"Village Governance and Service Satisfaction:
Evidence in Light of the Village Law"

Jan Pierskalla, Ohio State University
Erik Wibbels, Duke University

1. Introduction

The Village Law 6/2014 will involve the devolution of considerable fiscal resources and responsibilities to village governments. To date, there is little rigorous evidence bearing on the governance of villages or citizen satisfaction with their village authorities and services. What are conditions under which a transfer of resources and responsibilities to the villages is most likely to succeed? Which factors drive levels of citizen satisfaction with village government and services provision under the outgoing village law? This report provides such evidence with reference to the VRRI surveys conducted in 2008 and 2009. Those surveys covered 32 villages in Java, Sumatra, Kalimantan, Sulawesi and East Nusa Tenggara and include questions bearing on access to services, satisfaction with services, key village and household characteristics as well as a module bearing on village governance.[1]

In investigating the relationship between village governance and citizen satisfaction with services and the quality of governance, we focus on three key features of villages: a) their social characteristics; b) the effort of village government with regard to key services; and c) characteristics of village leadership and political processes.

Our findings provide room for cautious optimism with regards to implementation of the village law; we also uncover factors that are likely to constrain the performance of some villages in a post-Village Law Indonesia. Encouragingly, we find that citizen satisfaction with village governance is, on average, quite high. We also find that citizens have more positive perceptions of village services and governance:

- As objective measures of service performance and access improve
- As government service effort increases
- As political processes are viewed as less corrupt

On the other hand, there seem to be some structural constraints on village governance. Villagers have a negative assessment of services and governance where:

- Villages are ethnically heterogeneous
- Where village social trust is lower

Since neither ethnic composition nor the overall level of social trust are easily amenable to change, government officials and international donors are advised to recognize these constraints on village governance as the Village Law decentralizes resources and responsibilities to them.

The report progresses as follows. In the next section we provide some theoretical justification for our empirical exercise. Thereafter, we describe our data and methods. We present our results in section 4. In the concluding section we provide some general discussion of policy implications that emerge from the results.

2. Governance and Service Satisfaction: Background

[1] See World Bank (2010) for details on the VRRI surveys.

The new village law was designed with many objectives in mind, but among the more important were to fill a perceived shortfall in village infrastructure, to promote development, and further the process of decentralization. To that end, the law envisions a substantial increase in fiscal transfers to villages, robust village-level democratic procedures and vigorous local accountability. Despite these ambitions for the law, there has been little analytical work on village level governance, thanks in no small part to the paucity of village-representative surveys. Existing studies largely draw on qualitative fieldwork in select villages or an analysis of village-level outcomes for a broader set of localities. For example, Antlöv (2003), in response to the new post-1999 legal framework for village governance, highlights the importance of increased civil society engagement at the local level for democratic accountability in villages to be successful. This view is echoed in Bebbington et al. (2006), who equally emphasize the role of local social capital as an important factor for increasing village-level capacity. Apart from concerns about social capital and sufficient citizen engagement, others have pointed out the dangers of elite capture in a context of local democratic institutions. A few studies have engaged this issue in the Indonesian context. A World Bank study on community-driven development in Indonesia found no strong indication of wide-spread elite capture, but did find that reversing capture, if it occurred, was more likely when both elites and non-elites participated in democratic self-governance (Dasgupta and Beard 2007). Similarly, a recent study on elite capture in targeted government welfare programs found some evidence for capture by formal elites, but only with limited welfare implications (Alatas et al. 2013). The importance of elections at the village level has also been documented in the context of clientelistic electoral politics. Martinez-Bravo (2014) finds that villages with appointed heads feature a much stronger electoral alignment of results with the district level, compared to villages with elected officials.

These studies raise important points with regard to several issues surrounding village-level governance. Importantly though, they do not present any individual-level evidence with regard citizens' satisfaction with village governance and services provision. We provide such evidence below by conducting an analysis of VRRI survey responses. As Figure 1 below shows, villagers in the 32 villages are, *on average,* quite satisfied with their village leaders and village administrations.[2] Our goal is to provide insight into the individual- and village-level characteristics that are associated with variation in individual-level responses to perceptions of village services and governance quality. These characteristics might be of interest to policymakers working on putting the law into practice.

In conducting our investigation, we are guided by three bodies of research on the link between citizens and public sector outcomes. The first body of work suggests that citizens evaluate the public sector on its performance and that satisfaction with government is largely a function of retrospective evaluations of government effort and performance (Chanley, Rudolph & Rahn 2000). As government effort and outputs improve, so should citizen satisfaction. Second, a growing body of research suggests that social homogeneity, social trust and other features of social order have implications for public goods provision (Antlöv 2003 and Bebbington et al 2006). Whether because ethnic or religious diversity exacerbates collective action problems in the provision of public services or promotes zero-sum, group-wise perceptions of public effort, heterogeneity seems to be associated with weaker public goods outcomes. Third and finally, a body of work suggests that citizen satisfaction runs through their perceptions of the quality of democratic leadership and procedures (Levi & Sacks 2009, Sacks & Larizza 2012, Catterberg & Moreno 2006). Where citizens perceive procedures as fair, they feel included and have more positive evaluations of government outputs. In Olken (2010), this is true even when objective outcomes are the same. Below, we operationalize key elements of these arguments and subject them to empirical testing in order to

[2] In the figure, satisfaction is increasing on the 0-3 scale.

provide insight into the factors that shape how villages perceive local public services and governance.

3. Data and Methods

Our data comes from the VRRI surveys. The surveys were conducted in 2008 and 2009 over several waves and cover 120 respondents each in 32 villages across Indonesia. The project began with a census in each village and subsequent waves focused on different elements of village infrastructure, social networks, governance, etc. (see Appendix 1 for a list of villages).

We estimate a series of multivariate models in which a series of citizen evaluations of services and village governance serve as the response variables. The key dependent variables bearing on service provision are constructed from questions asking respondents whether they are satisfied with water service, education services, health services, and the process of getting an identification card. We also construct a service satisfaction index using principal component analysis.[3] The key dependent variables bearing on village governance are constructed from questions asking villagers their level of satisfaction with the village head, their satisfaction with village administration, and their trust in the village administration.

In those cases where the response variable is categorical—as with whether or not respondents are satisfied with services associated with water, education, health and issuance of identity cards—we estimate logit models with errors clustered on the village. Where our outcome measures are polychotomous or continuous—as with our village government satisfaction measures and the service satisfaction index—we estimate linear models with village-clustered standard errors.

We estimate three series of models, with each series introducing measures for independent variables bearing on the key literatures mentioned above, i.e. those that capture arguments bearing on government effort, social characteristics of the village, and the quality of local leaders and procedures. We measure government effort with reference to:

- Number of poverty programs available in the village
- Total village government expenditures
- Whether key village infrastructure—including water, roads, bridges and irrigation—have been maintained

We measure village social characteristic in the following manner:

- Average level of social trust among villagers
- Whether other ethnic groups are present in the village
- The size of the village, as measured by its population

Finally, we measure village leader and procedural characteristics in the following manner:

- Age of the village head
- Education of the village head
- Whether the respondent is aware of a corrupt incident in the village
- Respondent satisfaction with the electoral process

[3] The PCA includes citizen responses to questions about satisfaction with water, education, health, id card, road services, and the family card. The PCA reveals a major component with an eigenvalue of 2.87 that explains 48% of the variation in the satisfaction measures.

All models also incorporate a standard body of control variables, including the respondent's wealth, gender, age, education, employment status, and whether they are a government worker.[4] See Appendix 2 for variable names and descriptions.

4. Results

Although not the focus of our research, we did an initial analysis to see if objective indicators of access to services, including water infrastructure, distance to a community health clinic, and time it takes to get to school impact citizen assessments of service quality and village government. The results are reported in Appendix 3, Table 1 and suggest that citizen evaluations of specific services are generally responsive to objective measures of service access. Improved access to services is, indeed, associated with more positive assessments.

As we move on to the key results, we present them graphically rather than overwhelming the reader with tables. The figures below are rope-and-ladder plots of the coefficient estimates and corresponding confidence intervals derived from the multivariate models; the zero-line running through each figure represents no effect. Anytime the confidence interval crosses zero, the coefficient is insignificant. Each figure presents the effect of the independent variable of interest across a series of regressions, and the relevant dependent variables appear on the y-axis of the figures. For the interested reader, we report the tabular results in Appendix 3.

4.2 Results: Government Effort

Figure 1a and 1b present the results of a series of regressions of citizen satisfaction on individual-level controls and a series of measures of village government effort. The tabular results appear in Appendix 3, Table 3. Our measures of government effort include the number of poverty programs available in the village, village-level public expenditures, and whether maintenance has occurred on water infrastructure, roads, bridges, or irrigation infrastructure. As the figure indicates, village expenditures and bridge maintenance do not have a systematic relationship with any of the satisfaction measures, whether they reflect perceptions of services or the village government.

Figure 1a & 1b Here

The number of poverty programs, on the other hand, does have a systematic positive effect on satisfaction with some government services, particularly those bearing on identity cards, health and education.[5] The number of poverty programs available in villages ranges from 4 to 8.[6] That said, the coefficients in the top left of Figure 1a suggest that going from the minimum to the maximum number of poverty programs increases the probability of being satisfied with village id card

[4] The tables in the appendix exclude the dummy variables for employment status and government worker to simplify the presentation across models. This makes no difference to our findings.
[5] Some of these effects might driven by spillovers effects from increased satisfaction with government efforts in general – independent of specific efforts at the village level. The number of available poverty programs in each village is necessarily a flawed measure of effort, but does serve as a useful proxy in this context, because beneficiaries of these programs will interact with government officials more frequently.
[6] One village has access to four programs; 8 villages have access to five programs; 11 villages have access to six programs; 8 villages have access to seven programs; and 3 villages have access to eight programs.

services by about 20 percent, being satisfied with health services by 33 percent and being satisfied with education services by about 42 percent.[7]

Encouragingly, it also seems to be the case that in villages where the local government does work to maintain the water infrastructure, citizens are more satisfied with water service (see the point estimates and confidence intervals on the bottom-left of Figure 1a). The same goes with the overall service satisfaction index, labeled "Index" in the figure. The point estimate suggests that villages that maintain water see an increase in overall satisfaction with village services to the tune of about two-thirds of a standard deviation. Similar results are on display with regard to road maintenance (bottom right of Figure 1a); in villages that maintain roads, citizens have a more positive assessment of overall service quality. The picture with regards to village government is less clear—while village administrations that engage in road maintenance are more trusted by respondents, those respondent also have a lower level of satisfaction with village administration.[8]

The overall picture is mixed. Village government effort on maintenance, expenditures and social programs have no association with many indicators of citizen satisfaction with village services and government. In several cases, however, there is a positive association suggesting that government effort positively effects citizen satisfaction with some features of village governance.

4.3 Results: Village Diversity

Figure 2 presents the results of a series of regressions of citizen satisfaction on individual-level controls and a series of measures of village social characteristics. The key independent variables measure general social trust among villagers, whether villages are multiethnic, and their size. The results on this latter measure are null across the range of models.

Focusing on the top-left figure of Figure 2, social trust is associated with more positive citizen assessments of village government and overall services. While general trust has no association with specific services, be they water, health, education, etc., it is positively associated with our index of service satisfaction. The relationship with citizen perceptions of village government are uniformly positive, improving satisfaction with the village head, the village administration and trust in the village administration. To give a sense of the size of the effects implied by these coefficients, keep in mind that the average citizen in the average village gives their village head an approval score of 2.5 on a 0-3 scale, and their village administration a score of 2.3; they trust their village administration to the tune of 2.0. Going from a village in the 25th percentile of social trust to the 75th percentile is predicted to improve these scores to a 3 for village heads, 2.7 for village administrations, and 2.5 for trust in the administration. There is obviously uncertainty around these predictions and the baseline level of satisfaction with village government is quite high, but these are substantively important increases.

Figure 2 Here

[7] Conditional on mean values of other covariates, the baseline probability of approving each of these services when the number of poverty programs is at its minimum is: 52% for education, 69% for id cards, and 56% for health services.

[8] These potentially contradictory results could be a product of different sample sizes. Alternatively, it could be that trust in the village government goes up with maintenance, even as poor roads that need maintenance might lower satisfaction with the administration.

The results with regard to village ethnic heterogeneity are also quite consistent, albeit not encouraging. In general, the presence of multiple ethnic groups serves to depress satisfaction with services and village government. The relationship with water satisfaction is particularly negative. Going from a homogenous to a heterogeneous is associated with a 25% reduction in the probability of being satisfied with water service. The effects on perceptions of village government are less stark—switching to a heterogeneous village reduces trust in the village administration by a modest .1 on a 3 point and satisfaction with the administration by .13 on the same 3-point scale. These are modest predicted effects in light of fairly positive overall assessments of village administrations.

4.4 Results: Village Leadership and Political Processes

Finally, we turn to how features of village leadership and perceptions of the village political processes impact citizen satisfaction with village services and government. With regard to leadership, we focus on the effect of the education level and age of village heads on citizen satisfaction. With regard to political processes, we focus on how perception of elections and awareness of corruption impact citizen satisfaction.

Focusing first on the top-right hand figure of Figure 3, citizen knowledge of corruption in village government depresses citizen perceptions of most village-level outcomes. The point estimate, for instance, suggests that awareness of a corrupt incidence in a village reduces a respondent's likelihood of expressing satisfaction with health services by 10 percent. Similar effects are evident with respect to satisfaction with id cards and the overall service index. Likewise, the impact on perceptions of village government are uniformly negative. The coefficients suggest that in the average village, knowledge of corruption reduces predicted satisfaction with the village head from 2.4 to 1.8 on a 3-point scale, reduces satisfaction with the village administration from 2.3 to 1.9, and trust in the village administration from 2.0 to 1.6. With this data we cannot know if villagers are good at detecting corruption, but slightly more than 10 percent of respondents do claim to know of corruption in village administration and that knowledge is clearly associated with a decline in satisfaction with village government.

Figure 3 Here

The same basic dynamics characterize the relationship between elections and respondent satisfaction with village government and services. The bottom-right figure of Figure 3 shows that where citizens are satisfied with electoral processes, they have a more positive assessment of services and government. Taking water satisfaction as an example, the average respondent is predicted to have a 68 percent probability of approving of their water service; that probability goes up to 73 percent as that respondent moves from a 2 to a 3 on an index of satisfaction with the village elections. Similar effects are observed across the range of services. Turning to village governance, the effects of satisfaction with elections are quite strong. The same increase in election satisfaction noted above increases predicted satisfaction with the village head from 2.4 to 3, satisfaction with the village administration from 2.3 to 2.6, and trust in the administration from 2.0 to a modest 2.1.

Turning to characteristics of the village head, the top-right figure of Figure 3 shows no systematic relationship between their age and citizens satisfaction. The bottom-left figure, on the other hand, does suggest some systematic effect of the village head's education. In the sample, the village head's education is measured on a 0-5 point scale, with the average being a 2. The effect of education on the perceived quality of services is generally positive. Taking education as an example, the predicted probability of being satisfied with services goes from .59 to .89 as one moves from a

village with a leader that has the lowest level of education to one that has the highest. Simlar results hold for satisfaction with id card services and our index of service satisfaction. Interestingly, education is inversely related to satisfaction with the village head, although the effect is quite small.

Conclusion

These findings suggest that key features of the Village Law generate incentive compatibility between village citizens and leadership. Citizens care about village governance and services, and they are responsive to improvements in both. To the extent village leadership is responsive to the perceptions of village citizens, they will likely have incentives to improve governance and service quality. Hence, increased fiscal transfers to villages, as envisioned in the new village law, have the potential to increase citizen satisfaction if sufficiently translated into government effort. Moreover, we consistently found that satisfaction with the electoral process and absence of corruption increased citizen satisfaction across the board. This suggests large payoffs to paying particular attention to the implementation of the accountability provisions in the village law.

Appendix 1: Villages Included in the Analysis

1. BAGAK SAHWA
2. BONEPUTE
3. DATAR
4. KAYUARA
5. KOTABES
6. KROCOK
7. KUALA KARANG
8. KUANHEUM
9. LANGGENHARJO
10. LINAMNUTU
11. MAJA
12. MEDONO
13. MERDEKA
14. NANGA PAYAK
15. NOEBAUN
16. NUNKURUS
17. PONGSAMELUNG
18. RANTAU JAYA
19. SALU SOPA
20. SENDANG MULYO (Kragan sub-district)
21. SENDANG MULYO (Sluke sub-district)
22. SETAPUK KECIL
23. SIDODAD
24. SUNIARSIH
25. TAMAN ASRI
26. TANJUNG KERTA
27. TEGAL MULYO
28. TO PONGGO
29. TOHO ILIR
30. TOTO MULYO
31. WAEKECCEE
32. WAEMPUBBUE

Appendix 2: Variable Definitions and Descriptive Statistics

Variable Name	Operationalization
Socio-Economic Status	
Gender	Dummy for male/female.
Age	Numeric count of years.
Education	1-6 scale. Highest education point value derived from a question where points are assigned for different levels of schooling.
Water Infrastructure	Dummy taking 1 if a village has either public taps or PDAM present.
Time to School	Travel time to school, average across all children.
Dist Comm Health Center	Distance to community health center.
Applied for ID	Dummy for whether the respondent had applied for an idcard.
# Poverty Programs	Count of available poverty programs in village.
Village Expenditure	Total village expenditures
Water Maintenance	Dummy whether maintenance activity took place in the last 12 months.
Road Maintenance	Dummy whether maintenance activity took place in the last 12 months.
Bridge Maintenance	Dummy whether maintenance activity took place in the last 12 months.
Irrigation Maintenance	Dummy whether maintenance activity took place in the last 12 months.
General Trust	Average level of social trust among villagers derived from question: In general, how do you rate social trust in the village? 0-4 scale.
Other Ethnicity Present	Dummy for respondent answer to question: other ethnicity is present in village?
Village Population	Numeric count of village population.
Corruption Awareness	Dummy variable in response to question of whether respondent heard about a corruption case bearing on the Village Head Office in the last 2 years?
VH Age	Numeric count of years.
VH Education	1-7 indicator of village head's education level.
Election Satisfaction	0-3 indicator in response to respondent's satisfaction with the electoral process.
Dependent Variables	
Water	Dummy indicating satisfaction with water supply.
Education	Dummy indicating satisfaction with education services.
Health	Dummy indicating satisfaction with health services.
ID	Dummy indicating satisfaction with id card.
Index	Factor loadings on the first component of a principal component analysis of water, education, health, id card, road and family card satisfaction
Village Head	0-3 scale increasing in satisfaction with village head.
Village Admin	0-3 scale increasing in satisfaction with village administration.
Trust Vill Admin	0-3 scale increasing in trust in village administration.

APPENDIX 3: TABULAR RESULTS

TABLES AND FIGURES: CITIZENS SATISFACTION WITH VILLAGE PUBLIC SERVICES IN INDONESIA

1. EXPOSURE

TABLE 1. Determinants of Citizen Satisfaction, Exposure

	(1) Water	(2) Education	(3) Health	(4) ID	(5) Index	(6) Village Head	(7) Village Admin	(8) Trust Vill Admin
Socio-Economic Status	0.235^{+}	0.221^{+}	0.310*	0.287*	0.174*	-0.108*	-0.0449	-0.0641**
	(0.124)	(0.119)	(0.132)	(0.141)	(0.0811)	(0.0463)	(0.0397)	(0.0186)
Gender	0.759***	0.688***	0.497***	0.684***	0.667***	0.0430	0.0545	0.0484*
	(0.128)	(0.151)	(0.120)	(0.116)	(0.167)	(0.0479)	(0.0329)	(0.0234)
Age	0.0126***	0.0143*	0.00330	0.0126**	-0.00358	0.00472*	0.00589***	0.00176
	(0.00375)	(0.00556)	(0.00390)	(0.00443)	(0.00529)	(0.00180)	(0.00157)	(0.00125)
Education	-0.0323	-0.0136	-0.0254	-0.0540	-0.115*	-0.0204	0.00223	-0.0274***
	(0.0612)	(0.0818)	(0.0608)	(0.0658)	(0.0507)	(0.0214)	(0.0180)	(0.00717)
Water Infrastructure	-0.149				0.154	0.0472	-0.0577	-0.0341
	(0.420)				(0.288)	(0.126)	(0.0872)	(0.0403)
Time to School		-0.0138***			-0.00982**	-0.000858	0.00139	0.000194
		(0.00400)			(0.00291)	(0.00216)	(0.00122)	(0.000704)
Dist Comm Health Center			-0.0138**		-0.00308	0.00161	-0.00273	0.000729
			(0.00530)		(0.00816)	(0.00193)	(0.00165)	(0.00138)
Applied for ID				0.363*	0.196	-0.000347	-0.00872	0.000703
				(0.151)	(0.142)	(0.0609)	(0.0482)	(0.0183)
Constant	-0.770*	0.626	1.248***	0.578*	-0.0742	2.238***	2.092***	1.871***
	(0.347)	(0.410)	(0.274)	(0.277)	(0.270)	(0.146)	(0.101)	(0.0635)
Observations	2337	2173	3716	3348	1181	1609	1867	2065
Log-likelihood	-1565.9	-1076.8	-1859.1	-1474.7	-2238.1	-1957.3	-2123.7	-1133.9
AIC	3143.8	2165.6	3730.3	2961.4	4494.2	3932.5	4265.4	2285.9

Robust standard errors clustered by village.

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Date: May 21, 2014.

2. VILLAGE CHARACTERISTICS

TABLE 2. Determinants of Citizen Satisfaction, Village Characteristics

	(1) Water	(2) Education	(3) Health	(4) ID	(5) Index	(6) Village Head	(7) Village Admin	(8) Trust Vill Admin
Socio-Economic Status	0.217^{+}	0.257*	0.372**	0.314*	0.276**	-0.0727^{+}	-0.0410	-0.0576*
	(0.117)	(0.115)	(0.132)	(0.145)	(0.0970)	(0.0420)	(0.0309)	(0.0219)
Gender	0.670***	0.691***	0.578***	0.611***	0.556***	0.0608	0.0547	0.0509*
	(0.111)	(0.145)	(0.112)	(0.116)	(0.144)	(0.0356)	(0.0336)	(0.0195)
Age	0.0113***	0.0131**	0.00662^{+}	0.0112*	0.00527	0.00514**	0.00552***	0.00176**
	(0.00337)	(0.00460)	(0.00400)	(0.00493)	(0.00366)	(0.00172)	(0.00114)	(0.000618)
Education	0.0318	-0.0377	-0.0138	-0.0275	-0.0737	-0.00137	0.0111	-0.0280***
	(0.0520)	(0.0838)	(0.0749)	(0.0682)	(0.0613)	(0.0179)	(0.0166)	(0.00750)
General Trust	0.0382	-0.0847	-0.177	-0.0445	0.140*	0.127**	0.0865*	0.130***
	(0.0836)	(0.119)	(0.128)	(0.116)	(0.0620)	(0.0365)	(0.0323)	(0.0249)
Other Ethnicity Present	-1.085***	-0.243	-0.271	-0.712**	-0.593*	-0.000947	-0.129*	-0.0984**
	(0.304)	(0.277)	(0.272)	(0.244)	(0.217)	(0.0788)	(0.0540)	(0.0288)
Village Population	-0.000316	0.0000797	-0.0000231	0.000117	-0.0000884	0.0000763	-0.000108	-0.0000188
	(0.000363)	(0.000207)	(0.000258)	(0.000212)	(0.000234)	(0.000131)	(0.0000754)	(0.0000343)
Constant	0.488	0.657	1.400*	1.172*	-0.288	1.772***	2.122***	1.653***
	(0.951)	(0.574)	(0.653)	(0.515)	(0.595)	(0.241)	(0.181)	(0.0678)
Observations	2240	3239	3395	3101	1880	2632	2905	3288
Log-likelihood	-1419.0	-1605.4	-1704.4	-1366.7	-3587.0	-3196.9	-3281.1	-1819.5
AIC	2854.0	3226.8	3424.9	2749.4	7190.0	6409.7	6578.3	3655.0

Robust standard errors clustered by village.

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

3. GOVERNMENT EFFORT

TABLE 3. Determinants of Citizen Satisfaction, Government Effort

	(1) Water	(2) Education	(3) Health	(4) ID	(5) Index	(6) Village Head	(7) Village Admin	(8) Trust Vill Admin
Socio-Economic Status	-0.123	0.226	0.442*	0.227	0.0642	-0.0479	-0.0255	-0.0459
	(0.177)	(0.194)	(0.191)	(0.196)	(0.0977)	(0.0416)	(0.0295)	(0.0277)
Gender	0.392**	0.640***	0.413**	0.565***	0.404+	0.149***	0.0526	0.0428+
	(0.137)	(0.168)	(0.135)	(0.162)	(0.200)	(0.0363)	(0.0393)	(0.0204)
Age	0.00956	0.0144**	0.00407	0.0122**	0.00318	0.00440*	0.00419**	0.00111+
	(0.00636)	(0.00491)	(0.00401)	(0.00473)	(0.00444)	(0.00166)	(0.00132)	(0.000549)
Education	0.0955	0.114	0.0829	0.000236	-0.0369	-0.00970	-0.0129	-0.0276**
	(0.0606)	(0.110)	(0.0878)	(0.0760)	(0.0393)	(0.0231)	(0.0168)	(0.00818)
# Poverty Programs	0.312	0.734*	0.490*	0.361*	0.0157	-0.0448	0.0930	0.0218
	(0.341)	(0.342)	(0.219)	(0.166)	(0.299)	(0.0579)	(0.0574)	(0.0248)
Village Expenditure	1.69e-08	-3.77e-09	5.97e-09	-1.57e-10	1.17e-08+	-6.19e-10	1.77e-09	1.70e-09
	(1.04e-08)	(6.60e-09)	(7.57e-09)	(8.92e-09)	(6.55e-09)	(2.55e-09)	(2.94e-09)	(1.55e-09)
Water Maintenance	0.530*				0.409+	0.0809	0.0619	0.00675
	(0.210)				(0.196)	(0.0839)	(0.0690)	(0.0333)
Road Maintenance					0.307+	0.0669	-0.0641*	0.0597***
					(0.150)	(0.0450)	(0.0287)	(0.0134)
Bridge Maintenance					-0.162	0.0344	-0.00713	-0.0779
					(0.322)	(0.177)	(0.0959)	(0.0461)
Irrigation Maintenance					-0.0652	-0.000272	0.0440	0.0380
					(0.193)	(0.0744)	(0.0599)	(0.0280)
Constant	-3.469+	-3.849+	-2.254	-1.410	-1.485	2.354***	1.553**	1.638***
	(2.102)	(2.059)	(1.458)	(0.910)	(1.782)	(0.427)	(0.435)	(0.197)
Observations	1157	2071	2222	1947	900	1719	1784	2064
Log-likelihood	-748.7	-1044.7	-1196.8	-913.6	-1669.2	-2020.8	-1957.8	-1017.6
AIC	1513.5	2103.5	2407.7	1841.2	3360.5	4063.7	3937.7	2057.2

Robust standard errors clustered by village.

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

4. POLITICS

TABLE 4. Determinants of Citizen Satisfaction, Village Politics

	(1) Water	(2) Education	(3) Health	(4) ID	(5) Index	(6) Village Head	(7) Village Admin	(8) Trust Vill Admin
Socio-Economic Status	0.333	0.264	0.538*	0.199	0.233+	-0.0181	0.00802	-0.0254
	(0.341)	(0.175)	(0.227)	(0.176)	(0.114)	(0.0347)	(0.0433)	(0.0274)
Gender	1.304***	0.581***	0.453**	0.414*	0.573**	0.0374	0.0228	0.0531+
	(0.0706)	(0.156)	(0.149)	(0.183)	(0.150)	(0.0430)	(0.0504)	(0.0287)
Age	0.0190**	0.0150***	0.00864+	0.0131*	0.00375	0.00300	0.00493*	0.00191
	(0.00584)	(0.00434)	(0.00519)	(0.00602)	(0.00465)	(0.00193)	(0.00181)	(0.00118)
Education	-0.154+	-0.113	-0.126	-0.0917	-0.259*	0.0349+	0.0104	-0.0262
	(0.0791)	(0.0913)	(0.0988)	(0.0934)	(0.0918)	(0.0169)	(0.0255)	(0.0156)
Corruption Awareness	-0.524	-0.421+	-0.516*	-0.734**	-0.791*	-0.564***	-0.426***	-0.390***
	(0.398)	(0.222)	(0.217)	(0.242)	(0.349)	(0.133)	(0.0885)	(0.0451)
VH Age	0.0399	-0.0321	-0.0362	-0.0284	-0.0378	0.0146+	0.00193	-0.00527
	(0.0375)	(0.0272)	(0.0269)	(0.0230)	(0.0299)	(0.00686)	(0.00514)	(0.00460)
VH Education	0.393+	0.359*	0.237	0.470***	0.334*	-0.0529*	0.0300	-0.00657
	(0.236)	(0.156)	(0.184)	(0.129)	(0.113)	(0.0204)	(0.0263)	(0.0129)
Election Satisfaction	0.282*	0.304*	0.264**	0.269***	0.305**	0.647***	0.313***	0.111***
	(0.134)	(0.121)	(0.0930)	(0.0661)	(0.0723)	(0.0333)	(0.0310)	(0.0170)
Constant	-4.057*	0.127	1.013	0.404	-0.0610	0.0751	1.101***	1.871***
	(1.821)	(1.046)	(1.226)	(1.210)	(1.374)	(0.304)	(0.230)	(0.195)
Observations	856	1547	1646	1541	721	1661	1443	1601
Log-likelihood	-474.8	-829.3	-884.2	-694.8	-1352.6	-1729.2	-1586.8	-994.0
AIC	967.5	1676.6	1786.3	1407.7	2723.2	3476.4	3191.7	2006.0

Robust standard errors clustered by village.

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure 1: Mean Village Satisfaction
with Village Heads and Village Administration

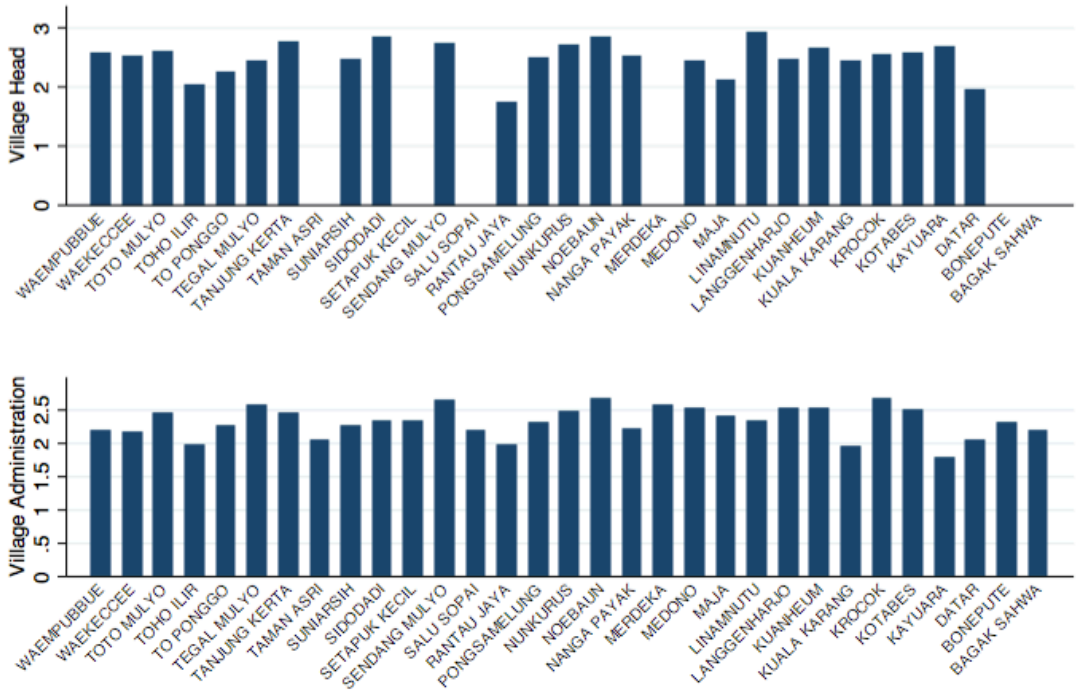
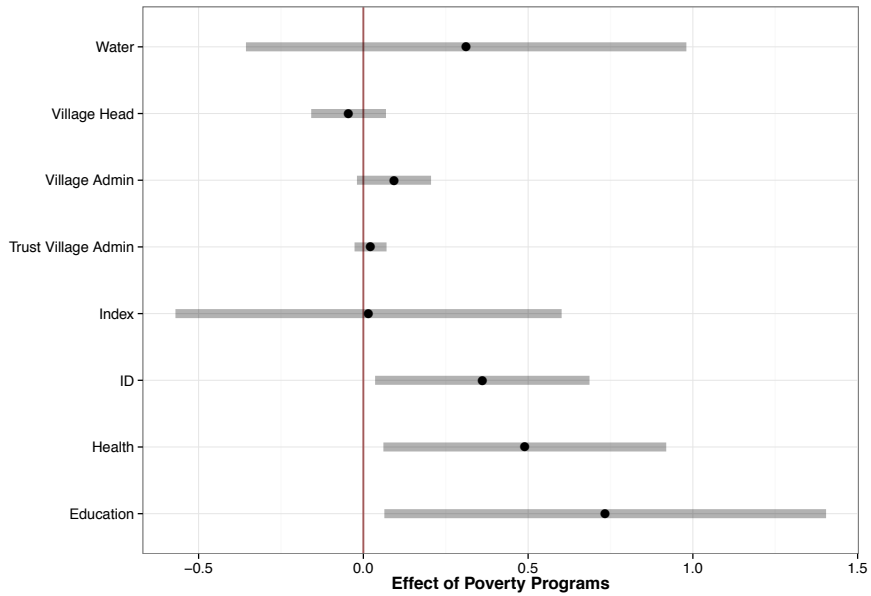
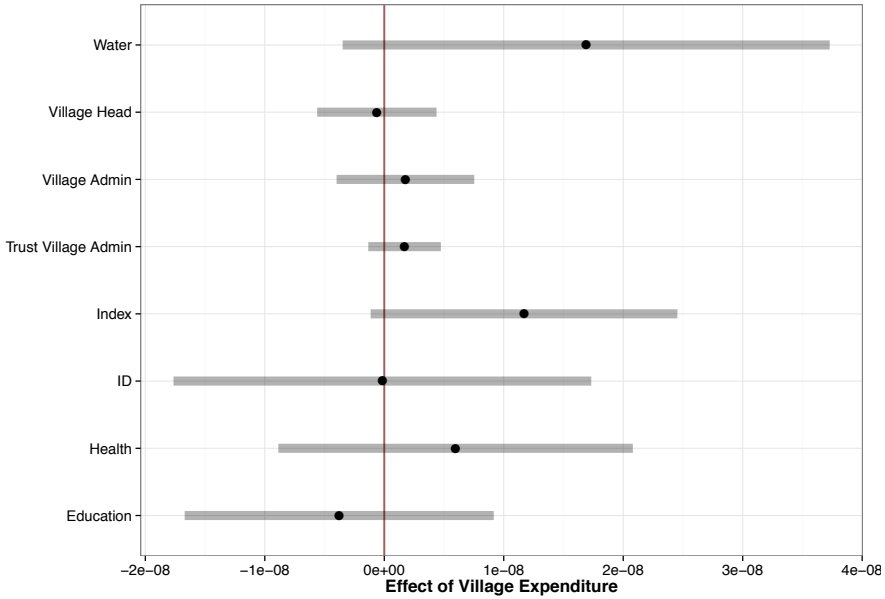
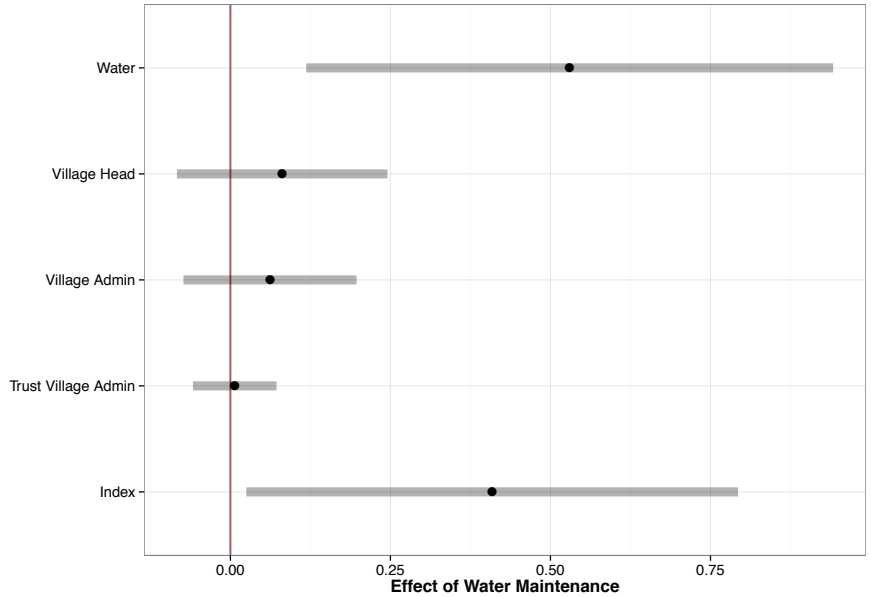


FIGURE 1a: EFFECT OF VILLAGE GOVERNMENT EFFORT ON APPROVAL
(Dependent Variables on Y-Axis)







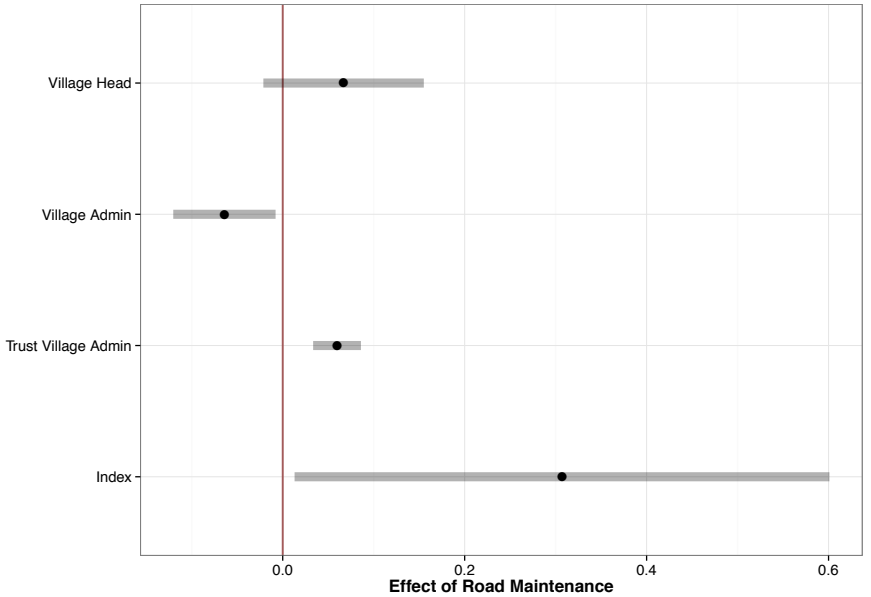
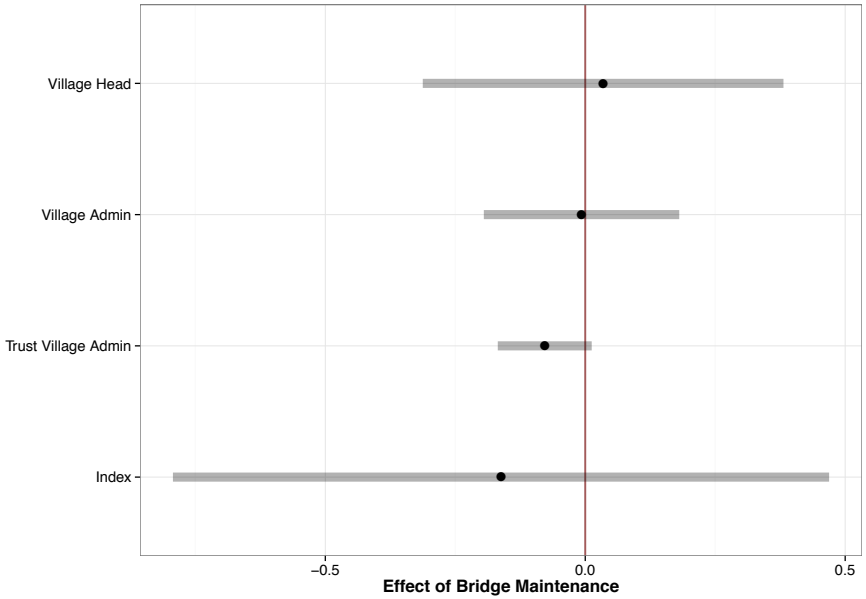


FIGURE 1b: EFFECT OF VILLAGE GOVERNMENT EFFORT ON APPROVAL
(Dependent Variables on Y-Axis)



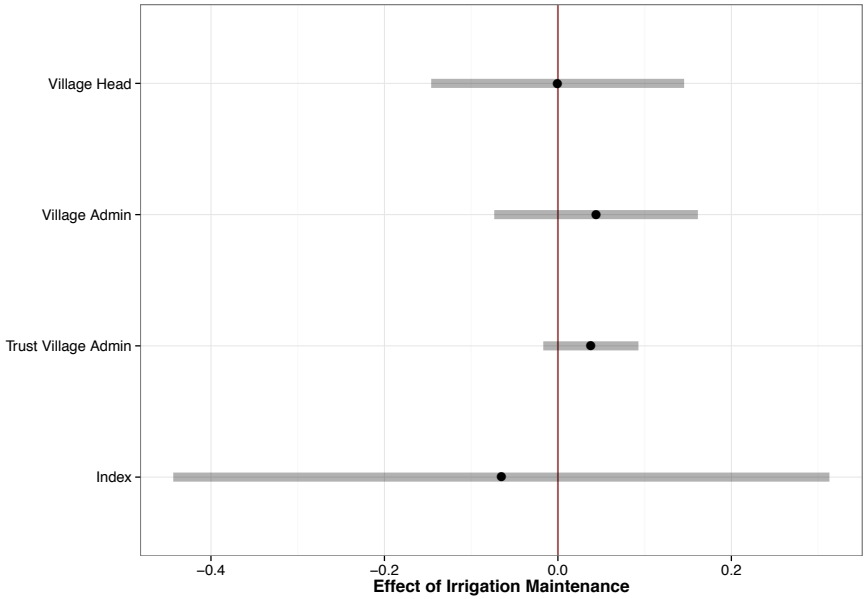
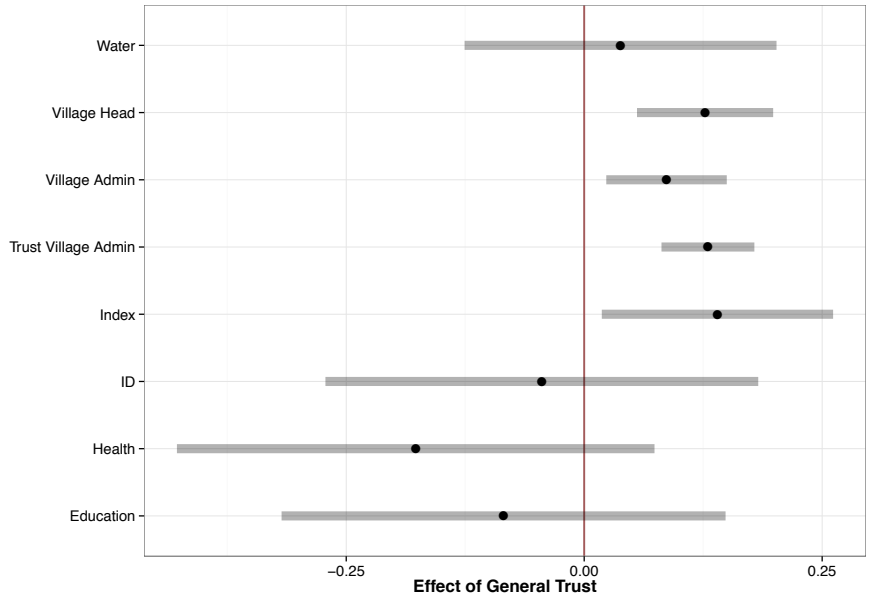
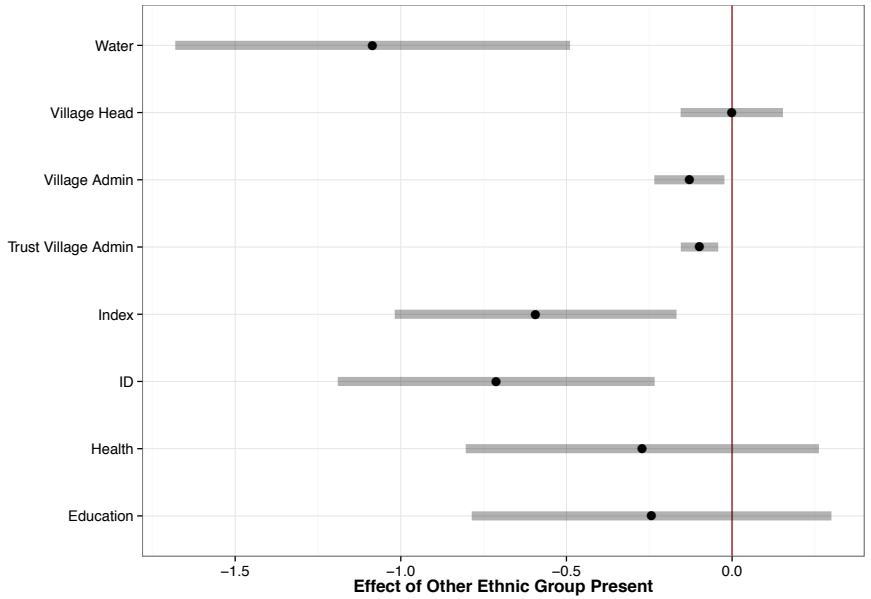


FIGURE 2: EFFECT OF VILLAGE SOCIAL CHARACTERISTICS ON APPROVAL
(Dependent Variables on Y-Axis)





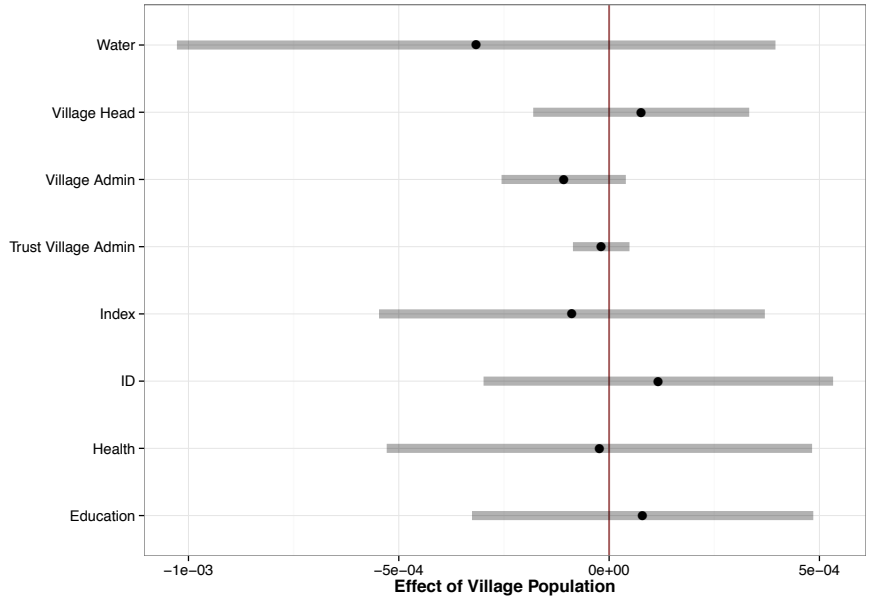


FIGURE 3: EFFECT OF VILLAGE LEADERSHIP AND POLITICAL PROCESSES ON APPROVAL
(Dependent Variables on Y-Axis)