On-line Appendices
How Political Insiders Lose Out When International Aid Underperforms:
Evidence from a Participatory Development Experiment in Ghana

Appendix A. Explaining Political Affiliation in Eastern Ghana

Table A1. Correlates of Political Affiliation

	(1) NDC Aligned HH	(2) NDC Aligned HH
Proportion Female	-0.084*	-0.087*
	(0.042)	(0.042)
Average Age	0.000	0.000
	(0.001)	(0.001)
Average Education	-0.003	-0.003
	(0.004)	(0.003)
Proportion Born in Community	0.028	0.024
	(0.028)	(0.028)
Proportion Akwapim	-0.136**	-0.077*
	(0.029)	(0.032)
Proportion Akyem	-0.147**	-0.111**
	(0.031)	(0.035)
Proportion Krobo	0.123**	0.075**
	(0.033)	(0.039)
Proportion Ewe	0.268**	0.295**
	(0.036)	(0.038)
Durable Asset Index	0.006	0.002
	(0.006)	(0.005)
Organizational Membership	-0.003	0.005
	(0.022)	(0.023)
District Fixed Effects	No	Yes
N	1,796	1,796
R-squared	0.112	0.136

Notes: + significant at 10 %; * significant at 5 %; ** significant at 1 %. Table reports coefficients from OLS regression model with robust standard errors in parentheses below.

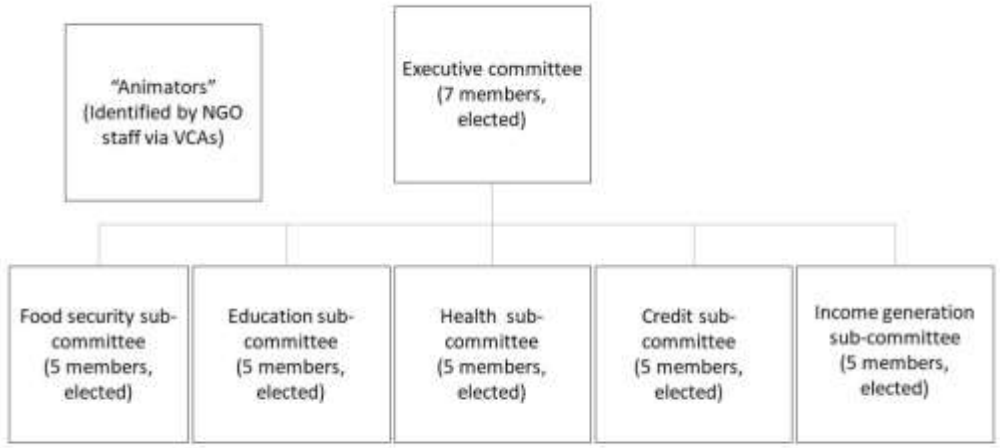
This appendix shows the correlates of households supporting the NDC at the beginning of our study; the outcome variable is whether a majority of adults in the household said they identified with the NDC. This is largely a function of ethnic identity, with households with more Krobo and Ewe members being more likely to identify with the NDC and households with more Akwapim and Akyem members being less likely to do so. In addition, households with more adult women were less likely to identify with the NDC, which likely reflects women's lower levels of partisan mobilization in Ghana.[1]

[1] The heterogeneous effects observed by partisanship in the manuscript are not observed when the sample is instead divided by the gender composition of households. (Results available upon request).

Appendix B. The Hunger Project's Participatory Development Approach

This appendix provides further details on The Hunger Project's (THP's) participatory development approach. THP begins its work with communities by organizing "vision, commitment and action" (VCA) workshops in which participants receive training in civic engagement and are encouraged to develop plans to improve their communities. These VCA workshops are repeated regularly throughout the course of the NGO's engagement with a community. Following the initial workshop, two types of leaders are selected to lead programming within their communities: "animators", volunteers identified as having strong leadership skills by the NGO staff who are then asked to help mobilize other community members, and THP committee members, who are elected by the community to oversee programming. Figure B1 illustrates the local leadership structure created as part of the THP process. There is often considerable overlap between animators and committee members, and both sets of leaders subsequently receive further leadership training by the NGO.

Figure B1. THP's participatory development institutions



Once community members demonstrate a commitment to devoting time and resources to collective goods following the initial VCA workshop, THP begins providing financial support for programming activities. At this point, it helps to facilitate the creation of "epicenters," which are community centers containing meeting halls, clinics, rural banks, foodbanks, toilets, a demonstration farm, and either a preschool or library. Once completed, these centers also run agricultural training programs, literacy classes and microfinance programs. THP provides funds to secure the title for the land for the community centers, it hires a contractor to oversee the construction of the center, and it provides some financial support for its education and microfinance programs. However, community members are also expected to devote significant resources in cash or in kind to support the construction of the center, and the goal is to have the local government provide support for many of the programs subsequently run out of the center. Thus, THP's model of change centers mainly around the effects of organizing workshops that develop leadership skills and civic mindedness, not on the effects of a capital infusion

into communities. THP's main emphasis is on engaging new leaders and to forming new community organizations that will help organize future collective activities to benefit the community. In fact, the THP model allows communities only marginal influence over how much resources to devote to different components of the multi-sectoral programming to which THP is committed; this contrasts with community-driven development programs that provide communities with cash grants but is fairly typical of many participatory development programs (Mansuri and Rao 2013; Mosse 2005). [2]

[2] For example, in one of our study communities, the committee decided not to build a community center as part of the programming.

Appendix C. Randomization Procedure

THP's model is intended to cater to groups of rural villages with combined populations of about 10,000 people. As a result, in each of the study districts, the research team first determined the communities that were eligible for inclusion in the study – to be eligible, villages had to have populations of less than 2000 people and be situated away from major roads – and then grouped them into village groupings ("clusters") in as naturalistic a way as possible. A public lottery was subsequently held in each district to determine which clusters would be invited to receive THP's programming. The lotteries were conducted by pulling names out of a hat in public, and so no stratification beyond the district level was possible. The lotteries were conducted between September 2006 and September 2008. Due to short-run capacity constraints, THP did not immediately begin engagement with all communities selected for treatment. Within treatment communities, programming was rolled out over a four-year period between 2008-2011.

After the district lotteries, representatives from the communities selected for treatment were invited to participate in a district-level VCA workshop to familiarize themselves with the THP process. The village chief and four other community representatives (2 male, 2 female) from all villages in selected groupings were invited to participate in the workshop.

Appendix D. Balance Statistics and Take-up Analysis

Table D1 shows that we fail to reject that treatment assignment is orthogonal to observable characteristics households and our main outcomes of interest. Each of the variables in this Table is an index. On average, treatment and control households demonstrated similar levels of civic participation and had similar perceptions of their village and district-level leaders. They also showed similar levels of food security, similar health and nutritional access and behaviors, similar access to services related to water, environment and sanitation, and similar economic livelihoods. The only index on which they are statistically significantly different at baseline was literacy and education, with control communities demonstrating higher levels at baseline.

Table D1. Balance Summary Statistics

	(1) Treatment (std dev)	(2) Control (std dev)	(3) Difference (se)	(4) N	(5) Village Took-Up Treatment (std dev)	(6) Village Did Not Take-Up Treatment (std dev)	(7) Difference (se)	(8) N
Community Participation Index	-0.277	-0.278	-0.018	3230	-0.111	-0.436	0.216*	1687
	(1.208)	(1.219)	(0.049)		(1.236)	(1.160)	(0.072)	
Accountability of Village Chief Index	0.408	0.406	0.016	3745	0.393	0.422	0.043	1939
	(1.015)	(1.018)	(0.043)		(1.036)	(0.992)	(0.057)	
Accountability of District	0.452	0.437	-0.001	3647	0.475	0.431	0.030	1897
Assemblymember Index	(1.384)	(1.431)	(0.083)		(1.370)	(0.045)	(0.088)	
Food Security Index	-0.955	-0.964	0.002	3645	-0.990	-0.920	-0.143**	1903
	(0.701)	(0.715)	(0.045)		(0.715)	(0.684)	(0.051)	
Literacy and Education Index	-0.201	-0.020	-0.186*	3786	-0.321	-0.074	-0.194+	1962
	(0.990)	(1.086)	(0.078)		(0.996)	(0.031)	(0.104)	
Health and Nutrition Index	0.550	0.487	-0.001	3786	0.658	0.434	0.473	1962
	(3.406)	(1.706)	(0.256)		(4.597)	(1.212)	(0.597)	
Water, Environment and Sanitation	-1.257	-0.952	-0.285	3582	-1.251	-1.263	0.350	1901
Index	(1.751)	(1.436)	(0.180)		(1.864)	(1.632)	(0.241)	
Livelihoods and Financial Inclusion	-0.080	-0.199	0.118	3786	-0.251	0.015	-0.172	1962
Index	(1.723)	(0.041)	(0.176)		(1.620)	(1.590)	(0.242)	
NDC Aligned Household	0.325	0.289	0.027	3267	0.352	0.298	0.023	1707
	(0.442)	(0.431)	(0.024)		(0.449)	(0.434)	(0.044)	

Notes: + significant at 10 %; * significant at 5 %; ** significant at 1 %. This Table reports baseline summary statistics from the main outcome measures at the household level. Columns (1) and (2) present means (with standard deviations in parentheses) of the treatment and control groups, respectively. Column (3) presents the difference and the standard error of the difference, calculated from an OLS regression model with district fixed effects and standard errors clustered at the unit of randomization (cluster). Column (4) indicates the N. Columns (5) and (6) present means (with standard deviations in parentheses) in the treatment communities that took up the treatment and that did not. Column (7) presents the difference between these communities (calculated as in column (3)), and column (8) indicates the N for this comparison.

Appendix E. Participation in and Governance Structures of THP

Table E1 compares THP leaders to the set of leaders who had ever held traditional leadership positions or held elected office in the village. Specifically, columns (1) through (5) of the table present data on the average (baseline) characteristics of respondents surveyed in our two-wave household survey. Column (1) displays the average characteristics of all adult respondents, column (2) presents the characteristics for respondents who had held a traditional office at some point (mainly village chiefs, subchiefs, linguists, queen mothers and other advisors), column (3) does this for respondents who had held a political office (mainly unit committee members, local party officials, and district assembly members), column (4) shows the characteristics of respondents who had participated in a THP workshop, and column (5) lists the characteristics of respondents who had held leadership positions within THP (animators and committee members). The last three columns of the table show the t-statistic from an unequal t-test comparing (6) the characteristics of all adults to the characteristics of VCA workshop participants; (7) the characteristics of traditional leaders to THP leaders; and (8) the characteristics of political leaders to THP leaders.

The individuals who took part in THP workshops tended to be different from the study communities more broadly. Workshop participants were significantly less likely to be women, significantly older, and significantly more educated than their communities more broadly. On these dimensions, program participants skewed towards those who are already advantaged in existing power structures. Yet, on other dimensions, the program was effective in bringing in disadvantaged community members. In particular, workshop participants were less wealthy (as measured by baseline asset ownership) and more dissatisfied with the president (as measured by trust in the president at baseline) than other community members (though it is noteworthy that they were not more dissatisfied with lower level political and traditional leaders).

In addition, THP managed to create leadership structures that were more inclusive of disadvantaged groups than either traditional institutions or elected institutions within the study communities. THP leaders were more likely to be female than either traditional or political leaders, and they were younger than traditional leaders. Furthermore, like THP workshop participants more generally, they were less wealthy and less aligned with the president at baseline. In this sense, THP's participatory approach appears to have been effective in placing individuals disadvantaged in other governance structures in leadership positions.

Table E1. THP Participants and Leaders Compared to their Communities and Preexisting Leaders

	(1) Mean adults (st. dev)	(2) Mean traditional leaders (st. dev)	(3) Mean political leaders (st. dev)	(4) Mean THP workshop participants (st. dev)	(5) Mean THP leaders (st. dev)	(6) Difference THP workshop vs. adults (st. error)	(7) Difference THP leaders vs. trad/pol. leaders (st. error)
Female	0.529	0.205	0.110	0.399	0.285	-0.130**	0.096
	(0.499)	(0.405)	(0.314)	(0.491)	(0.455)	(0.040)	(0.062)
	N=2942	N=195	N=100	N=163	N=63		
Age (years)	44.5	55.1	52.6	48.7	50.2	4.2**	-4.00**
	(17.5)	(13.1)	(12.1)	(12.6)	(10.3)	(1.04)	(1.52)
	N=2942	N=195	N=100	N=163	N=63		
Education	6.18	7.18	9.31	7.03	8.83	0.85**	1.21*
(highest grade)	(4.27)	(4.40)	(2.94)	(4.11)	(3.69)	(0.33)	(0.53)
	N=2922	N=194	N=98	N=163	N=63		
Born in village	0.436	0.407	0.505	0.432	0.503	-0.004	0.070
	(0.496)	(0.493)	(0.503)	(0.497)	(0.503)	(0.040)	(0.070)
	N=2920	N=194	N=99	N=162	N=63		
HH wealth	0.298	0.502	0.552	0.118	-0.039	-0.180**	-0.534+
index (baseline)	(2.100)	(2.653)	(2.254)	(0.183)	(1.820)	(0.046)	(0.302)
	N=2326	N=157	N=81	N=131	N=54		
Organization	0.668	0.688	0.842	0.826	0.905	0.158**	0.114+
member	(0.471)	(0.465)	(0.367)	(0.380)	(0.296)	(0.031)	(0.068)
(baseline)	N=2779	N=189	N=95	N=161	N=63		
NDC supporter	0.323	0.314	0.359	0.367	0.382	0.044	0.061
(baseline)	(0.437)	(0.440)	(0.453)	(0.450)	(0.454)	(0.039)	(0.067)
	N=2533	N=167	N=84	N=142	N=56		
NPP supporter	0.437	0.483	0.458	0.427	0.347	0.010	-0.121+
(baseline)	(0.458)	(0.469)	(0.457)	(0.462)	(0.458)	(0.039)	(0.069)
	N=2532	N=167	N=84	N=142	N=56		
Trust chief	3.06	3.16	3.11	3.05	3.06	-0.005	-0.094
(baseline)	(1.06)	(0.98)	(1.04)	(1.08)	(1.08)	(0.092)	(0.157)
	N=2507	N=168	N=85	N=145	N=58		

Notes: + significant at 10 %; * significant at 5 %; ** significant at 1 %. The first five columns report means, standard deviations (in parentheses) and N for: (1) all adults in treatment villages; (2) all who have held a traditional leadership position in treatment villages; (3) all who have held a political office in treatment villages; (4) all who have participated in a Vision, Commitment and Action workshop run by THP; and (5) all who have served as a leader in the context of THP programming, whether by acting as an animator or a committee member. Column (6) reports the difference in means between the adult population and the participants in the VCA workshops, with the standard error in parentheses. Column (7) reports the difference in means between traditional/political leaders and THP leaders, with the standard errors in parentheses.

Table E2. Exposure to THP Programming

	(1) Treatment Village Take-Up=1 (st. dev.)	(2) Treatment Village Take-Up=0 (st. dev.)	(3) Control mean (st. dev.)	(4) Difference Treatment vs. Control (st. error)	(5) Treatment Village, NDC HH (st. dev.)	(6) Treatment Village, Not NDC HH (st. dev.)	(7) Difference NDC HH vs. Not NDC HH (st. error)
Attended any Vision, Commitment and Action (VCA) session (binary)	0.100 (0.258) N=742	0.013 (0.101) N=665	0.000 (0.000) N=1337	0.058** (0.011)	0.065 (0.220) N=370	0.056 (0.194) N=854	-0.005 (0.035)
Number of VCA sessions attended in last 12 months	0.387 (1.651) N=742	0.030 (0.335) N=665	0.000 (0.000) N=1337	0.213** (0.052)	0.200 (1.143) N=370	0.231 (1.324) N=854	-0.045 (0.081)
Contributed to animator-led project (binary)	0.048 (0.181) N=742	0.011 (0.094) N=665	0.003 (0.044) N=1337	0.026** (0.005)	0.010 (0.070) N=370	0.016 (0.095) N=854	0.001 (0.010)
Attended THP fundraiser (binary)	0.093 (0.251) N=742	0.006 (0.074) N=665	0.001 (0.015) N=1337	0.050** (0.010)	0.017 (0.104) N=370	0.017 (0.101) N=854	-0.016 (0.014)
THP animator (binary)	0.024 (0.112) N=742	0.005 (0.052) N=665	0.000 (0.014) N=1337	0.014** (0.003)	0.028 (0.146) N=370	0.030 (0.146) N=854	-0.007 (0.005)
THP committee member (binary)	0.025 (0.119) N=742	0.007 (0.073) N=665	0.000 (0.000) N=1337	0.016** (0.004)	0.039 (0.172) N=370	0.055 (0.195) N=854	0.000 (0.007)
Any contact with THP programming (binary)	0.381 (0.440) N=742	0.041 (0.178) N=665	0.010 (0.089) N=1337	0.208** (0.034)	0.225 (0.374) N=370	0.195 (0.356) N=854	-0.005 (0.035)
Value of contributions to epicenter and associated programming (cedis)	57.9 (141.4) N=742	7.1 (47.4) N=665	0.8 (13.5) N=1337	30.7** (7.0)	39.5 (120.8) N=370	28.3 (87.3) N=854	8.130 (9.068)

Notes: +significant at 10%; * significant at 5%; ** significant at 1%. The first three columns report means, standard deviations (in parentheses) and N for households in treatment villages that took-up the treatment, households in treatment villages that did not take-up the treatment and households in control villages respectively. Column (4) reports the difference in means between households in villages assigned to treatment and control calculated via OLS regression with district fixed effects and standard errors (reported in parentheses) clustered at the unit of randomization (village cluster). The fifth and sixth columns report means, standard deviations (in parentheses) and N for NDC-aligned households and non-NDC aligned households in villages assigned to treatment. Column (7) reports the difference in means between NDC-aligned and non-NDC aligned households in treatment villages calculated via OLS regression with district fixed effects and standard errors (reported in parentheses) clustered at the unit of randomization (village cluster).

The breadth of inclusion in THP's programming is also apparent when we examine the proportion of the community included in various aspects of its programming and leadership activities in Table E2. This table begins by comparing the proportion of adults who participated in various THP programs across villages that took up the treatment (column 1) to those that failed to take up the treatment (column 2) and to those in the control group (column 3). The fourth column shows the difference in participation rates across all communities assigned to treatment and all communities assigned to control. Next, column 5 and 6 compare the rate of participation among NDC affiliated households and other households in treatment villages (regardless of take-up), with the seventh column indicating whether there were differences in participation rates based on partisan affiliation.

The first thing to note is that almost no one in the control communities participated in THP's programming. For each of the programs we consider, the control means approximate zero, and just 1 percent of the adults in the control communities had exposure to any of the programs or activities run by THP. In addition, the very low rates of programming in the communities that failed to take up the treatment suggest that these communities were not significantly exposed to programming after their decline of the invitation to take part. However, large proportions of the adult population participated in THP's programming in the village groupings that accepted treatment. In these villages, more than 11 percent of adults participated in VCA sessions, almost 10 percent contributed to a THP fundraiser, and 40 percent had participated in some kind of THP programming. THP's mobilization effort within communities is particularly impressive when one considers participation rates in other community-based development programs; for example, only 0.7 percent of the population is estimated to have participated in village development committee (VDC) member trainings as part of the Tuungane CDD program in the Eastern DRC (Humphreys, Sierra, and Windt 2014).

Appendix F. Attrition Analysis

This appendix examines whether treatment – either by itself or in interaction with baseline outcome variables – affects the likelihood of attrition. We find no evidence of this, as indicated by the F-tests presented at the bottom of the table.

Table F1. Household Attrition

	(1) Completed endline survey	(2) Completed endline survey	(3) Completed endline survey
Treatment	-0.007	-0.004	-0.014
	(0.018)	(0.018)	(0.034)
Treatment*Civic participation index			0.022
			(0.015)
Treatment*Quality of village leadership index			0.011
			(0.014)
Treatment*Perceptions of district leadership index			-0.007
			(0.012)
Treatment*Food security index			-0.015
			(0.023)
Treatment*Literacy and education index			0.013
			(0.018)
Treatment*Health and nutrition index			0.003
			(0.005)
Treatment*Environment index			-0.006
			(0.012)
Treatment*Livelihoods index			0.010
			(0.009)
Treatment*NDC-Aligned HH			-0.019
			(0.039)
Control mean	0.742	0.742	0.742
Straight effects for 9 measures	No	Yes	Yes
Treatment interacted with index effects	No	No	Yes
Observations	3786	3786	3786
p-value from F-test that treatment equals zero	0.721	0.817	
p-value from F-test that treatment interacted with indices jointly equals zero			0.684

Notes: + significant at 10%; * significant at 5%; ** significant at 1%. OLS intent-to-treat estimates (with standard errors in parentheses), clustered at the unit of randomization (village cluster). Each column reports results for a single OLS regression of the dependent variables listed in the columns. The dependent variable (non-attrition) is binary, taking 1 if the household was reached for both baseline and endline survey, and 0 if the household was only reached for the baseline and not the endline. All baseline control variables correspond to the outcome variables in Tables 2 & 5, as measured at baseline, with indices standardized to the endline control mean with mean 0 and standard deviation 1. For baseline observations that are missing, the variable is recoded to zero when missing, and a binary indicator of being missing is included into the regression.

Appendix G. Qualitative Data Collection and Results

The statistical analysis of the effects of the NGO's programming is complemented with qualitative evidence collected at two distinct time periods. In 2009, at the beginning of the project roll-out, a research team visited 4 treatment and 4 control villages, conducting multiple in-depth interviews and focus groups at each location. The treatment villages were purposefully selected to include two villages performing well and two villages performing poorly according to The Hunger Project's local staff. The control villages were selected so that they were each from the same district as the treatment villages and of approximately the same size and economic development level.

In 2015, researchers returned to 12 communities (7 treatment, 5 control), again conducting focus groups with citizens and in-depth interviews with community leaders, including individuals who took leadership positions in THP's activities, the elected district assemblyperson and district officials. Seven treatment villages were randomly selected from the districts with earliest exposure to THP in order to trace the effects of THP over the longest duration possible. The selected villages fell in five districts, and we randomly selected one control village in each of these districts for a total of five control villages.

The qualitative interviews found that the socioeconomic results of THP were ultimately disappointing for many participants, who expected larger infusions of capital into their communities. Qualitative interviews conducted in study communities in July 2009 during implementation of the program indicated extremely high expectations for the project, well represented in the following community member's comment: "Looking at how the THP has helped us … since they arrived, I believe when we work with them, most of our problems will cease."[3] However, these initially high expectations had faded by the time the endline interviews were done six years later, with one THP animator noting, "Because they said they were going to alleviate poverty, the community members thought that they were going to give us [more] money." Similarly, a local assemblymember pointed out that "our [community] involvement was very good. With the epicenter for instance we all used our strength to help. When there is something that we have to do, all the community come together to do it…," but the project was not financially sustainable without a greater influx of capital than was received: "We need money to run the activities at the epicenter. This money was not coming from anywhere…"[4]

In addition to the fact that the treated communities received less capital than expected, respondents noted other inefficiencies in THP's service delivery model compared to the local government's model. In particular, they noted the fact that the epicenter buildings were (by design) placed in locations off the main road network or with poor transport connections, making their services more difficult to access than government clinics, even if they were geographically closer as the bird flies.[5]

The promised benefits of greater levels of engagement with pre-existing governing institutions also failed to materialize. Citizens aligned with the NDC did become engaged in politics at all levels as a result

[3] Interview with male community member, treatment village, July 2009.
[4] Interview with THP animator, treatment village, August 2015; interview with assemblymember, treatment village, August 2015.
[5] Interview with THP animator, treatment village, August 2015.

of THP, which fits with interviewees' emphasis on the importance of partisan connections in mobilizing citizens for a wide range of activities in Ghana's Eastern Region. As one interviewee put it, "If you are a leader and people know your political affiliation and they see that you do not belong to their party, they won't attend communal labor when you call for one. I don't even know what to use to describe partisan politics…If someone knows that you do not belong to his party, he won't even respond to your greetings. It has really affected our relationships negatively." However, even in communities aligned with the incumbent NDC party, the increased levels of engagement with community and district-level government did not translate into more state investment in local public goods and services. In discussing the failure of state support to materialize, interviewees repeatedly noted both that district governments were not very forthcoming in support for the THP projects themselves, aside from sending a nurse to work at the clinic, and the limited influence of elected district assembly members over the local government budget.[6] In view of the limited political decentralization in Ghana, with the unelected DCE still maintaining a high degree of influence over the district budget, the expectation that better representation could result in better socioeconomic outcomes appears to have been unrealistic.

In view of the ultimately disappointing results of participatory development in this context, some citizens and governments overdisplaced resources from other projects in treated villages. For example, interviewees with budget officers indicated that the government took THP activities into account in developing its own plans in order to avoid duplicating efforts.[7] But insofar as the THP was not as efficient as the government in providing some services, these communities were harmed by the lack of state investment in these sectors. Importantly, THP projects probably looked particularly successful in NDC-aligned communities, where they generated higher levels of participation in other institutions too. As a result, the local government may have displaced more resources from these projects even without any additional pro-incumbent party bias in local government spending.

[6] Interview with assemblyman, community 1, August 2015; interview with assemblyman, community 2, August 2015; interview with assemblyman, community 3, August 2015; interview with assemblyman, community 4, August 2015.
[7] Interview with District Planning Officer, August 2015.

Appendix H. Index Construction and Components

TABLE H1. COMPONENTS OF MAIN POLITICAL INDICES

	(1) ITT Effect (standard error)	(2) TOT Effect (standard error)	(3) Control mean (standard dev.)	(4) N	(5) Baseline data included in model
Community Participation Index	0.054	0.103	0.000	2746	Yes
	(0.045)	(0.082)	(1.000)		
Associational membership	0.009	0.016	0.585	2745	No
	(0.016)	(0.030)	(0.430)		
Attended Last Community Meeting	0.021	0.040	0.472	2746	Yes
	(0.019)	(0.036)	(0.407)		
Raised Issue at Last Community Meeting	0.018	0.035	0.362	2745	Yes
	(0.017)	(0.032)	(0.397)		
Village Accountability Index	0.111*	0.211*	0.000	2744	Yes
	(0.047)	(0.091)	(1.000)		
Frequency of contact with village chief	0.283*	0.539*	4.767	2742	No
	(0.142)	(0.272)	(2.292)		
Extent to which can disagree with village chief	0.046	0.087	2.530	2741	Yes
	(0.049)	(0.093)	(1.249)		
Trust in village chief	0.087*	0.167*	3.667	2707	Yes
	(0.042)	(0.082)	(1.097)		
District Assemblymember Accountability Index	0.069	0.131	0.000	2792	Yes
	(0.072)	(0.131)	(1.000)		
Frequency of contact with District Assemblymember	0.062	0.118	0.993	2743	No
	(0.147)	(0.274)	(0.086)		
Satisfaction with District Assemblymember	0.070	0.132	2.089	2742	No
	(0.052)	(0.095)	(0.916)		
Trust in District Assemblymember	0.059	0.112	2.812	2792	Yes
	(0.078)	(0.144)	(1.293)		

Notes: +significant at 10%; * significant at 5%; ** significant at 1%. Column (1) presents OLS estimates (with standard errors reported in parentheses), clustered at the unit of randomization (village cluster), and controlled for district effects. Each row reports results for a single OLS regression. Column (2) reports 2SLS treatment-on-the-treated estimates (with standard errors reported in parentheses) with receiving an epicenter being the first stage clustered at the unit of randomization (village cluster). Column (3) reports endline control means (with standard deviations reported in parentheses). Column (4) reports the number of observations and the unit of observation. Column (5) reports whether baseline data is used in the model.

TABLE H2. COMPONENTS OF MAIN SOCIOECONOMIC INDICES

	(1) ITT Effect (standard error)	(2) TOT Effect (standard error)	(3) Control mean (standard dev.)	(4) N	(5) Baseline data included in model
Food Security Index	0.046	0.046	0.000	2749	Yes
	(0.046)	(0.046)	(1.000)		
Market price and access	0.032	0.058	0.000	2206	No
improvement	(0.050)	(0.092)	(1.000)		
(subindex of 2 indicators)					
Value of food consumption	-4.937*	-9.395*	73.1	2738	Yes
(weekly, GHC)	(2.061)	(4.118)	(56.4)		
Agriculture improvements	0.157**	0.298**	0.000	2739	Yes
(subindex of 5 indicators)	(0.057)	(0.110)	(1.000)		
Literacy and Education Index	-0.089	-0.171	0.000	2792	Yes
	(0.077)	(0.149)	(1.000)		
Education	0.005	0.010	0.000	2528	Yes
(subindex of 2 indicators)	(0.094)	(0.178)	(1.000)		
School quality	-0.116	-0.224	0.000	2116	Yes
(subindex of 3 indicators)	(0.135)	(0.256)	(1.000)		
Adult literacy/numeracy	-0.060+	-0.113+	0.000	2745	Yes
(subindex of 2 indicators)	(0.033)	(0.064	(1.000)		
Female adult literacy/numeracy	-0.069+	-0.130+	0.000	2326	Yes
(subindex of 2 indicators)	(0.039)	(0.075)	(1.000)		
No child labor	-0.046	-0.086	0.692	2792	Yes
	(0.063)	(0.118)	(0.462)		
Health and Nutrition Index	-0.064	-0.121	0.000	2792	Yes
	(0.087)	(0.166)	(1.000)		
Infant survival	-0.002	-0.003	0.993	250	No
	(0.010)	(0.016)	(0.086)		
Child anthropometry	-0.000	-0.000	0.000	1535	Yes
(subindex of 6 indicators)	(0.060)	(0.109)	(1.000)		
Health access	-0.088	-0.172	0.000	2792	Yes
(subindex of 7 indicators)	(0.157)	(0.311)	(1.000)		
Government health services	-0.141	-0.213	0.000	2792	No
(subindex of 9 indicators)	(0.152)	(0.223)	(1.000)		
Contraception usage	-0.012	-0.022	0.808	1005	No
	(0.027)	(0.050)	(0.385)		
Prenatal care	-0.034	-0.060	0.000	346	Yes
(subindex of 4 indicators)	(0.096)	(0.167)	(1.000)		
Postnatal care	-0.362**	-0.581**	0.000	213	Yes
(subindex of 9 indicators)	(0.135)	(0.211)	(1.000)		
Number of times immunized	0.308+	0.561+	9.195	1022	Yes
	(0.163)	(0.305)	(3.039)		
Survival	0.007*	0.012*	0.972	2792	No
	(0.003)	(0.006)	(0.085)		
HIV Knowledge	-0.091*	-0.173*	0.000	2758	Yes
(subindex of 4 indicators)	(0.041)	(0.080)	(1.000)		

TABLE H2. COMPONENTS OF MAIN SOCIOECONOMIC INDICES (CONTINUED)

	(1) ITT Effect (standard error)	(2) TOT Effect (standard error)	(3) Control mean (standard dev.)	(4) N	(5) Baseline data included in model
Water, Environment and	-0.107	-0.199	0.000	2792	Yes
Sanitation Index	(0.118)	(0.219)	(1.000)		
Public sanitation improvements	-0.211+	-0.398+	0.000	2792	Yes
(subindex of 2 indicators)	(0.120)	(0.226)	(1.000)		
Number of public water facility	-0.074	-0.137	0.859	2686	No
improvements	(0.104)	(0.190)	(0.884)		
Electricity availability (subindex of	-0.162	-0.302	0.000	2763	Yes
4 indicators)	(0.136)	(0.257)	(1.000)		
Agriculture conservation	0.183**	0.342**	0.000	2418	No
(subindex of 3 indicators)	(0.058)	(0.122)	(1.000)		
Livelihoods and Financial	0.103	0.194	0.000	2792	Yes
Inclusion Index	(0.087)	(0.160)	(1.000)		
Enterprise growth	0.022	0.042	0.000	2747	Yes
(subindex of 4 indicators)	(0.031)	(0.057)	(1.000)		
Durable assets	-0.027	-0.052	0.000	2750	Yes
(subindex of 7 indicators)	(0.050	(0.094)	(1.000)		
Farm investment	26.412	49.304	557.4	2396	Yes
(annual, GHC)	(71.389)	(132.695)	(1287.1)		
Household income	-59415.6	-113612.9	70222.8	2750	Yes
(annual, GHC)	(39428.5)	(75177.1)	(1710983.8)		
Financial inclusion - savings	0.062	0.116	0.000	2792	Yes
(subindex of 5 indicators)	(0.125)	(0.228)	(1.000)		
Financial inclusion - credit	0.294*	0.556*	0.000	2792	Yes
(subindex of 4 indicators)	(0.131)	(0.237)	(1.000)		
Non-food household	6.740	12.793	531.1	2741	Yes
expenditures (monthly, GHC)	(16.902)	(31.685)	(438.3)		

Notes: +significant at 10%; * significant at 5%; ** significant at 1%. Column (1) presents OLS estimates (with standard errors reported in parentheses), clustered at the unit of randomization (village cluster), and controlled for district effects. Each row reports results for a single OLS regression. Column (2) reports 2SLS treatment-on-the-treated estimates (with standard errors reported in parentheses) with receiving an epicenter being the first stage clustered at the unit of randomization (village cluster). Column (3) reports endline control means (with standard deviations reported in parentheses). Column (4) reports the number of observations and the unit of observation. Column (5) reports whether baseline data is used in the model.

TABLE H3. COMPONENTS OF MAIN SOCIOECONOMIC INDICES, NDC ALIGNED HHs

	ITT Effect (standard error)	TOT Effect (standard error)	Control mean (standard dev.)	N	Baseline data included in model
Food Security Index	0.017	0.032	0.131	680	Yes
	(0.076)	(0.140)	(1.69)		
Market price and access	0.078	0.140	0.126	550	No
improvement	(0.126)	(0.157)	(1.322)		
(subindex of 2 indicators)					
Value of food consumption	-9.979*	-18.545*	77.6	679	Yes
(weekly, GHC)	(4.196)	(7.994)	(69.5)		
Agriculture improvements	0.146	0.272	0.060	680	Yes
(subindex of 5 indicators)	(0.106)	(0.205)	(1.086)		
Literacy and Education Index	-0.090	-0.167	-0.155	690	Yes
	(0.099)	(0.176)	(1.035)		
Education	0.123	0.235	-0.156	618	Yes
(subindex of 2 indicators)	(0.134)	(0.257)	(0.991)		
School quality	-0.285**	-0.632**	0.111	441	Yes
(subindex of 3 indicators)	(0.106)	(0.215)	(0.687)		
Adult literacy/numeracy	-0.090	-0.167	-0.128	681	Yes
(subindex of 2 indicators)	(0.072)	(0.132)	(0.969)		
Female adult literacy/numeracy	-0.134+	-0.244*	-0.116	576	Yes
(subindex of 2 indicators)	(0.068)	(0.123)	(0.974)		
No child labor	0.010	0.018	0.685	690	Yes
	(0.064)	(0.116)	(0.465)		
Health and Nutrition Index	-0.244+	-0.454+	0.026	690	Yes
	(0.144)	(0.273)	(0.950)		
Infant survival	-0.032	-0.057	1.000	76	No
	(0.035)	(0.059)	(0.000)		
Child anthropometry	0.009	0.017	0.006	396	Yes
(subindex of 6 indicators)	(0.102)	(0.179)	(0.976)		
Health access	-0.063	-0.122	-0.083	690	Yes
(subindex of 7 indicators)	(0.182)	(0.348)	(0.977)		
Government health services	-0.298	-0.435	0.197	380	No
(subindex of 9 indicators)	(0.259)	(0.358)	(1.229)		
Contraception usage	-0.002	0.012	0.798	238	No
	(0.037)	(0.067)	(0.388)		
Prenatal care	-0.437+	-0.655+	0.069	95	Yes
(subindex of 4 indicators)	(0.250)	(0.381)	(0.894)		
Postnatal care	-0.213	-0.322	0.068	66	Yes
(subindex of 9 indicators)	(0.284)	(0.318)	(1.011)		
Number of times immunized	0.586+	0.981+	8.915	278	Yes
	(0.347)	(0.582)	(3.237)		
Survival	-0.005	-0.009	0.975	690	Yes
	(0.006)	(0.012)	(0.071)		
HIV Knowledge	-0.196*	-0.363*	-0.065	681	Yes
(subindex of 4 indicators)	(0.090)	(0.168)	(0.993)		

TABLE H3. COMPONENTS OF MAIN SOCIOECONOMIC INDICES, NDC ALIGNED HHs (CONTINUED)

	ITT Effect (standard error)	TOT Effect (standard error)	Control mean (standard dev.)	N	Baseline data included in model
Water, Environment and Sanitation Index	-0.250+ (0.144)	-0.460 (0.282)	-0.080 (1.121)	690	Yes
Public sanitation improvements (subindex of 2 indicators)	-0.350** (0.125)	-0.650* (0.272)	-0.091 (1.122)	690	Yes
Number of public water facility improvements	-0.181 (0.144)	-0.332 (0.267)	0.855 (0.951)	661	No
Electricity availability (subindex of 4 indicators)	-0.281+ (0.167)	-0.511 (0.316)	-0.067 (1.026)	679	Yes
Agriculture conservation (subindex of 3 indicators)	0.136 (0.086)	0.248 (0.161)	0.056 (0.973)	609	No
Livelihoods and Financial Inclusion Index	-0.001 (0.115)	-0.002 (0.207)	-0.037 (1.061)	690	Yes
Enterprise growth (subindex of 4 indicators)	0.096 (0.066)	0.179 (0.122)	-0.107 (1.018)	680	Yes
Durable assets (subindex of 7 indicators)	0.016 (0.044)	0.029 (0.081)	-0.157 (0.547)	681	Yes
Farm investment (annual, GHC)	67.7 (80.0)	122.75 (146.42)	487.2 (900.6)	608	Yes
Household income (annual, GHC)	-201702.8 (183863.4)	-376114.3 (341373.3)	188579.5 (3105460.7)	681	Yes
Financial inclusion - savings (subindex of 5 indicators)	0.000 (0.137)	0.000 (0.248)	-0.004 (0.952)	690	Yes
Financial inclusion - credit (subindex of 4 indicators)	0.069 (0.157)	0.126 (0.278)	0.048 (0.972)	690	Yes
Non-food household expenditures (monthly, GHC)	-53.1+ (29.0)	-98.8+ (53.7)	561.4 (406.7)	690	Yes

Notes: *significant at 10%; ** significant at 5%; *** significant at 1%. Column (1) presents OLS estimates (with standard errors reported in parentheses), clustered at the unit of randomization (village cluster), and controlled for district effects. Each row reports results for a single OLS regression. Column (2) reports 2SLS treatment-on-the-treated estimates (with standard errors reported in parentheses) with receiving an epicenter being the first stage clustered at the unit of randomization (village cluster). Column (3) reports endline control means (with standard deviations reported in parentheses). Column (4) reports the number of observations and the unit of observation. Column (5) reports whether baseline data is used in the model.

TABLE H4. COMPONENTS OF MAIN SOCIOECONOMIC INDICES, NON-NDC ALIGNED HHs

	(1) ITT Effect (standard error)	(2) TOT Effect (standard error)	(3) Control mean (standard dev.)	(4) N	(5) Baseline data included in model
Food Security Index	0.045	0.096	-0.042	1707	Yes
	(0.051)	(0.109)	(0.952)		
Market price and access	0.032	0.066	-0.072	1361	No
improvement	(0.056)	(0.118)	(0.870)		
(subindex of 2 indicators)					
Value of food consumption	-2.890	-6.165	71.6	1699	Yes
(weekly, GHC)	(2.194)	(4.893)	(52.8)		
Agriculture improvements	0.126*	0.268*	0.003	1700	Yes
(subindex of 5 indicators)	(0.063)	(0.132)	(0.995)		
Literacy and Education Index	-0.120	-0.260	0.057	1732	Yes
	(0.090)	(0.199)	(1.012)		
Education	-0.040	-0.084	0.000	1579	Yes
(subindex of 2 indicators)	(0.114)	(0.237)	(1.013)		
School quality	-0.217+	-0.464+	0.098	1368	Yes
(subindex of 3 indicators)	(0.127)	(0.276)	(0.973)		
Adult literacy/numeracy	-0.070+	-0.150+	0.069	1703	Yes
(subindex of 2 indicators)	(0.036)	(0.080)	(1.010)		
Female adult literacy/numeracy	-0.078+	-0.164+	0.062	1437	Yes
(subindex of 2 indicators)	(0.043)	(0.090)	(1.014)		
No child labor	-0.029	-0.062	0.697	1732	Yes
	(0.072)	(0.153)	(0.460)		
Health and Nutrition Index	-0.046	-0.099	0.007	1732	Yes
	(0.083)	(0.178)	(0.994)		
Infant survival	0.011	0.020	0.985	142	No
	(0.012)	(0.020)	(0.121)		
Child anthropometry	0.024	0.050	-0.020	944	Yes
(subindex of 6 indicators)	(0.076)	(0.157)	(0.997)		
Health access	-0.128	-0.286	0.031	1732	Yes
(subindex of 7 indicators)	(0.180)	(0.414)	(1.028)		
Government health services	-0.116	-0.192	-0.053	1166	Yes
(subindex of 9 indicators)	(0.150)	(0.240)	(0.916)		
Contraception usage	-0.039	-0.077	0.818	645	No
	(0.033)	(0.067)	(0.377)		
Prenatal care	0.109	0.219	-0.045	200	Yes
(subindex of 4 indicators)	(0.118)	(0.220)	(1.036)		
Postnatal care	-0.406*	-0.713*	-0.077	120	Yes
(subindex of 9 indicators)	(0.177)	(0.293)	(0.952)		
Number of times immunized	0.165	0.339	9.421	609	Yes
	(0.184)	(0.376)	(2.856)		
Survival	0.006	0.013	0.974	1732	No
	(0.004)	(0.008)	(0.083)		
HIV Knowledge	-0.061	-0.131	0.011	1714	Yes
(subindex of 4 indicators)	(0.053)	(0.116)	(1.028)		

TABLE H4. COMPONENTS OF MAIN SOCIOECONOMIC INDICES, NON-NDC ALIGNED HHs (CONTINUED)

	(1) ITT Effect (standard error)	(2) TOT Effect (standard error)	(3) Control mean (standard dev.)	(4) N	(5) Baseline data included in model
Water, Environment and Sanitation Index	-0.096	-0.204	0.085	1732	Yes
	(0.132)	(0.273)	(0.977)		
Public sanitation improvements (subindex of 2 indicators)	-0.175	-0.374	0.046	1732	Yes
	(0.135)	(0.283)	(0.996)		
Number of public water facility improvements	-0.035	-0.073	0.922	1660	No
	(0.119)	(0.245)	(0.903)		
Electricity availability (subindex of 4 indicators)	-0.200	-0.421	0.073	1716	Yes
	(0.147)	(0.311)	(1.006)		
Agriculture conservation (subindex of 3 indicators)	0.173*	0.365*	0.008	1487	No
	(0.071)	(0.161)	(1.041)		
Livelihoods and Financial Inclusion Index	0.078	0.165	0.052	1732	Yes
	(0.095)	(0.194)	(1.008)		
Enterprise growth (subindex of 4 indicators)	-0.024	-0.052	0.057	1705	Yes
	(0.046)	(0.099)	(0.955)		
Durable assets (subindex of 7 indicators)	-0.058	-0.125	0.070	1707	Yes
	(0.065)	(0.136)	(1.156)		
Farm investment (annual, GHC)	-1.915	-4.026	593.1	1474	Yes
	(85.8)	(178.5)	(1480.7)		
Household income (annual, GHC)	-33372.7	-71322.2	41033.6	1707	Yes
	(31162.5)	(65934.2)	(1045519.2)		
Financial inclusion - savings (subindex of 5 indicators)	0.014	0.028	0.044	1732	Yes
	(0.151)	(0.312)	(1.077)		
Financial inclusion - credit (subindex of 4 indicators)	0.332*	0.702*	0.004	1732	Yes
	(0.140)	(0.273)	(1.048)		
Non-food household expenditures (monthly, GHC)	21.5	45.6	523.9	1701	Yes
	(20.9)	(43.6)	(448.4)		

Notes: +significant at 10%; * significant at 5%; ** significant at 1%. Column (1) presents OLS estimates (with standard errors reported in parentheses), clustered at the unit of randomization (village cluster), and controlled for district effects. Each row reports results for a single OLS regression. Column (2) reports 2SLS treatment-on-the-treated estimates (with standard errors reported in parentheses) with receiving an epicenter being the first stage clustered at the unit of randomization (village cluster). Column (3) reports endline control means (with standard deviations reported in parentheses). Column (4) reports the number of observations. Column (5) reports whether baseline data was included in the model.

TABLE H5. COMPONENTS OF SUBINDICES

	(1) ITT Effect (standard error)	(2) TOT Effect (standard error)	(3) Control mean (standard dev.)	(4) No. HHs	(5) No. Villages	(5) Baseline data included in model	(6) Level of data collection
Market price and access improvement subindex	0.032	0.058	0.000	2206	194	No	
	(0.050)	(0.092)	(1.000)				
Maize market price (GHC)	-55.4	-105.179	136.3	1048	187	No	Household
	(41.2)	(78.316)	(1103.8)				
Sold maize (binary)	0.030	0.056	0.476	2206	194	No	Household
	(0.029)	(0.054)	(0.540)				
Agriculture improvements subindex	0.157**	0.298**	0.000	2739	194	Yes	
	(0.057)	(0.110)	(1.000)				
Number of farm improvements	0.286**	0.535**	1.165	2418	194	No	Household
	(0.082)	(0.168)	(1.421)				
Farm output market value (annual, GHC)	121.9	221.861	2294.3	2126	192	Yes	Household
	(241.4)	(433.276)	(5491.3)				
Number of cultivated acres	0.242	0.452	5.029	2412	194	No	Household
	(0.396)	(0.733)	(12.2)				
Current livestock value (GHC)	272.1	510.514	791.8	2251	194	No	Household
	(179.3)	(346.837)	(1941.5)				
Number of types of livestock owned	0.088	0.167	1.480	2738	194	No	Household
	(0.054)	(0.103)	(1.085)				
Education subindex	0.005	0.010	0.000	2528	194	Yes	
	(0.094)	(0.178)	(1.000)				
Highest number of years of education	-0.039	-0.071	3.322	2004	194	Yes	Household
	(0.129	(0.234)	(2.794)				
Average school attendance percentage in community	0.015	0.029	0.822	1938	132	Yes	Village
	(0.013)	(0.026)	(0.089)				
School quality subindex	-0.116	-0.224	0.000	2116	144	Yes	
	(0.135)	(0.256)	(1.000)				
Hours in school day	-0.149+	-0.345	6.460	1695	115	Yes	Village
	(0.088)	(0.197)	(0.862)				
Years of education of instructors	0.326	0.704	14.552	1882	129	Yes	Village
	(0.244)	(0.548)	(1.562)				
Teacher-student ratio	-0.048	-0.073	0.101	1890	129	Yes	Village
	(0.032)	(0.061)	(0.245)				
Adult literacy/numeracy subindex	-0.060+	-0.113+	0.000	2745	194	Yes	
	(0.033)	(0.064	(1.000)				
Literate (binary)	-0.021+	-0.040	0.439	2745	194	Yes	Individual
	(0.012)	(0.024)	(0.385)				
Numerate (binary)	-0.019	-0.036	0.623	2745	194	Yes	Individual
	(0.014)	(0.027)	(0.381)				
Female adult literacy/numeracy subindex	-0.069+	-0.130+	0.000	2326	194	Yes	
	(0.039)	(0.075)	(1.000)				
Literate (binary)	-0.036*	-0.068*	0.319	2326	194	Yes	Individual
	(0.016)	(0.031)	(0.408)				
Numerate (binary)	-0.016	-0.031	0.520	2326	194	Yes	Individual
	(0.018)	(0.034)	(0.448)				

TABLE H5. COMPONENTS OF SUBINDICES (CONTINUED, PAGE 2)

	(1) ITT Effect (standard error)	(2) TOT Effect (standard error)	(3) Congtrol mean (standard dev.)	(4) No. HHs	(5) No. Villages	(5) Baseline data included in model	(6) Level of data collection
Child anthropometry subindex	-0.000	-0.000	0.000	1535	194	Yes	
	(0.060)	(0.109)	(1.000)				
Height (cm), age 2 through 5	-0.995	-1.801	96.9	821	186	No	Individual
	(0.990)	(1.796)	(12.4)				
Weight (kg), age 2 through 5	-0.090	-0.163	12.6	821	186	Yes	Individual
	(0.239	(0.426)	(3.247)				
Arm circumference (cm), age 2 through 5	-0.064	0.118	15.8	819	186	Yes	Individual
	(0.109)	(0.199)	(1.833				
Height (cm), age 6 through 12	0.972	1.807	124.6	1315	193	Yes	Individual
	(1.083)	(2.011)	(17.8)				
Weight (kg), age 6 through 12	0.284	0.524	23.2	1315	193	Yes	Individual
	(0.381)	(0.704)	(6.926)				
Arm circumference (cm), age 6 through 12	0.049	0.091	18.2	1315	193	Yes	Individual
	(0.139)	(0.257)	(2.289)				
Health access subindex	-0.088	-0.172	0.000	2792	194	Yes	
	(0.157)	(0.311)	(1.000)				
Health center built since 2008	0.043	0.081	0.159	2792	194	No	Village
	(0.066)	(0.123)	(0.366)				
Number of types of immunizations available in nearest health center	-0.788+	-1.297+	6.072	1721	116	Yes	Village
	(0.434)	(0.730)	(1.633)				
Number of average patients (daily) treated in nearest health center	-5.538	-8.042	23.9	1690	114	Yes	Village
	(4.355)	(6.451)	(23.3)				
Prenatal care availability in nearest health center (binary)	-0.040	-0.076	0.853	1745	118	Yes	Village
	(0.069)	(0.110)	(0.354)				
Delivery availability in nearest health center (binary)	0.013	0.017	0.573	1745	118	Yes	Village
	(0.097)	(0.151)	(0.495)				
Number of beds in nearest health center	0.188	0.317	3.047	1676	113	Yes	Village
	(0.658)	(0.969)	(3.554)				
Number of days per week head of nearest health center works	0.358+	0.558+	6.200	1734	117	No	Village
	(0.204)	(0.324)	(1.115)				

TABLE H5. COMPONENTS OF SUBINDICES (CONTINUED, PAGE 3)

	(1) ITT Effect (standard error)	(2) TOT Effect (standard error)	(3) Control mean (standard dev.)	(4) No. HHs	(5) No. Villages	(5) Baseline data included in model	(6) Level of data collection
Government health services subindex	-0.141 (0.152)	-0.213 (0.223)	0.000 (1.000)	1717	116	No	
Frequency of visits to chlorinate wells (0 = never, 7 = once a week)	-0.143 (0.226)	-0.214 (0.329)	0.566 (1.460)	1702	115	No	Village
Frequency of visits to provide malaria eradication services (0 = never, 7 = once a week)	0.181 (0.394)	0.286 (0.595)	2.006 (2.207)	1717	116	No	Village
Frequency of visits to provide pre- and post-natal care (0 = never, 7 = once a week)	-0.199 (0.411)	-0.301 (0.611)	1.402 (2.138)	1717	116	No	Village
Frequency of visits to provide nutritional supplements (0 = never, 7 = once a week)	0.010 (0.360)	0.014 (0.539)	0.813 (1.785)	1717	116	No	Village
Frequency of visits to provide general health education (0 = never, 7 = once a week)	-0.313 (0.360)	-0.471 (0.535)	1.926 (2.259)	1717	116	No	Village
Frequency of visits to provide family planning education (0 = never, 7 = once a week)	-0.408 (0.411)	-0.617 (0.592)	2.044 (2.331)	1717	116	No	Village
Frequency of visits to distribute condoms (0 = never, 7 = once a week)	-0.373 (0.331)	-0.565 (0.484)	1.020 (1.973)	1717	116	No	Village
Frequency of visits to provide HIV/AIDS education (0 = never, 7 = once a week)	-0.836* (0.396)	-1.266* (0.626)	1.859 (2.272)	1717	116	No	Village
Frequency of visits to provide guinea worm education & eradication (0 = never, 7 = once a week)	-0.087 (0.372)	-0.133 (0.559)	2.049 (2.433)	1706	115	No	Village
Prenatal care subindex	-0.034 (0.096)	-0.060 (0.167)	0.000 (1.000)	346	162	Yes	
Received some prenatal care (binary)	-0.002 (0.035)	-0.003 (0.061)	0.839 (0.366)	346	162	Yes	Individual
Earliness of prenatal care ((40-week of pregnancy in which prenatal care began)/40)	-0.014 (0.027)	-0.024 (0.048)	0.627 (0.308)	344	162	Yes	Individual
Went to a "good" prenatal practitioner (binary)	-0.003 (0.036)	-0.006 (0.062)	0.839 (0.366)	346	162	Yes	Individual
Number of times went to prenatal care	-0.259 (0.348)	-0.456 (0.614)	4.716 (3.434)	346	162	Yes	Individual

TABLE H5. COMPONENTS OF SUBINDICES (CONTINUED, PAGE 4)

	(1) ITT Effect (standard error)	(2) TOT Effect (standard error)	(3) Control mean (standard dev.)	(4) No. HHs	(5) No. Villages	(5) Baseline data included in model	(6) Level of data collection
Postnatal care subindex	-0.362**	-0.581**	0.000	213	213	Yes	
	(0.135)	(0.211)	(1.000)				
Received some postnatal care (binary)	-0.040	-0.065	0.900	131	213	Yes	Individual
	(0.039)	(0.060)	(0.298)				
Number of times went to postnatal care	-0.382	-0.605	4.752	131	213	Yes	Individual
	(0.595)	(0.903)	(4.250)				
Child breastfed (binary)	-0.009	-0.014	1.000	131	213	No	Individual
	(0.006)	(0.010)	(0.000)				
Child not given water before 6 months (binary)	-0.065	-0.104	0.643	130	212	No	Individual
	(0.067)	(0.101)	(0.481)				
Child not given liquid before 6 months (binary)	-0.106*	-0.170*	0.757	130	212	No	Individual
	(0.052)	(0.079)	(0.431)				
Child not given solid food before 6 months (binary)	-0.031	-0.052	0.956	129	211	No	Individual
	(0.032)	(0.048)	(0.206)				
Height (cm), age < 2	-3.011+	-4.522+	64.3	128	196	No	Individual
	(1.765)	(2.575)	(15.3)				
Weight (kg), age < 2	-0.565+	-0.857+	7.461	128	197	Yes	Individual
	(0.335)	(0.487)	(2.485)				
Arm circumference (cm), age < 2	-0.040	-0.139	14.0	128	197	Yes	Individual
	(0.261)	(0.373)	(1.701)				
HIV Knowledge subindex	-0.091*	-0.173*	0.000	2758	194	Yes	
	(0.041)	(0.080)	(1.000)				
Heard of HIV (binary)	-0.017*	-0.033*	0.931	2758	194	Yes	Individual
	(0.007)	(0.014)	(0.171)				
Number of accurate ways known to prevent HIV (max 3)	-0.059*	-0.113*	1.466	2758	194	Yes	Individual
	(0.026)	(0.051)	(0.658)				
Knew that a person with HIV could still look healthy (binary)	-0.009	-0.017	0.743	2758	194	Yes	Individual
	(0.014)	(0.026)	(0.337)				
Knew that HIV can be transmitted from mother to child (binary)	-0.015	-0.029	0.719	2758	194	Yes	Individual
	(0.012)	(0.023)	(0.332)				
Public sanitation improvements subindex	-0.211+	-0.398+	0.000	2792	194	Yes	
	(0.120)	(0.226)	(1.000)				
Number of improvements made to any public sanitation facilities in community	-0.206	-0.359	0.689	2493	174	No	Village
	(0.135)	(0.239)	(1.033)				
Number of good sanitation practices visible in community	-0.178*	-0.325*	5.806	2754	192	No	Village
	(0.080)	(0.152)	(0.540)				

TABLE H5. COMPONENTS OF SUBINDICES (CONTINUED, PAGE 5)

	(1) ITT Effect (standard error)	(2) TOT Effect (standard error)	(3) Control mean (standard dev.)	(4) No. HHs	(5) No. Villages	(5) Baseline data included in model	(6) Level of data collection
Electricity availability subindex	-0.162	-0.302	0.000	2763	192	Yes	
	(0.136)	(0.257)	(1.000)				
Electricity from main grid available in community (binary)	-0.049	-0.092	0.463	2763	192	Yes	Village
	(0.054)	(0.101)	(0.499)				
Electricity established in past 5 years (binary)	-0.021	-0.035	0.355	1152	74	Yes	Village
	(0.089)	(0.148)	(0.479)				
Percentage of households connected to electricity	0.034	0.063	31.9	2763	192	Yes	Village
	(4.112)	(7.510)	(37.6)				
Number of days per month with no loss of electricity from more than 3 hrs	-0.378	-1.064	24.4	1153	74	Yes	Village
	(0.896)	(1.513)	(5.371)				
Agriculture conservation subindex	5.405	10.1	9.273	2416	194	No	Household
	(4.671)	(8.939)	(56.9)				
Number of agricultural improvements to farm made in past year	0.033*	0.061*	0.067	2417	194	No	Household
	(0.013)	(0.025)	(0.282)				
Number of trees planted	0.022	0.042	0.000	2747	194	Yes	
	(0.031)	(0.057)	(1.000)				
Soil-enriching legumes planted	-44.2	-80.3	207.7	1297	192	Yes	Household
	(42.7)	(79.0)	(932.6)				
Enterprise growth subindex	0.048	0.088	4.533	1324	192	No	Household
	(0.138)	(0.247)	(2.100)				
Business profit (monthly, GHC)	-0.039	-0.070	1.501	1326	192	No	Household
	(0.103)	(0.186)	(2.854)				
Number of days per week business runs	0.011	0.021	0.893	2745	194	Yes	Individual
	(0.009)	(0.016)	(0.275)				
Number of workers at business	-0.027	-0.052	0.000	2750	194	Yes	
	(0.050	(0.094)	(1.000)				
Belief that a new business can be worth the investment (binary)	-0.010	-0.018	0.113	2750	194	Yes	Household
	(0.036)	(0.068)	(0.486)				

TABLE H5. COMPONENTS OF SUBINDICES (CONTINUED, PAGE 6)

	(1) ITT Effect (standard error)	(2) TOT Effect (standard error)	(3) Control mean (standard dev.)	(4) No. HHs	(5) No. Villages	(5) Baseline data included in model	(6) Level of data collection
Durable assets subindex	-0.015	-0.029	0.073	2750	194	Yes	Household
	(0.017)	(0.032)	(0.434)				
Number of TVs owned	-0.001	-0.003	0.131	2750	194	Yes	Household
	(0.022)	(0.041)	(0.434)				
Number of satellites owned	-0.034	-0.065	0.192	2750	194	Yes	Household
	(0.030)	(0.057)	(0.570)				
Number of refrigerators owned	-0.006	-0.012	0.171	2750	194	Yes	Household
	(0.017)	(0.033)	(0.478)				
Number of electric fans owned	0.013	0.025	0.013	2750	194	Yes	Household
	(0.014)	(0.026)	(0.193)				
Number of sewing machines owned	-0.013	-0.026	0.223	2750	194	Yes	Household
	(0.025)	(0.047)	(0.588)				
Number of motorcycles owned	0.062	0.116	0.000	2792	194	Yes	
	(0.125)	(0.228)	(1.000)				
Number of bicycles owned	0.006	0.012	0.361	2792	194	Yes	Household
	(0.021)	(0.039)	(0.480)				
Financial inclusion – savings subindex	189.0	349.6	956.0	1024	189	Yes	Household
	(237.1)	(435.1)	(2757.4)				
Has savings (binary)	-37.3	-67.7	589.6	984	189	Yes	Household
	(136.4)	(245.0)	(1954.0)				
Savings flow (yearly, GHC)	0.018	0.033	0.045	2792	194	Yes	Village
	(0.037)	(0.068)	(0.208)				
Savings balance (GHC)	-37.3	-67.7	589.6	984	189	Yes	Household
	(136.4)	(245.0)	(1954.0)				
Existence of local financial institution	0.018	0.033	0.045	2792	194	Yes	Village
	(0.037)	(0.068)	(0.208)				
Financial inclusion – credit subindex	0.294*	0.556*	0.000	2792	194	Yes	
	(0.131)	(0.237)	(1.000)				
Formal borrowing, past year (binary)	0.028+	0.053+	0.072	2746	194	Yes	Household
	(0.015)	(0.027)	(0.259)				
Amount of formal loan, past year	14.9	28.3	57.4	2746	194	Yes	Household
	(18.7)	(35.7)	(362.2)				
Local institution provides loans	0.041	0.077	0.014	2792	194	Yes	Village
	(0.032)	(0.058)	(0.118)				
100 - interest rate at local financial institution	2.917*	6.567*	69.9	760	52	No	Village
	(1.362)	(2.445)	(11.5)				

Notes: +significant at 10%; * significant at 5%; ** significant at 1%. Column (1) presents OLS estimates (with standard errors reported in parentheses), clustered at the unit of randomization (village cluster), and controlled for district effects. Each row reports results for a single OLS regression. Column (2) reports 2SLS treatment-on-the-treated estimates (with standard errors reported in parentheses) with receiving an epicenter being the first stage clustered at the unit of randomization (village cluster). Column (3) reports endline control means (with standard deviations reported in parentheses). Column (4) reports the number of observations. Column (5) reports the number of villages. Column (6) reports whether baseline data is used in the model. Column (7) reports the level of measurement.

Appendix I. First-Stage of Instrumental Variable Results

This appendix shows a strong first stage effect of assignment to treatment on the probability of a village mobilizing to receive participatory programming.

Table I1. TOT first stage regression

	(1) Mobilized
Treatment	0.530** (0.069)
N	2792

Notes: + significant at 10%; * significant at 5%; ** significant at 1%. Treatment is defined as having received an invitation to mobilize the community to build an epicenter. Standard errors, clustered at the unit of randomization (village cluster), are reported in parentheses. The first stage is calculated using OLS with district fixed effects. The unit of observation is the household.

Appendix J. Village-level results by different partisan cut-offs

This appendix shows that electoral area-level results presented in Table 3 and 4 of the manuscript are not dependent on the specific cut-off used to defined NDC-aligned electoral areas (30 %). At the 30% cut-off, there are 50 NDC-aligned electoral areas (44 %) and 64 non-aligned electoral areas (55%) in our sample. If we define NDC-aligned electoral areas as those where at least 25 % of HHs are NDC-aligned at baseline, then we have 63 NDC-aligned electoral areas (55%) and 51 non-NDC aligned electoral areas (45%). If we define NDC-aligned electoral areas as those where at least 35 % of HHs are NDC-aligned at baseline, then we have 40 NDC-aligned electoral areas (35%) and 74 non-NDC aligned electoral areas (65%).

Figures J1, J2, J3, J4, J5 and J6 plot the ITT estimates for non-NDC electoral areas and NDC-electoral areas respectively for each of the electoral-area outcomes considered in Table 3 and 4 by the three different definitions of NDC-aligned electoral areas. Overall, the results are very consistent regardless of the cut-off used to define NDC-alignment. In only one instance does the interpretation of the results depend on the cut-off used to define NDC-alignment; we no longer observe greater activity levels by local representatives in NDC-aligned villages when using the demanding 35% threshold for defining NDC-aligned villages.

Figure J1. Turnout across non-NDC and NDC Aligned Villages by different cutoffs

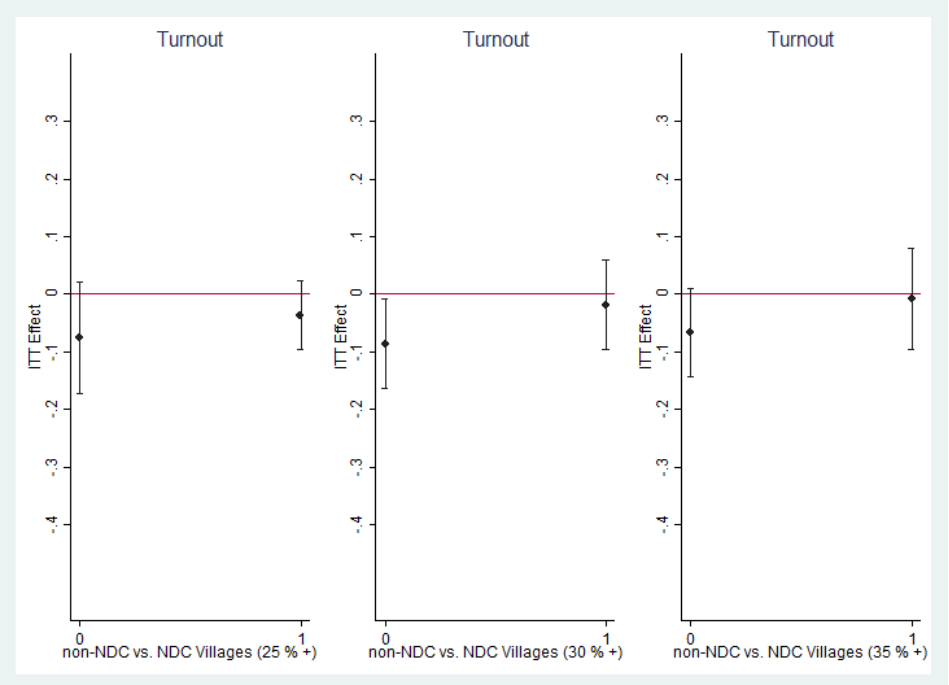


Figure J2. Candidates across non-NDC and NDC Aligned Villages by different cutoffs

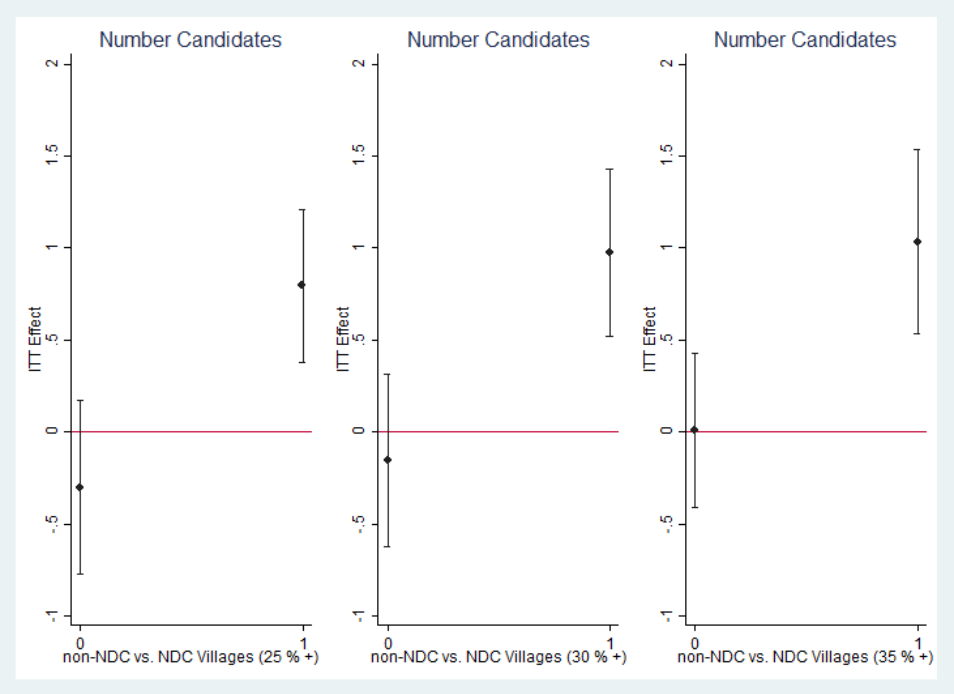


Figure J3. Activity across non-NDC and NDC Aligned Villages by different cutoffs

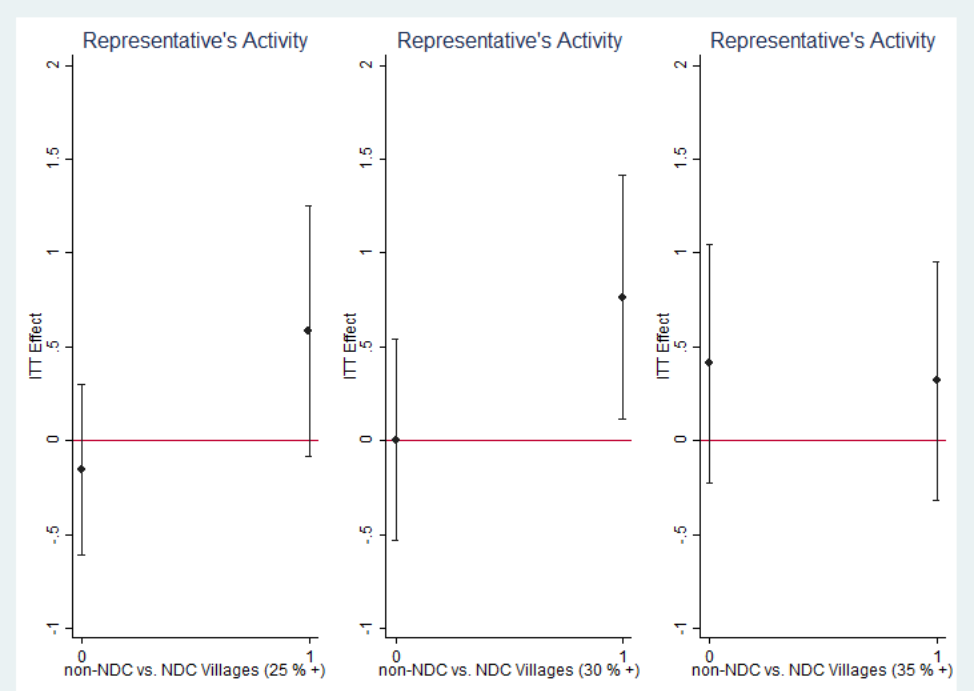


Figure J4. Local Government Projects across non-NDC and NDC Aligned Villages by different cutoffs

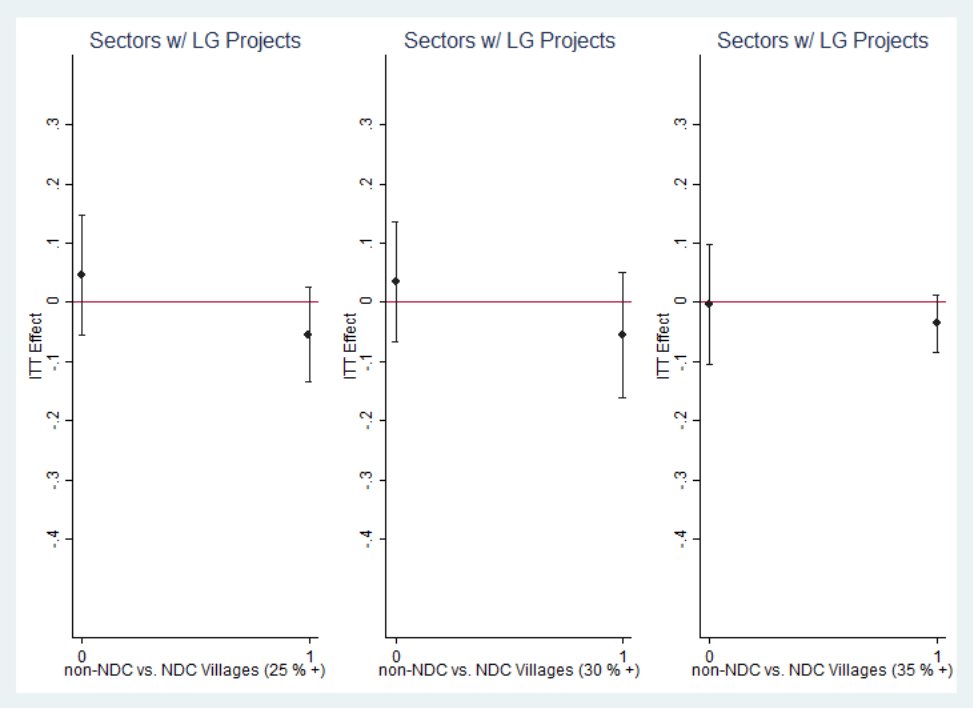


Figure J5. Local Government Projects in THP Sector across non-NDC and NDC Aligned Villages by different cutoffs

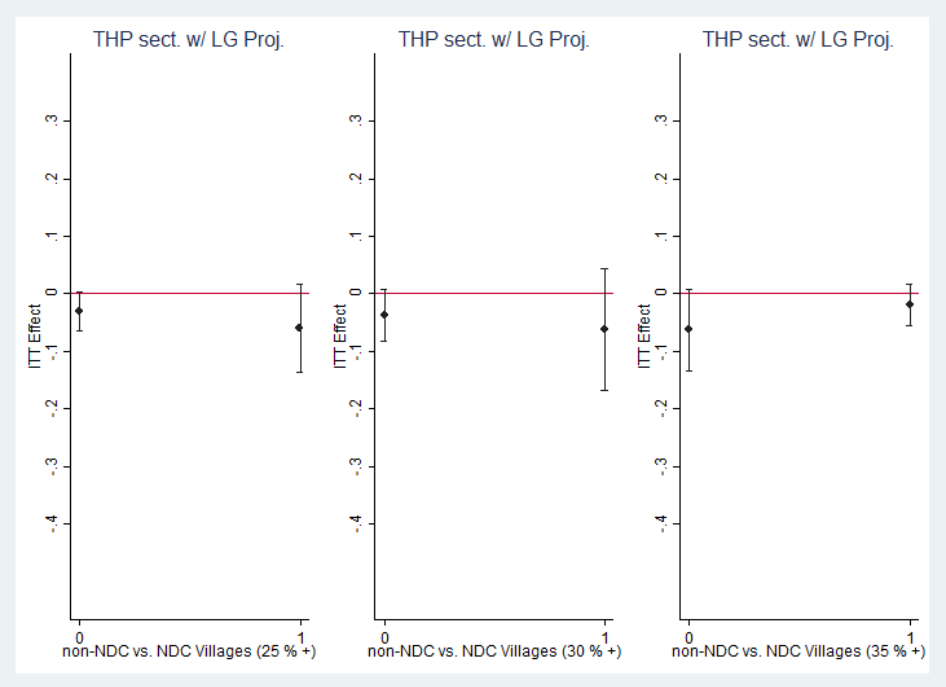
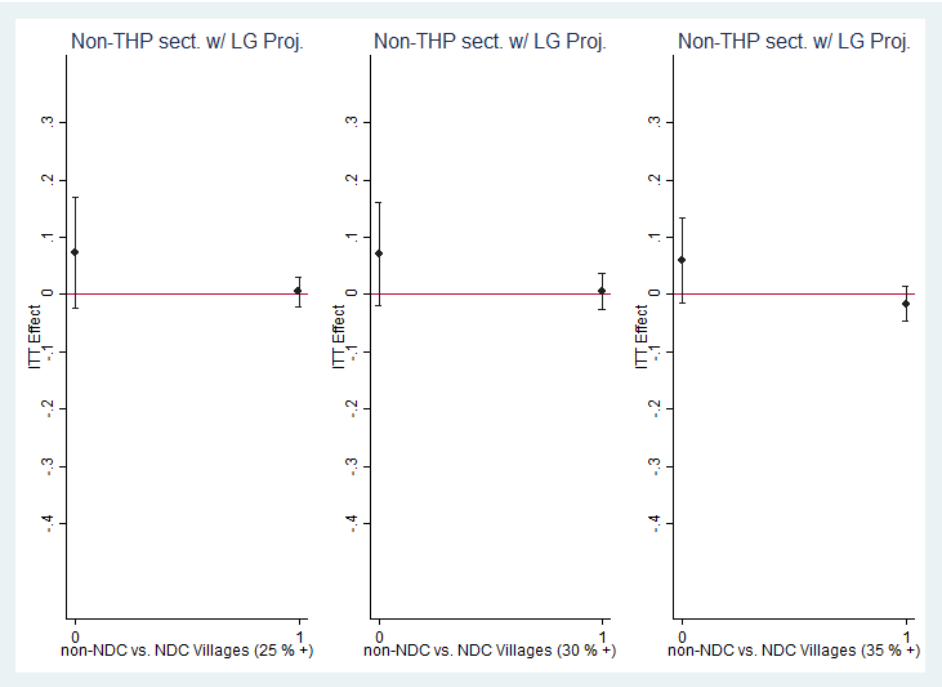


Figure J6. Local Government Projects in non-THP Sector across non-NDC and NDC Aligned Villages by different cutoffs



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