Experimental Evidence on External Aid
and Community Institutions in Sierra Leone

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Abstract: Institutional performance is thought to be a key determinant of economic success, however there is little evidence on how best to reform existing institutions. Foreign aid donors spend substantial resources on "community driven development" programs that combine the provision of public goods with intensive long term facilitation designed to strengthen local institutions; make them more democratic and inclusive of marginalized social groups; and enhance the capacity of communities to engage in collective action. This paper evaluates the effectiveness of one such program in post-war Sierra Leone using a randomized methodology. Data collection combined rich survey instruments with a set of novel structured community activities designed to measure how real world collective action and participation changed over the four year program (2005-2009). We find positive impacts on the establishment of local development committees, local public goods provision, links between communities and local government officials, household economic welfare, and village-level market activity. However, we do not find any program impacts on community social norms, the role of women and youths in local affairs, more egalitarian decision making or the capacity for collective action beyond the immediate project sphere. Overall, these findings suggest that community driven development programs and related donor projects may leave communities materially better off but may be less effective in fundamentally transforming local institutions or power dynamics.

1. Introduction

Many scholars have argued that the transparency, accountability and inclusiveness of government institutions are important determinants of economic development. In particular, more egalitarian institutions and individual rights have been tied to better economic outcomes in India (Banerjee and Iyer 2004), Brazil and the United States (Engerman and Sokoloff 1997), and former European colonies (Acemoglu, Johnson and Robinson 2001). However, there remains little consensus on the types of programs, policies or reforms that will successfully generate better institutions in less developed countries, and on whether it is possible, or even desirable, for external actors like foreign aid donors to attempt to restructure local power dynamics. This debate has played out vigorously among leading development economists in discussions about reforming aid policy. Some scholars argue that large infusions of foreign aid can help build stronger institutions (Sachs 2005); while others assert that historically determined social norms and local institutions are difficult to understand, let alone transform (Easterly 2001, 2006), and that such external attempts to reshape "better" institutions are likely to be futile.

Amongst foreign aid donors, non-governmental organizations (NGOs) and governments in less developed countries today, arguably the most popular strategy to promote political inclusion and improve the transparency of local government institutions lies in "community driven development" (CDD). For the World Bank alone, over nine percent of total lending supports CDD projects, placing the magnitude of investment in the billions of dollars (World Bank 2007). Typical CDD interventions combine block grants with intensive community mobilization that aims to promote local project "ownership," empower marginalized groups like women and the poor in decision-making, and catalyze collective action. By emphasizing local participation in, and control over, project implementation, CDD attempts to improve the alignment between local priorities and the provision of public goods through a political process that empowers non-elites.

These arguments in favor of the community driven development approach arise from extending the theory behind fiscal decentralization down to the village level, and CDD is thus often used to provide "bottom up" support for broader decentralization reforms. Yet while advocates promise a long and varied list of benefits – ranging from more efficient and cost effective infrastructure construction to the dismantling of authoritarian village institutions – critics hold concomitant concerns that CDD meeting participation requirements function as a

regressive tax, external finance may attract new leaders and crowd out more disadvantaged members of community groups (Gugerty and Kremer 2008), and additional resources and benefits that flow from CDD projects are easily captured by local elites (Bardhan 2002). While researchers have begun to explore these claims and critiques, few studies provide rigorous evidence regarding the real-world impact of CDD projects (Mansuri and Rao 2004).

This paper evaluates a well-implemented and well-funded CDD project in Sierra Leone, a country that provides a challenging yet compelling environment in which to test the impacts of the CDD approach. Authoritarian leaders in the 1970's and 1980's, who enriched themselves through illicit diamond deals while providing woefully inadequate public services, sent the country down a path of protracted institutional decline (Reno 1995). Scholars cite growing frustration with government incompetence and corruption (Richards 1996), grievances against traditional ruling chiefs (Keen 2003), and the widespread exclusion of women and young men from decision-making, as key destabilizing factors that may have contributed to the brutal civil war that ensued from 1991 to 2002. The country emerged from the war with dismal standards of living, health and education that placed it at the bottom of the Human Development Index (United Nations 2004). In this context of institutional collapse and widespread poverty, CDD's emphasis on rebuilding participatory governance from the ground up while providing basic public services seemed appropriate and became a key platform in the Government's ambitious post-war reform agenda to restore multi-party democracy at both the national and local levels.

The particular program under study, the "GoBifo" project (which means "Move Forward" in Sierra Leone's main language, Krio), was a Sierra Leone government project funded mainly by the World Bank. GoBifo provided both what we call "hardware" and "software" support to rural communities. The hardware included block grants of $4,667, or roughly $100 per household in these villages, for constructing local public goods and sponsoring skills training or income generating activities. The software side included regular technical assistance in establishing village management committees, development plans and budgets. Akin to community organizers in the U.S. context, GoBifo program facilitators worked intensively with local residents to promote democratic decision-making, the participation of socially marginalized women and youth in local politics, and transparent and accountable project management and budgeting practices. While the objective of making local government institutions more

participatory aimed to address some of the perceived root causes of the civil war, the design of the GoBifo project is very similar to many other CDD projects in non-post-conflict societies.

This paper assesses the extent to which GoBifo achieved its goal of promoting local collective action in Sierra Leone villages, and in so doing makes four contributions to the growing literature on aid, institutions and economic development. The first important element is the randomized experiment research design, which generates rigorous evidence of causal impacts, especially given the relatively large study sample of 236 villages and 2,832 households. Second, we laid out the exact econometric specifications and outcome variables we would focus on before analyzing any of the follow-up data (in 2009 as the project intervention came to a close, see supplementary Appendix). Our decision to adhere rigorously to this ex ante analysis plan eliminates the possibility of data mining or other selective presentation of results, and further bolsters the credibility of the empirical findings. Third, the extended timeframe of our study (2005-2009) allows us to explore evidence of longer run impacts on slowly evolving institutional and social outcomes. While four years may be short in comparison to the lifetimes over which current institutions developed, it is not short time in comparison to the time scales of these types of projects.

Fourth and finally, we combine rich household survey data with novel "structured community activities" (SCAs) that introduce three concrete, real-world scenarios in which we directly observe and measure how communities: (i) make a communal decision between two relatively comparable alternatives (specifically the choice between two useful assets, batteries versus salt), (ii) manage an asset they were given for free (here, a tarpaulin with multiple uses as a drying floor or roofing for community buildings), and (iii) respond to a matching grant opportunity (vouchers for building materials). We feel that these SCAs capture actual local collective action capacity more accurately than lab experiments, hypothetical vignettes or survey reports alone, and we are unaware of other studies that have used them before in this way.

The analysis explores a wide range of outcomes, which we divide into three broad groups. First, we find that the GoBifo project was well implemented: it successfully established the village-level structures and tools to plan and manage development projects, and provided communities with the financing and guidance to implement small scale initiatives. The distribution of contributions and benefits within communities was broad and equitable for the most part, and the leakage of project resources appears minimal. Second, we find that injecting

financial and human resources into communities had immediate impacts on the "hardware" aspects of local public goods infrastructure and economic wellbeing. Treatment communities have a larger stock of local public goods that are of better quality than in control areas. Local government leaders were also more active in overseeing pubic goods in treatment communities, and the greater interaction appears to have increased citizen confidence in their local representatives. Furthermore, treatment households have more assets after the four years of the project, and there is more market activity in their communities, including the presence of traders and items for sale, suggesting real living standards gains.

While external assistance through GoBifo created gains in local public goods infrastructure and measures of economic welfare, there is, however, no evidence that the program led to fundamental changes in the "software" of collective action – namely, local norms or institutional practices – to boost communities' capacity to act outside the immediate project sphere. As an example of this third group of outcomes, despite the new experiences many women gained by participating in GoBifo meetings and managing projects, they were no more likely to speak up in community meetings held after the project ended. Similarly, setting up a GoBifo village development committee with democratic management structures and experience carrying out local projects did not make treatment villages better able to raise funds in response to the matching grant opportunity for building supplies. These patterns, and the lack of significant treatment effects across a large and diverse range of other indicators, implies that GoBifo did not serve as a catalyst for improved collective action beyond the activities stipulated by the project itself. The extended time horizon of the research over four years suggests that these results cannot be dismissed as the result of a short term study.

By emphasizing the lack of institutional impacts we do not suggest that reforming norms and practices is impossible. In fact, other interventions – for example, quotas for women leaders in India (Duflo and Chattopadhyay 2004) – have had measurable, and at times dramatic, impacts on institutions within similar timeframes albeit in different contexts. Notice that while CDD attempts to influence norms informally (by encouraging inclusive project practices to spillover into other realms of village life), reforms to formal institutions like political reservations for women change the actual rules of the game, and may thus have a more profound impact.

The finding that a well implemented project with beneficial public goods and economic impacts did not trigger broader spillover effects on norms and institutions resonates with the

mixed results seen in the emerging empirical literature on CDD programs. In the Philippines, Labonne and Chase (2008) find that strong implementation performance—where CDD project preparation increased participation in village assemblies and interaction between residents and village leaders—did not initiate broader social change, and in fact, may have substituted for other avenues of collective action and associational activities. Voss (2008) finds mixed impacts of the Kecamatan Development Program (KDP) in Indonesia on household welfare and access to services. He finds no overall impact on consumption per capita, but notably, despite strong project emphasis on incorporating women into the development process, his analysis uncovers negative consumption impacts for female-headed households. Focusing on roads constructed under the same KDP project, Olken (2007) finds that enhanced top down monitoring—through guaranteed government audits—was more effective in reducing corruption than increased grassroots participation (through invitations and anonymous comment forms) in village-level accountability meetings between residents and project officials.

Most similar to our study in terms of context and empirical methods, Fearon, Humphreys and Weinstein (2009) concurrently conducted a randomized experiment of a community driven post-war reconstruction project in Liberia. Their basic result of positive impacts on social cohesion – as measured by greater contributions to an experimental public goods game and reduced survey reports of intergroup tension – accompanied by little to no impact on material welfare nor the stock of public goods appears quite the opposite of our constellation of findings. Yet closer inspection reveals many areas of commonality. In terms of household welfare, they do find positive impacts on female employment and marginally significant impacts on household assets, which might have been stronger had they had access to a larger sample (their study is limited to 83 communities, roughly one third the village sample size in GoBifo). Regarding community dynamics, their positive public goods game results are largely driven by higher contributions from internally displaced persons (IDPs), but there are few comparable IDPs in our research sites. Neither our study nor theirs finds evidence of program spillovers on real-world non-program collective activities like meeting attendance, participating in road maintenance or rehabilitating schools, clinics or wells.

The rest of the paper is structured as follows. Section 2 discusses the institutional context of Sierra Leone, the GoBifo intervention, and the research design in greater depth. Section 3

presents the econometric specifications. Section 4 discusses the empirical results, while section 5 presents accompanying robustness checks and discussion. The final section 6 concludes.

2. Background on Sierra Leone and the GoBifo Project

2.1 Institutions in Sierra Leone

Sierra Leone operates a dual system of governance where the official state apparatus based in the capital runs in parallel to the "traditional" chieftaincy system, neither of which has historically been particularly democratic nor inclusive. Sierra Leone enjoyed only a brief period of free and competitive democracy at the national level after achieving independence from Britain in 1961. During the subsequent decades, the country was ruled by authoritarian leaders who enriched themselves through illicit deals involving diamonds, while doing little to provide needed services such as health care and education (Reno 1995). Then President Siaka Stevens dismantled democratic institutions, initially by abolishing elected district governments in 1972, and ultimately declaring the country a one party state in 1978. One party rule continued until the military coup of 1992 that roughly coincided with the start of the civil war.

As background on the traditional system, the 149 Paramount chiefs come from the hereditary "ruling houses;" rule for life once appointed or elected; and exert control over resource allocation, including land and labor, as well as the local court system that reigns outside the capital. Their historical position of power was enhanced during the colonial period, when the British implemented direct rule over the capital and neighboring Western peninsula but exerted indirect rule over residents of the interior through the Paramount Chiefs. This latter system promoted chiefs loyal to the British, and institutionalized—and in many cases augmented—their autocratic power over their subjects, thereby exacerbating long standing inequities and reinforcing social divisions. Dominated by elder males, this system has continued through the present day to largely exclude women (who are not currently eligible for chieftaincy in much of the country) and young men from decision-making.

The weak economic performance and bad governance of the 1970's and 80's steered the country toward civil unrest. Partially as a result of the widespread discontent with the government, a small group of rebels, who had entered the country from Liberia in 1991, were successful in recruiting disenfranchised youth to rise up violently against the status quo. As their numbers swelled by early 1992, these rebels, known as the Revolutionary United Front (RUF),

spread the armed conflict to all parts of the country. The brutal civil war that resulted saw an estimated 50,000 Sierra Leoneans killed, over half of the population displaced from their homes, and thousands of civilians victimized by amputation, rape, and assault (Human Rights Watch 1999).

Scholars have pointed to three long standing social divisions that created frustration and may have helped incite violence. First, some have claimed that the initial motivations of the RUF were idealistic and that the early rebels were guided by a strong sense of political grievances related to the failings of the corrupt regime (Richards 1996). Such frustrations were particularly acute for young men, who were largely excluded from decision making by their elders and struggled to find work. Second, inequality between chiefs and their "subjects" fostered discontent that was rooted in perceived vagaries and excesses of chiefly rule, including coerced labor, capricious fines, and unpopular land allocations (Keen 2003). Third, although not likely a direct cause of the recent violence, women historically have held less power in local government and worse average socioeconomic status as compared to men. After the war ended, major institutional reforms aimed to address these core causes of dissension, to both promote greater equity and avert a return to violence.

The highest profile post-war political reforms were the restoration of multiparty democracy and the reconstitution of local government after over 30 years of dormancy. The National Electoral Commission (NEC) oversaw competitive elections for Parliament and the Presidency in both 2002 and 2007, and for the 19 Local Councils in 2004 and 2008, bringing democratic competition back to the national and district levels. In addition to historical antecedent, the theoretical benefits of decentralizing service delivery to the new Local Councils seemed a good match for the post-war environment. Specifically, decentralization offered potential efficiency gains from devolving service delivery to local government authorities that potentially have better information about, and greater ability to tailor public outputs to, differences in local preferences and costs (Oates 1999). In addition, bringing government "closer" to the people may create more opportunities for civic engagement. Advocates suggest that political participation carries both intrinsic value in empowering citizens as well as accountability gains in enabling the public to better monitor and constrain the behavior of elected officials.

2.2 The GoBifo Project

The GoBifo project fits into the post-war reform agenda with its aims to extend decentralization down to the village level, catalyze a "help yourself" approach to development,[1] and make local decision-making more inclusive of historically marginalized groups. The intervention had three stages—local institution building, development planning, and project implementation—operating at the village- and ward-levels simultaneously. In each village (or ward), project facilitators helped community members to: i) establish a Village (Ward) Development Committee (VDC/WDC); ii) articulate a development plan; and iii) implement projects identified in the plan using a series of block grants.

VDCs were not entirely new organizations in rural Sierra Leone. Richards et al. (2004) suggest that many VDCs were introduced by humanitarian assistance groups during the 1990's, and at the time the project began roughly half of the villages under study already had one. The WDCs are the lowest administrative unit of local government (covering around 10,000 citizens), and the elected Local Councilor representing the ward serves as the WDC chair. To officially link GoBifo activities into the broader decentralization reform taking place in Sierra Leone after the civil war, the VDC submitted its village development plan to the appropriate Ward Development Committee (WDC) for review, endorsement and onward transmission to the Local Council for approval (GoBifo Project, 2007). Upon approval, a financial agreement is signed between the VDC, the Local Council and the project before any funds are released.

Typical projects implemented include small scale public goods, like grain drying floors, latrines and community centers; as well as skills training and business development initiatives in areas like soap making, blacksmithing and carpentry (see Table 1 for distribution of projects by sector). This approach thereby extends the rationale behind decentralization—namely, organizing the management of public goods at the lowest geographic level that contains their costs and benefits—down to a lower level of disaggregation below the district council. Regarding civic engagement, the idea is that once communities have the institutions in place—a VDC, a development plan, a bank account and experience in budgeting and project management—they will be better able to take advantage of new opportunities that arise outside the direct purview of the program. Along these lines, the original project funding proposal

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[1] In fact, one of the original names considered for the project was "Hep Wisef," the Krio translation of "Help Ourselves."

[2] There were two minor data issues in measuring community size and ward location that led to a partial re-sampling,

emphasizes the "durability" and broad mandate of these structures by suggesting that they will become "the focal point for development interventions, and play coordinating and advocacy roles with other donors, line ministries and Ward Committees" (World Bank 2004).

GoBifo facilitators introduced practices aimed at making local decision-making more democratic and inclusive of women and youth in particular. As concrete examples, one of the three co-signatories on the community bank account was required to be female; women and youths were encouraged to manage their own projects; evidence of inclusion in project implementation was a pre-requisite for the release of subsequent funding tranches; and as part of their internal review process, field staff kept records of how many women and youth attended project-related meetings and how actively they participated in deliberations. The intention is that providing women and youths with learning-by-doing experiences, and exposing male elites to new ways of doing business, will empower these groups to take a more active role in other aspects of village decision-making and leadership. As an example, the project's operations manual prescribes leadership training to prepare women and youths to "link the rural communities with government and other development partners for services that cannot be provided by other agencies" and "advocate on behalf of the more vulnerable groups for more active participation in the development process" (GoBifo Project 2007).

This focus on social mobilization was intense and accounted for a large part of GoBifo human and financial resources. Specifically, facilitators were required to reside in one of the six villages assigned to them and spend approximately one day per week in each of the remaining villages. As they began work in January 2006 and completed all village-level projects by July 2009, each village received roughly six months of direct "facilitation" over a three and a half year period (see timeline in Figure 1). Furthermore, just under half of the total GoBifo budget was dedicated to village- and ward-level block grants (US$896,000 or 47%) with the balance covering "capacity development" in village- and ward-level planning (US$589,732 or 30%), project management and contingencies (US$255,320 or 14%), and monitoring and evaluation (US$177,300 or 9%). Thus for every dollar spent directly on community building projects, roughly one dollar was spent ensuring the money was used well through facilitation, administration and oversight.

The GoBifo project is quite representative of CDD initiatives in other less developed countries. The project implementation stages—establishing a local development committee,

providing technical support and allocating block grants—are quite standard, as is the pervasive emphasis on inclusive, transparent and participatory processes. Compared to projects in other countries, the main programmatic differences are that the village-level component of GoBifo did not involve any inter-community competition for funding and it operated on a smaller scale. For both the projects in Indonesia (Olken 2007) and the Philippines (Labonne and Chase 2008) cited above, communities submit proposals and compete with each other for project funds at the sub-district level. Regarding scale, GoBifo disbursed grants worth less than $5,000 to communities of on average 50 households or 300 residents (roughly $100 per household or $16 per capita). By comparison, the project in Liberia provided around $20,000 to "communities" that comprise around 4 villages or two to three thousand residents (roughly $8 per capita) (Fearon et al. 2009); and successful villages received on average $8,800 from the project in Indonesia (Olken 2007). While the per capita differences are not substantial, the difference in total grant size likely affects the maximum scale of project that is feasible.

2.3 Research Design

The 118 GoBifo treatment and 118 control villages were selected from a larger pool of eligible communities using a computerized random number generator. Figure 2 maps the location of the sample communities. Two districts were chosen to strike a balance in terms of regional diversity, political affiliation, and ethnic identity, while simultaneously targeting poor rural areas with limited NGO presence. Bombali district is located in the North, the region dominated by the Temne, Limba and Loko ethnic groups and traditionally allied with the All People's Congress (APC) political party. Bonthe district is in the South, where the Mende and Sherbro ethnic groups dominate and are historically aligned with the Sierra Leone People's Party (SLPP). Using the 2004 Population and Housing Census, the eligible pool of villages was restricted to communities considered of appropriate size for a GoBifo project, namely between 20 and 200 households in Bombali and 10 to 100 households in Bonthe (where villages tend to be smaller).[2] On this final pool, we ran 500 computer randomizations stratified by Local Council ward, and saved all resulting assignments that generated no statistically significant differences between treatment and control groups in terms of total number of households per village and distance to

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[2] There were two minor data issues in measuring community size and ward location that led to a partial re-sampling, however these did not affect the integrity of the randomization process (see Appendix A for details).

the nearest motorable road (as measured through GIS). One of these balanced assignments was then selected at random to determine the actual allocation of GoBifo treatment and control villages.

For each community in the sample, government Statistics Sierra Leone staff randomly selected twelve households to be surveyed from the Census household lists. Given the research interest in dynamics of exclusion and empowerment, the identification of respondents within the targeted households aimed to capture a broad range of perspectives. Rotating by household, enumerators thus interviewed four different types of respondent: non-youth male, youth male, non-youth female and youth female. All respondents are at least 18 years old, and note that the Government of Sierra Leone's definition of youth includes people up to 35 years of age (although in reality the definition of youth is a bit subjective). This selection strategy means that for each community, and for the overall sample, responses are roughly balanced across the four distinct groups.

The randomization procedure successfully generated two balanced groups. Specifically, Table 2 lists the mean value in the control group and estimated placebo (pre-program) treatment effect for a variety of community characteristics (like total households, distance to nearest road, average respondent years of education, and indices for war exposure and history of domestic slavery) as well as an illustrative selection of outcomes under each of the three families. There are no statistically significant differences in the 2005 pre-program value of any of these variables between the treatment and control communities. For full transparency, Appendix B contains the same estimates for all 94 outcomes of interest that were captured in the baseline data. The difference in baseline values across treatment and control groups is significant at 95% confidence for only four of these outcomes. Note that the analysis below typically controls for baseline values of the outcome under consideration, addressing any remaining covariate imbalance between treatment and control communities.

2.4 Data and Measurement

This analysis draws on three major sources of data: household surveys from 2005 (baseline) and 2009 (follow-up); village-level focus group discussions held in 2005 and 2009; and three novel structured community activities (SCAs) conducted in 2009 after GoBifo had ended. The SCAs were introduced with the initial post-program survey in May 2009 and then followed up in an

unannounced visit five months later. Extensive fieldwork using qualitative methods—including open-ended interviews, focus group discussion, and participant observation—was used to develop and refine both the baseline and follow-up survey instruments.

The 2005 household surveys collected extensive data on baseline participation in a range of local collective action activities as well as detailed demographic and socioeconomic information. To establish a panel, the field teams sought out the same respondents during the 2009 follow-up household surveys that they had interviewed in 2005, and the attrition rate was moderate: overall, 96% of the same households were located and 76% of the same individual respondents. The 2009 follow-up surveys were conducted in two rounds five month apart.

During data collection visits in 2005 and 2009, the field team supervisor assembled key opinion leaders—including VDC members, the village chief, women's leader, youth leader, among others—to answer questions about issues that affect the community as a whole, including describing the stock of local public goods. Research supervisors also completed a tour of the village and made their own physical assessments of the materials used in and quality of construction of common public structures like the primary school, water well, grain drying floor and latrine, as a cross-check on responses received in the focus group meeting.

Given the centrality of inclusion, participation and collective action in GoBifo's objectives, and the difficulty of gauging these dynamics through survey responses alone, the third main type of data was gathered through three novel structured community activities (SCAs). The SCAs were designed to directly observe how communities respond to concrete, real-world situations requiring collective action in different dimensions: (i) making a community decision between two relatively comparable alternatives; (ii) managing an asset that they were given for free; and (iii) raising funds in response to a matching grant opportunity. These activities were standardized across all villages, enabling us to measure whether GoBifo treatment and control communities handle the exact same situation differently. As opposed to hypothetical vignettes or experimental games, we feel that these exercises more directly capture the outcomes of interest. Lastly, note that these SCAs closely mimic the way NGOs initially engage with communities when they appear with the promise of possible future development assistance.

SCA #1 was designed to measure the extent to which a specific community decision was inclusive, participatory and democratic. The day before survey work, the research teams met with the Village Head and asked him/her to assemble the entire community for a meeting the

next morning. At the subsequent meeting, the enumerators presented the community with a choice of one of two small gifts—a carton of batteries (useful for radios and flashlights) versus many small bags of iodized salt—as a token of appreciation for participating in the research program. The enumerators emphasized that the community should decide how to share the gift themselves as they saw fit, and at that point the team of enumerators withdrew from the meeting to observe the decision-making process from the sidelines. The enumerators remained "outside" the community meeting circle and recorded how the deliberations evolved and exactly who participated. Among other things, the researchers recorded who participated in any side-meetings, the degree to which the chief, village head and elders dominated the process, the extent of debate, and the relative influence of different sub-groups on the final outcome. This exercise provides concrete quantitative data on the relative frequency of female versus male speakers, and youth versus non-youth speakers in an actual community meeting.[3] Note that this is the same metric that the GoBifo facilitators were required to track during project meetings as part of their own internal performance assessment (GoBifo Project 2008).

SCA #2 was designed to gauge the extent of elite capture of resources as a result of the CDD process. During the same visit at which the first SCA was carried out, the enumerators also gave each village a large plastic tarpaulin as a gift. Tarpaulins are frequently used in Sierra Leone as makeshift building materials for roofing, and in agriculture as a surface on which to dry grains or as a covering to protect grains from rain. During the subsequent 2009 follow-up visit five months later, enumerators recorded which households had had access to the tarpaulin in the intervening period, as well as who had received the salt or batteries distributed in SCA #1. This activity also captures an element of collective action, as enumerators assessed whether villages had been able to come up with any use at all for the tarp, and whether it had been put mainly towards public or private ends.

SCA #3 was designed to measure whether GoBifo had produced persistent effects on villages' capacity for local collective action beyond the life of the project itself. Each community received six vouchers they could redeem at a nearby building materials store if they raised matching funds. Specifically, each voucher was worth 50,000 Leones only if accompanied by another 100,000 Leones from the community. Matching all six vouchers

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[3] Of the four enumerators, one focused on the participation of youths, one on women, one on all adults and the fourth kept careful track of each person who spoke publicly.

generated 900,000 Leones, or approximately US$300, for use in the store. Take up of the program was recorded at the building materials stores. In addition, enumerators returned to the villages themselves five months after the initial visit to explore how inclusive and transparent the management of the resulting project had been, the distribution of project contributions and benefits, and the quality of final construction.

3. Econometric Specifications

As mentioned in the introduction, below we focus on the exact econometric analysis that we described in an ex ante analysis plan. Drafted before we examined any of the post-program data, this document lays out the exact econometric specifications and variables that we planned to use as outcomes (see the supplementary Appendix D). The research and project management teams together took great care to explicitly state in advance what they expected GoBifo to accomplish and how they would measure success. Given the long and wide ranging list of potential impacts, this step is important to avoid an *ex post* rationalization that highlights only positive impacts and hides any negative or zero effects discovered during analysis. Thus in 2005 (before the project began), GoBifo managers met with the authors to agreed to a set of hypotheses about the specific areas they expected GoBifo to impact. These hypotheses can in turn be grouped into three major families: i) project implementation, which considers how successful GoBifo was in delivering its stated goals of setting up local organizations and providing local public goods infrastructure; ii) local economic outcomes that directly resulted from external assistance; and iii) the "software" of local collective action – namely, local norms or institutional practices – to boost communities' capacity to act outside the immediate project sphere. [4]

The most general strategy for testing each hypothesis is to regress the relevant outcome measures on a treatment indicator variable and controls using the following model:

$$Y_c = \beta_0 + \delta T_c + V_c'\Gamma + W_c'\Pi + \varepsilon_c \tag{1}$$

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[4] To clarify the presentation of our results, we created the family groupings *ex post* and added our twelfth hypothesis (called H1 below) by pulling together outcomes that were already stated under the original eleven hypotheses.

where Y_c is a given outcome (i.e. road maintenance) in community c; T_c is the GoBifo treatment indicator; V_c is a vector of the community level controls; W_c is a fixed effect for geographic ward, the administrative level on which the randomization was stratified; and ε_c is the usual idiosyncratic error term. Here the parameter of interest is δ, the average treatment effect. Elements of V_c include distance from road, total number of households, district fixed effects, an index of conflict experienced during the recent civil war and a measure capturing the historical extent of domestic slavery.

For the outcome variables that were collected in both the baseline 2005 survey and in the 2009 follow-up surveys, the analysis exploits the panel structure of the data using the following model in equation (2):

$$Y_{ct} = \beta_0 + \beta_1 T_c + \beta_2 P_t + \delta(T_c \times P_t) + V_c^{'}\Gamma + W_c^{'}\Pi + \varepsilon_{ct} \tag{2}$$

where Y_{ct} is a particular outcome for community c at time t, where $t = 0$ in the 2005 baseline survey and $t = 1$ in the 2009 follow-up. The additional indicator variable P signals the post-treatment period. The parameter of interest is again δ, the average treatment effect. Since the geographic identifiers are fixed and the community-level controls are slow to change over time, these baseline variables remain as described above.

It is important to note that our results are robust to the exclusion of the vector of community controls and to limiting our analysis to only the post-program data. Towards full transparency, the supplementary Appendix C presents the "raw" results for each of the 319 unique outcomes considered using a minimal specification that uses only the follow-up data and includes only fixed effects for the Local Council wards (the unit of stratification). To preserve a degree of parsimony in our presentation, the tables in the main text include only an illustrative selection from each hypothesis of interest. Those readers interested in the complete details of any individual outcome, including the exact wording of the survey question and estimated treatment effect, should refer to Appendix C.

We further examined whether GoBifo had differential impacts across households and villages with different characteristics to assess the degree of heterogeneous treatment effects. These interaction terms include: gender, age (youth versus elder status), district, remoteness, community size, war exposure and history of domestic slavery. As none of these specifications

revealed consistent evidence for heterogeneous treatment effects, they are discussed only briefly in what follows (see Table 6 for a summary).

Some outcomes are measured at the village level (e.g. the existence of a community grain drying floor), while others concern households (e.g. radio ownership), and still others refer to the specific individual respondent (e.g. political attitudes). For simplicity, we measure all variables at the village level, taking village averages of household or individual level data as necessary, although note that household and individual-level analysis yields nearly identical results (available upon request).

For each hypothesis, this paper explores the effect of GoBifo on several different outcome measures—for example, treatment effects on the presence of primary schools, drying floors, grain stores, community centers and latrines—one by one. Yet a single global measure would provide a useful summary of how GoBifo effects a particular hypothesis overall—i.e. the effect on the entire stock of local public goods in the community. A natural choice for such a summary index is the average of the K specific relationships between GoBifo and each outcome under a given hypothesis. Thus for each hypothesis we estimate (i) the impact of GoBifo on each individual outcome; as well as (ii) the mean effects index (following Kling and Liebman 2004), which provides a summary measure of the average GoBifo effect on the entire set of outcomes.

Estimation of the mean effect index first standardizes binary and continuous outcomes into comparable units by translating each outcome into standard deviation units (i.e. by subtracting its mean and dividing by its standard error) before regressing each outcome on the vector of independent variables. The index (τ) is then the mean of these K standardized treatment effects. Equivalently:

$$\sigma_k^2 = Var(Y_k) \tag{3}$$

$$\tau_k = \frac{\delta_k}{\sigma_k} \tag{4}$$

$$\tau = \frac{1}{K}\Sigma_k \, \tau_k \tag{5}$$

Second, the estimation method calculates the standard error of the average index itself, which involves coefficients from multiple equations. Note that the ordinary least squares (OLS)

equation-by-equation approach does not provide any information about the covariances between estimators from the K distinct equations. The variance of the mean index, however, depends on both the variances of each individual δ_k as well as any covariances between δ_k and $\delta_{\neg k}$. To thus obtain the complete variance-covariance matrix requires a seemingly unrelated regressions (SUR) system approach. With the complete covariance matrix in hand, we can then test the cross-equation hypothesis that the average index of K coefficients equals zero.

4. Results

The following sections discuss the empirical results regarding treatment effects on individual outcomes and mean effects for each of 12 hypotheses under the three broad families of outcomes, namely, project implementation and direct program effects, impacts on public goods and economic wellbeing, and broader social and institutional changes.

4.1 Family A: Project Implementation and Direct Program Goals

4.1.1 Hypothesis 1: Creation of Functional Development Committees

The first family (and hypothesis) of treatment effects measures the extent to which the project successfully implemented its proposed interventions. This concerns the project's performance in establishing Village Development Committees (VDCs); helping communities draw up development plans and open bank accounts; and creating meaningful links between the participating villages and their local government representatives. Tables 3 and 4 present the results for each of 16 individual outcome regressions under this family. The first 7 "core" outcomes in Table 3 apply to all communities within the sample; while the remaining 9 "additional" outcomes in Table 4 are conditional on the existence of public infrastructure and thus only apply to those communities that have the particular good. First note that 15 of the 16 included treatment effects are greater than zero, and 11 of these are statistically significant at 95% confidence. Regarding interpretation, the coefficient on the interaction of the GoBifo treatment and the post-program time dummy in Column 1 of Table 3 indicates a positive treatment effect on the existence of VDCs by 34.1 percentage points, implying that GoBifo boosted the presence of VDCs from a baseline value of 58.2% to 92.3% in 2009. Similarly, the corresponding coefficient in Column 2 indicates that GoBifo increased the likelihood that a community was visited by a member of its Ward Development Committee in the past year by

15.6 percentage points. Column 6 shows a positive treatment effect on the existence of village development plans by 29.6 percentage points, and Column 7 reveals an increase in the presence of community bank accounts by 70.6 percentage points. This last effect captures tenfold increase from 8.1% to 79.2% of treatment communities with an account in a formal bank.

Turning to Table 4, the household survey asked respondents whether a member of the Ward Development Committee or Local Council was "directly involved in the planning, construction, maintenance or oversight" of each of nine main local public goods. Note that the treatment effect is positive for all but one of these goods, and statistically significant for seven at 95% confidence. This suggests that GoBifo successfully linked the village-level projects with the work of local politicians, a key accomplishment given its objective of supporting decentralization.

Table 5 provides a concise summary of the twelve research hypotheses grouped into three main families with their corresponding mean treatment effect indices. The positive, highly significant coefficient for hypothesis 1 suggests that GoBifo achieved its most immediate objective of creating the structures, tools and linkages to facilitate local development. Specifically, the coefficient of 0.534 indicates that overall, GoBifo caused a one half of a standard deviation unit increase in the presence of functional development committees and links to local government.   The aggregated impact of GoBifo on the project implementation family is thus positive, large in magnitude and significant at the 99% confidence level, suggesting that GoBifo was a well administered program and was likely better implemented than many other real-world programs. Figure C presents a graphical companion for Table 5 and previews our take home result: while GoBifo was well implemented and had a large positive effect on program goals (depicted by the first vertical bar centered around 0.5 standard deviations for Family A) and measures of development "hardware" (second bar centered around 0.2 standard deviations for Family B), we find no evidence for impacts on the "software" of collective action and institutions (third bar very close to zero for Family C).

Table 6 looks for potential heterogeneity in treatment effects by estimating the family-wide mean effect indices on the interaction of the GoBifo treatment with several community characteristics. Considering the first row, Column 1 shows that the direct treatment effect on development hardware is largely unaltered by the inclusion of six interactions terms that capture differential treatment effects by community size, war exposure, average respondent years of

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schooling, remoteness, history of domestic slavery and district. The near zero point estimates in the remaining Columns 2 through 7 suggest that the effectiveness of GoBifo project implementation did not vary along any of these dimensions. Expanding consideration to the remaining rows, the fact that only two of the eighteen estimated interaction effects are statistically distinguishable from zero suggests a remarkably homogenous impact of the program across the diverse range of villages included in the sample.

4.2 Family B: Impacts on Development "Hardware": Local Public Goods and Economic Activity

Given that GoBifo was successfully implemented, we next estimate impacts on outcomes. The distribution of project types (presented in Table 1) shows that communities used the majority of GoBifo grants for small-scale local public goods infrastructure in a variety of sectors. In addition, roughly one sixth of projects were devoted to skills training and income generation with the objective of improving local living standards and commerce. Ex ante Hypothesis 2 thus explores treatment effects on the quantity and quality of local public goods in the community; while Hypothesis 3 considers measures of household welfare and community-wide economic activity.

4.2.1 Hypothesis 2: The Quality and Quantity of Local Public Goods

GoBifo had a positive impact on the stock and quality of local public goods in treatment villages. Specifically, the second mean effect in Table 5 shows that GoBifo caused a 0.13 standard deviation increase in the stock of public goods, which is significant at 99% confidence. Tables 7 and 8 unpack this summary measure to explore the effects of the program on several of the more than thirty individual outcomes grouped under this hypothesis. (See Appendix C for the complete list of indicators under this and all other hypotheses.)

Outcomes under this hypothesis naturally cluster into three sub-groups: the stock of local public goods, the quality of such goods, and community financial contributions to the construction and upkeep of the stock. Table 7 breaks the core aggregate measure into its individual components, where the first nine columns explore impacts in the first sub-group. Note that seven of nine treatment effects on the stock of public goods are positive, and five are statistically significant. Because communities chose their own projects, one would expect

differences in local needs to translate into more muted effects dispersed across the stock of goods as opposed to large increases for one particular good. Along these lines, there are marked increases in the proportion of villages with a functional traditional birth attendant house by 17.5 percentage points, community center by 24.1 percentage points, latrine by 21.0, seed bank by 17.2, and sports filed by 7.1. Calculating a mean index on this sub-group reveals a highly significant increase of 0.21 standard deviations in the stock of functional local public goods.[5]

Turning to the next sub-group, Table 8 reveals that GoBifo had a strong positive impact on the quality of the materials used in and the overall construction of three common goods— primary school, latrine and grain drying floor. All of these individual effects are positive and significant, as is the sub-group index overall, which indicates an increase of 0.29 standard deviation units in the quality of these goods.[6] Note that these are cross-cutting measures that combine possible impacts from direct GoBifo infrastructure projects, as well as potential spillover effects from instituting new maintenance practices that residents then applied to other existing assets in the community. However, as discussed below, there is no consistent evidence that management practices did in fact improve in these villages, and thus the leading interpretation is that the positive impacts are being driven by the grants themselves.

Lastly, note that the group of indicators in Table 8 concerning community financial contributions to existing infrastructure is negative in sign (-0.09 standard deviations), although not statistically significant.[7] Combined with the negative and marginally significant treatment effect on whether the community approached another NGO or donor for development support in Column 10 of Table 7, these provide suggestive evidence that GoBifo funds may have served as a substitute, rather than a complement, for the community's own resources. At a minimum, it indicates that the GoBifo grants did not serve as a catalyst for additional fund-raising nor did the project experience encourage participants to seek development assistance beyond the project itself. The findings from the three SCAs discussed in Section 4.3.2 below reinforce this result.

4.2.2 Hypothesis 3: General Economic Welfare

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[5] Note that the mean effect index for the sub-group includes impacts on three additional goods not presented due to space constraints: peripheral health unit, market and sports uniforms.
[6] The quality of construction sub-group index also includes effects on water well.
[7] This sub-group includes contributions to an additional 6 types of infrastructure: peripheral health unit, traditional birth attendant house, water well, grain store, community center and sports field.

The second hypothesis in the "hardware" category concerns general measures of economic welfare for households and the community overall. There are two main reasons to expect GoBifo to improve economic welfare. First, projects dedicated to skills training and income generating initiatives—like soap-making and carpentry—if well implemented, could translate into new businesses and profits for local households. Similarly, a quarter of the communities implemented agricultural projects, like communal rice farms and seed multiplication initiatives, which could create greater post-harvest profits if successful. Second, GoBifo injected nearly five thousand dollars into each community (roughly equivalent to $100 per household on average) in a country where gross national income per capita was only $250 in 2006 (World Bank 2010), and a portion of the funds may be fungible. As an example, the discussion above suggests that GoBifo may have served as a substitute for existing communal contributions to public goods, which could then translate into greater household resources. Through either or both channels, our analysis reveals strong positive impacts on household living standards and community market activity. Returning to the summary in Table 5, the third mean effect index indicates a positive treatment effect of 0.272 standard deviation units, significant at 99% confidence, in measures of general economic welfare.

Table 9 examines the several individual components of the core index. Nearly all of the treatment effects are positive in sign (nine of ten) and five are statistically significant at conventional levels. The first five outcomes refer to village-level dynamics, where we see strong impacts on the number of petty traders (an average increase of 0.72 traders) and goods on sale (by 0.56 items out of ten common items for sale in rural Sierra Leone). The next five outcomes are aggregated up from household survey reports, where we see increases in a principal components analysis (PCA) asset score and participation in skills training. The PCA includes a collection of typical household assets (for example, a radio, mobile phone and generator) as well as amenities like source of drinking water and sanitation, and the materials used in the roof, walls and floor of the dwelling. Together, these measures suggest that GoBifo interventions encouraged the formation of new businesses and increased the level of market activity in participating villages. Assessing the two hypotheses in this family together, we conclude that treatment communities likely became better off in tangible ways due to their participation in the GoBifo program.

4.3 Family C: Impacts on Community "Software": Local Institutions and Social Norms

This section explores whether the experience of working together on successful community development initiatives through GoBifo strengthened the bonds between individuals and changed the way they interact in other, non-project settings. As we turn from proximate impacts tied directly to program activities to these more indirect influences on local norms and institutional practices, we find no evidence that GoBifo led to fundamental changes in the way that communities make decisions, the voice of women and youths, nor the capacity to act collectively outside the immediate sphere of the project.

4.3.1 Hypothesis 4: Trust

Despite exploring a wealth of measures, the analysis reveals no treatment effects on any of the five proxies for social capital—trust, collective action, groups and networks, inclusion and information—emphasized in the GoBifo project objectives (World Bank 2004, GoBifo 2007). Beginning with trust, of the twelve measures collected, only one treatment effect is statistically distinguishable from zero. Encouragingly, this significant positive effect is on respondents' reports about whether they trust NGOs and donor projects, which suggests that GoBifo field staff did indeed gain the trust of the communities where they operated and enhanced their confidence in this class of external actors. Specifically, residents of treatment communities were 5.4 percentage points more likely to agree that NGOs or donors "can be believed" (which is close to the Krio translation of the word trust) as opposed to you "have to be careful" in dealing with them. There are no effects on the remaining indicators, which combine respondent self-reports regarding how much they trust various groups with concrete examples of trusting behavior, like giving money to a neighbor to purchase goods on your behalf. The summary index for trust in Table 5 is positive in sign but not statistically distinguishable from zero. (See Appendix C for the complete list of outcomes and treatment effects under Hypothesis 4.)

4.3.2 Hypothesis 5: Collective Action and Contributions to Local Public Goods

In total we evaluate 59 outcomes relating to collective action and contributions to local public goods. Of this set, only seven treatment effects are significant at 95% confidence, with five positive in sign and two negative, which leads to a zero mean effect when all are considered jointly. This broad collection of measures falls under several categories. The first set are

derived from structured community activity (SCA) #2 (distribution of tarpaulin) and SCA #3 (the take-up of building materials vouchers). Table 10 present several illustrative measures from each SCA. Specifically, Panel C shows that there was no differential take up of the building vouchers: exactly 62 treatment villages (52.5%) and 64 control communities (54.2%) redeemed vouchers at the local supply stores; nor is there any difference in the number of vouchers redeemed, as most of the villages that cashed in any vouchers used all six. Similarly, Panel B shows that if anything there is a slight negative GoBifo treatment effect on use of the tarp. In particular, the likelihood that the community had decided to put the tarpaulin to some use (as opposed to keeping it in storage) by the time of the final follow-up visit was lower by -7.5 percentage points, significant at 90% confidence.

The next set of outcomes under Hypothesis 5 considers household contributions to existing local public goods (the same set of contributions shown in Table 8). The only difference here is that we expand consideration from just financial contributions to labor, local materials, or food provided to project workers. However, these also yield no treatment effects. There are also no differences in contributions to several different local self-help group (i.e., rotating savings groups and labor gangs) nor in financial support of community teachers. Lastly, while treatment villages were more likely to have a communal farm, by 23 percentage points (significant at 99% confidence), respondents were no more likely to have worked on the communal farm in the past year. This presents a telling example of how project-funded activities—for example, the subsidized provision of seeds and tools for a community farm—exerted a proximate effect on the establishment of a local organization but did not appear to have any lasting impacts on actual communal cultivation or other behaviors in subsequent seasons.

These findings about collective action are significant and somewhat troubling for gauging the long term impacts of the GoBifo project. Clearly, community members did gain experience in working together to successfully implement local development projects over the four years of the project. Yet their GoBifo-specific experiences did not lead to greater capacity to take advantage of the new opportunities that arose after the program ended. Most strikingly, while GoBifo often created new structures designed to facilitate local development—the VDC, a development plan, a bank account, and a communal farm—the program left them no better able to take advantage of the realistic SCAs. Moreover, the next set of results shows that the project

apparently failed to meaningfully transform the nature of local collective action patterns, norms or institutions in these communities.

4.3.3 Hypothesis 6: Strength of Self-Help Groups and Networks

We next examine measures of household-level involvement in local self-help groups. Specifically, for each kind of group, enumerators asked respondents whether they were a member, and if so, whether in the past one month they had attended a meeting and contributed financially or in labor. The list of groups includes credit / savings group, communal labor gang, school committee, social club, savings for special events (like funerals or weddings), fishing cooperative, seed multiplication group, women's group and youth group. The mean effects analysis combines these indicators with other measures of local cooperation such as whether the respondent had ever helped a neighbor re-thatch the roof of their house, a time-intensive activity that one person cannot easily do alone. Of the 40 treatment effects estimated under this hypothesis, only three are significant at traditional levels with two positive and one negative. The mean effects index in Table 5 is similar positive in sign but not statistically distinguishable from zero. Taken as a whole, GoBifo did not appear to exert any discernible impact on local group membership or contributions.

While beyond the scope of official GoBifo project objectives, and thus not included in the ex ante analysis plan document, we further explored effects on participation in religious groups (mainly Islamic and Christian) and in traditional societies (which are themselves closely linked to traditional non-Islamic and non-Christian religious beliefs). While the evidence is weak, there are appear to be small negative impacts on involvement in religious groups: of the 10 measures concerning membership, meeting attendance and contributions, eight treatment effects are negative in sign and two are marginally statistically significant. Specifically, residents of treatment communities were 8.0 percentage points less likely to contribute labor to a traditional society (significant at 95% confidence) and 7.3 percentage points less likely to make a financial contribution to a religious group (significant at 90%).

4.3.4 Hypothesis 7: Access to Information about Local Governance

There is no evidence of significant treatment effects on households' access to information about local government or governance. Of the twenty-one outcomes considered, only one—an

increase in the proportion of villages visited by a WDC member discussed earlier—is statistically significant. The collection of zero effects includes measures of how much respondents know about what the community is doing with the tarpaulin (SCA #2) and building vouchers (SCA #3); whether the they can name their leaders in the Local Council and the chiefdom; and their ability to answer objective questions about how local taxes are collected and used. The mean treatment effect index for this hypothesis is an insignificant 0.001 standard deviation units.

4.3.5 Hypothesis 8: Inclusion and Participation of Socially Marginalized Groups

Since the inclusion of women and youth held great prominence in GoBifo's objectives and facilitator operating manuals, it also received special attention in the data collection. Despite an exhaustive battery of measures, there are no statistically significant treatment impacts on the role of women or youth in local decision-making, nor on the transparency and accountability of decision-making more generally. Of the 72 relevant measures considered, only six were statistically significant at 95% confidence, dividing equally between positive and negative treatment effects.

Among the large set of outcomes under this hypothesis (see Appendix C for the complete list), three related groups are noteworthy. The first group concerns direct enumerator observation and records of concrete behaviors observed during the SCA #1 meeting to decide between the gifts of salt versus batteries. Here Panel A of Table 10 shows zero treatment effects on the total number of adults, women and youths who attended the meeting and spoke publicly during the deliberation. To illustrate: on average, 25 women attended these meetings and two of them made a public statement during the discussion about which item to choose. The difference between the number of women who spoke in treatment versus control communities is an insignificant -0.186, clearly showing that GoBifo had no impact on this simple act of expressing an opinion in a community setting outside the scope of project activities. This hypothesis further includes measures like whether any smaller exclusive groups broke off from the general meeting to make the gift choice without broader consultation; the duration of the deliberation; and how inclusive and democratic the overall dynamics of the decision-process appeared to the enumerators.

The second set of outcomes concern respondent opinions about how the SCA #1 choice was made that were recorded immediately after the meeting. These include the proportion of these randomly selected individuals who actually attended the meeting, whether they themselves spoke publicly, and their opinions about who had the final say and to what extent the decision was dominated by local elites. The third set of outcomes were measured during the final 2009 follow-up survey visit and concern household respondents' and local leaders' views on how decisions were made about how to distribute the salt versus batteries (SCA #1); how to use the tarp (SCA #2); whether to raise funds for the building materials vouchers, and if so, how to mobilize funds, which items to purchase and how to manage the resulting construction (SCA #3). There were no systematic differences between how decisions were made in the GoBifo treatment and control communities for any of these outcomes (see Appendix C).

As mentioned earlier, GoBifo facilitators actively encouraged women and youth to participate in all aspects of project planning, meetings and implementation, and measured the frequency and intensity of their participation in internal GoBifo review processes. Women and youth were further required to serve in leadership positions for the project (on the VDC and as bank account signatories) and had the opportunity to manage their own projects. Yet despite all of this activity to elevate the position of women and youth, we do not observe any improvement in their role relative to older men in community decision making beyond what the GoBifo project itself mandated. Even for relatively low cost actions like speaking up in meetings, the constant encouragement over more than three years of GoBifo project facilitation did not translate into greater voice for marginalized groups.

4.3.6 Hypothesis 9: Participation in Local Governance

While the mean effect index on the group of outcomes concerning participation in local governance in Table 5 is positive and statistically significant, it is largely driven by the establishment of local development institutions and links between communities and their local leaders already discussed under Family A. At the same time, some of the new outcomes under this hypothesis yield additional insights.

As expected from project activities, analysis reveals strong impacts on the existence of village development committees and plans. Yet despite the targeting of marginalized groups for leadership roles, there are no effects on the overall proportion of women and youth in VDC

membership (where a marginally significant increase in female members by 6.6 percentage points is countered by an insignificant decrease in youth members by 4.1 percentage points). Furthermore, treatment communities were no more likely to use the tarp and building materials distributed as part of structured community activities #2 and #3 for goals specified in their village development plan. Reinforcing earlier results, this latter disconnect between the establishment and use of the VDP suggests that communities are not applying project structures and tools to initiatives beyond the program.

GoBifo drew the attention of not only local government representatives (Local Council and WDC members) but also traditional chiefdom authorities. For the nine local public goods considered, the treatment effect concerning the involvement of the Section or Paramount Chief in the planning, construction and oversight of the infrastructure is positive in sign for seven and at least marginally significant for three goods. This suggests impacts on oversight by chiefdom authorities that are positive yet less pronounced than those for oversight by local government officials. There is no evidence, however, that these stronger links with either set of local officials translated into more active political behavior among individuals, such as voting or running for local office. More specifically, GoBifo had no impact on the likelihood that respondents voted in the 2007 national election (an insignificant -1.0 percentage point difference) or stood for Section Chief (3.4 percentage points) or as a WDC member (6.7 percentage points). The raw results in fact suggest a negative impact on voting in the 2008 local elections by 3.5 percentage points, however this loses significance when baseline data and controls are included.

4.3.7 Hypothesis 10: Control of Crime and Conflict

Survey evidence suggests no impact on the level of crime and conflict in communities or the mechanisms through which they are resolved. Of the ten indicators considered, only one—a 2.0 percentage point reduction in household reports of physical fighting over the past one year—is statistically significant at 95% confidence. While the nine null results imply that project efforts to enhance conflict management capacity may not have created lingering impacts, on the positive side it provides some reassurance that the infusion of cash grants into the community at least did not exacerbate conflicts over limited resources. That said, there is a marginally significant GoBifo effect on the proportion of respondents who reported that they had "ever had a conflict

over a loan or other financial matter" in the last twelve months: treatment households were 4.6 percentage points more likely to report a conflict about money, significant at 90% confidence.

4.3.8 Hypothesis 11: The Role of the Traditional Chiefly Authorities

Most outcomes under this hypothesis estimate the extent the which the Village Head and Elders dominated the structure community activity (SCA) decisions, including whether to choose the salt or batteries, how to share the resulting item amongst community members, how to use the tarpaulin, and what to do with the building materials vouchers. There are no systematic differences in whether respondents felt that "everyone had equal say" in these matters, or if someone had disproportionate say, whether that person was a traditional authority or elder.

However, considering the collection of outcomes where respondents answered the same questions about Local Council / WDC members and chiefdom officials reveals some interesting patterns about relative perceptions of these two spheres of local government. This set includes questions about how much respondents feel that officials in the Council (versus Chiefdom) listen to what people in their community say, how effectively the Council (Chiefdom) spends public funds, how much they trust Council (Chiefdom) representatives and the involvement of the Council (Chiefdom) officials in the implementation of nine local public goods. For people in both treatment and control areas, respondents generally answer these questions more favorably with respect to chiefdom officials: they trust chiefdom officials more, think that they listen more closely to their needs and report that they are more involved in overseeing the community's stock of public goods. Interestingly, however, in GoBifo areas the gap in perceptions of chiefdom versus Council / WDC officials narrows slightly. This suggests that the links and opportunities for community members to work together with their local elected officials created by GoBifo leaves respondents with a somewhat higher opinion of Local Council and WDC members than they had before.

A general risk inherent in the CDD emphasis on devolving control over project finances and choices is that local elites will use their authority and influence to capture benefits for themselves. We explored this issue by studying the distribution of a new public asset—the tarp (SCA #2)—to villages during the first 2009 follow-up visit, and then observing how it was being used in the unannounced second 2009 follow up visit five months later. While analysis finds no treatment effects on the extent of elite capture, it also reveals that the level of elite capture is

perhaps surprisingly relatively low in the communities under study (at least according to this measure). As an example, for the 78% of communities who had used the tarp by the time of the second visit, 87% had put the tarp towards a clearly public purpose. The most obvious example of elite capture would be to use the tarp to patch the roof of a single individual's house, which had happened in fewer than 3% of all cases. That said, 17% of communities overall had not yet used the tarp at all and were storing it at a private residence. The risk of capture for these communities appears quite high: by storing the tarp where it is not publicly available, local elites may be preventing the community from benefiting from the tarp, even if they have not yet put it to use for themselves.

4.3.9 Hypothesis 12: Political and Social Attitudes

The final hypothesis in the ex ante analysis plan concerns political and social attitudes. The GoBifo program's emphasis on the empowerment of women and youth, and the transparency and accountability of local institutions, may have engendered a more equitable or progressive outlook toward politics and social dynamics more generally. Enumerators gauged attitudes using pairs of largely opposing statements, like "As citizens, we should be more active in questioning the actions of leaders" versus "In our country these days, we should have more respect for authority," and asking respondents which one they agreed with more. These paired statements capture respondent views on a diverse range of topics including the acceptability of the use of violence in politics (a particularly salient issue in post-war Sierra Leone), domestic violence, the acceptability of youth and women in leadership roles, paying bribes and coerced labor. Once again, there is no statistically significant mean effect on these outcomes. The only significant effect for this group is a positive 3.8 percentage point increase in agreement with the idea that young people can be good leaders, however, this change in opinions regarding youth leadership did not translate into more youths holding actual leadership positions, like VDC membership.

5. Robustness Checks

The previous section highlights strong positive impacts on the creation of local development committees, the stock and quality of local public goods, economic welfare and linkages between communities and local leaders. It further presents evidence that the program did not impact social capital nor the dynamics of local decision-making. This section evaluates their robustness.

To start, consider typical threats to randomized experiments that would introduce bias to the treatment effect estimates. Fortunately, there were no problems with treatment non-compliance: all communities assigned to the treatment group received the program and none of those in the control group participated. Also, the baseline statistics presented in Table 2 and Appendix B suggest that the randomization process successfully created two very similar groups. If there is concern that the treatment group looked slightly better off at the start, note that the analyses use the baseline value of the outcome of interest as a control variable wherever panel data is available. Thus in order for spurious differences between the two groups to explain the positive impacts, the treatment group would have had to be on a steeper prior trend than controls. None of the treatment minus control differences in either table appear large enough to substantiate this concern.

Next consider reasons why the abundance of zero results might be underestimates. First, if there were significant spillovers from treatment to control communities, the results above would underestimate the impact of the program, since the control communities were also receiving benefits. However, for this to be true, we might expect the coefficient on the post time period to often be positive and significant for the outcomes of interest. This is not the case: across all the outcomes in Appendix C where panel data is available, there are exactly as many (21) positive as negative coefficients that are statistically significant. Thus it seems unlikely that these results are downward biased due to spillovers.

A further concern is that the projects GoBifo implemented at the ward level systematically benefited the control group at the expense of the treatment group. This would be perfectly understandable if, for example, Local Council members took into account the placement of GoBifo village-level projects in deciding where to locate ward projects and targeted those areas that did not already benefit. If anything, it appears that treatment villages knew slightly more about and received greater benefits from the ward-level projects than the controls. Specifically, 27.7% of respondents in treatment villages were able to name a GoBifo ward project compared to only 16.6% of respondents in control areas. Similarly, while 15.2% of respondents in treatment areas reported that a member of their household directly benefited from a ward-level project, only 6.1% of respondents in control areas reported benefits. Thus, it also seems unlikely that GoBifo ward-level projects systematically favored control communities and thereby led to a downward bias in the treatment effect estimates.

The final leading critique would be that the measures we used were simply not good enough or too blunt to detect subtle social or institutional differences between treatment and control communities. While some measures are certainly better than others, our main defense lies in the diversity and multiplicity of instruments used and the fact that they all produce similar results. To start, we combined different data collection methods. As an example, we use both survey data on the percentage of male and female respondents who said they spoke up during the salt versus batteries deliberation (SCA #1), and direct enumerator observation how many men and women they observed speaking during the meeting. Second, the research teams gathered information from a variety of sources. In each community, the field teams interviewed men and women in the privacy of their own homes, held a focus group discussion with key opinion leaders, observed a community decision as it unfolded, and made their own independent assessment of the materials used in and quality of construction of local public goods. Lastly, for each hypothesis we examine a large number of outcomes. Taking these aspects together, the zero effects are quite precisely estimated. To illustrate, note that on average approximately six people made a public statement during the salt versus batteries deliberation and that 29% of these speakers were women. The maximum true positive treatment effect that we may have incorrectly ruled out at the 95% confidence level is a 3.8 percentage point increase in the proportion of public speakers who were women, which is quite a small magnitude.

6. Conclusion

To reiterate, our main finding is that community driven development (CDD) is a reasonable mechanism for delivering small scale public goods, yet does not lead to more fundamental changes in local village institutions, norms or collective action performance. With quite modest grants, beneficiary villages in Sierra Leone implemented projects that increased the stock and quality of local public goods, enhanced the material wellbeing of households, and spurred greater market activity in their communities. Formal program links to the lowest tier of elected government further enhanced the oversight of public goods by local representatives, and the greater exposure to and interaction with these officials boosted citizen confidence in the nascent local governments. Yet such learning-by-doing experiences did not encourage collective action beyond the immediate project, and if anything, project funds may have substituted for private contributions to local public goods. This disconnect refutes the basic premise that participation

in a CDD project catalyzes collective action and voluntary contributions to public goods over the longer term.

The evaluation conclusively rejects the idea that CDD is an effective method to initiate social change or fundamentally alter local hierarchies and decision-making processes. Despite the project's intensive community organizing component focused on strengthening the role of women and young men, we see nearly four years later that women and youths are no more likely to voice their opinion about how the community should manage new public assets. Exposure to inclusive and participatory CDD processes similarly did not make traditional elites more willing or eager to seek out the views of others in making decisions about community resources and development opportunities. More specifically, our structured community activities reveal that women and youths were no more likely to speak publicly during a community meeting to decide between two comparable assets; local elites were no more or less likely to capture an asset that was given to the community for free; and communities were no better able to raise funds in response to a matching grant opportunity to purchase building materials. While current research stresses that institutions are important for successful economic development, our findings provide another piece of evidence that institutions and norms are difficult to change.

More broadly, our results suggest that the comparative advantage of the World Bank and similar external donors lies in implementing development "hardware", not instigating large-scale social and institutional change, at least not as currently delivered. Linking to larger debates in development economics, our findings support the idea that well allocated external assistance can have a positive impact on welfare (Sachs 2005), yet we should not be so naïve as to think that structural factors like social organization and local institutions are easily transformed (Easterly 2001, Kremer and Miguel 2007). Returning to the comparison between informal interventions focused on reshaping norms, like CDD, and changes to the rules of formal institutions, like female leadership quotas, the limited existing evidence suggests that the latter may be a more effective way to alter power dynamics and social perceptions in a relatively modest timeframe (Duflo and Chattopadhyay 2004). Perhaps it is thus necessary to redefine who holds formal political power and control over significant resources, and allow previously marginalized groups a chance to prove their merit on a larger stage, in order to nudge deeply entrenched beliefs and politics in a new direction. As our results concern one program, in one country, these more general implications are clearly speculative; however we can conclude with certainty that more

evidence is needed about the kinds of local movements and external interventions that can successfully enhance the inclusion and accountability of governance institutions.

REFERENCES

Acemoglu, D., S. Johnson and J.A. Robinson, "The Colonial Origins of Comparative Development: An Empirical Investigation," *American Economic Review*, 91:5 (2001), 1369-1401.

Bardhan, P., "Decentralization of Governance and Development," *The Journal of Economic Perspectives*, 16:4(2002), 185-205.

Easterly, W., *The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics*, (Cambridge: MIT Press, 2001).

Fearon, J., M. Humphreys and J. M. Weinstein, "Development Assistance, Institution Building, and Social Cohesion after Civil War: Evidence from a Field Experiment in Liberia," Center for Global Development Working Paper 194, 2009.

GoBifo Project, "GoBifo Overall Budget," project mimeograph, 2006.

GoBifo Project, "Operations Manual: Version 2 June 2007," project mimeograph, 2007.

GoBifo Project,"Results towards Goals and Objectives," project mimeograph, 2008.

Gugerty, M.K. and M. Kremer, "Outside Funding and the Dynamics of Participation in Community Associations," *American Journal of Political Science,* 52:3(2008), 585-602.

Human Rights Watch, *Sierra Leone: Getting Away with Murder, Mutilation, and Rape*, (New York: Human Rights Watch, 1999).

Humphries, M. and J.M. Weinstein, "Handling and Manhandling Civilians in Civil War: Determinants of the Strategies of Warring Factions," *American Political Science Review* 100:3(2006), 429-447.

Katz, L., J. Kling, and J. Liebman, "Experimental Analysis of Neighborhood Effects," Econometrica, 75:1(2007), 83-119.

Kling, J.R. and J.B. Liebman, "Experimental Analysis of Neighborhood Effects on Youth," manuscript, Princeton University, 2004.

Keen, D., "Greedy Elites, Dwindling Resources, Alienated Youths: The Anatomy of Protracted Violence in Sierra Leone," *International Politics and Society* 2(2003), 67-94.

Keen, D., *Conflict and Collusion in Sierra Leone,* (London: James Currey; New York: Palgrave, 2005).

Kremer, M. and E. Miguel, "The Illusion of Sustainability," *Quarterly Journal of Economics*, 122:3(2007), 1007-1065.

Labonne, J. and R. Chase, "Do Community-Driven Development Projects Enhance Social Capital? Evidence from the Philippines." The World Bank Policy Research Working Paper 4678, 2008.

Mansuri, G. and V. Rao, "Community-Based and –Driven Development: A Critical Review," *The World Bank Research Observer,* 19:1(2004), 1-39.

Oates, W. E., "An Essay on Fiscal Federalism," *Journal of Economic Literature*, 37:3(1999), 1120-1149.

Olken, B., "Monitoting Corruption: Evidence from a Field Experiment in Indonesia," *Journal of Political Economy,* 115:2(2007), 200-249.

Reno, W., *Corruption and State Politics in Sierra Leone,* (Cambridge and New York: Cambridge University Press, 1995).

Richards, P., *Fighting for the Rainforest: War, Youth and Resources in Sierra Leone*, (London: James Currey; Portsmouth, NH: Heinemann for the International African Institute, 1996).

Richards, P., K. Bah and J. Vincent, "The Social Assessment Study: Community-driven Development and Social Capital in Post-war Sierra Leone," unpublished manuscript, 2004.

Sachs, J.D. 2005, *The End of Poverty: Economic Possibilities for Our Time,* (New York: Penguin Press, 2005).

Voss, J., 2008. "Impact Evaluation of the Second Phase of the Kecamatan Development Program in Indonesia." The World Bank, Jakarta.

United Nations, *Human Development Report 2004* (New York: United Nations Development Program, Oxford University Press, 2004).

World Bank, "Japan Social Development Fund Grant Proposal: Capacity Development to Strengthen Social Capital in Sierra Leone," project mimeograph, 2004.

World Bank, *World Development Report 2008: Agriculture for Development* (Washington: The World Bank, 2007).

World Bank, "World Development Indictors: 2006 GNI per capita, Atlas method (current US$)," accessed 20 August 2010 from http://data.worldbank.org/.

Table 1: Distribution of GoBifo Projects by Sector

Project Type:	Share of total projects	Number of communities with this type of project
	(1)	(2)
Agriculture	26%	149
Income generation/training	17%	101
Livestock/fishing	14%	83
Community center/sports	14%	80
Education	12%	70
Water and Sanitation	10%	57
Health	5%	31
Roads	2%	10

Table 2: Baseline Comparison between Treatment and Control Communities

	Baseline mean for controls	Placebo treatment effect	N
	(1)	(2)	(3)
Panel A: Community Characteristics			
Total households per community	46.76	0.50	236
		(3.66)	
Distance to nearest motorable road in miles	2.99	-0.32	236
		(0.36)	
Index of war exposure	0.68	-0.01	236
		(0.02)	
Historical legacy of domestic slavery	0.36	0.03	236
		(0.06)	
Average respondent years of education	1.65	0.14	235
		(0.14)	
Panel B: Selected Outcomes from Project Implementation Family A			
Proportion of communities with a Village development committee (VDC)	0.55	0.07	232
		(0.06)	
Proportion visited by Ward Development Committee (WDC) member in past year	0.15	-0.01	228
		(0.05)	
Panel C: Selected Outcomes from "Hardware" Family B			
Proportion of communities with a functional drying floor	0.23	0.05	231
		(0.05)	
Proportion of communities with a functional primary school	0.41	0.08	230
		(0.06)	
Average household PCA asset score	-0.06	0.13	235
		(0.09)	
Supervisor assessment that community is better off than others nearby	0.31	0.05	201
		(0.06)	
Proportion of communities with any petty traders	0.54	0.01	226
		(0.06)	
Panel D: Selected Outcomes from "Software" Family C			
Respondent agrees that chiefdom officials can be trusted	0.66	-0.01	235
		(0.02)	
Respondent agrees that Local Councillors can be trusted	0.61	0.00	235
		(0.02)	
Respondent is a member of credit / savings group	0.25	-0.03	235
		(0.02)	
Respondent is a member of labor sharing gang	0.50	-0.02	235
		(0.03)	
Respondent spoke publicly in last community meeting	0.47	0.00	235
		(0.03)	
Respondent voted in last local elections	0.85	-0.01	235
		(0.02)	
Respondent has not had a financial conflict in the past year	0.77	0.02	235
		(0.02)	

Notes on table: i) significance levels indicated by $+ p < 0.10$, $* p < 0.05$, $** p < 0.01$; ii) robust standard errors; iii) placebo treatment effect run on pre-program baseline data aggregated to village level mean, using a minimal specification that includes only fixed effects for the Local Council wards (the unit of stratification); and iv) the exact wording from each survey question can be found in Appendix C.

Table 3: Hypothesis 1 Project Implementation Results for Core Individual Outcomes

	Dependent Variable:						
	Village development committee	Visit by WDC member	Visit by Local Councillor	Met Councillor or attended Council meeting	Met WDC member or attended WDC meeting	Village development plan	Community bank account
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
GoBifo*Post	0.341**	0.156*	0.042	0.032	0.045+		
	(0.077)	(0.070)	(0.080)	(0.030)	(0.023)		
GoBifo	0.062	-0.019	-0.009	-0.005	-0.004	0.296**	0.706**
	(0.059)	(0.047)	(0.056)	(0.021)	(0.017)	(0.048)	(0.045)
Post	-0.089	0.064	-0.017	-0.174**	-0.109**		
	(0.056)	(0.048)	(0.056)	(0.023)	(0.016)		
Constant	0.226	0.022	0.680**	0.585**	0.319**	0.401	0.207
	(0.143)	(0.118)	(0.137)	(0.039)	(0.046)	(0.250)	(0.126)
Specification	Panel	Panel	Panel	Panel	Panel	Cross section	Cross section
Observations	467	462	464	471	471	221	226
R^2	0.28	0.14	0.19	0.44	0.38	0.37	0.61

Notes on table: i) significance levels indicated by $+ p < 0.10$, $* p < 0.05$, $** p < 0.01$; ii) the relevant treatment effect for the panel specifications in Columns 1-5 is the coefficient on GoBifo*Post, while the relevant treatment effect for the cross section (follow-up data only) specifications in Columns 6-7 is on GoBifo; iii) robust standard errors in parentheses, clustered by village for panel specifications; iv) includes fixed effects for the Local Council wards (the unit of stratification); v) each specification includes the following control variables: total households per community, distance to nearest motorable road, index of war exposure, index of history of domestic slavery, district dummy variable; and vi) WDC stands for Ward Development Committee.

Table 4: Hypothesis 1 Project Implementation Results for Additional Individual Outcomes

Dependent Variable:
[Given existence of functional infrastructure X in the community] A Member of the WDC or Local Council was actively involved in the planning, construction, maintenance or oversight of the resource

	Primary School	Health Clinic	Traditional birth attendant (TBA) house	Water well	Drying floor	Grain store	Community center	Latrine	Sports field
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
GoBifo	0.181**	-0.222	0.002	0.119**	0.140*	0.295**	0.244**	0.155**	0.081*
	(0.055)	(0.189)	(0.106)	(0.044)	(0.061)	(0.076)	(0.053)	(0.040)	(0.035)
Constant	0.362+	0.037	-0.256	-0.301*	0.194	0.152	-0.284	-0.134	0.155
	(0.209)	(1.155)	(0.349)	(0.147)	(0.191)	(0.279)	(0.208)	(0.118)	(0.133)
Specification	Cross section	Cross section	Cross section	Cross section	Cross section	Cross section	Cross section	Cross section	Cross section
Observations	138	26	70	150	115	71	95	169	181
R^2	0.46	0.74	0.71	0.57	0.52	0.62	0.63	0.56	0.47

Notes on table: i) significance levels indicated by + p <0.10, * p <0.05, ** p <0.01; ii) the relevant treatment effect for all Columns is on GoBifo; iii) robust standard errors in parentheses; iv) includes fixed effects for the Local Council wards (the unit of stratification); v) each specification includes the following control variables: total households per community, distance to nearest motorable road, index of war exposure, index of history of domestic slavery, district dummy variable; and vi) WDC stands for Ward Development Committee.

Table 5: Summary of Results by Hypothesis

Hypotheses by family	GoBifo Mean Effect (std. error)
Family A: Project Implementation	
Mean Effect for Family A (Hypothesis 1; 7 total outcomes)	**0.534****
	(0.060)
H1: GoBifo creates functional development committees (7 outcomes)	0.534**
	(0.060)
Family B: Proximate Impacts or "Hardware" Effects	
Mean Effect for Family B (Hypotheses 2 and 3; 30 total outcomes)	**0.197****
	(0.029)
H2: GoBifo increases the quality and quantity of local public services infrastructure (16 outcomes)	0.130**
	(0.036)
H3: GoBifo improves general economic welfare (14 outcomes)	0.272**
	(0.042)
Family C: Social Change or "Software" Effects	
Mean Effect for Family C (Hypotheses 4, 5, 6, 7, 8, 9, 10, 11 and 12; 146 total outcomes)	**0.029**
	(0.019)
H4: GoBifo enhances trust (11 outcomes)	0.042
	(0.065)
H5: GoBifo increases collective action and contributions to local public goods (15 outcomes)	0.038
	(0.041)
H6: GoBifo builds groups and networks (12 outcomes)	0.027
	(0.043)
H7: GoBifo increases access to information about local governance (19 outcomes)	0.001
	(0.038)
H8: GoBifo enhances inclusion and participation in community decisions, especially for vulnerable groups (43 outcomes)	0.005
	(0.029)
H9: GoBifo increases participation in local governance (15 outcomes)	0.121**
	(0.046)
H10: GoBifo reduces crime and conflict (8 outcomes)	0.031
	(0.055)
H11: GoBifo changes local systems of authority (25 outcomes)	0.047
	(0.036)
H12: GoBifo fosters more liberal political and social attitudes (9 outcomes)	0.028
	(0.042)

Notes on table: i) significance levels indicated by $+ p < 0.10$, $* p < 0.05$, $** p < 0.01$; ii) robust standard errors clustered by village for panel data; iii) includes fixed effects for the Local Council wards (the unit of stratification); iv) each specification includes the following control variables: total households per community, distance to nearest motorable road, index of war exposure, index of history of domestic slavery, district dummy variable; v) these mean effect estimates are limited to the "core" set of outcomes that excludes all conditional outcomes (i.e. those that depend on the state of another variable--for example, quality of infrastructure depends on the existence of the infrastructure); and vi) for complete list of all core and additional variables under each hypothesis-- including the exact wording of survey questions and treatment effect estimates for each individual outcome--see Appendix C.

Table 6: Summary of Treatment Effect Heterogeneity

Hypotheses by family		Interactive Treatment Effect of GoBifo and:						
	GoBifo Mean Effect (std. error)	Community size (std.error)	Index of war exposure (std.error)	Average respondent schooling (std.error)	Distance to motorable road (std.error)	History of domestic slavery (std.error)	Bombali district (std.error)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Family A: Project Implementation (Hypothesis 1; 7 total outcomes)	0.547* (0.230)	-0.001 (0.002)	0.030 (0.280)	0.020 (0.038)	0.012 (0.015)	-0.164 (0.107)	0.003 (0.104)
Family B: Proximate Impacts of "Hardware" Effects (Hypotheses 2 and 3; 30 total outcomes)	0.669** (0.135)	0.000 (0.001)	-0.227 (0.185)	-0.032 (0.025)	-0.013 (0.011)	-0.142* (0.069)	-0.246** (0.060)
Family C: Social Change of "Software" Effects (Hypotheses 4, 5, 6, 7, 8, 9, 10, 11 and 12; 146 total outcomes)	0.056 (0.106)	-0.002 (0.001)	0.005 (0.125)	0.009 (0.017)	-0.004 (0.008)	0.001 (0.049)	0.051 (0.050)

Notes on table: i) significance levels indicated by $+ p < 0.10$, $* p < 0.05$, $** p < 0.01$; ii) robust standard errors; iii) includes fixed effects for the Local Council wards (the unit of stratification); iv) each specification is run on the post-program data and includes the following control variables: total households per community, distance to nearest motorable road, index of war exposure, index of history of domestic slavery, district dummy variable, and average respondent years of school, plus all six of these control variables interacted with the GoBifo treatment dummy; v) these mean effect estimates are limited to the "core" set of outcomes that excludes all conditional outcomes (i.e. those that depend on the state of another variable--for example, quality of infrastructure depends on the existence of the infrastructure); vi) for complete list of all core and additional variables under each hypothesis--including the exact wording of survey questions and treatment effect estimates for each individual outcome--see Appendix C; and vii) due to programming memory constraints, the estimates for Family C do not include ward fixed effects (this omission will be rectified shortly).

Table 7: Hypothesis 2 Stock of Local Public Goods, Selection of Core Outcomes

| | Dependent Variable: Mean Effects Sub-Index on Stock of Local Public Goods (12 goods in total) = 0.212 ** (0.044) | | | | | | | | | |
| | Primary school | Traditional birth attendant (TBA) house | Water well | Drying floor | Grain store | Community center | Latrine | Seed bank | Sports field | Proposal to NGO |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
GoBifo*Post	-0.007		-0.068	0.104	0.001	0.241**				-0.156+
	(0.050)		(0.081)	(0.066)	(0.051)	(0.063)				(0.081)
GoBifo	0.084	0.175**	0.104+	0.054	0.064	-0.083+	0.210**	0.172**	0.071+	-0.002
	(0.056)	(0.035)	(0.059)	(0.050)	(0.041)	(0.047)	(0.059)	(0.048)	(0.040)	(0.060)
Post	0.056+		0.091	0.007	0.041	-0.017				-0.050
	(0.032)		(0.059)	(0.042)	(0.029)	(0.039)				(0.058)
Constant	-0.364*	-0.235**	0.113	-0.332**	-0.294**	-0.278*	0.460*	-0.097	-0.134	-0.118
	(0.142)	(0.091)	(0.175)	(0.099)	(0.086)	(0.124)	(0.228)	(0.122)	(0.171)	(0.120)
Specification	Panel	Cross section	Panel	Panel	Panel	Panel	Cross section	Cross section	Cross section	Panel
Observations	464	235	451	459	468	469	234	226	236	460
R^2	0.34	0.37	0.21	0.27	0.19	0.33	0.26	0.41	0.34	0.13

Notes on table: i) significance levels indicated by $+ p$ <0.10, $* p$ <0.05, $** p$ <0.01; ii) the relevant treatment effect for the panel specifications in Columns 1, 3-6 and 10 is the coefficient on GoBifo*Post, while the relevant treatment effect for the cross section (follow-up data only) specifications in Columns 2 and 7-9 is on GoBifo; iii) robust standard errors in parentheses, clustered by village for panel specifications; iv) includes fixed effects for the Local Council wards (the unit of stratification); v) each specification includes the following control variables: total households per community, distance to nearest motorable road, index of war exposure, index of history of domestic slavery, district dummy variable; vi) other items in the stock of local public goods sub-index include peripheral health unit, market and sports uniforms (individual results not shown); and vii) TBA stands for traditional birth attendant and NGO for non-government organization or donor.

Table 8: Hypothesis 2 Stock of Local Public Goods, Selection of Additional Outcomes

	Dependent Variable:								
	Mean Effects Sub-Index on Measures of Public Goods Quality (12 measures in total) = 0.290 ** (0.076)						Mean Effects Sub-Index on Community Financial Contributions to Public Goods (9 measures in total) = -0.090 (0.094)		
	Supervisor physical assessment of the quality of construction materials			Supervisor physical assessment of the overall appearance			The money and supplies for the resource were provided entirely by the community or in part from the community and part from an external source (NGO, government, donor)		
	Primary school	Latrine	Drying floor	Primary School	Latrine	Drying floor	Primary school	Latrine	Drying floor
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
GoBifo*Post							-0.007 (0.112)		0.086 (0.124)
GoBifo	0.116* (0.055)	0.177** (0.055)	0.142+ (0.076)	0.122** (0.045)	0.060+ (0.031)	0.093+ (0.056)	-0.039 (0.085)	-0.197* (0.093)	-0.109 (0.085)
Post							-0.149+ (0.079)		-0.149 (0.107)
Constant	0.338 (0.274)	-0.115 (0.184)	0.757** (0.212)	0.062 (0.190)	0.336** (0.082)	0.409+ (0.235)	1.051** (0.274)	0.407 (0.298)	0.740** (0.268)
Specification	Cross section	Cross section	Cross section	Cross section	Cross section	Cross section	Panel	Cross section	Panel
Observations	123	154	101	123	153	99	242	126	184
R^2	0.30	0.53	0.35	0.29	0.29	0.28	0.22	0.24	0.29

Notes on table: i) significance levels indicated by + p <0.10, * p <0.05, ** p <0.01; ii) the relevant treatment effect for the panel specifications in Columns 7 and 9 is the coefficient on GoBifo*Post, while the relevant treatment effect for the cross section (follow-up data only) specifications in Columns 1-6 and 8 is on GoBifo; iii) robust standard errors in parentheses, clustered by village for panel specifications; vi) includes fixed effects for the Local Council wards (the unit of stratification); v) each specification includes the following control variables: total households per community, distance to nearest motorable road, index of war exposure, index of history of domestic slavery, district dummy variable; vi) all outcomes are conditional on the existence of the functional public good in question; and vii) while the individual results are not shown due to space constraints, the quality mean effect index also includes measure of water well construction, and the

Table 9: Hypothesis 3 Economic Welfare Results for Core Individual Outcomes

	Dependent Variable:									
	Better off than other villages nearby	Village has a bank account	Total petty traders in village	Total goods on sale of 10	Total new businesses	HHS PCA asset score	HHS asset quintile	Total HHS sources of income	Total HHS income	Attended skills training
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
GoBifo*Post	0.090					0.212*	0.158+	0.102		
	(0.087)					(0.090)	(0.094)	(0.105)		
GoBifo	0.056	0.706**	0.719*	0.560*	0.091	0.107	0.089	-0.114	-21.773	0.119**
	(0.063)	(0.045)	(0.344)	(0.240)	(0.310)	(0.079)	(0.089)	(0.079)	(73.069)	(0.018)
Post	-0.036					-0.109+	0.077	0.063		
	(0.059)					(0.060)	(0.062)	(0.074)		
Constant	-0.221	0.207	4.054**	4.985**	1.415	1.286**	3.377**	0.904**	644.326*	0.321**
	(0.143)	(0.126)	(1.248)	(1.294)	(1.213)	(0.284)	(0.180)	(0.138)	(258.336)	(0.053)
Specification	Panel	Cross section	Cross section	Cross section	Cross section	Panel	Panel	Panel	Cross section	Cross section
Observations	432	226	225	236	207	471	471	472	236	235
R^2	0.14	0.61	0.30	0.44	0.40	0.52	0.51	0.29	0.18	0.37

Notes on table: i) significance levels indicated by $+ p < 0.10$, $* p < 0.05$, $** p < 0.01$; ii) the relevant treatment effect for the panel specifications in Columns 1 and 6-8 is the coefficient on GoBifo*Post, while the relevant treatment effect for the cross section (follow-up data only) specifications in Columns 2-5 and 9-10 is on GoBifo; iii) robust standard errors in parentheses, clustered by village for panel specifications; iv) includes fixed effects for the Local Council wards (the unit of stratification); v) each specification includes the following control variables: total households per community, distance to nearest motorable road, index of war exposure, index of history of domestic slavery, district dummy variable; and vi) HHS stands for household and PCA for principal component analysis.

Table 10: Selected Outcomes from the Structured Community Activities (SCAs)

Structured Community Activity (SCA) Outcome:	Mean for Controls	Treatment Effect	Standard Error	N
	(1)	(2)	(3)	(5)
Panel A. Participation in Gift Choice Deliberation				
GoBifo Mean Effect for SCA #1 (32 outcomes in total)		**0.002**	**(0.036)**	
Duration of gift choice deliberation (in minutes)	9.36	1.59	(1.13)	225
Total adults in attendance at gift choice meeting	54.51	4.13	(3.20)	236
Total women in attendance at gift choice meeting	24.99	2.33	(1.68)	236
Total youths (18 to 35 years) in attendance at gift choice meeting	23.57	2.17	(1.38)	236
Total number of women who spoke publicly during the deliberation	1.88	-0.19	(0.22)	236
Total number of youths (18 to 35 years) who spoke publicly	2.14	0.23	(0.24)	236
Proportion of communities that held a vote during the deliberation	0.10	0.07+	(0.04)	236
Panel B. Commnity Use of Tarpaulin				
GoBifo Mean Effect for SCA #2 (18 outcomes in total)		**-0.027**	**(0.042)**	
Proportion of communities that held a meeting after the research team left to discuss what to do with the tarp	0.98	-0.03	(0.02)	233
Proportion of communities that stored the tarp in a public place	0.06	0.06	(0.04)	225
Proportion of communities that had used the tarp by the follow up visit (5 months after receipt)	0.90	-0.08+	(0.04)	233
Given use of the tarp, proportion of communities that used the tarp in a public way	0.86	0.02	(0.05)	161
Panel C. Collective Action and the Building Materials Vouchers				
GoBifo Mean Effect for SCA #3 (13 outcomes in total)		**-0.047**	**(0.051)**	
Proportion of communities that redeemed any vouchers at the building material supply store	0.54	-0.02	(0.06)	236
Average number of vouchers redeemed at the store	2.95	0.05	(0.35)	236
Proportion of communities that held a meeting after the research team left to discuss what to do with the vouchers	0.98	-0.05*	(0.02)	231

Notes on table: i) significance levels denoted by $+ \ p < 0.10$, $* \ p < 0.05$ and $** \ p < 0.01$; ii) robust standard errors; and iii) treatment effects estimated on follow-up data with only ward fixed effects (level of stratification) as controls.

Figure 1: Project and Research Timeline

Oct-05 |	Baseline survey	
Nov-05 |		
Dec-05 ↓		
Jan-06 |	Ward Facilitator Training	
Feb-06 |		
Mar-06 |		
Apr-06 ↓		
May-06 |	Development Planning	
Jun-06 |		
Jul-06 |		
Aug-06 |		
Sep-06 |		
Oct-06 |		
Nov-06 |		
Dec-06 ↓		
Jan-07 |	Ward Development Committee Approval	
Feb-07 |		
Mar-07 ↓		
Apr-07 |	Delays	
May-07 |		
Jun-07 |		
Jul-07 |		
Aug-07 |		
Sep-07 ↓		

Oct-07 |	First grants disbursed
Nov-07 |	
Dec-07 ↓	
Jan-08 |	Projects implemented
Feb-08 |	
Mar-08 ↓	
Apr-08 |	Second grants disbursed
May-08 ↓	
Jun-08 |	Projects implemented
Jul-08 |	
Aug-08 ↓	
Sep-08 |	Third grants disbursed
Oct-08 ↓	
Nov-08 |	Projects implemented
Dec-08 |	
Jan-09 |	
Feb-09 |	
Mar-09 |	
Apr-09 ↓	
May-09 ↓	Follow-up survey 1
Jun-09 |	Voucher program
Jul-09 |	
Aug-09 |	
Sep-09 ↓	
Oct-09 |	Follow-up survey 2
Nov-09 ↓	

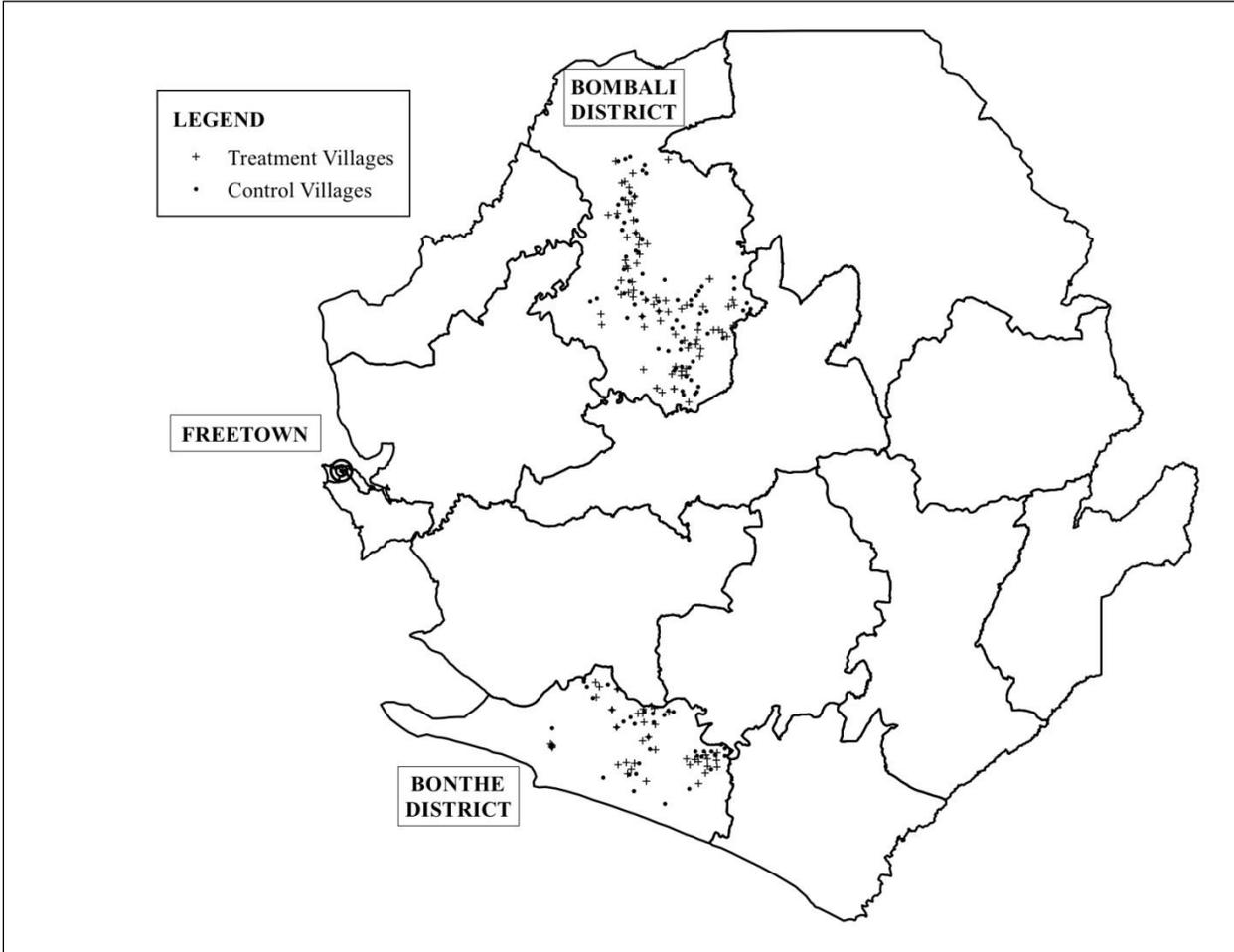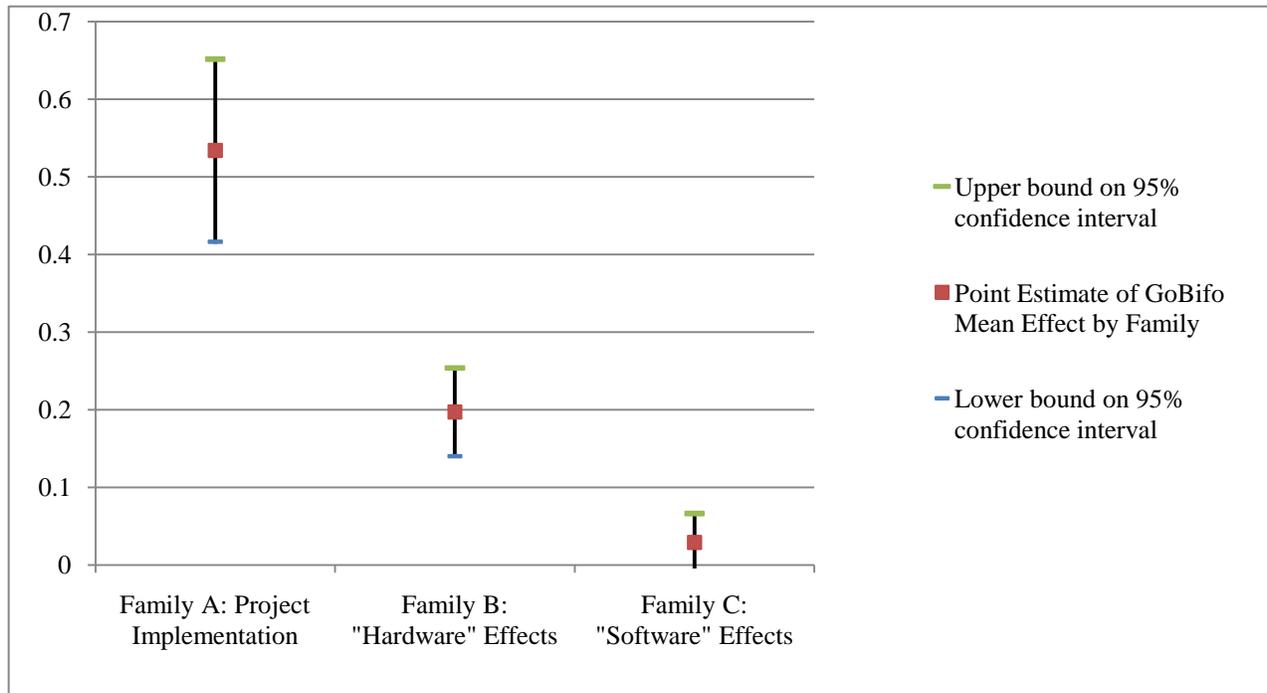**Figure 2: Map of GoBifo Sample Villages**

Figure 3: GoBifo Mean Effect by Family (in standard deviation units)

Appendix A. Sampling Details

This section discusses the sample selection process in more detail. It explains: i) the selection of wards within districts; ii) the onsite randomization process for the 8 research communities in Bonthe Town; and iii) two data issues—inaccurate measures of total households per village and ward location—that lead to a partial re-sampling of the research areas. Importantly, none of these issues systematically affect either treatment or control communities, and thus do not create bias for the treatment effect estimates.

After the districts were selected, the sample of wards (the lowest administrative unit of local government) was chosen to avoid duplication of effort with a similar community development program. GoBifo project management collaborated with The National Social Action Project (NSAP) to avoid overlap of their programs in particular wards. Since NSAP had already selected the most vulnerable wards (as classified by its own poverty mapping exercise) for its programs, GoBifo chose to work in all the remaining wards. Thus our sample—of treatment and control communities—likely represents better-off communities in these districts, although by any measure the research areas are very poor.

While the majority of the randomization was conducted electronically, the randomization process for the island communities of Bonthe Town was conducted manually by a public lottery. Since there was no community list from the Census available to use in the computerized process, estimation of community size and selection into treatment and control groups was completed onsite. As Town sections are roughly comparable in size to villages in Bonthe District, the project team treated each section as a single community. Also, since the wards in Bonthe Town are substantially smaller than those in the District, GoBifo decided to intervene in only two (instead of six) communities per ward. The research team thus wrote the names of all sections in the target wards on individual pieces of paper and drew the four project and four control sites from a box in the presence of the Section Heads, Local Councilors and two independent observers.

As explained in the Research Design Section, community-level eligibility for the GoBifo program was determined by: i) total number of households (20 to 200 households in Bombali district and 10 to 100 in Bonthe); and ii) location within a targeted ward in one of the two districts. At the time, the most up-to-date information on community size was from the Statistics Sierra Leone (SSL) 2004 Population and Housing Census. As the Census data entry process was still ongoing, the only electronically available measures were the pre-census cartographic team estimates of total households per locality. We thus used this measure to eliminate communities that were too small or large, and on 17 October 2005 conducted an initial randomization on the resulting eligibility pool to select 228 villages, composed of 114 treatment and 114 control communities (or 6 treatment and 6 control in each of 19 wards). The first 3 days of field work surveyed 32 communities from this initial list. However, the field team reported large

differences in the community size estimates from the cartographic team and what they encountered in the villages, frequently off by 50 or more households. The research team thus manually generated a new list of total households for all communities in the target wards using the hard copies of the Census enumeration area summary books. Using this more accurate measure of total households per village to define a new eligibility pool, we conducted a second randomization on 18 November 2005 for the 228 villages. Due to budget constraints, we could not drop the communities already surveyed in the first three days of research, and therefore required that they be included in the second sample. In addition, there were 11 communities in this second sample for which SSL was unable to locate the full census books, and was therefore unable to compile household listings. One further village was found to be empty as it was not a permanent settlement. Replacements for these 12 communities were generated by assigning random numbers to the remaining communities in their respective wards.

The second issue discovered during fieldwork was that 9 selected communities in one particular chiefdom were assigned to the wrong Local Council ward. As background, since the 2004 Census had not yet been completed, the National Electoral Commission had to rely on old Census data in drawing ward boundaries for the 2004 Local Council elections. This process created some confusion on the ground concerning which chiefdom sections individual Councillors represented. Direct reports from the relevant Local Councillors revealed that 9 communities from our sample needed to be replaced in order to retain the balance of 6 treatment and 6 control communities in each of the 3 targeted wards in Gbendembu Ngowahun chiefdom. The research team made the necessary replacements by assigning random numbers to the remaining communities in each ward.

Appendix B: Treatment versus Control Comparison of All Outcomes in Baseline Data

Row	Outcome in baseline data	Baseline Mean for Controls	Placebo Treatment Effect	Standard Error	N	Hypothesis
		(1)	(2)	(3)	(4)	(5)
1	Attend WDC meeting	0.199	-0.003	0.017	235	H1, H9
2	Met Councillor	0.358	-0.004	0.021	235	H1, H9
3	Village development committee	0.547	0.068	0.061	232	H1, H5, H9
4	Visit by Local Councillot	0.339	-0.01	0.055	228	H1, H7
5	Visit by WDC member	0.148	-0.014	0.046	228	H1, H7
6	Functional community center	0.231	-0.085+	0.047	233	H2
7	Functional drying floor	0.235	0.054	0.051	231	H2
8	Functional grain store	0.094	0.069	0.043	233	H2
9	Functional market	0.009	0	0.012	232	H2
10	Functional peripheral health unit	0.045	0.007	0.028	227	H2
11	Functional primary school	0.409	0.075	0.062	230	H2
12	Functional water well	0.36	0.113+	0.061	229	H2
13	Proposal to NGO	0.339	-0.001	0.06	231	H2, H5
14	Community financial contribution to community center	0.839	-0.069	0.098	56	H2, H5
15	Community financial contribution to drying floor	0.3	-0.116	0.088	86	H2, H5
16	Community financial contribution to grain store	0.133	0.168	0.168	38	H2, H5
17	Community financial contribution to peripheral health unit	0.571	-0.800*	0.379	14	H2, H5
18	Community financial contribution to primary school	0.7	-0.025	0.088	118	H2, H5
19	Community financial contribution to water well	0.816	0.041	0.075	108	H2, H5
20	Household PCA asset score	-0.061	0.125	0.086	235	H3
21	Community better off than others in area	0.313	0.046	0.064	201	H3
22	Any petty traders in community	0.544	0.008	0.062	226	H3
23	Household PCA asset quintile	2.757	0.105	0.097	235	H3
24	Total sources of household income	1.48	-0.114	0.071	236	H3
25	Household sold agricultural goods	0.298	0.013	0.025	234	H3
26	Willingness to entrust neighbor with market purchases	0.848	-0.011	0.015	235	H4
27	Belief that money left in community would be recovered	0.216	-0.022	0.018	235	H4
28	Member of credit/savings group	0.245	-0.028	0.024	235	H4
29	Has entrusted a neighbor with market purchases	0.809	0.008	0.014	235	H4
30	Trust in central government officials	0.608	0.002	0.018	235	H4
31	Trust in chiefdom officials	0.664	-0.01	0.019	235	H4
32	Trust in Local Council	0.611	0.003	0.021	235	H4
33	Trust people from outside community	0.469	0.002	0.021	235	H4
34	Trust community members	0.856	0.019	0.014	235	H4
35	Participated in footpath brushing	0.716	-0.008	0.017	235	H5
36	Existence of communal farm	0.421	0.007	0.06	230	H5
37	Existence of community teachers	0.931	-0.096+	0.055	119	H5
38	Worked on communal farm in past year	0.223	0.012	0.031	235	H5
39	Contributed money to labor sharing gang	0.288	0.023	0.03	222	H5, H6
40	Contributed money to credit/savings group	0.794	-0.033	0.044	196	H5, H6
41	Contributed money to school PTA	0.669	0.054	0.041	197	H5, H6
42	Days worked on communal farm	4.913	-0.62	0.722	158	H5
43	Contributed labor to labor sharing gang	0.635	0.014	0.035	222	H5, H6
44	Contributed labor to school PTA	0.513	0.004	0.04	197	H5, H6
45	Leones paid to community teacher	43918.918	-7224.552	11061.2	75	H5
46	Community teacher renumerated	0.907	-0.005	0.06	100	H5
47	Community teacher trained	0.673	-0.207*	0.087	97	H5
48	Member of labor sharing gang	0.5	-0.019	0.026	235	H6
50	Member of school PTA	0.327	0.015	0.024	235	H6
51	Member of social club	0.219	0.024	0.02	235	H6
52	Helped re-thatch neighbor's house	0.395	0.005	0.021	235	H6

53	Attended labor sharing group meeting	0.534	-0.032	0.036	222	H6, H8
54	Attended credit/savings group meeting	0.651	0.003	0.049	196	H6, H8
55	Attended school PTA meeting	0.821	0.048	0.032	197	H6, H8
56	Received help re-thatching own roof	0.712	0.019	0.035	222	H6
57	Index of public information displayed in community	0.222	0.058*	0.028	229	H7
58	Able to name Local Council Chair	0.094	0.022	0.014	235	H7
59	Able to name date of next general election	0.199	-0.002	0.019	235	H7
60	Able to name Local Councillor	0.334	0.022	0.026	235	H7
61	Able to name Paramount Chief	0.685	-0.017	0.023	235	H7
62	Able to name Local Council project	0.056	-0.003	0.011	235	H7
63	Able to name Section Chief	0.582	0.022	0.027	235	H7
64	Able to name tax rate for adults	0.821	-0.022	0.018	235	H7
65	Listens to radio for information about government	0.427	0.007	0.021	235	H7
66	Able to name who spends market dues	0.391	0.022	0.045	162	H7
67	Attended community meeting	0.696	-0.009	0.019	235	H8
68	Attended communal farm meeting	0.835	-0.097*	0.047	151	H8
69	Attended meeting to decide teacher pay	0.601	-0.017	0.036	182	H8
70	Spoke during community meeting	0.468	0.002	0.026	235	H8
71	Spoke during communal farm meeting	0.628	0.054	0.056	141	H8
72	Spoke during teacher pay meeting	0.629	-0.024	0.041	162	H8
73	Believe could change unjust Council policy	0.421	-0.009	0.02	235	H9
74	Believe could change unjust Chiefdom policy	0.416	-0.019	0.02	235	H9
75	Member of community stood for Local Council	0.095	0.001	0.039	232	H9
76	Member of community stood for Paramount Chief	0.107	0.02	0.042	222	H9
77	Member of community stood for Section Chief	0.336	0.078	0.063	230	H9
78	Member of community stood for WDC membership	0.198	0.021	0.051	231	H9
79	Voted in 2004 local elections	0.846	-0.005	0.015	235	H9
80	Voted in 2003 general elections	0.891	-0.01	0.014	235	H9
81	No report of physical fight in past year	0.974	-0.006	0.006	235	H10
82	No report of theft in past year	0.65	-0.011	0.022	235	H10
83	No report of witchcraft in past year	0.963	-0.003	0.008	235	H10
84	No conflict over money in past year	0.767	0.019	0.017	235	H10
85	Given money conflict, no violence ensued	0.885	-0.023	0.034	200	H10
86	No conflict taken to traditional courts	0.508	0.008	0.019	235	H11
87	Relative trust in Local Council versus Chiefdom	-0.052	0.013	0.015	235	H11
88	Not traditional authority who decided teacher pay	0.688	0.057	0.098	92	H11
89	Defaulters on teacher pay not reported to the Chief	0.404	0.085	0.102	101	H11
90	Both youth and non-youth work on communal farm	0.677	-0.055	0.073	98	H12
91	No children work on communal farm	0.167	0.117	0.075	98	H12
92	Both men and women work on communal farm	0.729	-0.011	0.063	98	H12
93	Different tribes work on communal farm	1.128	0.023	0.113	97	H12
94	Index of how inclusive the labor gang is	0.443	-0.025	0.021	222	H12
95	Index of how inclusive the credit/savings group is	0.577	0.003	0.028	196	H12

Notes on table: i) significance levels indicated by $+ p < 0.10$, $* p < 0.05$, $** p < 0.01$; ii) robust standard errors; iii) placebo treatment effect run on pre-program baseline data under minimal specification that includes only fixed effects for the Local Council wards (the unit of stratification); and iv) the exact wording from each survey question can be found in Appendix C.

Supplementary Appendix C (Not Intended for Publication): Raw Results for All Outcomes

Row	Survey question	Endline mean for controls	Treatment effect	Standard error	N	Hypothesis	Mean effects index
		(1)	(2)	(3)	(5)	(6)	(7)
1	Have you personally talked with a member of the WDC or participated in a meeting organized by the WDC in the past year?	0.090	0.041**	0.013	236	H1, H9	core
2	Does this community have a bank account?	0.081	0.711**	0.045	226	H1, H3	core
3	In the past year, have you talked with the Local Councillor or participated in any meeting organized by the council?	0.184	0.029	0.018	236	H1, H9	core
4	Since January 2006, has this community had a Village or Community Development Committee (VDC or CDC)?	0.458	0.407**	0.052	235	H1, H5, H9	core
5	Does this community have a village development plan (i.e. an agreed plan with specific priorities for what the community will do for its own development over the next few years)?	0.617	0.298**	0.048	221	H1, H9	core
6	Has this community been visited by a Local Council member in the past one year?	0.322	0.034	0.058	236	H1, H7	core
7	Has this community been visited by a Ward Development Committee member in the past year?	0.212	0.138*	0.055	234	H1, H7	core
8	[Given functional community center in the community] Was a member of the Ward Development committee or Local Council directly involved in the planning, construction, maintenance or oversight of this community center?	0.251	0.201**	0.055	95	H1, H9	additional
9	[Given functional drying floor in the community] Was a member of the Ward Development committee or Local Council directly involved in the planning, construction, maintenance or oversight of this drying floor?	0.243	0.133*	0.062	115	H1, H9	additional
10	[Given functional grain store in the community] Was a member of the Ward Development committee or Local Council directly involved in the planning, construction, maintenance or oversight of this grain store?	0.144	0.212**	0.074	71	H1, H9	additional
11	[Given functional latrine in the community] Was a member of the Ward Development committee or Local Council directly involved in the planning, construction, maintenance or oversight of this latrine?	0.219	0.145**	0.040	169	H1, H9	additional
12	[Given functional health clinic in the community] Was a member of the Ward Development committee or Local Council directly involved in the planning, construction, maintenance or oversight of this PHU?	0.615	-0.28	0.218	26	H1, H9	additional
13	[Given functional primary school in the community] Was a member of the Ward Development committee or Local Council directly involved in the planning, construction, maintenance or oversight of this primary school?	0.415	0.18**	0.053	138	H1, H9	additional
14	[Given functional football/sports field in the community] Was a member of the Ward Development committee or Local Council directly involved in the planning, construction, maintenance or oversight of this football/sports field?	0.163	0.078*	0.035	181	H1, H9	additional
15	[Given functional traditional birth attendant (TBA) house in the community] Was a member of the Ward Development committee or Local Council directly involved in the planning, construction, maintenance or oversight of this TBA house?	0.399	-0.063	0.114	70	H1, H9	additional
16	[Given functional water well in the community] Was a member of the Ward Development committee or Local Council directly involved in the planning, construction, maintenance or oversight of this well?	0.354	0.11*	0.044	150	H1, H9	additional

Row	Survey question	Endline mean for controls (1)	Treatment effect (2)	Standard error (3)	N (5)	Hypothesis (6)	Mean effects index (7)
17	Ask to be taken to the nearest bush path. This should be a foot path (not a road for cars) that the community uses the most. Ask the community: when was the last time this community brushed this foot path? [days to last brushing]	-41.263	-8.472	6.352	192	H2, H5	core
18	Does the community have a community center and is it functional?	0.212	0.161**	0.050	236	H2	core
19	Does the community have a drying floor and is it functional?	0.237	0.166**	0.057	228	H2	core
20	Does the community have a grain store and is it functional?	0.136	0.068	0.047	235	H2	core
21	Does the community have a latrine and is it functional?	0.462	0.208**	0.059	234	H2	core
22	Does the community have a market and is it functional?	0.017	0	0.017	235	H2	core
23	Does the community have a public health unit and is it functional?	0.060	0.017	0.033	235	H2	core
24	Does the community have a primary school and is it functional?	0.462	0.077	0.063	234	H2	core
25	Does the community have any wells (mechanical or bucket) and are any of them functional?	0.459	0.042	0.064	222	H2	core
26	Do any of the local sports teams have uniforms / vests?	0.100	0.105*	0.048	225	H2	core
27	Does the community have a football / sports field and is it functional?	0.444	0.071+	0.043	236	H2	core
28	Does the community have a traditional birth attendant (TBA) house and is it functional?	0.079	0.172**	0.034	235	H2	core
29	Ask to be taken to the nearest bush path. This should be a foot path (not a road for cars) that the community uses the most. Walk 100 steps down the path (i.e. look at the middle, not the start of the path). In your own opinion, how bushy is the path? [Answer indexed from 0 "very bushy" to 1 "very clear"]	0.482	0.001	0.035	228	H2, H5	core
30	Since January 2006, has this community taken a project proposal to an external funder—like local government or NGO—for support? *Note that the community should have been the ones initiating the request.*	0.292	-0.154**	0.052	229	H2, H5	core
31	Does this community have a seed bank (i.e. where people can borrow rice or groundnuts to plant and repay after harvest)?	0.170	0.173**	0.048	226	H2	core
32	[After asking the community how they have used (or plan to use) the tarp] SUPERVISOR: In your own opinion, is the tarp being used (or is there a plan to use it) in a public way (where everyone benefits) or in a private way (where only few people benefit)?	0.857	0.015	0.051	161	H2, H11	core
33	[Given the community redeemed vouchers and after asking the community how they have used (or plan to use) the building materials] SUPERVISOR: In your own opinion, are the buillding materials being used (or is there a plan to use them) in a public way (where everyone benefits) or in a private way (where only few people benefit)?	0.898	-0.003	0.061	98	H2	additional
34	[Given that there is a community center in the community] The money and supplies for the community center were provided by the community itself or in part from the community and part from an external source (like NGO, Government or donor)	0.808	-0.291*	0.128	71	H2, H5	additional
35	[Given that there is a drying floor in the community] The money and supplies for the drying floor were provided by the community itself or in part from the community and part from an external source (like NGO, Government or donor)	0.105	-0.018	0.073	98	H2, H5	additional

Row	Survey question	Endline mean for controls	Treatment effect	Standard error	N	Hypothesis	Mean effects index
		(1)	(2)	(3)	(5)	(6)	(7)
36	[Given that there is a grain store in the community] The money and supplies for the grain store were provided by the community itself or in part from the community and part from an external source (like NGO, Government or donor)	0.000	0.064	0.054	50	H2, H5	additional
37	[Given that there is a latrine in the community] The money and supplies for the latrine were provided by the community itself or in part from the community and part from an external source (like NGO, Government or donor)	0.761	-0.187*	0.092	126	H2, H5	additional
38	[Given that there is a public health unit (PHU) in the community] The money and supplies for the PHU were provided by the community itself or in part from the community and part from an external source (like NGO, Government or donor)	0.143	0	0.000	16	H2, H5	additional
39	[Given that there is a primary school in the community] The money and supplies for the primary school were provided by the community itself or in part from the community and part from an external source (like NGO, Government or donor)	0.554	-0.011	0.091	124	H2, H5	additional
40	[Given that there are any water wells in the community] The money and supplies for at least one well were provided by the community itself or in part from the community and part from an external source (like NGO, Government or donor)	0.375	-0.200*	0.087	109	H2, H5	additional
41	[Given that there are any water wells in the community] The money and supplies for at least one well were provided by the community itself or in part from the community and part from an external source (like NGO, Government or donor)	0.335	0.024	0.039	182	H2, H5	additional
42	[Given that there are any water wells in the community] The money and supplies for at least one well were provided by the community itself or in part from the community and part from an external source (like NGO, Government or donor)	0.449	-0.043	0.091	81	H2, H5	additional
43	[Given that there is a football field or other sports facility] does the sports facility have any modern equipment (like metal goal posts or nets)?	0	0.015	0.015	153	H2	additional
44	Index of supervisor physical assessment of drying floor that gives weight to the lack of cracks and the lack of water pooling in the floor.	0.375	0.15+	0.077	101	H2	additional
45	Index of supervisor physical assessment of the quality of building materials used in the latrine that gives weight to non-mud floor, non-thatch roof and non-mud or thatch walls	0.27	0.149**	0.055	154	H2	additional
46	Index of supervisor physical assessment of the quality of building materials used in the primary school that gives weight to non-mud floor, non-thatch roof and non-mud or thatch walls	0.583	0.106+	0.055	123	H2	additional
47	Index of supervisor physical assessment of the type and cleanliness of the water source that gives weight to tap or wells, fencing, no vegetation and area not used for human waste	0.464	0.008	0.041	224	H2	additional
48	Supervisor summary assessment of the overall appearance of the drying floor	0.426	0.100+	0.058	99	H2	additional
49	Supervisor summary assessment of the overall appearance of the latrine	0.417	0.057+	0.031	153	H2	additional
50	Supervisor summary assessment of the overall appearance of the primary school	0.482	0.108*	0.044	123	H2	additional

Row	Survey question	Endline mean for controls	Treatment effect	Standard error	N	Hypothesis	Mean effects index
		(1)	(2)	(3)	(5)	(6)	(7)
51	Supervisor summary assessment of the overall appearance of the water source	0.426	-0.026	0.032	221	H2	additional
52	Household PCA Asset/Amenities score (includes hhs ownership of bicycle, mobile phone, generator, car/truck/motorcycle, electric fan, umbrella, TV, radio/cassette player, torchlight; non-mud floor of house; non-thatch roof of house; non-mud walls of house; index of water source quality (i.e. tap/well better than river); index of toilet facility quality (i.e. latrine better than bush))	-0.170	0.337**	0.100	236	H3	core
53	Supervisor assessment that community is "much better off" or "a little better off" than other communities he/she has been to in this area	0.263	0.141*	0.060	231	H3	core
54	In the past one year, what are the top three ways you yourself have earned cash and how much cash have you earned from each activity in the past one year (in 1,000 Leones)	746.943	-23.678	76.422	236	H3	core
55	In the past 2 years (since October 2007), have you started a new business, even if it is small or informal?	0.072	0.015	0.012	236	H3	core
56	[From supervisor tour of community] Have you seen anybody selling packaged goods (cigarettes, crackers, etc) in this village today from their own home (i.e. not out of a store)?	0.441	0.113+	0.059	229	H3	core
57	Quintile of Household PCA Asset/Amenities score	2.835	0.263**	0.084	236	H3	core
58	In the past one month, have you or anyone in your household sold any agricultural produce (or fish, livestock)?	0.507	0.003	0.027	236	H3	core
59	In the past one month, have you or anyone in your household sold any non-agricultural goods or services--like petty trading?	0.186	0.02	0.019	236	H3	core
60	Number of goods out of 10 common items (bread, soap, garri, country cloth/garra tie-dye, eggs/chickens, sheep/goats, palm oil/nut oil, coal, carpenter for hire/shop, tailor/dressmaker, blacksmith for hire/shop) that you can buy in this community today	4.449	0.585*	0.257	236	H3	core
61	How many people have started a new business (even if it is small or informal) in this community in the past 2 years (since October 2007)? [Record name, type of business and year started]	1.745	0.152	0.313	207	H3	core
62	How many houses and small shops (including tables, boxes and kiosks) are selling packaged goods (like cigarettes, biscuits, etc) inside this community today?	2.432	0.769*	0.364	225	H3	core
63	In the past one year, what are the top three ways you yourself have earned cash (total number of sources out of 3)	1.543	-0.012	0.047	236	H3	core
64	In the past 2 years (since October 2007), have you participated in any skills training (bookkeeping, soap-making), adult literacy (learn book) or vocation education courses (carpentry, etc.)?	0.061	0.122**	0.018	235	H3	core
65	[Given that household sold agricultural products in the past year] total Leones received last time sold rice, cassava, groundnuts, vegetables and other produce?	202.553	-2.466	17.698	233	H3	additional
66	[Given that household sold agricultural produce in the last one month] have you or anyone in your household sold any agricultural produce (or fish, livestock) outside this village in the past month--i.e. in a market or to a trader outside of this village?	0.768	-0.003	0.031	224	H3	additional

Row	Survey question	Endline mean for controls (1)	Treatment effect (2)	Standard error (3)	N (5)	Hypothesis (6)	Mean effects index (7)
67	[Given farming household] the last time anyone in your household harvested rice, cassava, groundnuts, vegetables or other produce, how much of it did you sell?	0.705	0.004	0.024	235	H3	additional
68	[Given that household sold non-agricultural goods or services in the last one month] did anyone in your household sell any non-agricultural goods or services (like petty trading) outside this village in the past month--i.e. in a market or to a trader outside of this village?	0.644	-0.004	0.050	187	H3	additional
69	How many days did each child inside this household between the ages of 5 and 18 go to school inside the past 7 days	4.501	-0.034	0.050	235	H3	additional
70	Tomorrow, if you needed to buy something from town or the market but were unable to travel there, would you give your money to someone from the community (not a household member) to buy the item for you?	0.942	0.007	0.009	236	H4	core
71	Suppose you were at a community meeting and you accidentally left your purse/wallet/some money on the bench. If you go back to get it one hour later, will it still be there?	0.259	-0.02	0.019	236	H4	core
72	Do any people from different households here come together to sell agricultural goods or other petty trading as a group to markets outside of this village (i.e. heap the goods together and send one person to sell; NOT every person totes their own load)?	0.274	0.012	0.047	217	H4, H5, H6	core
73	Are you a member of any credit or savings (osusu) groups?	0.228	0.02	0.022	236	H4	core
74	Have you ever given money to a nonhousehold member to buy something for you at town/market?	0.929	0.013	0.011	236	H4	core
75	In your opinion, do you believe central government officials or do you have to be careful when dealing with them?	0.432	0.014	0.026	236	H4	core
76	In your opinion, do you believe chiefdom officials or do you have to be careful when dealing with them?	0.506	0.014	0.024	236	H4	core
77	In your opinion, do you believe Local Councillors or do you have to be careful when dealing with them?	0.388	0.009	0.026	236	H4	core
78	In your opinion, do you believe NGOs / donor projects or do you have to be careful when dealing with them?	0.631	0.054*	0.025	236	H4	core
79	In your opinion, do you believe people from outside you own village / town / neighborhood or do you have to be careful when dealing with them?	0.396	-0.023	0.020	236	H4	core
80	In your opinion, do you believe people from you own village / town / neighborhood or do you have to be careful when dealing with them?	0.848	-0.017	0.016	236	H4	core
81	[Given that has ever left some money somewhere in the village] did you get your money back?	0.352	-0.039	0.029	234	H4	additional
82	Community redeemed any of the 6 vouchers for building materials in Field Activity #3	0.542	-0.017	0.060	236	H5	core
83	Have you participated in road brushing or town cleaning in the past two months?	0.419	-0.018	0.023	236	H5	core
84	Number of vouchers for building materials out of 6 maximum that the community redeemed under Field Activity #3	2.949	0.051	0.348	236	H5	core
85	Does this community have any communal farms?	0.299	0.230**	0.058	235	H5	core
86	Does the primary school that children in the community attend have community teachers?	0.922	-0.064	0.039	232	H5	core
87	Has anyone in this community ever used the tarp? (from field activity #2, verified by supervisor physical assessment)	0.897	-0.075+	0.044	233	H5	core

Row	Survey question	Endline mean for controls (1)	Treatment effect (2)	Standard error (3)	N (5)	Hypothesis (6)	Mean effects index (7)
88	[Given that community has ever used the tarp] community has used the tarp at least 10 times	0.45	-0.045	0.061	222	H5	core
89	How much money would you yourself be able to contribute to the building materials vouchers (in Leones)?	41,679.531	-24200	21,069.357	235	H5	core
90	How much money do you think the community will be able to raise to use the building materials vouchers (in Leones)?	481,000.000	8459.763	12,821.225	234	H5	core
91	In the past one year, did you work on a communal farm (this means a farm owned by the community where community members works on the farm)?	0.226	0.035	0.028	235	H5	core
92	[Given membership in labor sharing gang] have you contributed any money to this group in the past one month?	0.269	-0.042	0.032	220	H5, H6	additional
93	[Given membership in credit or savings group] have you contributed any money to this group in the past one month?	0.920	0	0.027	195	H5, H6	additional
94	[Given membership in school PTA] have you contributed any money to this group in the past one month?	0.593	-0.04	0.066	148	H5, H6	additional
95	[Given membership in group savings for a major event (weddings, funerals) group] have you contributed any money to this group in the past one month?	0.736	-0.063	0.069	117	H5, H6	additional
96	[Given membership in a social club] have you contributed any money to this group in the past one month?	0.629	-0.109	0.080	119	H5, H6	additional
97	[Given has worked on communal farm] about how many days in total did you work on a communal farm in the last one month?	4.674	0.421	0.522	164	H5	additional
98	[Given existence of functional community center in the community] did you contribute any labor for building or maintaining this resource?	0.574	0.194**	0.068	100	H5	additional
99	[Given existence of functional drying floor in the community] did you contribute any labor for building or maintaining this resource?	0.657	0.037	0.047	121	H5	additional
100	[Given existence of functional grain store in the community] did you contribute any labor for building or maintaining this resource?	0.671	0.024	0.104	77	H5	additional
101	[Given membership in labor sharing gang] have you contributed any labor to this group in the past one month?	0.879	-0.008	0.025	221	H5, H6	additional
102	[Given existence of functional latrine in the community] did you contribute any labor for building or maintaining this resource?	0.670	0.033	0.043	175	H5	additional
103	[Given membership in credit or savings group] have you contributed any labor to this group in the past one month?	0.126	-0.041	0.032	194	H5, H6	additional
104	[Given existence of functional health clinic in the community] did you contribute any labor for building or maintaining this resource?	0.677	-0.198	0.190	29	H5	additional
105	[Given existence of functional primary school in the community] did you contribute any labor for building or maintaining this resource?	0.722	0.012	0.034	142	H5	additional
106	[Given membership in school PTA] have you contributed any labor to this group in the past one month?	0.223	-0.032	0.054	150	H5, H6	additional
107	[Given membership in group savings for a major event (weddings, funerals) group] have you contributed any labor to this group in the past one month?	0.304	-0.083	0.064	125	H5, H6	additional

Row	Survey question	Endline mean for controls (1)	Treatment effect (2)	Standard error (3)	N (5)	Hypothesis (6)	Mean effects index (7)
108	[Given membership in a social club] have you contributed any labor to this group in the past one month?	0.389	-0.009	0.076	123	H5, H6	additional
109	[Given existence of functional sports field in the community] did you contribute any labor for building or maintaining this resource?	0.419	0.052	0.034	182	H5	additional
110	[Given existence of functional traditional birth attendant TBA house in the community] did you contribute any labor for building or maintaining this resource?	0.592	0.044	0.105	81	H5	additional
111	[Given existence of functional water well in the community] did you contribute any labor for building or maintaining this resource?	0.696	-0.012	0.037	153	H5	additional
112	[Given redeemed building materials vouchers] has the community brought the building materials back to the village?	0.758	-0.097	0.072	127	H5	additional
113	[Given existence of functional community center in the community] did you contribute any local materials or food for building or maintaining this resource?	0.525	0.178*	0.073	100	H5	additional
114	[Given existence of functional drying floor in the community] did you contribute any local materials or food for building or maintaining this resource?	0.536	0.048	0.054	121	H5	additional
115	[Given existence of functional grain store in the community] did you contribute any local materials or food for building or maintaining this resource?	0.522	0.048	0.103	77	H5	additional
116	[Given existence of functional latrine in the community] did you contribute any local materials or food for building or maintaining this resource?	0.551	0.057	0.045	175	H5	additional
117	[Given existence of functional health clinic in the community] did you contribute any local materials or food for building or maintaining this resource?	0.595	-0.149	0.211	29	H5	additional
118	[Given existence of functional primary school in the community] did you contribute any local materials or food for building or maintaining this resource?	0.654	0.03	0.037	142	H5	additional
119	[Given existence of functional sports field in the community] did you contribute any local materials or food for building or maintaining this resource?	0.352	0.076*	0.036	184	H5	additional
120	[Given existence of functional traditional birth attendant (TBA) house in the community] did you contribute any local materials or food for building or maintaining this resource?	0.613	-0.066	0.116	81	H5	additional
121	[Given existence of functional water well in the community] did you contribute any local materials or food for building or maintaining this resource?	0.574	0.031	0.042	153	H5	additional
122	[Given that community redeemed vouchers and built something with the materials] supervisor assessment of the quality of construction concerning the building materials	0.650	0.037	0.100	23	H5	additional
123	[Given community teachers at the school children in the community attend and provision of some incentive] how much money in Leones will each teacher receive for this current term (third term of 2008-09 academic year)?	75837.93	7490.998	23010.59	103	H5	additional
124	[Given community teachers at the school children in the community attend] are the community teachers given an incentive for their work by the community (for example: money, food, work on their farm)?	0.854	0.008	0.042	198	H5	additional
125	[Given community teachers at the school children in the community attend] were the community teachers ever trained?	0.471	0.113+	0.067	173	H5	additional

Row	Survey question	Endline mean for controls	Treatment effect	Standard error	N	Hypothesis	Mean effects index
		(1)	(2)	(3)	(5)	(6)	(7)
126	[Given community redeemed vouchers] has the community begun using the building materials?	0.242	-0.017	0.077	124	H5	additional
127	Are there any fishing groups / cooperatives in this community/	0.186	0.014	0.041	228	H6	core
128	Are you a member of any fishing groups or cooperatives?	0.030	-0.004	0.009	236	H6	core
129	Are you a member of any labor sharing groups?	0.486	-0.011	0.024	236	H6	core
130	Are you a member of any school PTA groups?	0.188	-0.041+	0.022	236	H6	core
131	Are you a member of any group saving for special events (weddings, funerals) groups?	0.121	0.003	0.015	236	H6	core
132	Are you a member of any seed multiplication groups?	0.108	0.033+	0.017	236	H6	core
133	Are you a member of any social clubs?	0.091	0	0.013	236	H6	core
134	Are you a member of any women's groups (general)?	0.235	0.059**	0.020	236	H6	core
135	Are you a member of any youth groups (general)?	0.344	0.005	0.021	236	H6	core
136	In the past year, have you helped someone from the community (non-household member) to re-thatch their roof?	0.312	-0.031	0.024	236	H6	core
137	[Given membership in fishing cooperative] have you contributed any money to this group in the past one month?	0.437	-0.025	0.166	44	H6	additional
138	[Given membership in seed multiplication group] have you contributed any money to this group in the past one month?	0.189	0.06	0.062	144	H6	additional
139	[Given membership in women's group] have you contributed any money to this group in the past one month?	0.347	-0.024	0.045	210	H6	additional
140	[Given membership in youth group] have you contributed any money to this group in the past one month?	0.337	-0.014	0.042	225	H6	additional
141	[Given membership in fishing cooperative] have you contributed any labor to this group in the past one month?	0.516	0.123	0.108	44	H6	additional
142	[Given membership in seed multiplication group] have you contributed any labor to this group in the past one month?	0.639	0.061	0.063	144	H6	additional
143	[Given membership in women's group] have you contributed any labor to this group in the past one month?	0.655	-0.052	0.044	209	H6	additional
144	[Given membership in youth group] have you contributed any labor to this group in the past one month?	0.680	0.038	0.036	225	H6	additional
145	[Given membership in fishing cooperative] have you been to a meeting for this group in the past one month?	0.532	0.145	0.157	44	H6, H8	additional
146	[Given membership in labor sharing gang] have you been to a meeting for this group in the past one month?	0.746	-0.009	0.032	221	H6, H8	additional
147	[Given membership in credit or savings group] have you been to a meeting for this group in the past one month?	0.687	0.056	0.046	195	H6, H8	additional
148	[Given membership in school PTA] have you been to a meeting for this group in the past one month?	0.710	-0.028	0.060	151	H6, H8	additional
149	[Given membership in group saving for major event group] have you been to a meeting for this group in the past one month?	0.531	0.07	0.070	126	H6, H8	additional
150	[Given membership in seed multiplication group] have you been to a meeting for this group in the past one month?	0.630	0.082	0.065	143	H6, H8	additional
151	[Given membership in social club] have you been to a meeting for this group in the past one month?	0.684	0.041	0.070	126	H6, H8	additional
152	[Given membership in women's group] have you been to a meeting for this group in the past one month?	0.544	0.086	0.044+	210	H6, H8	additional

Row	Survey question	Endline mean for controls	Treatment effect	Standard error	N	Hypothesis	Mean effects index
		(1)	(2)	(3)	(5)	(6)	(7)
153	[Given membership in youth group] have you been to a meeting for this group in the past one month?	0.675	-0.03	0.040	225	H6, H8	additional
154	[Given that you needed to re-thatch a roof at home in the past year] did anyone from the community (non-household member) help you re-thatch your roof/	0.719	-0.005	0.045	204	H6	additional
155	Supervisor assessment of whether there are any of the following items--awareness campaigns, financial information, development plan, minutes from any meetings, government policies, election information--visible anywhere around the village (i.e. on a notice board, school, clinic, shop, etc.)?	0.138	0.01	0.020	218	H7	core
156	Can you tell me which gift was chosen? (refers to field activity #1)	0.899	-0.009	0.015	236	H7	core
157	Did you attend a meeting today about gifts from our team? (refers to field activity #1)	0.840	-0.019	0.018	236	H7, H8	core
158	Can you tell me what were the two choices of gift presented to the community? (refers to field activity #1)	0.889	-0.01	0.015	236	H7	core
159	You may remember that during our last visit we left some gifts with this community as a thank you for helping us with our research. Can you tell me what those gifts were? (out of 3)	2.611	-0.033	0.026	236	H7	core
160	Correctly able to name what the tarp was used for or what the community's plan is for using the tarp	0.589	-0.08	0.048+	236	H7	core
161	Correctly able to name the whether or not the community redeemed any vouchers	0.814	-0.06	0.030*	236	H7	core
162	Correctly able to name the Chairperson of the Local Council	0.081	0.019	0.012	236	H7	core
163	Correctly able to name the year of the next general elections	0.192	0.041	0.018*	236	H7	core
164	Correctly able to name the Local Councillor from their ward	0.384	0.014	0.033	236	H7	core
165	Correctly able to name the Paramount Chief for this chiefdom	0.680	0.001	0.023	234	H7	core
166	Able to name a type and location of a Local Council project	0.080	0.005	0.014	236	H7	core
167	Correctly able to name the Section Chief for this section	0.533	0.053	0.032+	234	H7	core
168	Correctly able to name the amount adults are supposed to pay in Local Tax	0.925	-0.003	0.011	236	H7	core
169	Do you get information from the radio about politics and what the government is doing?	0.655	0.021	0.020	236	H7	core
170	Correctly able to name whether or not the community has used the tarp	0.754	-0.041	0.037	233	H7	core
171	Has this community been visited by the Paramount Chief in the past year?	0.161	0.059	0.049	236	H7	core
172	[Given community redeemed vouchers] Correctly able to name total vouchers redeemed, total cash contributed, who went to the building materials store on behalf of the community and materials purchased; and confirmed that they saw the materials upon arrival and the receipt from the store	3.582	-0.164	0.236	126	H7	additional
173	[Given household member has paid market dues in the past year] able to correctly name authority who spends the market dues	0.440	0.038	0.047	183	H7	additional
174	Enumerator record of whether public debate (opinions expressed loudly enough for all to hear) occurred during the gift choice deliberation (field activity #1)	0.610	0.042	0.047	236	H8	core
175	In your opinion, "every person helped to decide" best describes how the community decided what to do with the vouchers	0.571	0.019	0.030	236	H8	core

Row	Survey question	Endline mean for controls	Treatment effect	Standard error	N	Hypothesis	Mean effects index
		(1)	(2)	(3)	(5)	(6)	(7)
176	In your opinion, "every person helped to decide" best describes how the community decided to share the [salt/batteries]	0.611	0.005	0.025	236	H8	core
177	In your opinion, "every person helped to decide" best describes how the community decided what to do with the tarp	0.596	0.028	0.027	236	H8	core
178	Enumerator account of how democratically the group evenutally came to a decision about which gift to choose, ranging from 5 = open discussion followed by group vote to 1 = chief and/or elders decide without other input (field activity #1)	3.396	-0.016	0.102	236	H8	core
179	Do any disabled people hold leadership positions in this community (like member of VDC, youth leaders, headman, women's leader, secret society head)?	0.115	0.013	0.043	228	H8	core
180	Did any disabled people (blind, polio, amputee, wheelchair, etc.) attend the last community meeting?	0.545	0.07	0.063	227	H8	core
181	Enumerator record of duration of gift choice deliberation in minutes (field activity #1)	9.362	1.587	1.132	225	H8	core
182	Everybody in the village had equal say in deciding what to buy / do with the building materials vouchers (this includes deciding not to use them)	0.522	-0.053	0.056	230	H8	core
183	Everybody in the village had equal say in deciding how to share the [salt/batteries]	0.526	-0.083	0.056	233	H8	core
184	Everybody in the village had equal say in deciding how to use the tarp	0.509	-0.103+	0.058	232	H8	core
185	If the big ones in the community wanted salt and everyone else wanted the batteries, respondent says they think the community would get the batteries	0.352	0.026	0.032	236	H8	core
186	In your opinion, "every person helped to decide" best describes what happened at the meeting when the community had to choose between the salt and batteries	0.562	0.002	0.032	236	H8	core
187	"Everybody in the village had equal say" chosen in response to who do you think had the most say over the choice between salt and batteries	0.671	-0.045+	0.027	236	H8, H11	core
188	Gift (salt versus batteries) chosen reflects the view of the majority of household's response to "would you rather have a small packet of iodized salt or a Vinnic battery for your household?"	0.958	0	0.026	236	H8	core
189	Was there any community meeting to decide what to buy / do with the vouchers or how to raise the funds after our team left your community (not the original gift meeting)?	0.983	-0.052*	0.023	231	H8	core
190	In the past one year, have you attended any community meetings?	0.732	0.011	0.020	236	H8	core
191	Was there any community meeting to decide how to share the [salt/batteries] after our team left your community (not the original gift meeting)?	0.991	0	0.012	233	H8	core
192	Was there any community meeting to decide how to decide what to do with the tarp after our team left your community (not the original gift meeting)?	0.983	-0.026	0.020	233	H8	core
193	Enumerator record of total adults (18+ years) present at gift choice meeting (field activity #1)	54.508	4.131	3.204	236	H8	core
194	Enumerator record of total women (18+ years) present at gift choice meeting (field activity #1)	24.987	2.331	1.682	236	H8	core
195	Enumerator record of total youths (18-35 years) present at gift choice meeting (field activity #1)	23.568	2.165	1.384	236	H8	core
196	Did anyone take minutes (written record of what was said) at the most recent community meeting?	0.295	0.142*	0.063	227	H8	core

Row	Survey question	Endline mean for controls	Treatment effect	Standard error	N	Hypothesis	Mean effects index
		(1)	(2)	(3)	(5)	(6)	(7)
197	Did you attend any meeting to decide what to buy / do with the vouchers after our team left your community 9not the original gift meeting)?	0.765	-0.054*	0.025	236	H8	core
198	Did you attend any meeting to decide how to share the [salt/batteries] after our team left your community 9not the original gift meeting)?	0.846	-0.035+	0.019	236	H8	core
199	Did you attend any meeting to decide what to do with the tarp after our team left your community 9not the original gift meeting)?	0.812	-0.039+	0.021	236	H8	core
200	Community has not had any problems with financial mismanagement / corruption in the past 2 years (since October 2007)	0.964	0.001	0.025	224	H8	core
201	Enumerator record of whether no group left the meeting area to have a private discussion during the gift choice deliberation (field activity #1)	0.542	-0.008	0.060	236	H8	core
202	Enumerator record of whether no private discussion among opinion leaders within the meeting area (not loud enough for all to hear) occurred during the gift choice deliberation (field activity #1)	0.449	0.021	0.048	236	H8	core
203	Imagine that someone from outside comes into this community, and wants to do a project. They give the community the choice between two rpojects. What do you think is the best thing to do? Respondent chooses "discuss together as a community until decision is reached" or "have a vote" and not "allow the village authorities to decide"	0.852	0	0.019	236	H8, H11	core
204	Enumerator account of how actively women participated in the deliberation compared to men, ranging from 5 = no difference between women and men to 1 = women not active at all compared to men (field activity #1)	2.900	-0.119	0.128	236	H8	core
205	Enumerator account of how actively youth participated in the deliberation compared to non-youth (over 35 years), ranging from 5 = no difference between youth and non-youth to 1 = youth not active at all compared to non-youth (field activity #1)	3.003	0.025	0.123	236	H8	core
206	Respondent feels that "everybody in the village had equal say" in deciding what to do with the vouchers	0.509	0.024	0.030	236	H8	core
207	Respondent feels that "everybody in the village had equal say" in deciding how to share the [salt/batteries]	0.554	0.031	0.028	236	H8	core
208	Respondent feels that "everybody in the village had equal say" in deciding what to do with the tarp	0.522	0.055+	0.029	236	H8	core
209	Supervisor asks to see the tarp at second round follow-up visit: can the community show you the tarp?	0.836	-0.116*	0.051	232	H8	core
210	Enumerator record of total public speakers during gift choice meeting (field activity #1)	6.042	0.225	0.402	236	H8	core
211	Enumerator record of total women public speakers during gift choice meeting (field activity #1)	1.881	-0.186	0.219	236	H8	core
212	Enumerator record of total youth (18-35 years) public speakers during gift choice meeting (field activity #1)	2.136	0.225	0.238	236	H8	core
213	Tarp is stored in a public place (community center, school/clinic, church/mosque) when it is not being used	0.060	0.055	0.037	225	H8	core
214	"Everybody in the village will have equal say" chosen in response to who do you think will have the most influence over how the tarpaulin is used	0.500	-0.033	0.027	236	H8, H11	core
215	Enumerator record of whether a vote occurred during the gift choice deliberation (field activity #1)	0.097	0.072+	0.042	236	H8, H11	core

Row	Survey question	Endline mean for controls (1)	Treatment effect (2)	Standard error (3)	N (5)	Hypothesis (6)	Mean effects index (7)
216	[Given community redeemed vouchers and brought materials back to village] was there any public presentation of materials when they came back from the store?	0.813	0.057	0.079	92	H8	additional
217	[Given private discussion among small group away from meeting] Enumerator record of how inclusive the side group was of non-opinion leaders (field activity #1)	2.531	-0.091	0.123	101	H8	additional
218	[Given worked on a communal farm in the past year] did you attend any meeting to decide what to plant on the communal farm or what to do with the harvest this year?	0.940	-0.046	0.029	164	H8	additional
219	[Given community has any community teachers] did you go to a meeting to decide what to give the teachers?	0.667	0	0.035	194	H8	additional
220	[Given the presence of a functional community center] did you attend any meeting about the planning, construction or maintenance of this resource?	0.601	0.241**	0.067	100	H8	additional
221	[Given the presence of a functional drying floor] did you attend any meeting about the planning, construction or maintenance of this resource?	0.676	0.067	0.049	121	H8	additional
222	[Given the presence of a functional grain store] did you attend any meeting about the planning, construction or maintenance of this resource?	0.740	-0.014	0.090	77	H8	additional
223	[Given the presence of a functional latrine] did you attend any meeting about the planning, construction or maintenance of this resource?	0.592	0.034	0.043	175	H8	additional
224	[Given the presence of a functional health clinic] did you attend any meeting about the planning, construction or maintenance of this resource?	0.668	-0.175	0.185	30	H8	additional
225	[Given the presence of a functional primary school] did you attend any meeting about the planning, construction or maintenance of this resource?	0.762	0.016	0.033	142	H8	additional
226	[Given the presence of a functional sports field] did you attend any meeting about the planning, construction or maintenance of this resource?	0.576	0.016	0.039	182	H8	additional
227	[Given the presence of a functional traditional birth attendant (TBA) house] did you attend any meeting about the planning, construction or maintenance of this resource?	0.564	0.134	0.108	81	H8	additional
228	[Given the presence of a functional water well] did you attend any meeting about the planning, construction or maintenance of this resource?	0.734	0.004	0.037	153	H8	additional
229	[Given private discussion among small group away from meeting] Enumerator record of the proportion of group that is women and youth (field activity #1)	0.929	-0.064	0.089	107	H8	additional
230	[Given community redeemed any vouchers] community is able to show the supervisor the receipt from the building materials store	0.403	0.055	0.086	127	H8	additional
231	[Given community redeemed any vouchers] was there any public presentation of the materials when they came back from the store?	0.333	-0.102	0.082	128	H8	additional
232	[Given community redeemed any vouchers] Supervisor asks to see the building materials at second round follow-up visit: can the community show you the materials?	0.632	-0.111	0.081	136	H8	additional
233	[Given attended meeting to decide what to buy / do with the vouchers] did you speak publicly during the voucher meeting (meaning that you said something that everyone in the meeting could hear, not just your neighbor)?	0.482	0.019	0.024	235	H8	additional

Row	Survey question	Endline mean for controls	Treatment effect	Standard error	N	Hypothesis	Mean effects index
		(1)	(2)	(3)	(5)	(6)	(7)
234	[Given attended community meeting in past year] did you make any speeches, comments or suggestions publicly during the last community meeting you attended?	0.506	-0.01	0.025	236	H8	additional
235	[Given attended meeting about the communal farm] did you make any speeches, comments or suggestions publicly during that meeting?	0.687	-0.045	0.048	160	H8	additional
236	[Given attended meeting to decide what to do with the salt/batteries] did you speak publicly during the salt/batteries meeting (meaning that you said something that everyone in the meeting could hear, not just your neighbor)?	0.514	-0.004	0.021	236	H8	additional
237	[Given attended meeting to decide what to do with the tarp] did you speak publicly during the tarp meeting (meaning that you said something that everyone in the meeting could hear, not just your neighbor)?	0.503	-0.02	0.023	236	H8	additional
238	[Given attended a meeting to decide what to give the community teachers] did you make any speeches, comments or suggestions publicly during this meeting about what to give them?	0.691	0.005	0.040	185	H8	additional
239	[Given community redeemed vouchers and brought materials back to village] materials are stored in a public place (community center, school/clinic, church/mosque) when they are not being used	0.128	0.262**	0.095	84	H8	additional
240	Respondent thinks they have "some" or "little" as opposed to "no" chance to change an unjust chiefdom law (for example, if the chief asks everyone to contribute 3 bushels or rice and you think this is too much, do you think you could get the chief to change the policy to only 1 bushel)?	0.511	0.005	0.022	236	H9	core
241	Respondent thinks they have "some" or "little" as opposed to "no" chance to change an unjust local government policy (for example, if the Local Council asks everyone to contribute 3 bushels or rice and you think this is too much, do you think you could get the Council to change the policy to only 1 bushel)?	0.522	-0.022	0.022	236	H9	core
242	Do you think the Local Council listens to what people in this town / neighborhood say or what they need?	0.295	0.051*	0.022	236	H9	core
243	How often do you discuss politics or the government with someone form the community, like a friend or a member of your household, ranging from 5 = everyday to 1 = never	2.067	0.043	0.034	236	H9	core
244	Did anyone in this community contest the party symbol in the 2008 local council elections?	0.127	-0.034	0.037	236	H9	core
245	Did anyone in this community stand for the most recent paramount chief elections?	0.119	0.018	0.043	235	H9	core
246	Did anyone in this community stand for the most recent section chief elections?	0.280	0.034	0.058	236	H9	core
247	Did anyone in this community stand for the most recent Ward Development Committee elections or get nominated for WDC?	0.259	0.067	0.056	231	H9	core
248	Did you vote in the local government election (2008)?	0.851	-0.035*	0.016	236	H9	core
249	Did you vote in the first round of the last presidential general election (2007)?	0.963	-0.01	0.007	236	H9	core
250	Did you vote in the second round (run-off) presidential election (2007)?	0.933	-0.008	0.010	236	H9	core
251	[Given functional community center in the community] Was the Section Chief or Paramount Chief directly involved in the planning, construction, maintenance or oversight of this community center?	0.555	0.109	0.069	97	H9	additional

Row	Survey question	Endline mean for controls	Treatment effect	Standard error	N	Hypothesis	Mean effects index
		(1)	(2)	(3)	(5)	(6)	(7)
252	[Given functional drying floor in the community] Was the Section Chief or Paramount Chief directly involved in the planning, construction, maintenance or oversight of this drying floor?	0.476	0.082	0.063	118	H9	additional
253	[Given functional grain store in the community] Was the Section Chief or Paramount Chief directly involved in the planning, construction, maintenance or oversight of this grain store?	0.398	0.116	0.098	74	H9	additional
254	[Given functional latrine in the community] Was the Section Chief or Paramount Chief directly involved in the planning, construction, maintenance or oversight of this latrine?	0.395	0.07	0.043	170	H9	additional
255	[Given functional health clinic in the community] Was the Section Chief or Paramount Chief directly involved in the planning, construction, maintenance or oversight of this PHU?	0.803	-0.276+	0.167	27	H9	additional
256	[Given functional primary school in the community] Was a member of the the Section Chief or Paramount Chief directly involved in the planning, construction, maintenance or oversight of this primary school?	0.610	0.099+	0.051	139	H9	additional
257	[Given functional football/sports field in the community] Was the Section Chief or Paramount Chief directly involved in the planning, construction, maintenance or oversight of this football/sports field?	0.363	0.054	0.051	183	H9	additional
258	[Given functional traditional birth attendant (TBA) house in the community] Was the Section Chief or Paramount Chief directly involved in the planning, construction, maintenance or oversight of this TBA house?	0.608	-0.05	0.103	76	H9	additional
259	[Given functional water well in the community] Was the Section Chief or Paramount Chief directly involved in the planning, construction, maintenance or oversight of this well?	0.572	0.034	0.050	152	H9	additional
260	Proportion of female members of the VDC	0.209	0.066+	0.037	151	H9	additional
261	Proportion of female or youth members of the VDC	0.426	0.005	0.045	151	H9	additional
262	Proportion of youth members of the VDC	0.258	-0.041	0.040	151	H9	additional
263	[Given has a village development plan and redeemed vouchers] does the building materials project/plan relate to something inside the VDP or is it a new project not in the plan?	0.765	-0.058	0.085	130	H9	additional
264	[Given has a village development plan] does the tarp project/plan relate to something inside the VDP or is it a new project not in the plan?	0.524	-0.041	0.082	161	H9	additional
265	[Given has a village development plan] is the VDP written down anywhere?	0.403	0.247**	0.079	170	H9	additional
266	Enumerator verifies that respondent's voter ID card has the correct hole punched indicating a vote in the local council elections	0.619	-0.031	0.023	236	H9	additional
267	Enumerator verifies that respondent's voter ID card has the correct hole punched indicating a vote in the first round presidential elections	0.726	0	0.020	236	H9	additional
268	Enumerator verifies that respondent's voter ID card has the correct hole punched indicating a vote in the second round presidential elections	0.710	-0.008	0.020	236	H9	additional
269	[Given not a member of the VDC] would you like to be a member of the VDC?	0.361	-0.041*	0.020	236	H9	additional
270	No conflict that respondent needed help from someone outside the household to resolve in the past one year	0.831	0.016	0.016	236	H10	core

Row	Survey question	Endline mean for controls (1)	Treatment effect (2)	Standard error (3)	N (5)	Hypothesis (6)	Mean effects index (7)
271	In the past 12 months, respondent has not been involved in any physical fighting	0.970	0.014*	0.006	236	H10	core
272	In the past 12 months, no livestock, household items or money stolen from the respondent	0.618	-0.006	0.022	236	H10	core
273	During the last 12 months, respondent has not been a victim of witchcraft (juju)	0.989	-0.001	0.004	236	H10	core
274	Respondent agrees with "Beating children will only teach them to use violence against others" and not "In order to bring up a child properly, you need to punish him / her"	0.402	0.001	0.021	236	H10	core
275	Respondent agrees with "No one has the right to use physical violence against anyone else" and not "A married man has a right to heat his wife if she misbehaves"	0.688	-0.015	0.018	236	H10, H12	core
276	No report of household member ever having a conflict with someone over a loan or other money business	0.823	-0.026+	0.015	236	H10	core
277	Respondent agrees with "The use of violence is never justified in politics" and not "It is sometimes necessary to use violence in support of a just cause"	0.681	0	0.016	236	H10	core
278	[Given a conflict over a loan] respondent says there was never any personal violence / fighting between self or household member and someone else	0.904	-0.025	0.032	199	H10	additional
279	[Given conflict that required external assistance resolving] did not seek help from anyone outside the community	0.492	0.051	0.049	177	H10	additional
280	Enumerator report that chief and/or elders did not decide between the salt and batteries with little or no input from other members of the community	0.932	0.008	0.031	236	H11	core
281	Respondent thinks non-chiefdom and non-elders had the most say in over the choice between salt and batteries	0.689	-0.045+	0.026	236	H11	core
282	Respondent agrees with "Women can be good politicians and should be encouraged to stand in elections" and not "Women should stay at home to take care of their kids"	0.727	0.026	0.019	236	H11, H12	core
283	Respondent agrees with "Responsible young people can be good leaders" and not "Only older people mature enough to be leaders"	0.762	0.038*	0.016	236	H11, H12	core
284	Relative view of "do you think the Local Council [as opposed to Paramount chief] listens to what people in this town/neighborhood say or what they need?"	-0.232	0.067*	0.028	235	H11	core
285	Village focus group does not choose a chiefdom official or elder in response to "who had the most influence over what to do with the building material vouchers (this includes deciding not to use them)?"	0.583	-0.046	0.058	230	H11	core
286	Village focus group does not choose a chiefdom official or elder in response to "who had the most influence over how to share the [salt/batteries]?"	0.595	-0.066	0.059	233	H11	core
287	Village focus group does not choose a chiefdom official or elder in response to "who had the most influence over hoe the tarpaulin is used or whether to keep it in storage?"	0.569	-0.068	0.060	232	H11	core
288	In your opinion, "the chief decided" does not best describe how the community decided what to do with the vouchers / how to raise money / what to buy at the store (this includes deciding not to use them)	0.909	-0.002	0.018	236	H11	core
289	In your opinion, "the chief decided" does not best describe how the community decided how to share the [salt/batteries]	0.896	0.005	0.014	236	H11	core

Row	Survey question	Endline mean for controls	Treatment effect	Standard error	N	Hypothesis	Mean effects index
		(1)	(2)	(3)	(5)	(6)	(7)
290	In your opinion, "the chief decided" does not best describe how the community decided to use the tarp	0.898	0.01	0.015	236	H11	core
291	Respondent does not choose a chiefdom official or elder in response to "who had the most influence over what to do with the building material vouchers (this includes deciding not to use them)?"	0.524	0.041	0.029	236	H11	core
292	Respondent does not choose a chiefdom official or elder in response to "who had the most influence over how to share the [salt/batteries]?"	0.574	0.032	0.028	236	H11	core
293	Respondent does not choose a chiefdom official or elder in response to "who had the most influence over hoe the tarpaulin is used or whether to keep it in storage?"	0.543	0.056+	0.029	236	H11	core
294	Respondent agrees with "As citizens, we should be more active in questioning the actions of leaders" and not "In our country these days, we should have more respect for authority"	0.526	0.019	0.023	236	H11	core
295	Respondent has never gone to a traditional court (village headman court, section chief's court, local court, paramount chief's court) for help in resolving a dispute	0.686	0.005	0.019	236	H11	core
296	Relative view of "if the Local Council [as opposed to Paramount chief] was given 500 million Leones to complete a project in this area, do you believe they would spend all the money doing a good job on the project or would they cut some of the money?"	-0.085	0.02	0.026	230	H11	core
297	[Given that respondent chooses private residence as the best place to store the tarp] tarp not stored at chiefdom or elder's house	0.058	0.004	0.012	236	H11	core
298	Relative view of "do you believe" Local Councilors as opposed to Chiefdom officials	-0.127	-0.012	0.025	236	H11	core
299	Village focus group says tarp is not stored in chief's private residence	0.305	0.136*	0.062	236	H11	core
300	[Given redeemed vouchers and brough materials back to village] village focus group says materials not stored in chief's private residence	0.510	0.273*	0.110	95	H11	additional
301	[Given redeemed vouchers] Village focus group says people who were not chiefdom officials went to the building materials store on behalf of the community	0.561	-0.052	0.089	128	H11	additional
302	[Given some community teachers] respondent says it was not a traditional authority who had the most influence in determining how much to pay the community teachers	0.870	-0.073	0.051	190	H11	additional
303	[Given some community teachers] respondent says that if a household who was supposed to contribute did not give anything for the community teachers, community did not report them to the chief or take them to the Paramount chief court	0.549	-0.013	0.067	195	H11	additional
304	Respondent agrees with "It's wrong to pay a bribe to any government official" and not "In our country, it's okay to pay a bribe to a government official to encourage them"	0.801	0.019	0.014	236	H12	core
305	Respondent agrees with "No one should be forced to do something they don't want to do" and not "It is OK for local leaders to have the right to force people to work for the community"	0.589	-0.011	0.020	236	H12	core

Row	Survey question	Endline mean for controls	Treatment effect	Standard error	N	Hypothesis	Mean effects index
		(1)	(2)	(3)	(5)	(6)	(7)
306	Respondent agrees with "Responsible people can be good local leadeers even if they are not from this community" and not "Only people who have lived here for a long time know enough about this community to be good leaders"	0.593	0.006	0.020	236	H12	core
307	Is the current (or acting) village chief/Headman a woman?	0.035	0.025	0.025	229	H12	core
308	Is the current (or acting) village chief/Headman less than 35 years old?	0.044	-0.036	0.022	229	H12	core
309	Respondent agress with "In this community, elders / authorities treat youths justly and with respect" and not "In this community, the way elders / authorities treat youths is not always right"	0.754	-0.001	0.020	236	H12	core
310	[Given presence of communal farm] both youths and non-youths work on the farm	0.700	-0.085	0.072	97	H12	additional
311	[Given presence of communal farm] children do not work on the farm	0.286	-0.091	0.078	97	H12	additional
312	[Given presence of communal farm] both men and women work on the farm	0.643	-0.021	0.092	97	H12	additional
313	[Given presence of communal farm] people of different tribes work on the farm	0.300	-0.055	0.092	97	H12	additional
314	[Given membership in group savings for major event] index of whether group contains both genders, youth and non-youths, and different ethnic groups	0.695	-0.002	0.035	129	H12	additional
315	[Given membership in labor sharing gang] index of whether group contains both genders, youth and non-youths, and different ethnic groups	0.449	0.001	0.022	221	H12	additional
316	[Given membership in credit/savings group] index of whether group contains both genders, youth and non-youths, and different ethnic groups	0.604	0.036	0.029	197	H12	additional
317	[Given current chief chosen since 2005] Is the current (or acting) village chief/Headman a woman?	0.067	0.089	0.097	64	H12	additional
318	[Given current chief chosen since 2005] Is the current (or acting) village chief/Headman less than 35 years old?	0.103	-0.11	0.070	64	H12	additional
319	[Given membership in social club] index of whether group contains both genders, youth and non-youths, and different ethnic groups	0.608	0.008	0.046	125	H12	additional

Notes on table: i) significance levels indicated by + p <0.10, * p <0.05, ** p <0.01; ii) robust standard errors; and iii) treatment effect run on post-program follow-up data under minimal specification that includes only fixed effects for the Local Council wards (the unit of stratification).