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**Opportunities and Challenges for Community  
Involvement in Public Service Provision in  
Rural Guatemala**

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## **INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE**

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## ABSTRACT

The purpose of the research summarized in this paper is to provide policy-relevant knowledge on the governance of rural services in Guatemala and thus to contribute to improving the provision of services that are essential for agricultural and rural development. Almost 10 years ago, the Guatemalan government decided to strengthen decentralization and community participation to improve the quality of public services, as well as access to these services for the poor, especially in rural areas. Based on quantitative and qualitative primary data, we examine how services are actually provided today and how community preferences and participation affect service provision in rural Guatemala. Our main finding is that the provision of formally decentralized services by local governments is incomplete. As a result, many rural communities continue to lack access to services, and some of them engage in supplying these services themselves. However, communities do not consider themselves to be more effective at service provision and would therefore prefer to be served by the government. Moreover, we find that community participation in the planning and evaluation of services has a positive impact on the responsiveness of the local government's service provision. However, the effectiveness of community participation varies greatly among the examined cases, with several participatory governance bodies not functioning properly due to low education levels, poverty, and weak civil-society organization.

**Keywords:** participation, community-based development, decentralization, public services, Guatemala

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## 1. INTRODUCTION

In the last two decades, some progress has been made in improving access to public services for the poor in Guatemala, but a large service gap remains, especially in rural areas. According to the Presidential Planning Secretariat (Secretaría de Planificación y Programación de la Presidencia, or SEGEPLAN), the percentage of the population with access to improved water sources increased from 63 percent in 1990 to 78.7 percent in 2006. Access to sanitation followed a similar pattern, with an increase from 32 percent in 1990 to 54.5 percent in 2006. Some progress was observed in education as well, as measured by the primary-level completion rate, which increased from 43.7 percent in 1991 to 77.6 percent in 2009 (the net enrollment rate was 98.3 percent in 2009). Access to health services also improved, as indicated by a decrease in the infant mortality rate from 73 per 1,000 live births in 1987 to 30 per 1,000 live births in 2009. However, the rural–urban disparity is still significant: in 2006, only 64.1 percent had access to an improved source of water in rural areas, versus 91.2 percent in urban areas. For access to sanitation, the discrepancy was 22 percent versus 82.5 percent in 2006. Finally, in 2009, the infant mortality rate was still higher in rural areas than in urban centers: 38 versus 27 per 1,000 live births, which indicates an ongoing need to extend basic services to rural populations (SEGEPLAN 2010).

To improve the quality of and access to public services, particularly for marginalized segments of the population, Guatemala has embarked upon a range of governance reforms since the mid-1980s. The most recent impetus to reform the provision of public services was the passing of the so-called trilogy of laws in 2002. This trilogy comprises a new Decentralization Law and substantial reforms to the Municipal Code and the Urban and Rural Development Council Law (Congreso de la República de Guatemala 2002a, 2002b, 2002c). According to the Municipal Code, the responsibility to universalize access to basic services—for example, drinking water, sanitation, and maintenance of small roads—as well as to improve their quality was decentralized to municipal governments. The Development Council Law institutionalized a five-tier system of councils for civil-society participation in planning such services, ranging from the community to the national level.<sup>1</sup> In addition, the government has implemented two large-scale programs to extend the coverage of health and education services in remote areas by involving nongovernmental organizations (NGOs) and community organizations in the management of these services, for example, by running a primary school or a health post.

Hence, the Guatemalan government has set up a legal framework that facilitates several forms of community involvement in service provision. Community representatives are offered the opportunity to participate in the planning and evaluation of services that are provided by different levels of government, particularly by the municipal government, and communities are also expected to participate in managing water, health, and education services. What is missing so far, however, is systematic evidence of the effectiveness of these reform efforts. With this paper, we intend to begin filling this gap by providing some empirical insights on the state of implementation of these reforms, the preferences of communities regarding their involvement in service provision, the impact of their involvement, and the conditions needed to make community participation more effective.

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<sup>1</sup> The planning process begins at the community level, with Community Development Councils (CDCs) prioritizing requests for services and projects needed in the community and presenting those requests to the Municipal Development Council (MDC).

## 2. METHODS

The results we present in this paper are based on qualitative and quantitative research methods. For the quantitative data, a community-based survey was implemented in 200 villages located in rural municipalities in 2010-2011. Those villages were randomly selected using a two-stage sampling strategy. In the first stage, 132 (out of 333) municipalities with at least 70percent of their population living in rural areas were treated as primary sampling units (PSUs). These rural municipalities were classified into three strata according to the percentage of their budget spent on social services such as education, healthcare, water, and sanitation. A sample of 15 municipalities was randomly selected from each stratum for a total of 45 PSUs. Proportional random sampling was implemented in the second stage to select 200 villages.

In each village, a set of community members were purposefully recruited to respond to the survey questionnaire. Recruited community members included a member of the healthcare community, a teacher, someone older than 50 years, a member of the local development committee, a farmer, and two mothers. Group interviews were implemented at the corresponding community. In addition to collecting socio-demographic characteristics of the community, the survey was designed to measure access to and quality of public services related to rural development: water, sanitation, education, healthcare, road infrastructure, and agricultural extension. The survey also gathered information on institutional arrangements and community preferences for public services provisions (see Vásquez [2012] for a more detailed description of the questionnaire and sampling procedure).

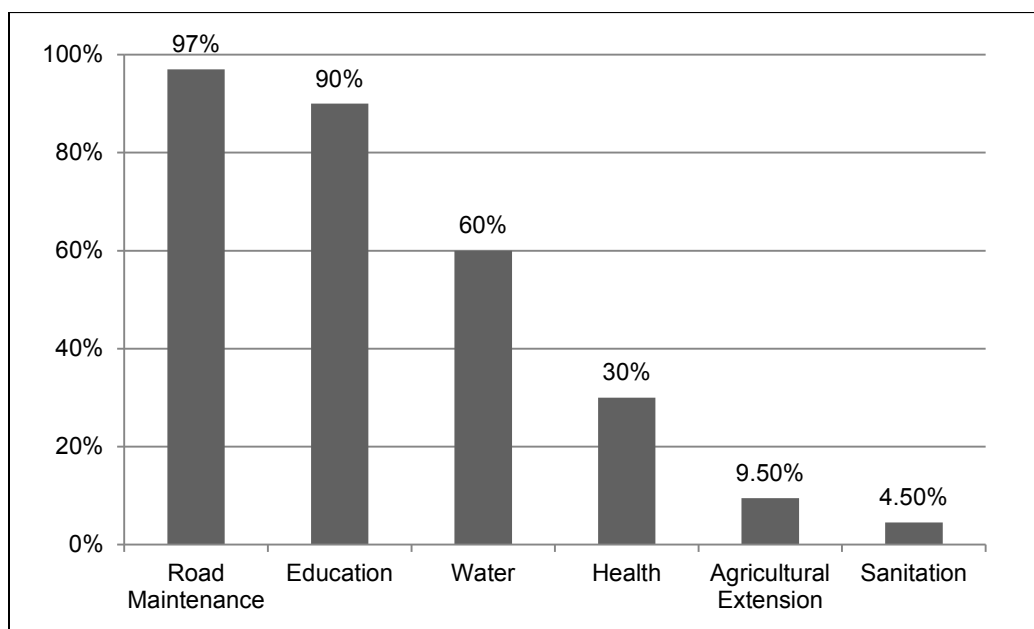
Group discussions with community members and municipal council officials and other key informants were the sources of the qualitative data. We carried out semistructured interviews with 11 key experts in Guatemala City and collected secondary qualitative data, such as minutes of meetings, Municipal Development Plans, and local media reports, in each municipality (for more details on the qualitative data collection and analysis, see Basurto and Speer [2012] and Speer [2012a]).

### 3. COMMUNITY INVOLVEMENT IN RURAL SERVICE PROVISION: KEY RESULTS

#### How Are Local Public Services Actually Supplied in rural Guatemala?

Survey results from the 200 rural communities indicate significant variation in access to basic services (see Figure 3.1). Road maintenance is the service most commonly provided in the sampled communities, followed by educational services. Access to water and health services follow, but both are still far from universally accessible. Figure 3.1 shows that agricultural extension and sanitation are basically nonexistent in the sampled communities. The absence of agricultural extension can to some extent be attributed to service provision reforms implemented in the 1990s in which government agricultural extension programs were terminated under the expectation that the private sector would provide these services.

**Figure 3.1—Percentage of communities with access to basic services**



Source: Results from community survey (N=200).

Table 3.1 presents current service provision as percentages of sampled communities that reported receiving the corresponding service. Together with Figure 3.1, the table provides several interesting insights on the state of implementation of the Guatemalan governance reforms. First, our results suggest that decentralization of water, sanitation, and road maintenance is far from complete. The most striking example is water provision, which is one of the most essential services for the communities. Though municipalities are, according to the law, the primary water supplier, we find that in practice they provide hardly any services to villages in rural areas, presumably due to severe constraints in human and financial resources (see Vásquez 2011b). To compensate for the absence of government-provided services, there is significant community participation in providing water. Community-managed systems provide water to 102 out of the 120 sampled communities that have piped water.<sup>2</sup> Table 3.1 also shows a road maintenance participation rate of approximately 25 percent among the sampled communities. This percentage is similar to the percentage of communities that are served mainly by the municipality.

<sup>2</sup> Vásquez (2011a) reports similar results based on a national household survey indicating that community-managed systems provide water to more than 39 percent of rural households, while only 16.8 percent of rural households are served by municipal systems.

**Table 3.1—Actual service provision**

Service	Mandated Supplier	Current Suppliers				
		Central Government	Municipality	Local Committee	NGO	Other
<b>Road maintenance</b>	Municipalities (for small, communal roads) <sup>a</sup>	45.4%	29.4%	25.2%	0.0%	0.0%
<b>Education</b>	Ministry of Education	98.9%	0.0%	1.1%	0.0%	0.0%
<b>Water</b>	Municipalities	0.0%	15.0%	85.0%	0.0%	0.0%
<b>Health</b>	Ministry of Public Health and Social Assistance	80.0%	1.7%	3.3%	8.3%	6.7%
<b>Agricultural extension</b>	Ministry of Agriculture, Livestock Farming and Food	52.6%	5.3%	0.0%	10.5%	31.6%
<b>Sanitation</b>	Municipalities	0.0%	66.7%	33.3%	0.0%	0.0%

Source: Results from community survey.

Note: The Ministry of Communications, Infrastructure and Housing is responsible for maintaining main roads.

Second, there is virtually no community participation in health and education services. The lack of community involvement in education is likely due to the end of the community-based school management program referred to as Programa Nacional de Autogestión para el Desarrollo Educativo (PRONADE) in 2008.<sup>3</sup> In health services, we find that there is slight community involvement and some NGO involvement, but the large majority of the communities in our survey that had access to health and education services were served by the central government.

Third, we find no community participation in the provision of agricultural extension, which is almost inexistent in the sampled communities because the private sector has not taken up this service (only 5 out of the 200 sampled communities reported receiving agricultural extension services from private firms). Agricultural extension services were provided until the beginning of the 1990s by the central government. When the government cut spending on extension, the private sector was expected to offer these services instead, but this plan failed in most areas due to the inability of small farmers to afford such services. Hence, today the only farmers who have access to extension services are large *finca* owners in the fertile lowlands. To fill this vacuum, NGOs and other programs have become the largest providers of agricultural extension services.

### What Do People Think about Potential Governance Solutions for Service Provision?

The survey asked community members to report which service their community most needed to have either implemented or improved. Results indicate that water is the most needed service (39.5 percent), followed by health services (16.5 percent), road infrastructure (13.5 percent), and sanitation (10.5 percent). Communities were also asked to choose which organization would provide the best service, in their opinion. Table 3.2 shows the community responses, which indicate strong preferences for centralized approaches to the provision of water, sanitation, education, health, road maintenance, and agricultural extension services. A majority of communities believe that, compared to other potential providers, the central government would provide better services (particularly education, health, road maintenance, and agricultural extension).

<sup>3</sup> PRONADE was implemented in 1996 in order to extend educational services to rural communities located at least three kilometers away from the nearest school. Selected communities were required to form an education council of 15 community members to manage the school. PRONADE was ended in 2008 due to allegations of corruption and political pressure from the national union of teachers.

Only some communities view the municipality as a good provider for water, sanitation, and road maintenance. One reason that municipalities are not perceived as efficient providers of services could be that decentralization has not yet advanced very far. The examples of efficient services that community members know of are still run by central government social funds or line ministries. This may change when more municipalities provide services such as water, sanitation, road maintenance, and eventually perhaps even health and education services. However, this will not be easy to achieve given the technical and financial challenges that municipal administrations face in providing public services (see, for example, Vásquez 2011b).

**Table 3.2—Community preferences for service provision**

	<b>N</b>	<b>Central Government</b>	<b>Municipality</b>	<b>Local Committee</b>	<b>NGO</b>	<b>Other</b>
<b>Road maintenance</b>	193	78.8%	16.6%	0.5%	3.6%	0.5%
<b>Education</b>	196	93.4%	1.0%	3.1%	2.0%	0.5%
<b>Water</b>	197	53.3%	23.3%	10.7%	9.1%	3.6%
<b>Health</b>	199	89.5%	3.5%	1.5%	5.0%	0.5%
<b>Agricultural extension</b>	198	90.9%	0.5%	3.0%	4.0%	1.5%
<b>Sanitation</b>	200	63.5%	24.0%	2.5%	8.5%	1.5%

Source: Results from community survey.

Table 3.2 also shows that communities do not perceive themselves as being more efficient than the government (or the municipality) in providing public services. Among all the services listed in Table 3.2, water is the most frequently community-managed service (see Table 3.1), but only 10.7 percent of sampled communities believe that they can be more efficient than other potential providers in supplying drinking water to their citizens. In fact, Vásquez (2011b) presents results from a national household survey indicating that community-managed water systems tend to have more frequent supply interruptions than municipal and private systems. Those interruptions may be partially related to lack of financial resources, as community-managed systems have the lowest average monthly water bills compared to other forms of water provision (see Vásquez 2011b). Under these circumstances, communities would prefer the government and, to some extent, the municipality to manage and deliver public services to their constituents.<sup>4</sup> Community preferences for centralized approaches could also be explained by community fatigue in providing labor and other inputs required to operate and maintain community-managed systems (see Harvey and Reed 2007).

In addition to being inconsistent with community preferences, the involvement of rural communities in service provision is not the result of official decentralization strategies. Rather, it has been an organic response by rural communities to the inability of municipalities to supply the services they are officially mandated to provide, such as water, sanitation, and road maintenance (see Table 3.1). This seems to be another case of “unfunded mandates.” Municipal requests for more resources from the central government to extend and improve rural services seem justified in light of the existing legal framework and community preferences. Transfers from the central government could also allow municipal governments to support rural committees with technical and managerial assistance in order to improve rural services and prevent community fatigue.

It is worth noting that these results do not imply that communities are not willing to participate at all in the provision of basic services. They believe that other potential suppliers (that is, central government and municipalities) would provide better services. This is consistent with the fact that the government and, to a lesser extent, municipalities have more financial resources and technical capacities than communities. However, communities have more local knowledge about their own needs and observe

<sup>4</sup> Using hedonic models, Vásquez (2011a) found similar evidence about preferences for municipal water services over community-managed systems at the household level.

the quality of services, which could be valuable assets in efforts to improve service provision. As Bakker (2008) argues, although community participation can rarely deal effectively with issues of financing, access, and operational management, it can improve transparency and accountability. A review of the literature on participatory governance shows some encouraging findings on the impact of these forums on government responsiveness, access to public services, well-being, and poverty (Speer 2012b). Recognizing the potential advantages of community involvement, the Development Council Law proposes that communities play an important role in planning and evaluating government-provided services, particularly those services that municipal governments are mandated to provide.

### **What Is the Impact of Community Participation on the Quality of Municipal Governance?**

To find out whether community participation has a positive effect on local government responsiveness in rural Guatemalan municipalities and to assess what conditions are required to enable communities to hold local governments accountable, we carried out a qualitative comparative study in 10 rural municipalities. In this study, we examined how participatory governance in the form of active debates in the Municipal Development Councils (MDCs) affects local government responsiveness and how this impact is linked to the presence of other accountability mechanisms, such as competitive elections and access to local media. The key finding of the qualitative comparative analysis is that effective participatory governance is a necessary condition for local government responsiveness and a sufficient condition when it is combined with competitive elections. The combination of information about government actions in participatory governance forums and the credible threat of not being re-elected increase the incentives for government officials to act in the interest of the electorate. The interview data also show that participatory governance forums reduce the information gap between voters and the mayor with regard to the actions and decisions that the mayor has taken in office and, thus, strengthen the government's incentive to provide public services to the poor majority of voters.<sup>5</sup>

These findings are in line with and complement studies on the importance of access to information about government actions for improving downward accountability in developing countries. An emerging body of literature shows that increasing voter information leads to better government performance and less corruption in developing countries (Ferraz and Finan 2009; Pereira, Melo, and Figueiredo 2009). Also, some insights can be gained from India about possible mechanisms for achieving improved governance. For instance, Besley and Burgess (2002) find that Indian states with a higher circulation of local newspapers and more competitive elections have more responsive governments. Moreover, information campaigns and public hearings in villages, in which citizens learn about the quality of services and project implementation details, have been shown to reduce the diversion of public funds and improve local public services in Indian villages (Jenkins and Goetz 1999; Khemani 2006). Our findings from Guatemala show that participatory governance forums can be an effective alternative for information provision that can also work in countries in which local media are relatively undeveloped and in which public hearings in villages are not organized by a social movement.

But how does this work in practice? Community participation in the MDCs increases voter knowledge about government performance in rural areas through the following mechanisms. First, village representatives can mobilize their village not to vote for a candidate; with this threat they can move an incumbent to release sensitive information on projects and spending decisions. Second, village representatives pass on the information they obtain in the municipal capital in village assemblies; thus, the information provided in the MDC can reach illiterate and immobile citizens in remote areas of a municipality. Third, information is provided through familiar and trusted village members and discussed among village representatives, which facilitates collective action by voters to sanction an incumbent. Thus, community participation in service planning and evaluation can change incentives in rural political markets.

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<sup>5</sup> For a more detailed explanation of the comparative analysis on which these findings are based, see Speer (2012a).

The information effect of the MDCs is especially relevant for people in rural areas because they usually have less access to information than people in urban areas. However, as Table 3.3 shows, in many cases not all the villages in a municipality participate in the MDC, or the members of an MDC do not receive enough information from the municipal government to judge the quality of municipal service provision.

Table 3.3 also demonstrates that there are large differences between the municipalities in terms of the frequency of the MDC meetings and the degree to which community representatives voice their disapproval when they are not satisfied with municipal government services.<sup>6</sup> To analyze how community participation in the planning and evaluation of municipally provided services could be made more effective, we now turn to the results of our investigation regarding the conditions for effective MDCs.

**Table 3.3—Performance of Municipal Development Council (MDC) meetings**

Name of municipality	Criteria for MDC Performance as Accountability Mechanism			
	No. of meetings (in the last 12 months)	Scope of participation in MDC meetings	Quality of information flow from municipal government to MDC members	Demand for corrective actions in the MDC / voicing of disapproval by MDC members
Victoria	1	Somewhat broad	Not very good	Not very strong
La Villa	7	Quite broad	Slightly good	Somewhat strong
Mar Azul	7	Somewhat broad	Not very good	Not strong at all
Villa Beni	1	Somewhat broad	Not good at all	Not very strong
Aurora	10	Quite broad	Not very good	Not very strong
Valle de Oro	6	Quite broad	Somewhat good	Very strong
Buenas Hermanas	12	Quite broad	Quite good	Very strong
La Selva	12	Quite broad	Somewhat good	Very strong
Mayan	22	Quite broad	Somewhat good	Very strong
Bequita	9	Very broad	Not very good	Not strong at all

Source: Interview data and minutes of MDC meetings.

Note: We changed the original names of the municipalities to fictitious names to protect the privacy of our interview partners.

### How Can Community Participation in the MDCs Be Improved?

The historical and social context of the development council reform in Guatemala suggests that the two key factors that are likely to constrain effective implementation are the rejection of the reform by mayors and the low capacity of civil-society actors to engage in a discourse with public officials. Therefore, we have analyzed the following two questions in the 10 selected rural municipalities: (1) what motivates a mayor to adopt an MDC and (2) what enables civil-society actors to participate and exert pressure on the municipal government so that they run an MDC effectively?

The findings of our qualitative comparative study indicate that a mayor can be motivated to run a participatory governance forum by a combination of seeing a benefit in running the forum, self-enforcement of the obligation to run the forum, and social enforcement of the law by civil-society actors. Our findings also suggest that social enforcement and active participation in the MDCs can take place only when there is a large number of civil-society organizations, when citizens have a high capacity to engage in public debates, and when the cost of attending meetings for the community representatives is relatively low.

<sup>6</sup> Table 3.3 is a simplified, verbalized version of the original table that was created based on interview and secondary data for the fuzzy-set Qualitative Comparative Analysis (fsQCA) of the effectiveness of the MDC in Speer (2012a).

Moreover, the results of the qualitative comparative analysis indicate that, first, even illiterate and uneducated village representatives can be aware of their rights and duties when intense capacity building takes place and when civil-society organizations support them in understanding the technical aspects of service planning and in organizing the participatory governance forum. Second, village representatives in poor areas can mitigate (and thus be able to meet) the cost of participation when distances to meetings are short, when members rotate posts frequently, and when the representatives' communities support them financially. Third, the findings suggest that the presence of a large number of civil-society organizations attracts resources, such as capacity-building measures, which in turn foster the capacity of citizens to participate. This finding points to the importance of taking into account beneficial interactions between individual- and group-level conditions in explaining the capacity of civil-society actors to participate.<sup>7</sup>

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<sup>7</sup> For more details of the analysis of the conditions for effective community participation in the MDCs, see the comparative analyses in Speer (2012a).

## 4. POLICY IMPLICATIONS

The results of our quantitative and qualitative analyses of community participation in local service provision in rural Guatemala can be summarized as follows. First, the provision of formally decentralized water, sanitation, and road maintenance services by municipal governments is incomplete. Other services, such as health and education, remain centralized, while agricultural extension was de facto privatized. As a result, many rural communities continue to lack access to services, and some of them engage in supplying these services themselves, particularly in the form of water committees. However, communities do not consider themselves to be more effective at service provision compared with the central and local government and would therefore prefer the government to provide these services.

Second, community participation in the planning and evaluation of these services has a positive impact on the responsiveness of municipal service providers in municipalities with competitive elections because this participation reduces information asymmetries between rural voters and their municipal government. However, the effectiveness of this type of participation varies widely among the examined municipalities, with a large share of the MDCs not functioning properly due to the low level of education, the high level of poverty, and the weakness of civil-society organizations in many areas.

Based on these findings, we can recommend the following actions to policymakers and donors:

1. Improve community members' motivation to engage in service provision and support them in managing *existing* community water, sanitation, and road maintenance systems. We regard this as necessary because the Guatemalan government will not be able to extend government services to all rural communities in the short to medium term. Capacity building could include, for example, providing community committees with technical assistance and managerial training in order to improve community-managed services and prevent infrastructure from falling into disrepair. Such measures can also contribute to reducing the amount of inputs provided by the community and, thus, prevent the eventual participation fatigue of community members.
2. Support the municipal governments in extending municipal services to currently *unconnected* areas and in improving the quality of municipal services. This could be realized, for instance, by providing capacity building and technical support to municipal administrations, which would lead to better service quality. Strengthening municipal governments will help advance the decentralization process and may help convince the population that municipal governments can provide these services efficiently. Moreover, this would contribute to increased user compliance (for example, paying fees on time, making nonmonetary contributions to improve the service) and would, in turn, improve municipal government finances, which would make it possible for municipalities to extend their services to more communities.

Foster community participation in the MDCs to improve the transparency, accountability, and responsiveness of municipal service providers and thus raise incentives for citizens to comply with user fees. Community representatives and civil-society actors' knowledge of their rights in the MDCs, and their technical and organizational capacities to claim them, can be increased effectively in the short to medium term by capacity building despite low levels of education. The formation and functioning of civil-society organizations can be promoted, for example, through capacity building and group-based allocation of funds for social and economic projects. The cost of participation can be mitigated by, for instance, adapting the schedule of meetings to make them compatible with usual working hours, by refunding travel expenses,<sup>8</sup> and by frequent rotation of the position of the community representative.

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<sup>8</sup> Funds for compensating community representatives for their expenses could be taken from the national budget for the Development Council Projects. This would ensure that even the poorest municipalities, whose inhabitants require this support most, are able to provide it.

## REFERENCES

- Bakker, K. 2008. "The Ambiguity of Community: Debating Alternatives to Private-Sector Provision of Urban Water Supply." *Water Alternatives* 1 (2): 236–252.
- Basurto, X., and J. Speer. 2012. "Structuring the Calibration of Qualitative Data as Sets for Qualitative Comparative Analysis (QCA)." *Field Methods* 24 (2): 155–174.
- Besley, T., and R. Burgess. 2002. "The Political Economy of Government Responsiveness: Theory and Evidence from India." *Quarterly Journal of Economics* 117 (4): 1415–1451.
- Congreso de la República de Guatemala. 2002a. *Código Municipal* [Municipal Code]. Decreto N°12 de 2002. Guatemala City, Guatemala: Congreso de la República de Guatemala.
- \_\_\_\_\_. 2002b. *Ley de los Consejos de Desarrollo Urbano y Rural* [Law of the Urban and Rural Development Councils]. Decreto N°11 de 2002. Guatemala City, Guatemala: Congreso de la República de Guatemala.
- \_\_\_\_\_. 2002c. *Ley General de Descentralización* [General Decentralization Law]. Decreto N°14 de 2002. Guatemala City, Guatemala: Congreso de la República de Guatemala.
- Ferraz, C., and F. Finan. 2009. *Electoral Accountability and Corruption: Evidence from the Audits of Local Governments*. NBER Working Paper No. 14937. Cambridge, MA, US: National Bureau of Economic Research.
- Harvey, P., and R. Reed. 2007. "Community-Managed Water Supplies in Africa: Sustainable or Dispensable?" *Community Development Journal* 42 (3): 365–378.
- Jenkins, R., and A. M. Goetz. 1999. "Accounts and Accountability: Theoretical Implications of the Right-to-Information Movement in India." *Third World Quarterly* 20 (3): 603–622.
- Khemani, S. 2006. *Can Information Campaigns Overcome Political Obstacles to Serving the Poor?* Paper prepared for the Expert Group on Development Issues (EGDI) Secretariat, Ministry for Foreign Affairs, Sweden. Washington, DC: World Bank.
- Pereira, C., M. A. Melo, and C. M. Figueiredo. 2009. "The Corruption-Enhancing Role of Re-Election Incentives? Counterintuitive Evidence from Brazil's Audit Reports." *Political Research Quarterly* 62 (4): 731–744.
- SEGEPLAN (Secretaría de Planificación y Programación de la Presidencia). 2010. *Tercer Informe de Avances en el Cumplimiento de los Objetivos de Desarrollo del Milenio*. Guatemala City, Guatemala: SEGEPLAN.
- Speer, J. 2012a. "Participatory Governance, Accountability, and Responsiveness: A Comparative Study of Local Public Service Provision in Rural Guatemala," PhD Dissertation, Humboldt University, Berlin. <http://edoc.hu-berlin.de>.
- \_\_\_\_\_. 2012b. "Participatory Governance Reform: A Good Strategy for Increasing Government Responsiveness and Improving Public Services?" *World Development* 40 (12): 2379–2398.
- Vásquez, W. F. 2011a. *Household Preferences and Governance of Water Services: A Hedonic Analysis from Rural Guatemala*. IFPRI Discussion Paper 01152. Washington, DC: International Food Policy Research Institute.
- \_\_\_\_\_. 2011b. "Municipal Water Services in Guatemala: Exploring Official Perceptions." *Water Policy* 13 (3): 362–374.
- \_\_\_\_\_. 2012. "Rural Water Services in Guatemala: A Survey of Institutions and Community Preferences." *Water Policy*, doi: 10.2166.

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