

Impacts of Supporting Civic Participation in Local Governance: Experimental Evidence from Rwanda

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Abstract: Rigorous evaluations of large-scale governance reform programs are rare, particularly in post-conflict or semi-authoritarian settings such as those found in contemporary Rwanda. This paper evaluates a recent program sponsored by the Millennium Challenge Corporation to promote civic participation in local governance in Rwanda. The initiative supported civil society organizations advocating for local issues and trained district government officials to increase responsiveness to citizens. Our evaluation uses a stratified random assignment design, whereby districts were matched on baseline characteristics and randomly assigned to either a treatment or a control group. Using nationally representative household-level survey data, we find a pattern of small negative effects on citizens' perceived knowledge about local government affairs, perceived citizen influence on government officials, and satisfaction with government services. There were no discernible impacts on awareness of government meetings, familiarity with government officials, or perceived access to government information. We investigate the underlying mechanisms producing these impacts using qualitative interviews and find that the program succeeded in encouraging citizens to question local government policies more openly in some circumstances. With the global interest of donor agencies in improving democracy, human rights, and governance in a variety of contexts, including post-conflict settings, this represents a substantial contribution to the evidence base regarding the effectiveness of nationwide governance programs and interventions.

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Although “citizen participation” is often cited as a principal or ancillary objective in governance reform initiatives, outcomes related to civic participation are rarely evaluated rigorously. One of the main impediments to evaluation in this field is the unavailability of rigorously defined comparison groups: these reform initiatives are frequently nationwide in scope, targeting the entire population of interest. Another challenge relates to the complex range of

interrelated outcomes associated with citizen participation and influence. For example, supporting new advocacy campaigns designed to change government policies might raise citizens' awareness about governance issues and simultaneously increase citizen dissatisfaction with the government's performance.

Although evaluations of nationwide governance initiatives are rare, a number of smaller studies have attempted to explore the effects of local civic participation interventions, such as information campaigns. Results of a natural experiment in Brazil involving corruption audits showed that providing citizens with audit results before voting significantly reduced the likelihood that officials with poor records would be reelected (Ferraz and Finan 2008). Similarly, a random-assignment study in India found that a CSO-led information campaign about the performance of local officials significantly reduced the reelection chances of officials the CSO rated as poor (Banerjee et al. 2011). But studies also suggest that declines in citizen satisfaction could instead be attributable to declines in citizen influence. For example, a randomized study in Indonesia found that citizens who did not participate directly in policymaking (in this case, by delegating local policy choices to elected leaders) are less likely to be satisfied with policy outcomes (Olken 2010).

Given the small number of studies completed to date, the relationship between citizen access to information and the extent of citizen influence, participation, and satisfaction with policymaking outcomes remains poorly understood. In particular, more evidence is needed regarding the potential impacts of civic participation initiatives in a wider range of programmatic and policy contexts that more closely resemble the type of large-scale governance programs currently being undertaken in the field. Development agencies and foundations invest heavily in programs designed to strengthen governance and democratic processes, and such programs are often targeted toward countries with policy environments that may impede the programs' success for a variety of different reasons. For example, programs encouraging citizen participation are regularly targeted

both to nations with weak central government structures (i.e. post-conflict environments) and to semi-authoritarian states discouraging some forms of open political discourse. Given the wide range of potential contexts for these programs, it is especially important to begin testing the effectiveness of large-scale governance interventions in practice, where implementers often face particular implementation constraints related to ambitious project timelines and challenging policy environments.

This study takes advantage of the staggered implementation of a civic participation strengthening program in Rwanda, funded by the Millennium Challenge Corporation (MCC), to examine impacts on a number of civic participation outcomes. The program was designed to encourage a more open environment for local civic engagement and improve government transparency and accountability. We employed a stratified random assignment design to identify how the program affected citizen perceptions about access to government information, satisfaction with government services, and citizens' perceptions about their influence on local government decision making. In addition, we conducted qualitative field work (in-depth, one-on-one and small group interviews and observations) to understand the underlying processes that link the program's activities to the outcomes listed above. Findings from the qualitative surveys complement the quantitative analyses, as they help to contextualize how the program activities were implemented and also the extent to which the activities were implemented as intended.

This paper contributes to the literature by presenting rigorous impact findings for a governance intervention implemented at the country level. Also, by combining qualitative survey findings with the quantitative impact findings, we investigate the mechanisms linking the intervention's activities to the outcomes examined in the evaluation. With the global interest of donor agencies in improving democracy, human rights, and governance in a variety of contexts,

this represents a substantive contribution to the evidence base regarding the effectiveness of nationwide governance programs and interventions.

We find that the program increased citizens' willingness to voice concerns about local governance; in treatment districts, more citizens raised concerns about opaque government affairs, low citizen influence, and poor local services. However, the size of these effects was modest, and the program did not impact citizens' awareness of government meetings, familiarity with government officials, or perceived access to government information. Qualitative data suggest that these impacts may have been tempered by the program's limited activity schedule and uneven implementation across districts. Even with these limitations, the program's successes in fostering greater willingness among citizens to voice criticism could represent meaningful first steps toward increasing public advocacy and producing positive changes in local governance over time.

The rest of the paper is organized as follows. Section I details the intervention and the context in which it was implemented. Section II discusses the evaluation design and the data collection strategy. Section III presents the empirical strategy and Section IV presents the evaluation's impact estimates. Findings from the qualitative field work are discussed in Section V, and Section VI concludes with a discussion of both the quantitative and qualitative findings.

I. Program Design and Context

Beginning in 2002, the Government of Rwanda (GoR) began an extensive decentralization initiative designed in part to encourage more citizen participation in local government. With support from multilateral donors including the World Bank and the United Nations Development Program (UNDP), the GoR undertook a series of reforms to develop more open and effective local political institutions (UNDP 2005). These decentralization reforms were designed to increase the

accountability and transparency of government and to empower local communities to take control of their governance processes (World Bank 2009).

As these decentralization reforms have been implemented, however, civil society organizations (CSOs) have struggled to meaningfully engage with governance processes and influence government policymaking at both the national and local levels. Although many CSOs are active in Rwanda, there are important restrictions on their political activities and direct advocacy (USAID 2002). The GoR has been accused of obstructing the activities of multiple human rights groups operating in the country (Human Rights Watch 2011), and policies limiting political dissent in Rwanda have garnered criticism from outside observers, especially following the 2010 presidential elections (Amnesty International 2010; Human Rights Watch 2010; European Parliament 2012). To avoid these challenges, many CSOs focus on issues that are less closely tied to national politics in Rwanda. In practice, this has limited the capacity of CSOs to attract funding and support beyond what is available through government initiatives, calling their independence into question.

In response to these issues, MCC sponsored the Rwanda Threshold Program (RTP)¹ that includes, among other components, two initiatives related to civic participation. The Strengthening Civic Participation and Strengthening Civil Society components of the RTP were intended to enhance the involvement of local and national CSOs in government policymaking, support new efforts by government leaders to invite more active civic participation, and promote well-informed citizen participation in public affairs. The Strengthening Civic Participation component focused

¹ Since its inception in 2004, MCC has funded initiatives to promote economic growth and poverty reduction around the world. MCC supports large, multiyear development initiatives, known as “Compacts”, in countries that achieve high scores on a set of economic and governance indicators. Compacts fund development priorities identified by recipient country governments. Separately, MCC also provides smaller “Threshold” programs to countries that are close to meeting the Compact requirements but fall short of the eligibility criteria in some areas. Threshold programs are intended to support policy reform and help countries improve their Compact eligibility scores (MCC Threshold Program, available at [<http://www.mcc.gov/pages/program/type/threshold-program>], accessed November 25, 2014).

on interventions at the local level (largely addressing district-level governance), and the Strengthening Civil Society component targeted CSOs and central government officials operating at the national level.

In this paper, we present impact estimates for the RTP's Strengthening Civic Participation component.² This component was originally designed as a three-year initiative focused on (1) supporting the efforts of CSOs to advocate for local issues and (2) training local government officials to increase responsiveness to the concerns and priorities of citizens. Together, these activities were intended to encourage a more open environment for local civic engagement and participation with improved government accountability.

All activities under the Strengthening Civic Participation Component of the RTP took place between June 2009 and December 2011 and were implemented by the Urban Institute (UI) in coordination with USAID and GoR stakeholders.³ The primary activities planned for the program included training for local government officials on mechanisms to increase civic participation, technical assistance to build the management and advocacy capacity of local CSOs, grants to district governments and CSOs, and technical assistance to the Ministry of Local Government and Ministry of Finance to develop and distribute a citizen's guide to the national budget. The program also planned to provide technical assistance to local development bodies called the Joint Action Development Forums (JADF)—a set of district-level platforms for government officials, CSOs, and development partners to share action plans and improve coordination.

² It was not possible to evaluate the Strengthening Civil Society component of the RTP in this study, as the scope of the program's activities with the central government prevented identification of a valid comparison group.

³ Other components of the RTP were implemented by a variety of different implementing organizations. All RTP initiatives were coordinated by USAID with oversight from the GoR and funding from MCC.

Importantly, the program’s original work plan called for an optional third year of implementation (in 2012) that did not take place after MCC and the GoR jointly agreed to suspend the program. As a result, many planned activities were not fully implemented, including a majority of the grant disbursements intended for CSOs and local government bodies (Table 1).

Table 1. Implementation Status of Planned Strengthening Civic Participation Activities

Planned Activities	Realized Activities (15 Phase I Districts)	Implementation
Local Government Activities		
District needs assessments (2010)	Diagnostic interviews completed in all phase I districts	Fully implemented
Training on decentralization reform and participatory budget planning	Training completed in all phase I districts, with 669 of 729 expected participants attending.	Mostly implemented
Grants to local governments	5 of 15 district governments completed all planned grant activities (remaining 13 districts partially completed activities)	Partially implemented
CSO Activities		
Building of CSO capacity to engage in policy discussions/dialogue	Some planned training was tied to grant-based activities that were not completed.	Partially implemented
Development of institutional and organizational capacity of CSOs	Some planned training was tied to grant-based activities that were not completed.	Partially implemented
Grants to CSOs	13 of 43 CSOs completed all planned grant-funded activities (remaining 30 CSOs did not receive grants)	Partially implemented
Other Activities		
Consultations with citizens regarding civic participation via public forums and radio broadcast outreach	Consultations took place as planned	Fully implemented
Develop district-level service Improvement Action Plans among citizens	Fewer resources than anticipated were expended on this element of the program due to a need for increased staff resources for capacity-building and grant activities	Partially implemented
Dissemination of a national budget guide for citizens	Guides were widely distributed in program areas, aided by high demand from local CSOs	Fully implemented

The implementer originally planned to conduct activities in two separate, year-long phases, with 15 districts receiving activities in each phase. After an initial year of planning, training activities and technical assistance took place in 15 districts over the course of the program’s second year (2011). The phase II districts were scheduled to receive activities the following year (2012), but the RTP was not extended to this third implementation year. As a result, the program completed

only 10 months of local government training and CSO-support activities in phase I districts and several of the planned technical assistance and grant disbursement activities did not take place.⁴ For example, only 5 of the 15 local district governments receiving grants were able to complete all planned grant activities. Similarly, only 13 of the 43 CSO grants planned for phase I were ultimately disbursed and fully implemented. None of the phase II districts received RTP activities.

II. Evaluation Design and Data Collection

The phased rollout of the program allowed for a stratified random assignment design in which Rwanda's 30 districts were randomized to either phase I or phase II (15 in each phase). Districts within each province were first matched in pairs or groups of three on the following five district-level characteristics, measured using administrative data collected from government sources:

- Population change between 2002 and 2006
- Population density
- Common Development Fund (CDF) appropriation amounts for FY 2008 (as a proxy for poverty levels)
- Percent of district budget from local (vs. federal) revenues in FY 2008
- District expenditure per capita on good governance and social affairs

These matched district pairs or triplets were then used as randomization blocks. A public lottery was conducted in the presence of district officials to randomly assign districts within each block to the treatment group (districts that would receive program activities in phase I in 2011) or the control group (districts that would not receive the program activities until phase II). As indicated, the 15 phase II districts never received program activities because the RTP was not extended beyond 2011. Thus study outcomes were measured before any activities were implemented in control districts. Figure 1 shows the assignment of treatment and control districts, by province.

⁴ Specifically, if the program had been extended to another year of implementation a number of additional grants to CSOs and district governments would have been dispersed in phase I districts (and activities related to those grants would have still been ongoing in phase I districts at the time of our follow-up survey in March 2012).

Figure I. District Assignments for the Strengthening Civic Participation Component



Note: Treatment districts are shaded in grey; control districts are white. Dark borders indicate provincial boundaries.

The Strengthening Civic Participation Program officially began in January 2010 with initial implementation planning. Random assignment of districts were completed in June 2010 and the primary program activities were implemented in the treatment districts over the course of the program's second year, starting in March 2011 and ending in December 2011. We administered a baseline household survey before the start of program activities, in January 2011, and a follow-up survey in March 2012, after the program activities ended.

Nationally, civic participation trends during this period may have been affected by other related programs and initiatives. As part of a separate media component, the RTP sponsored two community radio stations which began broadcasting in June 2011. In this same period, a number of other donors and organizations implemented a variety of programs related to civic participation

and local governance. For example, Norwegian People’s Aid partnered with local civic organizations to address issues related to youth political participation, the European Union funded programs to improve access to basic services and encourage good governance at the local level, and Catholic Relief Services implemented public infrastructure projects and microfinance programs in rural districts. To the extent that these other programs were successful in impacting citizens, it is possible that some changes in nationwide civic participation outcomes would have occurred in the absence of the RTP. However, these other initiatives did not systematically target the evaluation’s treatment group or control group and are not likely to bias the study’s impact estimates.

1. Household survey and qualitative data

We designed a household survey to collect data for evaluating the impacts of the Strengthening Civic Participation program, which was administered at baseline before the program (in early 2011) and one year afterwards (2012). The survey questionnaire drew from several existing survey instruments used widely in developing countries, including the Afrobarometer Round 4 Democracy and Governance in Uganda Survey (Afrobarometer 2008), the South African Social Attitudes Survey: Role of Government IV (Human Sciences Research Council 2006), the Social Audit of Local Governance Household Survey 2006 (Prism Research 2006), and the Social Cohesion in Rwanda Opinion Survey (National Unity and Reconciliation Commission 2007). We also adjusted wording of the English version of the questionnaire to facilitate an accurate translation into Kinyarwanda. USAID staff and GoR officials to ensure that the translation accurately reflected the intended meaning in the local context.⁵

⁵ The survey instrument can be found at [http://www.mathematica-mpr.com/~media/publications/pdfs/international/rwanda_baselinert.pdf]

The baseline survey had a target sample size of 10,000 respondents. To ensure that the sample was representative and widely distributed across the country, sample targets were calculated at the sector level. Using census data we calculated the proportion of the national population within each sector. We determined the number of individuals to survey in each sector by applying that proportion to our targeted sample size of 10,000. The survey sample included all 416 sectors in Rwanda. Within each sector, households were selected using a random walk method (Wood et al. 2012), and after enumerating all household members one adult respondent (age 16 or older) per household was selected at random.

In 2012, we surveyed a second, cross-sectional sample of 10,000 Rwanda citizens located in the same 416 sectors; the sample consisted of a new set of randomly selected respondents in each sector. Data collection procedures for the 2012 national household survey were designed to be consistent with those in 2011 to facilitate a meaningful comparison of trends over time (however small updates were made to the survey instrument to capture additional items of interest requested by key evaluation stakeholders, streamline the survey administration process, and facilitate easier data entry and data cleaning procedures). The final response rate for the follow-up survey was 97.4 percent. This high response rate is similar to the 2011 baseline survey, which achieved a 96.3 percent response rate.

Table 2 shows the characteristics of respondents in the 2012 survey sample, and compares them to the sample in the baseline survey that took place in 2011. The demographic composition of the two samples is very similar, although there were modest differences between the two samples in the composition of respondent's households. For example, in 2012, 47 percent of respondents said that they are the heads of their household, compared to 41 percent in 2011. Also, 22 percent of responding citizens in 2012 said that they live with four or more people in their household. In 2011, 30 percent reported living in households of this size. The demographic

composition of these two survey samples aligns closely with other national demographic data obtained by the World Health Organization (WHO), World Bank, and Rwanda’s National Institute of Statistics (NISR).

Table 2. Respondent and Household Characteristics (Percentage)

Characteristic	2011	2012
Gender		
Male	45	43
Female	55	57
Age		
16–20	14	10
21–30	33	34
31–40	23	24
41–50	15	15
51–60	8	9
Over 60	6	8
Years of education		
None	15	16
1–6	53	51
7–11	21	20
12 or more	11	13
Relationship to head of household		
Head of household	41	47
Spouse	29	32
Son or daughter	19	14
Other relative	11	6
Number of adults living in respondent's household		
1 (Respondent lives alone)	5	9
2	40	45
3	25	24
4 or more	30	22
Total respondents	9,619	10,032

Source: Mathematica Citizen survey, 2011 and 2012.

The evaluation also included qualitative data collection—primarily in-depth interviews—to explore mechanisms linking program activities to the outcomes measured in the evaluation’s impact analyses. Qualitative data sources include semi-structured in-person or telephone interviews with (1) nine local Rwandan government officials (primarily mayors and vice mayors) from six districts, (2) 33 representatives from 26 Rwandan CSOs throughout Rwanda (including respondents in both treatment and control districts), and (3) 10 implementation and oversight staff in the U.S. and Rwanda responsible for implementing the civic participation activities, as well as

(4) review and analysis of 24 RTP implementation reports. During the interviews, the research team either took detailed notes or (where possible) recorded the discussion. The notes or recordings were then transcribed, translated, cleaned (where necessary), and cross-checked against component documents and reports. These notes, transcripts, and program reports were then coded using qualitative data analysis software (NVivo).

2. Baseline Equivalence of Treatment and Control Groups

Using data from the baseline survey, we tested for the baseline equivalence of the treatment and control groups. If the random assignment procedure succeeded, we would expect there to be no systematic pattern of baseline differences between the treatment group and control group. Indeed, as shown in Table 3, differences between the gender and age distributions of the two district groups are all less than three percentage points and none of these differences is statistically significant at the 1 or 5 percent levels. Similarly, the treatment and control groups are statistically indistinguishable with respect to all of the survey’s measures of socioeconomic status (education, employment status, use of dirt-floor housing, and meat consumption).

Table 3. Baseline Equivalence of Demographic and Socioeconomic Characteristics

Characteristic	Treatment	Control	Difference
Gender (% male)	46	44	2.6 (1.9)
Age			
< 20	13	15	-1.7 (0.9)
21-30	33	34	-0.9 (1.3)
31-40	24	23	1.4 (0.7)
41-50	15	14	0.7 (1.0)
> 50	15	14	0.5 (0.5)
Years of education (% > 6)	30	34	-3.6 (3.0)
Employment (% earning income)	45	47	-1.8 (3.4)
Housing quality (% with dirt floor)	69	64	5.3 (6.0)
Meat consumption (past two weeks)	29	38	8.5

Total Number of Respondents	4,851	4,743
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Source: Citizen survey (Mathematica 2011).

Note: Differences are measured by ordinary least squares regressions of the relevant characteristic on the treatment dummy with a vector of indicator variables for the random assignment blocks. All regressions used robust standard errors clustered at the district level. None of the differences shown in this table are statistically significant at either the 1 or the 5 percent level.

In addition to respondent demographics, we also examined whether the treatment and control groups were equivalent at baseline on the main civic participation outcome measures. We estimated the impacts of the Strengthening Civic Participation program for six outcome indices (Table 4).⁶ We constructed outcome indices for several reasons. First, estimating impacts by comparing the treatment and the control groups on a large number of separate survey questions is likely to result in one or more statistically significant impacts by chance (Benjamini and Hochberg, 1995). Second, since factor analysis assumes that the observed variables are influenced by a few underlying variables or factors that are unobserved, constructing those underlying latent variables (the unobserved factors) can provide useful information about patterns of responses among survey respondents. Third, grouping survey questions into a few outcome indices helps make it possible to examine and interpret programmatic impacts in a tractable manner.

Table 4. Survey Items Used to Establish Outcome Indices

Outcome Index	Components
Awareness of Local Government Meetings	Awareness of public meeting—budget Awareness of public meeting—nonbudget Awareness of NGO activity Awareness of JADF
Familiarity with Local Government Officials	Name the district mayor Name at least one member of district council Name at least one member of sector council Name at least one member of cell council
Knowledge about Local Government Affairs	Ever received district budget information

⁶ A formal explanation of the factor analysis methods used for this study is available at [http://www.mathematica-mpr.com/~media/publications/pdfs/international/rawanda_threshold_program_fnlprt.pdf]

	Have enough information to assess government performance
Access to District Government Information	Access to budget information Access to government salary information
Citizen Influence	Respondent can influence government policy Respondent can openly disagree with a government official without negative consequences
Satisfaction with Local Services	Satisfied overall with drinking water services Satisfied overall with waste collection services Satisfied overall with education at local schools Satisfied overall with local health facilities

Source: Citizen survey (Mathematica 2011 and 2012).

At baseline, we did not find any significant differences between the two district groupings on the study's six outcome measures (Table 5). Each outcome measure was scaled to a value between 0 and 100 by converting each of the six estimated factors to binary variables: if a survey respondent's factor score was above the mean score for the full survey sample in that year, the binary variable was coded as 100, otherwise it was coded as 0. Thus, the impact estimates compare the percentage of citizens with an above-average factor score in the treatment districts with the percentage in control districts.

Table 5. Baseline Equivalence of Treatment and Control Districts on Civic Participation Indices

Civic Participation Indices	Treatment Districts' Baseline Index	Control Districts' Baseline Index	Difference
Awareness of Local Government Meetings	39	36	3.4 (2.6)
Familiarity with Local Government Officials	50	47	2.5 (2.4)
Knowledge About Local Government Affairs	38	38	-0.1 (3.2)
Perceived Access to Government Information	43	44	-0.7 (1.7)
Citizen Influence	60	61	-0.4 (3.5)
Satisfaction with Local Services	72	74	-2.0 (4.0)

Source: Citizen survey (Mathematica 2011).

Note: Differences are measured using the same approach shown in Table 2. None of the differences shown in this table are statistically significant at the 5 percent level.

III. Empirical Strategy

We estimate the impacts of the Strengthening Civic Participation program by using the following ordinary least squares regression:

$$(2) \quad Y_{idt} = \alpha + \beta * TREAT_d + BLOCK_{idt} + X_{idt} * \gamma + \delta * Y_{d,t-1} + \varepsilon_{idt}$$

where Y_{idt} is the civic participation outcome of interest for individual i in district d measured at time t , which is the follow-up year in this case; $TREAT_d$ is the treatment dummy variable indicating whether a district was randomly assigned to receive treatment; $BLOCK_{idt}$ represents a set of dummy variables indicating the randomization block; X_{idt} is the individual-level demographic characteristics; $Y_{d,t-1}$ is the district-level mean of the outcome variable Y measured at time $t-1$, which in this case is the baseline year; and finally, ε_{idt} is the random error. The term β is our coefficient of interest representing the impact of the Strengthening Civic Participation program on outcome Y . The standard errors in (2) are clustered at the district level using the standard Huber-White estimator to account for the possibility of correlations among individuals' characteristics within districts.⁷

IV. Impact Estimates

Table 6 summarizes the main findings. For each of the six outcome indices, the table shows the impact of the program as measured by the regression-adjusted difference between the treatment group mean and control group mean. The Strengthening Civic Participation component had no positive and statistically significant impact on any of the six civic participation indices. Rather, for three of the six outcomes, the regression-adjusted impact estimates are negative and statistically

⁷ The respondents in each district received a weight corresponding to the district's probability of being assigned to treatment within a given block (accounting for the fact that some blocks had two districts and other blocks had three districts). Within a given district, all survey respondents were weighted equally.

significant. Specifically, the program had a statistically significant (at the 5 percent level) negative effect equal to four percentage points on satisfaction with local services and a negative impact of two percentage points on both the citizen influence and knowledge about local government affairs outcomes.

Table 6. Main Impacts of the Strengthening Civic Participation Program

	Awareness of local government meetings	Familiarity with local government officials	Knowledge about local government affairs	Access to government information	Citizen influence	Satisfaction with local services
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	1.38 (1.87)	-0.92 (1.35)	-1.95* (0.90)	-1.10 (0.88)	-2.21* (1.03)	-3.87** (1.24)
Outcome at baseline	7.69 (19.86)	24.00 (16.54)	25.91** (6.78)	6.21 (18.32)	-5.19 (7.87)	0.67 (9.52)
Male	1.05 (1.26)	9.47** (0.06)	3.89** (1.06)	2.87* (1.27)	3.43** (0.80)	-0.31 (1.17)
Age	-0.02 (0.04)	0.06 (0.05)	-0.10* (0.05)	-0.36** (0.03)	-0.17** (0.04)	-0.13** (0.04)
Years of education (% > 6)	10.79** (0.88)	14.80** (1.15)	8.34** (1.11)	8.14** (1.58)	5.00** (1.12)	-4.96** (1.25)
Employed	9.83** (1.54)	13.09** (1.39)	8.43** (0.80)	6.38** (0.96)	7.95** (1.36)	1.05 (1.20)
Dirt floor housing	0.92 (1.42)	-4.29* (1.38)	-0.55 (1.20)	-6.00** (1.65)	-4.74** (1.50)	-2.60 (1.54)
Meat in diet	7.36** (1.55)	3.63* (1.38)	4.35** (1.11)	5.42** (1.34)	3.03* (1.30)	-1.56 (1.31)
N	9,113	9,233	8,797	8,683	9,034	8,707

Note: Differences are measured by ordinary least squares regressions of the relevant outcome index (0-100 scale) on the treatment dummy. All regressions include fixed effects for the study's random assignment blocks, and used robust standard errors clustered at the district level.

** Difference is statistically significant at the 5 percent level,

*** Difference is statistically significant at the 1 percent level.

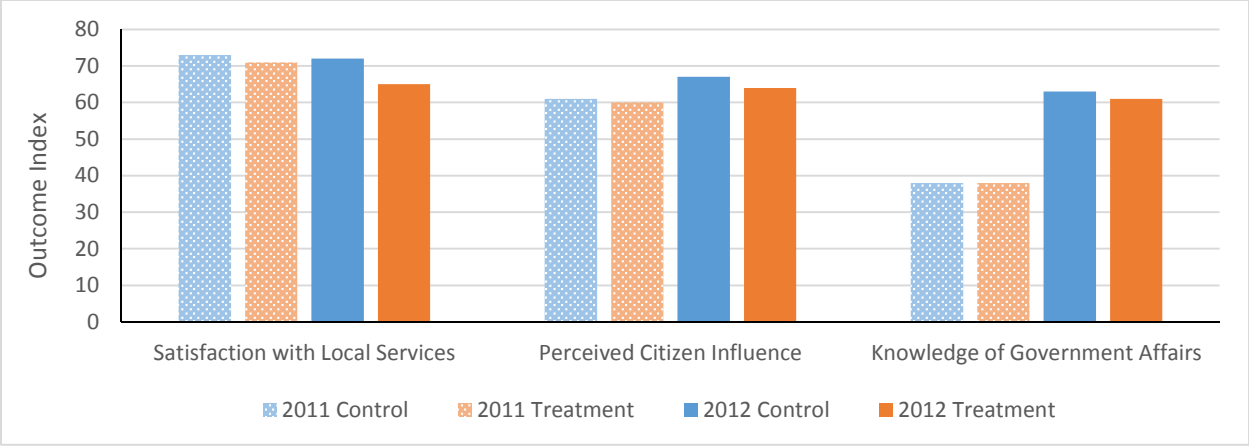
Each outcome index denotes the percentage of citizens who have an above-average index score for that outcome. Thus, the negative impact of four percentage points on satisfaction with local services implies that the program activities lowered the percentage of citizens with an above-average satisfaction-score by four points in the treatment districts. Likewise, we find that the component lowered the percentage of treatment-group citizens with an above-average index score by two percentage points for the citizen influence and knowledge about local government affairs outcomes. We did not find any significant impacts on awareness of local government meetings, familiarity with local government officials, or perceived access to government information.

We also examined the change in outcomes from baseline to follow-up in the treatment and control districts for the three indices with statistically significant negative impacts (Figure 2). As

noted, the baseline and follow-up surveys each used different samples of citizens in the same study districts. Thus, the outcomes are not directly comparable, in the sense that they do not represent changes in outcomes for the same group of individuals; instead, the figure shows average outcomes in the same set of districts in 2011 (at baseline) and in 2012 (one year after program activities began and after the RTP ended). However, because the outcome indices are converted into binary variables, they have the same interpretation for both years: they represent the percentage of citizens in the sample with above-average outcome scores.

For the satisfaction with local services outcome, there was a negative trend from 2011 to 2012 in the treatment districts, but almost no change in the control districts. In 2011, more than 70 percent of the citizens reported above-average satisfaction scores in both groups (meaning that more than 70 percent of citizens in both the treatment and control groups reported a higher satisfaction score than the national average). In 2012, the percentage of citizens with above-average satisfaction levels in the control districts was almost unchanged (the difference was approximately -1 percentage points); however, satisfaction levels dropped by approximately 6 percentage points in the treatment districts. Interestingly, for the knowledge of government affairs outcome there was a sharp positive change in the percentage of citizens with above-average scores in both the treatment and control districts. This positive trend was more pronounced in the control districts than in the treatment districts, however.

Figure 2. Change in Selected Outcome Indices in Treatment and Control Districts



1. Impacts on Subgroups

To examine if the impacts were more prominent among subgroups of interest to policymakers, we also estimated the impacts of the Strengthening Civic Participation component for citizens with specific characteristics. We tested whether impacts differed significantly for women, adults under the age of 35, low-income citizens (defined as those who live in dwellings with a dirt floor), and different education groups (those with at least a primary education and those with at least a secondary-level education). Table 7 presents the results, comparing the impacts for each of these subgroups to the program’s overall impact. Specifically, each estimate represents the difference between the impact for members of a subgroup and for those who are not part of that subgroup. We did not find statistically significant differences, either positive or negative, in any of the impact estimates for the subgroups we examined.

We conducted additional subgroup analyses to test whether the impact estimates are driven by differential exposure to certain program activities. To do so, we exploited variation in the implementation of grants to local governments and examined if the pattern of impacts differed in the group of five treatment districts that completed all planned grant-funded activities before the

RTP concluded (the remaining 10 treatment districts received some grant funds but did not complete all planned activities).

Table 7. Subgroup Impacts of the Strengthening Civic Participation Component

Civic Participation Indices	Women	Youth (under 35)	House with Dirt Floor	Level of Education	
				At Least Primary	At Least Secondary
Awareness of local government meetings	0.5 (2.6)	0.8 (2.5)	-4.0 (2.9)	1.9 (2.1)	0.4 (3.5)
Familiarity with local government officials	0.1 (2.4)	-2.7 (2.4)	-0.5 (2.7)	-1.7 (2.4)	2.0 (3.2)
Knowledge about local government affairs	-1.4 (2.1)	0.9 (2.4)	0.6 (2.4)	-1.7 (2.3)	-2.5 (2.5)
Access to government information	0.8 (2.6)	-0.2 (1.9)	4.8 (3.2)	-2.5 (3.2)	-0.7 (5.2)
Citizen influence	1.2 (1.7)	-2.6 (2.0)	-3.0 (2.6)	-1.2 (2.2)	2.5 (3.1)
Satisfaction with local services	3.2 (2.1)	-1.9 (1.8)	-1.5 (2.4)	-2.6 (2.1)	-2.2 (2.5)
Subgroup Sample Size	5,722	5,433	6,136	3,283	1,310

Note: Entries in each cell represent percentage point differences between impact estimates for members of the tested subgroup and for all respondents who are not part of the subgroup. Estimates are based on a separate set of impact regressions for each subgroup and each outcome index. None of the differences shown in this table are statistically significant at the 5 percent level.

As shown in Table 8, on four of the six civic participation outcomes the impacts in full-implementation districts were statistically indistinguishable from the impacts in other districts. However, we did find statistically significant differences for two outcomes. In the full-implementation districts the intervention had a *more negative* impact on citizens' reported satisfaction with local services (with a difference of 6 percentage points relative to impacts in other districts); also, in the full-implementation districts the intervention had a *more positive* impact on perceived knowledge about local government affairs (with a difference of 4 percentage points).

These results should be interpreted with caution, however, as the small number of districts involved limits our power to detect significant differences between subgroups. In addition, the five district governments that were able to fully implement program grants are not a random subsample of the study's treatment districts. As a result, it is possible that these differences in impacts may

be correlated with an unobserved factor. For example, local governments in a few treatment districts may have been particularly eager to enact new initiatives and reforms during the study period; under such a scenario, these districts could have produced local changes in civic participation outcomes even in the absence of the intervention and its grant-funded activities.

Table 8. Subgroup Impacts for Respondents in Districts Completing SCP Grants

Civic Participation Indices	Overall Impacts of the SCP Component	Difference in Impacts for Respondents in SCP Treatment Districts That Completed All Planned Grant Activities
Awareness of local government meetings	1.4 (1.9)	2.9 (4.0)
Familiarity with local government officials	-0.9 (1.4)	-1.6 (2.6)
Knowledge about local government affairs	-2.0* (0.9)	4.1* (1.9)
Access to government information	-1.1 (0.9)	2.8 (1.7)
Citizen influence	-2.2* (1.0)	1.6 (2.4)
Satisfaction with local services	-3.9** (1.2)	-5.6** (1.4)
Sample Size	9,233	1,572

Source: Citizen survey (Mathematica 2012).

Note: Entries in each cell represent percentage point differences between impact estimates for members of the tested subgroup and for all respondents who are not part of the subgroup. Estimates are based on a separate set of impact regressions for each subgroup and each outcome index.

*Difference is statistically significant at the 5 percent level.

**Difference is statistically significant at the 1 percent level.

2. Robustness Checks

We examined the robustness of the main impact findings by estimating the impacts with outcome variables constructed in three alternative ways. For our main impact estimates, we used factor analysis to identify one factor for each outcome domain using sets of survey questions and then converted the estimated factor scores to binary variables. These outcome variables were coded as 100 if the score was above the mean score of the sample and 0 otherwise. In our first alternative model, we use the 75th percentile as the cutoff instead of the mean. In our second alternative model, we use the raw factor scores estimated from the factor analysis without converting them to binary

variables. In our third alternative model, we construct the outcome variables directly as the equally weighted average of the responses from the survey questions (that is, without using the survey-question weights suggested by factor analysis). The results from these three alternative models are presented in columns two to four in Table 9; column 1 shows the study’s preferred benchmark results, for comparison.

For the awareness of local government meetings, familiarity with local government officials, and satisfaction with local services outcomes, we found the same results under all three alternative models as in our main model—not statistically significant for the first two and significantly negative for the third. For the other three outcome variables, the main impact findings were sensitive to the way outcome variables were constructed. Under each alternative model, the sign of the impact estimates remained consistent, but the standard errors fluctuated enough to change the statistical significance of the impact estimates under certain specifications.

Table 9. Sensitivity of Impacts to Alternative Specifications

Civic Participation Indices	Main Specification ^a	Alternative Specifications		
		(1) ^b	(2) ^c	(3) ^d
Awareness of local government meetings	1.4 (1.9)	1.9 (1.7)	2.6 (3.7)	3.1 (4.0)
Familiarity with local government officials	-0.9 (1.4)	0.3 (1.4)	-0.3 (3.0)	0.4 (4.4)
Knowledge about local government affairs	-2.0* (0.9)	-2.0* (0.9)	-3.1 (2.0)	-1.7 (1.3)
Access to district government information	-1.1 (0.9)	-1.9* (0.8)	-3.3* (1.6)	-2.7* (1.3)
Citizen influence	-2.2* (1.0)	-1.0 (0.9)	-4.1 (2.2)	-3.0 (2.4)
Satisfaction with local services	-3.9** (1.2)	-5.5** (1.2)	-5.9* (2.3)	-8.2** (2.4)

Note: Entries in each cell represent the impact estimate corresponding to different regressions of the relevant outcome index and the model specification. Regressions include dummies for random assignment blocks, controls for respondents’ demographic characteristics and baseline measures of the relevant outcome index as shown in equation (1). All regressions used robust standard errors clustered at the district level.

^a Binary outcome equal to 1 if the factor score is above sample mean and 0 otherwise.

^b Binary outcome equal to 1 if the factor score is above the sample’s 75th percentile 0 otherwise.

^c Outcome is continuous raw factor scores scaled to have a mean of 0 and a standard deviation of 1.

^d Outcome is the unweighted average of relevant survey questions, no factor analysis.

* Difference is statistically significant at the 5 percent level,

** Difference is statistically significant at the 1 percent level.

Next, we conducted an additional subgroup analysis to test whether the impact estimates are driven by differential exposure to the other interventions carried out under the RTP. Specifically, we tested whether the impacts of the SCP component appeared to be different in the districts that also received strong broadcast signals from one or both of the community radio stations created by the RTP (examining impacts separately in the two treatment districts that contained an RTP station broadcast tower). Across all of the civic participation outcomes we measured, there were no significant differences between the SCP component’s impacts in this broadcast area and the component’s impacts in the treatment districts outside the broadcast area (Table 10).

Table 10. Subgroup Impacts for Respondents in Districts with an RTP-funded Radio Station

Civic Participation Indices	Overall Impacts of the SCP Component	Difference in Impacts for Respondents in RTP Radio Stations’ Broadcast Districts
Awareness of local government meetings	1.4 (1.9)	2.3 (4.0)
Familiarity with local government officials	-0.9 (1.4)	-0.9 (4.0)
Knowledge about local government affairs	-2.0* (0.9)	-1.6 (1.2)
Access to government information	-1.1 (0.9)	-2.3 (1.3)
Citizen influence	-2.2* (1.0)	1.2 (2.0)
Satisfaction with local services	-3.9** (1.2)	4.5 (2.4)
Sample Size	9,233	733

Source: Citizen survey (Mathematica 2012).

Note: Entries in each cell represent percentage point differences between impact estimates for members of the tested subgroup and for all respondents who are not part of the subgroup. Estimates are based on a separate set of impact regressions for each subgroup and each outcome index.

*Difference is statistically significant at the 5 percent level.

**Difference is statistically significant at the 1 percent level.

Finally, we conducted a “falsification” test to examine whether our results are driven by factors unrelated to the Strengthening Civic Participation, such as differential economic growth in the treatment districts. To conduct this test, we used our main analytical approach in equation (1) to assess whether the program had an “effect” on three different economic indicators: 1) employment; 2) housing quality (residences with a dirt floor); and 3) the percentage of respondents

eating meat in the past two weeks. We did not find any statistically significant impacts of the program on these three economic outcomes. Thus, the falsification test suggests that the program's impacts were not likely to be generated by economic factors or trends outside of the intervention itself.

V. Qualitative Results

To provide additional context for these results, we conducted qualitative research examining why the program produced declines on several of the survey's outcome indices. One possibility is that the program inadvertently harmed some types of civic participation. For example, incomplete rollout of the program may have produced unfulfilled expectations among citizens hoping for increased access to and engagement with local government. Alternatively, a different hypothesis is that the program helped citizens to feel more comfortable criticizing local government. In other words, an "intended outcome" interpretation would suggest that program activities raised awareness of governance problems and encouraged citizens to voice negative opinions. If program activities raised citizen awareness about existing governance challenges or encouraged freer criticism in public forums or semi-public activities (such as our study survey), negatively impacting survey outcomes could represent a successful first step in the program's theory of change.

Qualitative data provide relatively little evidence to support the first hypothesis (that negative impacts reflect unintended outcomes) and more substantial evidence to support the second hypothesis (intended outcomes). Across interview types and locations, CSO and local government respondents did express disappointment that program activities only lasted for 10 months and that implementation of several RTP activities was not completed. However, this disappointment was directed almost exclusively at program administrators, and in many cases respondents voiced

support for extending the program because they thought it was well-designed and effective. Indeed, CSO and government respondents often noted how, in their view, the program increased engagement with local government, encouraged greater citizen openness in criticizing local officials, and raised citizens' expectations that the government should be responsive to their concerns. Key insights from the qualitative interviews are presented below.

Limited CSO capacity. Interviews with CSO officials and implementers suggest that CSOs often lacked the infrastructure necessary to absorb grant funds, budget appropriately, and apply resources to pursue civic participation goals effectively. As one implementer explained, “CSOs were not very adept at managing themselves—some of the most basic mistakes they were making were striking—they were learning about what is decentralization, what is the role of civil society, what is planning, how to have a role in planning, how to make budgets work.” The need to improve the operational capacity of CSOs may have reduced the resources available for civic participation strengthening activities. Several implementers stated that, as a result of these capacity constraints, the program devoted more time and resources than anticipated to training and managerial capacity building. This left implementers with fewer opportunities to support the type of CSO-led advocacy campaigns that would have influenced civic participation outcomes more directly. Combined with the fact that grant-funded CSO and local government activities were only partially implemented, administrative staff and beneficiaries consistently voiced concerns that the program only realized part of its potential.

Impacts on citizen attitudes toward government. Despite these challenges, many CSO and local government respondents stated that program activities helped citizens to develop new views on their proper role in public decision making. A number of CSO respondents discussed how the Strengthening Civic Participation component's activities helped citizens to feel “freer with their local leaders.” One CSO respondent was “personally pleased with the fact that citizens can be able

to criticize when things aren't going as expected so that they can be improved on." Three other CSO respondents and one local government respondent commented independently that after the program occurred, citizens were more able to criticize or engage with local government. As one implementer elaborated, "CSO final reports commented on how citizens did not know they had a right to criticize government until some of our community dialogues and training."

Several respondents pointed out that these changes were noteworthy because civic participation was not a strongly held norm in Rwanda. CSOs, local government officials, and implementers all noted that it is not a common practice for citizens to voice strong views in public or advocate for their positions with local government officials. As one implementer elaborated, the "culture doesn't permit people to often say what they think and what they don't like." Another stressed that "civic participation is a new and sensitive concept in Rwanda." Framing it differently, one CSO respondent suggested that program activities helped "enlighten citizens on the roles and responsibilities of the cell, sector, and district leaders...I am now free to communicate with our leaders in the district. The same applies to the citizens—now they aren't afraid of asking about things that are going wrong." However, it is also important to note that respondents in at least two control districts noted a similar trend of growing citizen empowerment vis-à-vis government, suggesting that in some cases similar changes may have been occurring nationwide due to trends and activities beyond those of the RTP.

Impacts on civic engagement. In addition to attitudinal changes, CSO and local government respondents reported that the program resulted in greater interaction and dialogue between local government and citizens. For example, several CSO respondents described successful interactions with local government officials in the wake of the program. They reported increases in citizens' active participation in public meetings, articulating priorities and offering feedback through official events, and speaking out more broadly. Several district mayors also associated program

activities with an increase in their beneficial interactions with the citizenry. CSO respondents felt that having local civic leaders present for community meetings helped to “eliminate distrust and build confidence with the population as well as the government.”

In sum, the qualitative data support the argument that the program’s negative effects on citizen views about government (as expressed in our survey data) represent intentional consequences of the program and its activities. In addition, a variety of respondents noted that the RTP’s partial implementation and limited CSO capacity limited the program’s effectiveness. This is consistent with the modest size of the program’s impacts, and the fact that the program did not have a statistically significant impact on several key outcomes.

VI. Discussion

For the outcomes showing insignificant effects (awareness of government meetings, familiarity with government officials, and perceived access to government information), it appears that the civic participation initiative was not able to impact several of its targeted outcomes on citizens. Importantly, none of the program’s activities involved direct interactions between implementing program staff and general citizens in treatment districts. Instead, program activities were designed to build the capacity of CSOs and local government officials, relying on those receiving technical assistance to take actions that would in turn promote interaction. As a result, even if program activities changed the amount of communication between CSOs and government officials, those changes did not alter the perceptions of Rwandan citizens about several civic participation measures within the time period of the evaluation. It is possible that the intervention will produce larger or more positive impacts on these outcomes in the longer run—a topic for potential future study. However, it is also important to remember that this RTP component was

not fully implemented. It is not possible to assess whether the program would have produced larger (either positive or negative) impacts if the full plan of activities had been implemented as planned.

However, our impact findings (combined with qualitative data) suggest that even under a limited implementation schedule some of the component's activities succeeded in modestly increasing citizens' willingness to voice concerns about the quality local government services, lack of knowledge about local government affairs, and the amount of citizen influence on local government decisions. The Strengthening Civic Participation component supported the work of CSOs whose activities were designed to raise citizen awareness about local policy problems and to encourage citizens to voice their concerns. CSOs supported by the program reported that their activities deliberately sought to encourage citizens to voice dissatisfaction more openly. In this sense, causing citizens to report that they are less satisfied with government services or other policies could represent a first step in the intervention's theory of change. Potentially, an initial decrease in citizens' satisfaction in treatment districts and a greater willingness among citizens to voice criticism could encourage public advocacy and influence local governance over time. In this context, the program's impacts on citizen attitudes appear to be an intentional byproduct of increased CSO activism and increased citizen comfort in voicing critical views.

This evaluation has implications for the design and implementation of future interventions related to improving civic participation in local governance. Our results highlight the importance of the local context in determining the amount of time and types of interventions required to impact governance outcomes. The activities evaluated in Rwanda were carried out within an abbreviated 10-month timeframe, and resources were divided among a wide range of activities. The implementers and program stakeholders we interviewed often pointed out that time constraints made it very challenging to produce meaningful changes in citizen behavior or governance outcomes. Local capacity constraints also affected the program in several unanticipated ways. In

particular, the limited operational capacity of CSOs slowed program implementation, requiring that the program spend more time and resources improving CSOs' basic organizational systems before key grant-funded activities could begin.

Evaluations such as this one are particularly important in the democracy and governance sector. Development agencies and foundations make large investments in programs designed to strengthen democratic institutions and processes, yet little is known about the effectiveness of these programs in practice, where implementers often face challenging grant schedules and political environments that are unreceptive to reform. A final outcome of this study is to demonstrate that, under the right conditions, it is possible to complete a detailed evaluation to assess the impacts of large-scale governance initiatives, many of which remain untested or experimental in nature. Continuing such evaluation efforts remains a vital pathway to determining whether these programs improve outcomes for citizens, establishing a stronger evidence base to inform the design of future governance interventions.

REFERENCES

- Amnesty International (AI). “Safer to Stay Silent; The Chilling Effect of Rwanda’s Laws on ‘Genocide Ideology’ and ‘Sectarianism.’” 2010. Available at <http://www.amnesty.org/en/library/asset/AFR47/005/2010/en/ea05dff5-40ea-4ed5-8e55-9f8463878c5c/afr470052010en.pdf>. Accessed October 30, 2012.
- Banerjee, Abhijit, Selvan Kumar, Rohini Pande, and Felix Su. “Do Informed Voters Make Better Choices? Experimental Evidence from Urban India.” Unpublished manuscript, 2011. Available at <http://www.povertyactionlab.org/node/2764>. Accessed December 14, 2012.
- Benjamini, Y., and Y. Hochberg. Controlling the False Discovery Rate: A Practical and Powerful Approach to Multiple Testing. *Journal of the Royal Statistical Society, Series B (Methodological)*, vol. 57, no. 1, 1995, pp. 289–300.
- Bonferroni, Carlo Emilio. Il Calcolo delle Assicurazioni su Gruppi di Teste. In *Studi in Onore del Professore Salvatore Ortu Carboni*, pp. 13–16. Rome, 1935.
- Bostoen, Kristof, and Zaid Chalabi. “Optimization of Household Survey Sampling Without Sample Frames.” *International Journal of Epidemiology*, vol. 35, no. 3, June 2006, pp. 751–755.
- Conseil de Concertation des Organisations d’Appui aux Initiatives de Base (CCOAIB). The State of Civil Society in Rwanda in National Development: Civil Society Index Rwanda Report, 2011. Available at <http://www.undp.org.rw/CIVICUS-civil-society-index-Rwanda.pdf>. Accessed September 20, 2012.
- Duflo, Esther, Rachel Glennerster, and Michael Kremer. “Using Randomization in Development Economics: A Toolkit.” *Handbook of Development Economics*, vol. 4, 2007, pp. 3895–3962.
- European Parliament (EU). “Violence and Political Repression in Rwanda.” European Parliament: Parliamentary questions, 2012. Available at <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+WQ+E-2012-005726+0+DOC+XML+V0//EN>. Accessed October 30, 2012.
- Ferraz, C., and F. Finan. “Exposing Corrupt Politicians: The Effects of Brazil’s Publicly Released Audits on Electoral Outcomes.” *The Quarterly Journal of Economics*, vol. 123, no. 2, 2008, pp. 703–745.
- Gasana, Charles. “The Decentralisation Process in Rwanda: Ensuring Improved Accountability on All Levels.” Paper presented at the World Bank Decentralization and Community Empowerment Workshop, Nairobi, March 25, 2002.
- Gellar, Sheldon, Sharon Morris, and Anicet Kayigema. *USAID/Rwanda Civil Society in Rwanda: Assessment and Options*. Burlington, VT: ARD, Inc., 2001.
- Human Rights Watch (HRW). “Rwanda: Stop Intimidating Regional Human Rights Group,” 2011. Available at <http://www.hrw.org/news/2011/08/23/rwanda-stop-intimidating-regional-human-rights-group>. Accessed October 2, 2012.

- Human Rights Watch. “Rwanda: Silencing Dissent Ahead of Elections,” 2010. Available at <http://www.hrw.org/news/2010/08/02/rwanda-attacks-freedom-expression-freedom-association-and-freedom-assembly-run-presi>. Accessed October 30, 2012.
- Innocent, Gahiji. “Rwanda: Districts Need Decentralization of Budget for Sectors, Cell Levels.” AllAfrica, 2012. Available at <http://allafrica.com/stories/201207050480.html>. Accessed October 4, 2012.
- International Fund for Agricultural Development (IFAD). Africa Knowledge Management Network website. Available at <http://www.ifadafrica.org/index.php/km-learning-approaches/45-continuous-improvement-processes-at-all-levels/cornerstone-11/126-joint-action-development-forum-jadf>. Accessed November 4, 2012.
- Kohen, Ari, Michael Zanchelli, and Levi Drake. “Personal and Political Reconciliation in Post-Genocide Rwanda.” *Social Justice Research*, vol. 24, 2011, pp. 85–106.
- Millennium Challenge Corporation (MCC). “Threshold Program.” 2014a. Available at <http://www.mcc.gov/pages/program/type/threshold-program>. Accessed February 25, 2014.
- Millennium Challenge Corporation. “Selection Indicators.” 2014b. Available at <http://www.mcc.gov/pages/selection/indicators>. Accessed February 25, 2014.
- National Institute of Statistics of Rwanda. “Districts Baseline.” Available at http://statistics.gov.rw/index.php?option=com_content&task=view&id=159&Itemid=321. Accessed October 24, 2012.
- National Unity and Reconciliation Commission. “Social Cohesion in Rwanda.” Kigali, Rwanda: National Unity and Reconciliation Commission, 2007.
- Nichols-Barrer, Ira, Lindsay Wood, Matt Sloan, and Anu Rangarajan. “Evaluation of the Rwanda Threshold Program: Baseline Report.” Washington, DC: Mathematica Policy Research, 2011.
- Olken, Ben. “Direct Democracy and Local Public Goods: Evidence from a Field Experiment in Indonesia.” *American Political Science Review*, vol. 104, 2010, pp. 243–267.
- SNV Netherlands Development Organisation (SNV). SNV Rwanda. “Joint Action Development Forum in Rwanda: Experiences and lessons learned,” 2009. Available at http://www.snvworld.org/sites/www.snvworld.org/files/publications/joint_action_development_forum_in_rwanda_-_lessons_learned_and_experiences.pdf. Accessed September 30, 2012.
- United Nations Development Programme (UNDP). “Support to the Five Year Decentralization Implementation Programme (DIP5),” 2005. Available at <http://www.undp.org.rw/prodocpму-DIP5-project43228.pdf>. Accessed October 2, 2012.
- United States Agency for International Development (USAID). *Rwanda Democracy and Governance Assessment*, 2002.

Wood, Lindsay, Ira Nichols-Barrer, and Matt Sloan. "Evaluation of the Rwanda Threshold Program: 2012 Survey User's Manual." Final report submitted to the Millennium Challenge Corporation. Washington, DC: Mathematica Policy Research, May 2012.

World Bank. "Rwanda—From post-conflict reconstruction to development." World Bank, IDA at Work, Washington D.C., 2009.