted.

"How does this village compare to your neighbors regarding ....?"	Percent saying their village is better than neighboring villages	Percent saying their village is at the same level as neighboring villages	Percent saying their village is worse than neighboring villages
Roads	17.45%	29.09%	51.31%
Streetlights	18.01%	42.71%	36.85%
Aganwadi	31.98%	42.46%	20.48%
Self Help groups	39.27%	40.41%	15.78%
NGOs	20.78%	33.62%	43.21%

Table 7: Comparision of own village with others: Perceptions

Problem	Any of the top 3 priorities	1st priority
Roads	55.66%	22.32%
Drainage	44.05%	12.39%
Sanitation	36.29%	13.93%
Water (other than for drinking purposes)	35.63%	15.91%
Electricity	26.4%	5.88%
Drinking water	22.94%	13.84%
Housing	12.14%	4.83%
Transport	10.76%	2.58%
Health	10.63%	2.91%
Street lights	7.8%	1.55%
Village roads	2.11%	0.79%
Social problems	1.71%	0.72%
Education	1.70%	0.15%
Employment	1.27%	0.3%
Vetenary	0.72%	0.082%
Anganwadi	0.68%	0.089%
Cleanliness	0.58%	0.068%

Table 8: Top three priorities of households

5.1 Household preferences

Table 8 represents the top three preferences of the households. Each person was asked to state in order of priority, the issues they wanted to be addressed using village funds. Their responses were recorded and then classified in the following categories (Refer appendix for the list of responses and classification).

The prefernces also reflect some appreciation of what is a local problem that can be fixed by the GP. Recall that while people tend to think the Adyaksha is "responsive"(42%) and "available" (45%) he or she rarely "gets things done" (4%). Roads, drainage, water, sanitation are mentioned most frequently while health and education are mentioned very infrequently. We can't explain why. One possibility is that people know this is a state-provided service and not under local control. In early supervision missions of the project, state officials justified giving specific guidance to GPs on how to spend GSP money by saying that the things people said they wanted (roads, water, etc..) were "already handled" by other schemes by the state or central governments. It appears that the people don't agree that these problems are "handled" sufficiently. This is precisely what the GSP was supposed to allow for. While there is a great deal of agreement over the broad categories of essential spending, there are still substantial differences in how people rank the problems. This will be examined in detail below.

SC	ST	OBC	Others
Other road (24.58%)	Other road (22.95%)	Sanitation (21.16%)	Other road (27.54%)
Other water (16.63%)	Drinking Water(18.36%)	Other road (17.38%)	Other water (18.86%)
Drinking Water(12.89%)	Drainage (15.56%)	Drinking water(15.9%)	Drainage (12.54%)
Sanitation (11.24%)	Other water (13.9%)	Other water (14.12%)	Drinking water (9.63%)
Drainage (10.87%)	Sanitation (10.52%)	Drainage (12.36%)	Electricity (8.93%)

Table 10: Top five priorities according to caste

MALE	FEMALE
Roads (22.84%)	Roads (21.53%)
Drinking water (16.5%)	Other water (17.47%)
Other water (14.88%)	Sanitation (16.66%)
Drainage (12.69%)	Drainage (11.94%)
Sanitation (12.69%)	Drinking water (9.86%)

Table 11: Top five priorities according to gender

5.1.1 Preferences and political activity

Preferences if attended Gram Sabha are not very different from the preferences of people who have never attended a Gram Sabha.

Issue	First choice of people who have "ever attended" a Grama Sabha	First choice of people who have "never attended" a Grama Sabha
Drinking water	16%	16
Other water	13	11
Drainage	12	10
Toilets	12	12
Roads	21	21
Electricity	5	7

Table 9: Preferences of people who have attended Gram Sabhas vs those who have not

5.1.2 Caste-wise preferences

Table 10 presents the top five priorities of people caste-wise. It is important to note that SCs and STs have similar preferences while OBCs and Others differ somewhat is what they state as their top priorities, with only the upper caste people seemingly concerned about electricity. Roads seem to be a problem across castes, so does water, with lower castes more concerned about drinking water than others.

5.1.3 Gender-wise preferences

Table 11 shows the top five preferences of people according to gender. It may seem surprising that more males have reported drinking water as their first priority than females, but it is important to note the fact that in the classifications of problems shown in table A.1 those problems which specifically mentioned drinking water were classified as "drinking water" while those which didn't were classified as "other" water, so it is entirely possible that they were also referring to drinking water but mentioned the problem just as a problem of "water". Secondly, we also find that 16.66% women are concerned about sanitation as compared to 12.69% of the men, which in itself id an important finding and reflects the concerns of women regarding the hygiene and sanitation of their surroundings.

	First choice drinking water	Any choice drinking water	First choice: other water	Any choice: other water	First choice: Electricity	First choice: Roads
SC	0.023	0.039	-0.016	-0.033	-0.02	-0.025
	(0.02)	(0.02)	(0.02)	(0.03)	(0.01)	(0.03)
ST	0.088***	0.114***	-0.045	-0.112***	-0.046**	-0.048
	(0.02)	(0.03)	(0.02)	(0.03)	(0.01)	(0.04)
OBC	0.062**	0.101***	-0.042*	-0.121***	-0.053***	-0.104***
	(0.02)	(0.03)	(0.02)	(0.03)	(0.01)	(0.03)
Wealth	-0.001	0.008	-0.002	0.002	0.005	-0.00
	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.00)
Illiterate	0.014	0.029	-0.037*	-0.048**	0.017	-0.018
	(0.01)	(0.02)	(0.02)	(0.02)	(0.01)	(0.02)
In main village	-0.119**	-0.123**	0.007	0.031	-0.020	0.054*
	(0.04)	(0.04)	(0.02)	(0.03)	(0.02)	(0.03)
Constant	0.204***	0.269***	0.194***	0.413***	0.101***	0.233***
	(0.04)	(0.04)	(0.02)	(0.04)	(0.02)	(0.03)

Table 12: Patterns of preferences

5.1.4 What influences preferences?

Beyond understanding what people want, we are also interested in finding patterns among the people. Much of what people want will be determined by the circumstances of the village and since most of the area is dry so it should be expected that water is mentioned often as discussed above. The question is "who in particular is interested in water?" In general we will attempt to explain these preferences by using multiple regression analysis with the same set of variables that are exogenous to the preferences themselves used for . These include caste, an index of "wealth", literacy and whether the person lives in the main village or a hamlet outside. For particular items, we add characteristics of the person that are specific to the problem discussed. The basic results are found in table 12.

One very clear pattern emerges from these results is that caste per se is very closely related to what people want. On almost every item which people mentioned as their top three priorities of the village, the three lower caste categories (SC, ST, OBC) share the same sign. This indicates that they all systematically prefer something different from high caste people. Wealth and illiteracy are highly correlated with caste so their coefficients are sometimes hard to interpret. Generally speaking, illiteracy has the same effect of being in the lower three caste categories. The effect of wealth is not clear – since OBC and high castes are indistinguishable by wealth, it is capturing some effect of being wealthy but not OBC.

For example, there are two definitions of water that people want: those that explicitly mention "drinking" water and those that don't. The category that does not include explicit reference to drinking water may include some people who meant drinking water, but did not specify it in the answer. However, a clear pattern emerges that higher caste people want "other" kinds of water and lower caste people want drinking water. This holds up when "wanting" is restricted to the first choice of people as well as being among the top three choices of people. Water is a normal good so, at least under the definition of being in the top three choices, the effect of wealth is positive. Of course, since upper caste people are, on average, wealthier than others, they will end up wanting water as well but as a consequence of their wealth, not of their identity. By the same token, illiterate people want it as well though this could be another indicator of low caste. Wealth is highly correlated with literacy and caste so these indicate the separate effects of the explanatory variables, controlling for the effects of the others.

Similarly, to differing degrees, all lower caste people want drains (though not as their first priority but second or third instead) more than upper. Though not significant for people other than OBC's the same can be true for sanitation, and housing (again, usually as a second or third choice). Wealth is strongly associated with NOT thinking housing is a big issue, probably since it is only the poor who don't have adequate housing,

Preference	Percentage of GPM whose 1st preference
Drinking Water	26.04%
Roads	22.14%
Other water	14.76%
Drainage	9.71%
Sanitation	8.22%

Table 13: Top 5 preferences: GPM

regardless of caste. On the other hand, upper caste people want electricity, streetlights, water for purposes other than drinking and are the only ones who seem to want better health care (expressed almost exclusively as better hospitals, not primary health care).

While most people want roads, regardless of these variables, they, too are more highly desired by upper caste people, particularly as a first choice. We can speculate as to why (perhaps they have produce to sell) but all we can say here is that caste is the only significant explanatory variable for roads.

Whether or not you have a pump-set was added to the equation for electricity (but not elsewhere) in order to pick up at least one specific reason for wanting power. As expected, having one is highly correlated with claiming electricity as a high priority item. So, it is wealthy, irrigated landowners of high caste that generally want electricity as a first choice. However, since owning a pump set is a choice by the farmer, it is not clear which way causality runs and we did not explore all the possible determinants of preferences, most of which are similarly endogenous.

5.2 GPM and GPS preferences

6 Agreement scores

A major goal for the Gram Swaraj Project was to align decisions concerning Gram Panchayat spending with the priorities of the citizens of the Gram Panchayat. Of course, everyone has a different opinion of what are high priority items for the use of Gram Panchayat money so it is hard to define what exactly "align decisions with peoples' priorities" means. In this section we propose an operational definition of "agreement" between different peoples' rankings and see how the poorest peoples' priorities are best represented. The comparison is made with three possible types of people or procedures – 1) the opinions of the GP Secretary concerning what the Gram Panchayat for whom he or she is responsible needs 2) the opinions of a Gram Panchayat elected member and 3) the results of a Participatory Rural Assessment conducted in each of the GP's sampled as well as in two wards per GP. The secretary is likely to be influential within the state bureaucracy being a state-level civil servant and represents the status quo given that so few decisions are made via elected local governments. The opinions of a GP member is the best representative we can get of what an elected official would recommend for public money.

The definition of "agreement" is made operational by examining the stated priorities (ranked 1 through 3) of people (in the household survey) on the one hand and either the GP secretary, member or the results of the PRA's at GP and ward level. There are many possible measures of "agreement" comparing such rankings. Most are statistical techniques related to correlations. However, these often have hidden assumptions concerning the underlying degree of intensity of preference that are not well known. In this study we develop a measure based on the set of logical possibilities of different rankings which, in principle, can be weighted to reflect any subjective knowledge that a researcher has about the relative strength of opinions.

An example should fix ideas. If a household ranks three problems first, second and third, how does this compare with, say, the PRA ranking of three problems – not necessarily the same three? Perfect agreement would be if both had the same ranking of the same three problems. Complete disagreement would be one in which none of the three mentioned by the household is even mentioned by the group as a whole. In between, there is a wide variety (34 options in this case) of possible combinations of problems mentioned by each source (the household and any of the other decision making groups). The more overlap of issues raised and the more similar the ranking of those issues, the higher the score on "degree to which the public decision (or opinion) reflects the opinion of the household" and is a household level variable. The closer the agreement,

the more likely a household is to get its wishes answered in public decisions. We will examine how this varies by socio-economic status, caste, education, etc. to see who is influential in (or, simply in agreement with) collective decisions.

The survey asked households to list in order of priority the problems they faced in the village and the top three are examined. We categorize the data into 20 broad categories (listed in A.1).The same question was asked of GPs at the GP level (what are the problems you face in the GP) and the Gram Panchayat Secretary. We are looking to see whether the preferences of the Gram Panchayat Members and that of the Gram Panchayat Secretary overlap with those of the household. That is, we assign agreement scores to the pairs of three-tuples from the household and the GP member/secretary. The best pairing is when the first priority listed by the household is the first priority listed by the GPM/GPS, the second matches the second and the third matches the third. The worst score is assigned to when none of the priorities of the household are seen in the priority of the GPM/GPS. Since the households were asked to list in priority, any ranking on the pairs of tuples we assign will consider the first priority of the household with highest importance, then the second and then the third. In case the GP mentions a priority that doesn't figure in the HHs set, we will need to note that the coverage of the household priorities in the GP priorities may show variation - 3 might be covered, 2 might be covered or only 1. This gives rise to 34 combinations where the priorities can overlap in different ways[3].

6.1 Construction

Figure 6 illustrates how each household's ranking of problems could relate to a comparison group. The black circles are the ordering of the village (or ward or GP member or GP secretary) priorities 1, 2 and 3. The blue circles are for a household. An entry of 4, for example is true when a household ranks it 1 and the village ranks it 2. All logical possibilities are triplets.

A = {1,2,11} (that is, it has the same ranking 1,2,3 as the village)
B= {1,2,15}
C= {1,12,7}
D={1,12,15} . .

There are 34 of these that can be grouped into 22 categories that can be ranked (with 8 ties or "equivalence sets" like this one). To order elements of the equivalence sets you have to know more details about people's intensity of preferences.

There are two key characteristics we are concerned with -

1. Cohesiveness: How much do the 3 priorities that the household listed as important are represented in the GP's top 3 priorities? (irrespective of the order).

2. Quality: How much is the ranking of the problems given by the household represented in the GP datasets?

It is important to note here that these two objectives can potentially conflict. For example, consider the households priorities noted to be (1,2,3) and two cases for the GP's priorities that map into this: (2,3,1) and (1,null, 3).

In this case it is clear that if we put full weight on cohesiveness dimension then the first three-tuple will be closer to the household preferences than the second. However, if we consider priority, then the second tuple captures the first priority of the household better, and the quality of the agreement is better.

There is subjectivity in how to assign these rankings. We proceed by assigning importance to both dimensions in a combined measure (see appendix for the full ranking). Given the tension between the two characteristics that there is no unique strategy to rank the pairs of tuples.

Consider two rankings: one, as above, is not very strict (if A is preferred to C and B is not strictly ordered to either, then B is preferred to C) and one is very strict (everything is in an equivalence set if any non-comparability is found between any included pair – So A,B and C are classified the same).

[3]Explain how we get 34 cases: The first priority of the household can be reflected as 1,2,3 or null for the GP. Given this, the set of options for the second priority are assigned. For comparability, we take out the 85 observations in the GPM data and XX observations in the GPS data that have "doubles" where multiple of the household match to the same of the GPM/GPS. This is X percent of the data. We remove these as the double suggests an emphasis that the household places on the priority that may not be represented (eg. different kinds of water both map to water) in a simple manner.

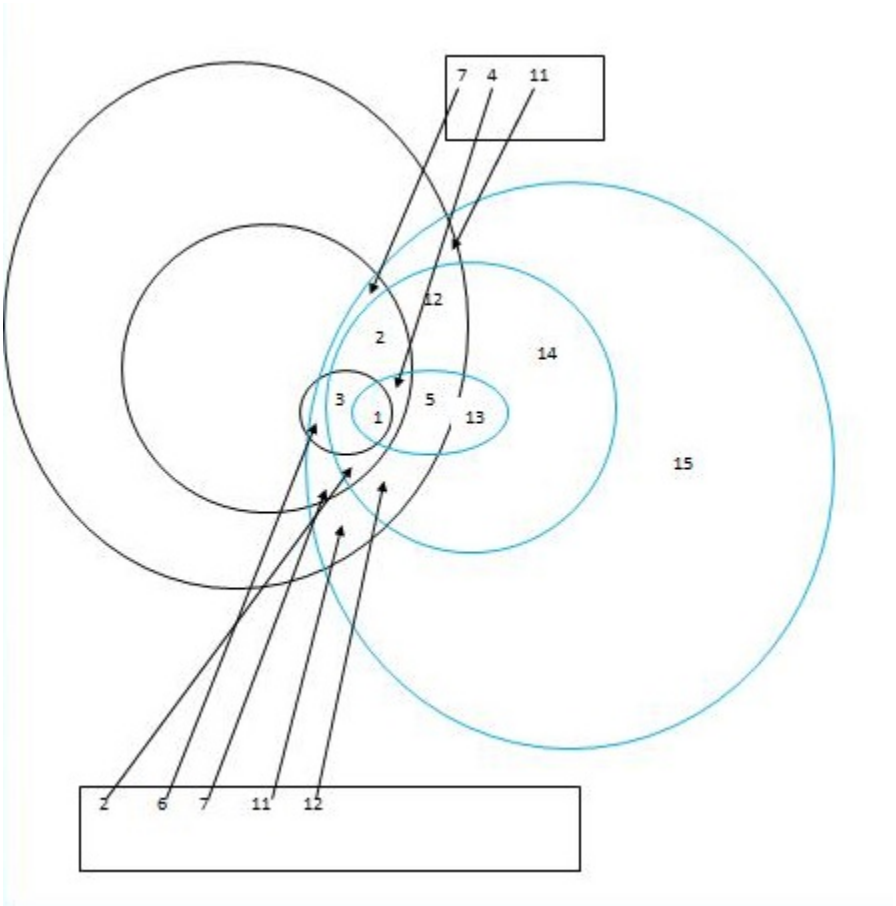


Figure 6: Preference scores calculation

It sounds like they should be very different but it turns out that the first way and giving "A" a score of 22, there is a big lump at 17. In the second way, everything over the 14th triplet are permutations of the same three choices and are in the same set (except A itself). Several of the very low agreement categories were lumped together. Absolutely nothing of substance changes between definitions.

A historical/ technical note: ever since Arrow's 1951 "Impossibility Theorem" on individual values and social preferences, we know there is no "correct" way to make this ranking and this applies to the method proposed here. . If we define the domain as the set of all possible 3x2 matrices that can be generated from the GPM and household data, then, given that the rankings (subjective or following a particular principle of logic: unrestricted domain assumption of Arrow's impossibility theorem, which says that preferences can be formed in any way over the economic states, which in this case are 64) of different individuals are complete, transitive and ordinal; then according to Arrow's Impossibility Theorem, there can be no way of aggregating those preferences by a social welfare function that satisfies the 5 assumptions of completeness, transitivity, unanimity, independence of irrelevant alternatives and no dictatorship.

6.2 Alternative scoring

Since there is no such aggregation possible over the wide variety of rankings one may have, we choose to keep three of those that match the most with what we need our rankings to fulfill, i.e. , representativeness or cohesion and quality matching or lexicographic preference ordering and one set of rankings that follows both; first cohesiveness in partitions and then lexicography within those partitions as explained. Even though our chosen ranking can't be correct in all circumstances and may look a bit complicated in its construction, the underlying reasoning should be straightforward and intuitive. To counter the absence of a unique measure, we also consider two robustness measures, one where the quality is given importance and one where the cohesiveness is given relatively higher importance.

1. Cohesiveness by itself gives us 4 possibilities. We do not assign this characteristic full weight as this reduces the variance within agreement scores. But we can give it higher weight than the rank while including both. So we take cohesiveness and nest lexicographic preferences within it: first we look at the 6 combinations where all the households priorities are represented, then if two are represented, then one, then null. Within the first, we still need to define an order within the set that is created, we use lexicographic preferences to define these. This is also shown in the appendix tables.

2. For these, the obvious way to proceed is with lexicographic preferences. That is, we consider the first priority matching to the first of the household and then look into the second, etc. We keep the lowest category as that of no overlap.This is shown in the appendix sections.

The comparison of these agreement scores is shown in figure 7.

6.3 Agreement score results

6.3.1 Closeness of preferences

The immediate pattern that arises from constructing the agreement scores is the higher agreement of GPMs with households relative to the GPS with households. The GPS has almost no agreement with the household.

As shown in Table A.1, GPS sometimes gave answers for priorities of village that were not pertaining to the village services and facilities, but concerning procedural difficulties in their jobs. Even if we bump up the priorities of the GPS to give them the benefit of the doubt, (maybe they did not understand the question properly) and since none of the households gave any priorities relating to any procedural difficulties, bump up the priorities of the GP secretaries who gave their first priorities as procedural problems, and try to increase matching, there is still very low agreement. There is no significant impact on results of improving the match in this manner.

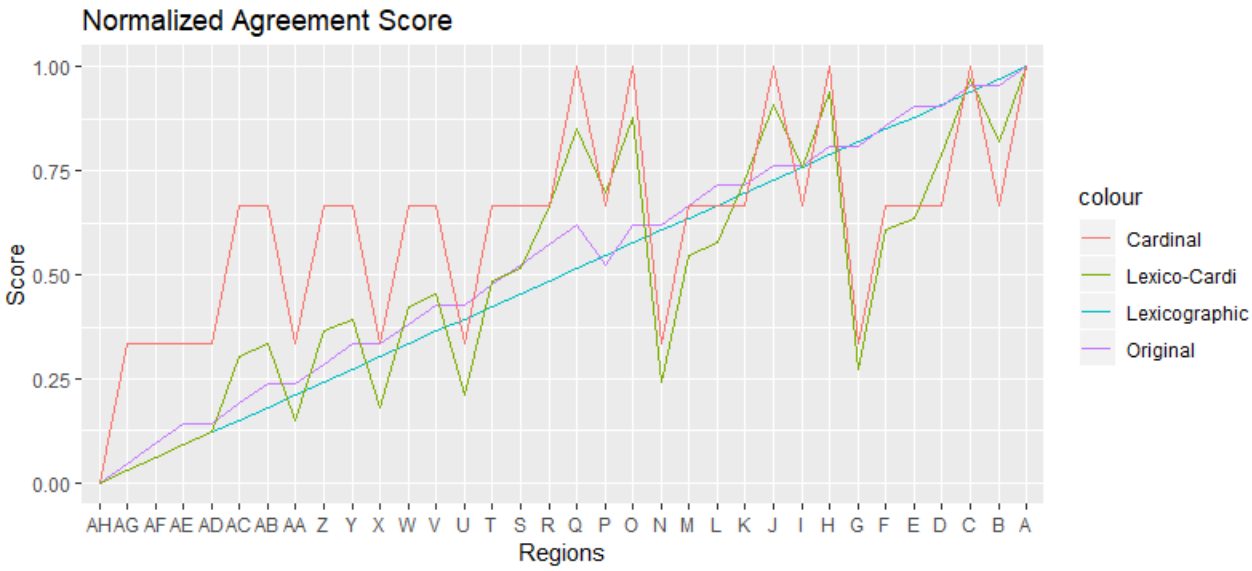


Figure 7: Comparison of agreement scores

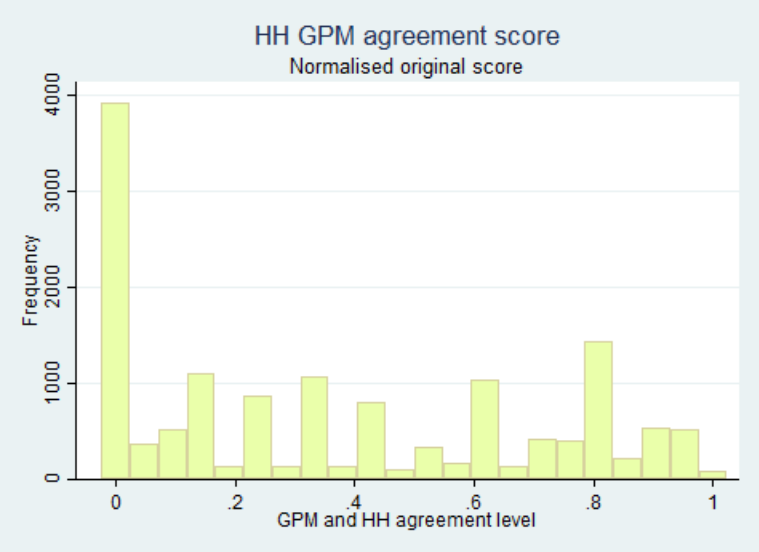


Figure 8: GPM HH agreement score

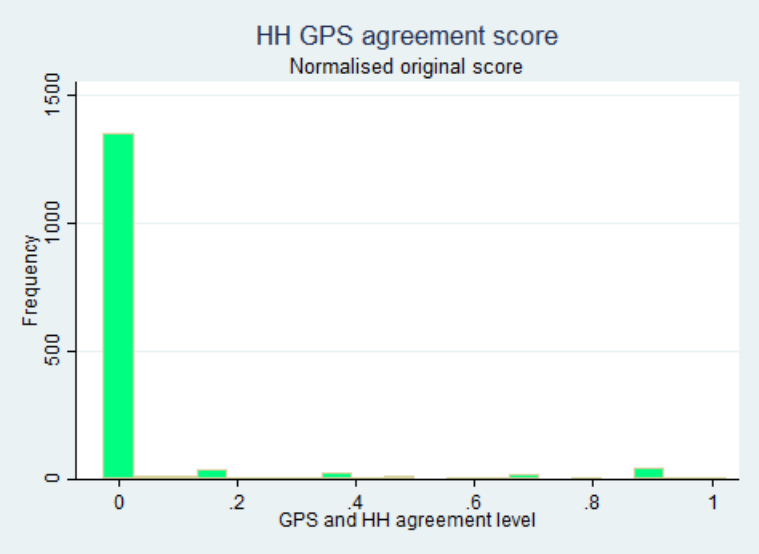


Figure 9: GPS HH agreement score

6.3.2 Who represents the poor?

Of course, what people say they prefer and what exactly gets built with the money provided by the project or such projects may not have much to do with each other. We can just make the assumption that what decision makers such as GP Members and GP Secretaries want are likely to be implemented. Therefore, the extent to which their preferences correspond to those of the citizenry, particularly the disadvantaged, matter.

In broad outline, we compare the ranking of preferences of people in our villages with those of possible decision makers or, in the case of the PRA's, a different method of determining peoples' preferences (other than asking them). The following figure shows how closely GP members and GP secretaries agree with different people. The first set of columns in each comparator is the fraction of times that the top three preferences of a household are NEVER mentioned by the corresponding comparator. So, for GP members, this happens between 20% (for OBC people – frequently the plurality in a village) and 30% (for other people). For GP Secretaries, this complete lack of any overlapping opinions happens around 40% of the time except when it comes to ST people for whom this happens 54% of the time. That is, for over half of the ST people, when they list their three priorities for public expenditure there will be no overlap with the priorities of the GP secretary.

The second set of columns shows the number of times the priorities are quite close to the comparator. While there are 22 possible degrees of "agreement" according to our measure, it turns out that at a score of 17 or above, the three things a household wants are also the three things the comparator thinks are important but in a different order. This is a pretty good reflection of each others' priorities. Scores over 17 also include cases where someone's first choice is also the comparator's first choice. For the sake of exposition, we group scores higher than 17 together and call them "close agreement". So, GP members are in close agreement with OBC and ST people (being "close" over twenty percent of the time, a little less with SC people and less still with those of higher caste. In contrast, GP secretaries tend to agree most with upper caste people, followed by OBC ad SC. Again, there appears a large disconnect between what secretaries want and what tribal people want. GP members seem to be much more attuned to the ST people than are the secretaries.

The third set of column is the "net disagreement" with a comparator or, the difference between the first two sets. So, it is the frequency of being completely out of touch with peoples' preferences minus the frequency of being in close agreement. To make this easier to read, the following repeats this "net disagreement" separately for the three comparators. The results are striking. The case of "pure democracy", or letting elected members represent their constituents, leads to the highest degree of agreement with "complete disagreement" being larger than "close agreement" only 10% of the time, or so. Caste certainly comes in here since for OBC people, the difference is nil – the GP members do very well in representing the majority but don't have

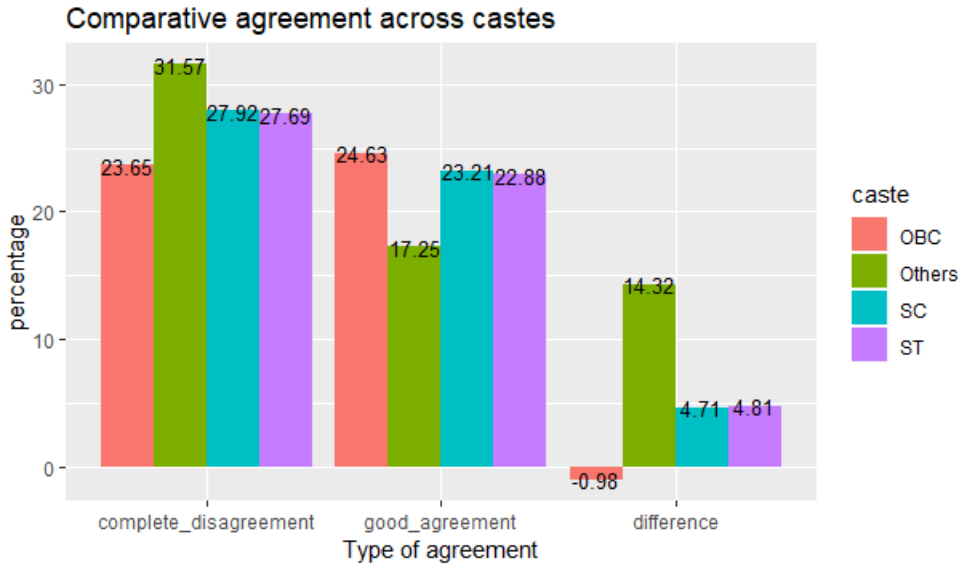


Figure 10: Agreement of GPM across castes

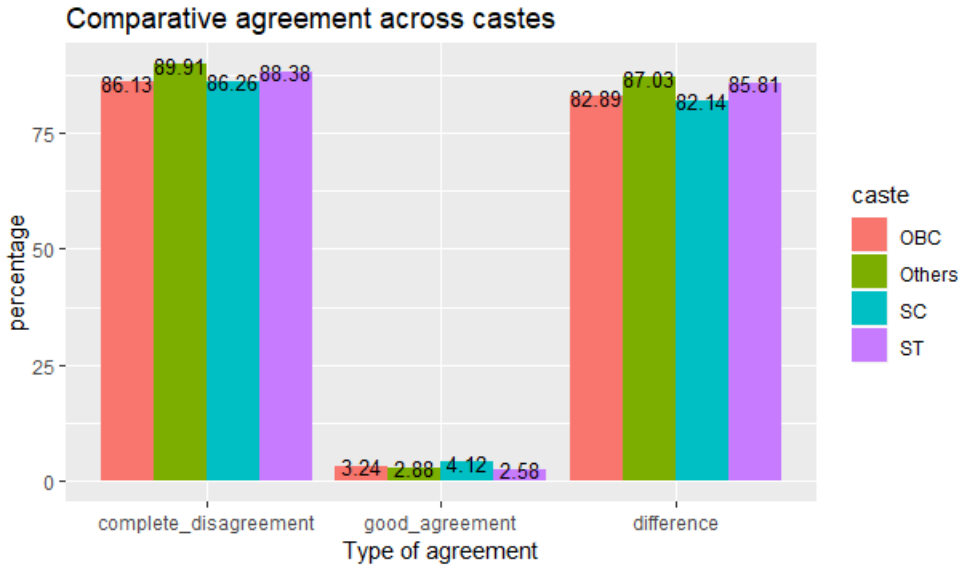


Figure 11: Agreement of GPS across castes

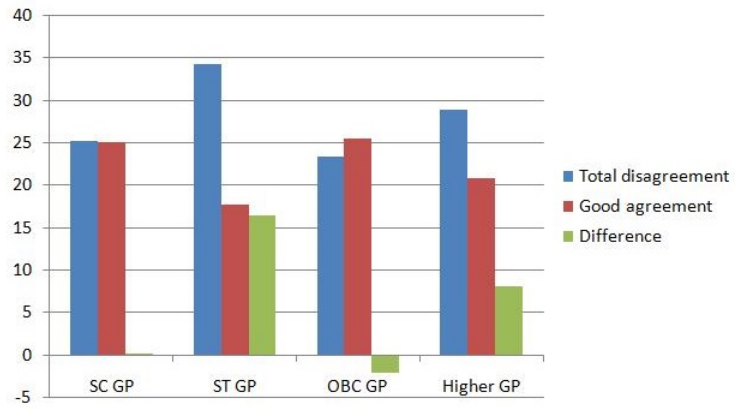


Figure 12: Does GPM caste matter; net agreement and disagreement?

particular biases against anyone else.

The results for the secretaries are rather disturbing. The notion of "closeness" varies substantially between the "complete bureaucracy" and the people with the secretaries agreeing the most with upper caste people, substantial disagreement with SC and OBC people and, with the combination of high "disagreement" and low "agreement" with tribal people, an extremely bad score for representativeness with ST's.

The reason this is disturbing is the GP Secretaries' preferences are much closer to those of upper caste and wealthier people and farthest away from those of ST people than any other comparator group. There is a particular reason that these comparisons are important. Skepticism of decentralization in India (as well as many other places, including the U.S.) is frequently based on fear of "elite capture" or, the undue influence of powerful local people who are believed to dominate village decisions. Therefore, the state has an interest in directing spending decisions so that such elites do not hold sway in local public expenditure allocations. The state also has an interest in countering the possible "tyranny of the majority" where the interests of the poor or marginalized may be ignored (or worse) by the majority in a village even if they are not the elites. These fears are also behind the involvement of organizations in civil society (NGO's mostly) who may enter villages and make assessments of what people (particularly poor people) really want through mechanisms such as the PRA's done for this project. But the results here indicate that State government representatives – the GP Secretaries – do not serve this function at all and indeed, it looks like they intensify it.

It is possible that Grama Sabhas could be prone to the same kinds of biases as the public group meetings of the PRA's. One of the core requirements of the GSP is to have GS's before GP budget meetings. While we couldn't directly observe GS's to see what issues came up, we can go back to the data and see if people who attend GS's are different than others in their villages. The following table shows the comparison.

The columns are virtually identical. While we can't rule out that the "group dynamics" or the "what you say in public versus what you say in private" effects in Grama Sabha meetings, at least we can rule out selection bias since the people who have attended do not systematically differ from those who have not. Therefore, combined with the results presented above that GS's are attended by low caste people in larger proportions than others, these results indicate that GS's are not especially prone to "elite capture".

While it is possible that outside organizations such as NGO's can help bring peoples' preferences to light, this seems to be a very difficult task. The results show that the ones done in conjunction with the baseline were not at all representative so any process outside of ordinary elections needs to be examined with extreme care.

6.3.3 Does the GP Member's caste matter?

6.3.4 Robustness for GPS preferences

6.3.5 Robustness with alternative scores

7 Dyadic Regression

Armed with an agreement score, we can now examine what drives variation across the scores. The key drivers are those typically examined in a dyadic regression, the characteristics of each element of the dyad. The dependent variable to explain agreement is made up of a pair of two peoples' preferences. This type of variable is called a "dyad" and the appropriate statistical technique is called a "dyadic regression". The dependent variable is a pair and the independent variables are either pairs of characteristics in which people differ or shared characteristics such as their village.These are commonly used in network analysis. The generic non-direction dyadic regression equation is given by:

$$Y_{ij} = \alpha + \beta_1|z_i - z_j| + \beta_2(z_i + z_j) + \gamma|w_{ij}| + u_{ij}$$

Note that this specification of the dyadic regression is symmetric. Say that z measures income. Then if i is richer than$j$ and i's income goes up, the effect is $\beta_1 + \beta_2$ since the absolute value of their difference increases. If j is richer than i and j's income goes up, the effect is also $\beta_1 + \beta_2$. If the poorer person's income goes up then the effect is $-\beta_1 + \beta_2$ since the absolute difference goes down. This is true regardless of who is who.

7.1 Model specification

We take the outcome variable as the difference in the agreement score. The caste and education dummies are used to set up the dyadic regression through sums and absolute differences.

7.1.1 Dyadic regression variance-covariance matrix

Block diagonal (villages) with sub-blocks of specific GP member responses on the village diagonal and sub-blocks across members from individual villagers agreements with anyo

Is is that the preferences/problems are similar or more aware of needs and more connected.

$$AVar(\hat{\beta} = \frac{1}{N-K}(X'X)^{-1}\left(\sum_{i=1}^{N}\sum_{j=1}^{N}\sum_{k=1}^{N}\sum_{l=1}^{N}\frac{m_{ijkl}}{2N}X_{ij}u_{ij}u_{kl}X_{kl}\right)(X'X)^{-1}$$

7.2 Results

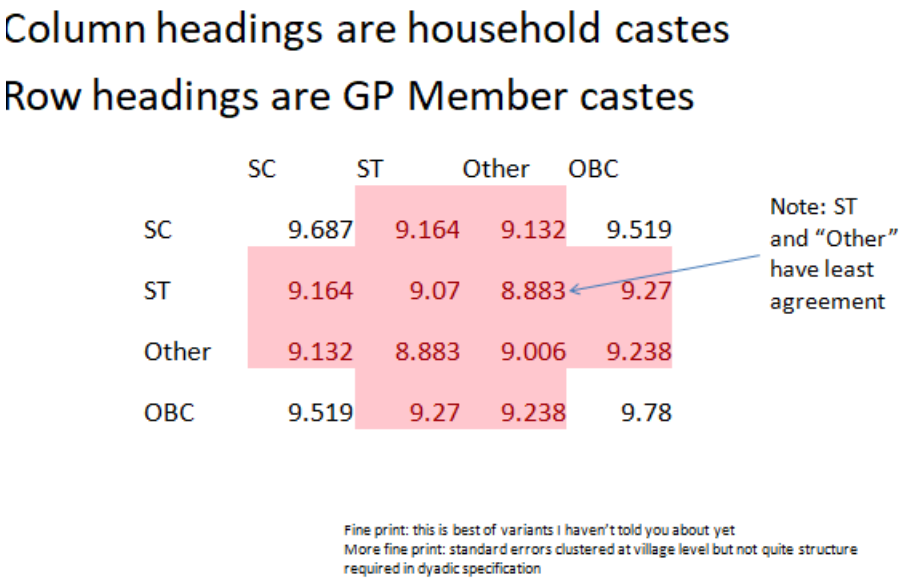


Figure 13: Dyadic regression preliminary results

The results we find in the dyadic regression is similar to what was found with the raw data. GP members tend to set priorities the same way their constituencies do, high caste and ST members less so. OBC and SC people tend to agree most strongly with their own caste members. ST and high caste people don't even agree with their own caste GP members

8 Additional results

8.1 Gender

We find that the top priorities of woman are water and sanitation. This is consistent with (1) Karnataka being a dry area, especially in the poorer North, (2) women being responsible for the procurement and management of household water, and (3) sanitation problems found to be prevalent for women across India.

8.2 Wealth

Using the weights from the PCA, we can construct comparable measures of wealth for the GPMs and the GPS. We can then use a categorized version of this in regressions following the dyadic setup.

9 Conclusion

This paper directly measures what priorities over public goods provisions households think are important. In terms of the role of state representatives, if they do not share the priorities of the poor and lower caste people but do share those of higher castes, then it is important to ask how effective they can be in furthering low caste interests relative to the elites, or the majority. And, in the case they are not effective, what exactly is the gap in democracy that needs to be addressed? In all such environments, we cannot take the perfect state as the benchmark finally, but compare local autonomy only with the status quo.

There are a couple of caveats to this study. First, as of now the Gram Panchayat's have virtually no discretion over how they spend their money. Second, this study doesn't rule out the possibility that even if people agreed to build roads, these roads may still be build in front of the OBC Adhyaksha's house and not in SC colonies, for example.

Following up on the Grama Swaraj Project, the local untied funds were used for projects such as building GP headquarters and libraries. The largest share of the expenditure was on school boundary walls, supplementing the Sarva Shiksha Abhiyaan. There were other uses for the funds that no households had mentioned. Finally, the project failed to do what it was intended to do, due to undermining by state officials rather than local officials.

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Table A.1: Categories of priorities for the village - narrow and broad

Broad category	Narrow category
Housing	"Accomodation", "Government house problem", "House problem", "To manage the construction of homes","Selecting housing facility recepients", "House tiles problem", "Bill clearance of housing facility"
Aganwadi	"Anganawari","No Anganwadi worker , Anganwadi closed - No counselling", "Anganawari building"
Sanitation	"Bath room problem", "Ladies toilet problem", "Sanitation problem", "Toilet problem","Bad maintenance of existing of public toilets", "No public, private toilets, insufficient toilets"
Drainage	"Cleaning of underground drainage", "Drainage problem", "Drainage should be clean", "Farmer drainage", "Need under ground drainage", "No drainage","Pipe line drainage system","Insufficient drains","Drainage problem"
Electricity	"Bhagyajyoti", "Electricity problem", "Light problem", "Load sharing", "Voltage Problem","No bulb in current pole"
Drinking Water	"Drinking water-bad quality","Drinking water- limited supply","Drinking water problem", "Over tank problem"
Otherwater	"Bour well problem", "Hand pump prblem","Number of irrigation channels insufficient","Open well", "Pipe line problem","Public tap", "Water problem", "Water tank problem", "Canal problem","Floride in water problem","Water tank for cow", "Pipe line drainage system", "Tank repair", "Water for irrigation","Good water source is far","Water tank is not clean", "Cleaning well","Public demand for water supply", "Water distribution management"
Othertransport	Bridge problem", "Bus problem", "Bus stand problem", "Traffic problem", "Transportation problem", "No concessions for travel in private buses", "Inconvenient timings of buses"
Health	"Doctor,nurse does not come to village or stay in village", "Hospital problem", "No PHC, PHC closed", "No sub-centre, sub-centre closed"
Employment	"Employment problem", "Job card", "Nrega","For knowing about when work starts","The work is far away","Employees problem", "Works problem", "Field work"
Villageroad	“Village road problem","Poor quality of roads in village"
Otherroad	"No cc road","Problem of accessibility to approach road during monsoons", "Road problem", "Poor quality of village approach road","No connectivity to mainroad,highway"
Streetlight	"No street light pole", "Street light problem", “Not enough streetlights"
Education	"School problem", "Education problem", "Compound to school","Play ground problem", "Teacher quality poor", "Teacher problem"
Vetenary	"Vetenary doctor problem","Vetenary hospital problem","Hospital for live stock"
Cleanliness	"Village cleaning", "Cleaning or removing dustbin", "Dustbin problem", "Cleaning problem"
Social	"Bpl card", "Caste elimination", "Gp approval", "Handicap pension", "Pension","Ration card", "Woman society", "Ward sabha and grama sabha", "Society", "Blind child pension","Mandal problem","Payment problem","Samuday problem", "Widow pension", "Ladies problem","Old age pension","Suvarna village plan", "Public problem","No help for handicaps","Members are not talking with people", "Crime in the village","Good envirnoment", "Arahaya yajona", "Security problem","Employee panchayat problem","In udyoga kharti yojana it is difficult to make involvement for","Political pressure","More fight for member","Not solve the problem of people","Difficulty of getting help","President unable to control", "Members are unable to control", "President and elect members should be in the panchayat", "B.p.l problem", "Asharya school spce problem", "Election problem"
Other	"Community hall", "Food problem", "House loan", "Janata house", "Land problem", "Library problem", "Loan", "Sc centre", "Shelter problem", "Ashray yojana problem", "Grave yard", "Improvement in our church", "Milk dairy", "Mosquitoes destruction problem", "Site problem","Kerocine", "No theatre", "Subsity loan necessary", "Wild animal", "Temple problem", "Shop problem", "Forest nurcry", "Govt sales shop", "News paper not available", "Nyabele angadi report", "Nya bele dhop problem", "No proper security to village in reany season", "Coolie problem", "College problem", "Population problem", "Dk,Cs", "Ambulance problem", "Funds", "Bank problem", "Computer problem", "To clean cloth", "Difficult to convenience to village peoples", "Five needs to people who have got", "Nonetranslate", "NA", "Nothing", "Not Translated", "None", "N.T", "ghost.category"
Govtprocedure	"Money problem", "Not give any information about money","Not telling budget", "Panchayat office", "Permission security", "Approval problem","To collect the revenue","It is far from taluq centre","Office building","Peoples pressure is more","Many programmes","Grant amount is less","No sufficent fund for panchayat","Any time they scold","Tax collection problem", "Lack of grants", "Self pressure from g.p members", "Accounts are not easy to come by", "No clerk", "Less staff", "Pressure of govt"