LOCAL POLITICS OF FOREST GOVERNANCE: WHY NGO SUPPORT CAN REDUCE LOCAL GOVERNMENT RESPONSIVENESS

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Abstract

Concerned with the challenges of sustainable development, policy makers and scholars often urge nongovernmental organizations to increase their efforts to support governance of natural resources in developing countries. How does funding from external NGOs influence the responsiveness of local government policy to the sector-specific needs and policy preferences of local citizens? Using a unique longitudinal dataset from surveys of local governance actors in 200 municipalities in Bolivia and Guatemala from 2001 to 2007, we explore these questions in the context of local natural resource policy. We find preliminary support for the hypothesis that external NGOs gain disproportionate influence over local policy processes in forestry by donating to local governments, and that this influence “crowds out” the influence of local grassroots actors, leading to less responsive local governance as rated by councils of local citizens. However, political pressure on local government officials from organized local groups in the forestry sector counteracts this negative relationship. Although NGOs can contribute to technical capacity for local governments and are generally seen as supportive of decentralized and participatory governance, our findings suggest that NGOs exert political pressure on local governments in pursuit of their own policy goals, and that NGO support may sometimes steer local governments away from responding to the specific livelihood needs of local resource users. More generally, our findings underscore the importance of local political contexts in moderating the effects of NGO interventions.

Keywords: natural resources; forestry; NGOs; local politics; governance

I. INTRODUCTION

NGOs are increasingly important actors in local natural resource governance in developing countries. With the goal of promoting conservation, development, and sustainable livelihoods, these organizations work with local communities in a variety of ways, including by donating financial resources to cash-strapped local governments. In theory, these funds could allow local officials to hire staff, establish offices for the governance of particular resources such as forests or irrigation systems, and ultimately respond more effectively to the needs of local natural resource users. However, external donor organizations, such as international environmental NGOs and development agencies, can also use funding to local governments as a means to exert influence on local government policy, and can use this influence to further their own environmental policy goals that may be different from the policy preferences of local resource users. This means that there is a potential tension in the relationship between external funding and local government responsiveness: while NGOs are generally seen as some of the strongest supporters of participatory governance and local empowerment through decentralization, these funders may actually steer local governments away from being responsive to local preferences in decentralized contexts. This study examines the relationship between NGO funding and local governance responsiveness in the forestry sector using a unique longitudinal dataset from 200 municipalities in Bolivia and Guatemala. We formulate and test a theory to explain the conditions under which NGO funding is likely to impede the responsiveness of the local government to citizen preferences, based on the particular local political contexts in which they operate.

What do these funding arrangements look like? Our field observations from Bolivia provide several examples in which NGOs offered financial support to local governments in particular policy areas, including forestry. In Sorata, we carried out interviews with a number of NGO personnel, including a Norwegian Baptist missionary organization *Misión Alianza Norwega* (MAN) and the Catholic charity organization *Caritas*. *Caritas* had contributed technical expertise and funding to the local government for a number of projects in the more rural parts of the municipality, including bridge and irrigation construction and contributing to local education. MAN provided funding for local projects in education, sanitation, agriculture, and a large number of other projects. Typically, these projects consisted of some volunteer labor, technical advising, and funding which was matched at some percentage by the local government. These organizations usually donated funding directly to the local government budget, and the local government used those funds to carry out projects.

We found that NGOs also funded local governments in the forestry sector. For example, in San Ignacio de Velasco, an NGO was involved in investing money and personnel in forest governance, including land titling and technical assistance in forestry. This organization, the *Fundación para la Conservación del Bosque Chiquitanía* (Foundation for the Conservation of Chiquitani Forests), received financial support from the European Commission, The Nature Conservancy, and other international organizations. Again, the NGO channeled this funding through the municipal government budget. There were many NGOs donating money and other resources to projects in a range of other policy areas in the municipality; San Ignacio was described as a “teaching” municipality that hosted officials from other local governments who wanted to learn more

about seeking outside funding from NGOs. Our field observations from the municipalities of Bolivia and Guatemala suggest that most of the outside NGOs supporting local forest governance have an environmental or developmental mission, and many are similar to well-known organizations such as the US-based environmental NGO World Wildlife Foundation, the Switzerland-based NGO Cooperative for Assistance and Relief Everywhere (CARE), or the development NGO Plan Bolivia.

Cases such as these are common in Bolivia, Guatemala, and elsewhere in the developing world. In our sample of municipalities in Bolivia and Guatemala, surveyed mayors were asked whether or not external NGOs had donated money or goods to the local government for forest governance. In 2001, 142 mayors answered “yes” while only 76 answered “no.” Furthermore, the role of NGOs in this funding chain is on the rise. OECD statistics show that overseas development aid for forest governance that is channeled through NGOs has more than quadrupled as a share of total aid in this sector between 2005 and 2014 (OECD, 2016).

While scholars are paying increasing attention to the role of NGOs in developing country governance, two key questions seem understudied. First, how does external financial support to local governments influence the responsiveness of local government policy to local preferences? And second, how do local political factors moderate the effects of this external involvement? These questions are important because NGOs are playing an increasingly important role in local governance and without robust empirical knowledge about the effects of NGO interventions, how is it possible to design interventions that can improve outcomes? We recognize the importance of financial and technical support that external organizations can offer to local governments. However,

we argue that one should not assume that these resources will necessarily improve responsiveness in all. After all, the creation of responsive local institutions is primarily a political process governed by local politicians who are motivated in part by political rewards such as staying in power, getting re-elected, and protecting the interests of the ruling elite. The key contribution of this research is to examine NGO funding in the context of this local political incentive structure.

In this study, we utilize ratings of local government responsiveness in the forestry sector by local citizen councils in a large sample of Bolivian and Guatemalan municipalities. Bolivia and Guatemala are an appropriate setting for this research for at least two reasons. First, both countries underwent meaningful decentralization reforms that transferred authority to municipal governments. Although decentralization is not limited to the forestry sector in either country, municipalities in Guatemala have the authority to issue logging permits, collect taxes on forest products, write and enforce rules regarding forest use, and rent out forest lands, while municipalities in Bolivia engage in monitoring, enforcement, and other forest management activities. These two decentralized countries are a good fit for our research question because local governments are able to make meaningful policy choices in the forestry sector. Second, forestry is important for rural livelihoods in both countries.

We find that the effect of financial contributions from external NGOs on local responsiveness depends upon the extent to which local politicians face political pressure from organized local stakeholders in the forestry sector. Our findings suggest that NGO funding can actually hinder responsiveness where local officials do not face political pressure to address local communities' expressed needs in a specific policy area. We

examine the mechanisms at work, and conclude that this is because donor NGOs earn disproportionate influence over local policy processes, and their influence overpowers the involvement of local actors in policymaking. However, this negative effect does not hold where organized local groups exert political pressure on the local government in the forestry sector. This is because where the local leadership perceives political benefits from meeting citizen demands and perceives NGO funding as a plausible instrument to achieve their political goals, they are motivated to take an active role in forestry policy and ensure that external actors do not steer local policy away from the preferences of the community.

II. PREVIOUS RESEARCH

We seek to add to the existing literature on NGOs and local environmental governance by examining the effects of NGO funding on local government responsiveness to citizens' preferences. Our contribution to these existing literatures is to (1) examine the relationship between external donors and local governments directly, (2) to consider the implications of this relationship for the responsiveness of local government to local preferences, (3) to articulate a theory that considers the moderating effects of local political contexts, (4) and to test our theory across a large number of municipalities in two decentralized countries. In this section, we identify the contributions of previous research to date, focusing specifically on the literatures examining local government responsiveness in decentralized contexts as well as the literatures on NGO interventions and NGO funding.

Responsiveness in decentralized contexts

National governments in developing nations have increasingly transferred responsibilities to local governments to manage natural resources. This trend is part of a

broader pattern of widespread decentralization and devolution reforms across a variety of sectors in recent decades—reforms that appear justified on a number of theoretical grounds. It has been argued that an excessively centralized regime is inefficient and unresponsive to the specific needs of local people (Faguet, 2012), and that decentralization can improve accountability (Escobar-Lemmon & Ross, 2014; Faguet, 2012), help to address poverty and promote development (Kalirajan & Otsuka, 2012; Weingast, 2014), improve the provision of public services (Faguet, 2012), and foster public participation (McNulty, 2011; Ryan, 2012). However, at the local level, a growing literature shows highly variable outcomes from the decentralization of natural resource governance in the developing world (Andersson, Evans, Gibson, & Wright, 2014; Andersson & Ostrom, 2008; Duncan, 2007; Larson, Pacheco, Toni, & Vallejo, 2007a; Ribot, Lund, & Treue, 2010).

One of the key issues under study regarding decentralization in the natural resource sector is the degree to which decentralization reforms actually enhance the responsiveness of local governments, and as a consequence, the extent to which policy outcomes align with local needs (Faguet, 2012). While local governments in a decentralized system should in theory be more responsive than a centralized regime (Treisman, 2007), it seems clear that decentralization reforms often fall short of this goal (Larson, Pacheco, Toni, & Vallejo, 2007; Ribot, Agrawal, & Larson, 2006). Previous literature indicates that the accountability of local governments to their constituents is an important condition for responsive local governance under decentralization (Andersson, Gordillo, & Van Laerhoven, 2009). Ribot (1995) points out that the purported benefits of decentralized or participatory governance arrangements are only possible where decisions

are made by local authorities that are inclusive, representative, and locally accountable. In other words, a decentralization reform in and of itself does not guarantee responsiveness

In assessing decentralized governance arrangements across several countries in Latin America, Andersson et al. (2009) found wide variation in the responsiveness of local governments to local needs in rural development. The key factor for explaining this variation was the presence of institutions through which local citizens could communicate their needs to politicians, and the degree of local political pressure on local mayors. They also suggest that the financial resources available to governments account for some of the variation observed in responsiveness.

These findings, along with similar findings in the context of forestry (Andersson & Ostrom, 2008), suggest that the relationship between local citizens and the local government is an important factor for explaining responsiveness in decentralized contexts. However, our study is motivated by the fact local governments interact not only with local groups (the focus of much of the previous literature), but with external political actors as well, and by the idea that support from external NGOs that bring their own political preferences to the table may steer local governments away from being responsive to local needs.

NGOs and local interests

International and domestic NGOs have proliferated in recent decades, and they are an increasingly important source of funding for governance in developing nations. Foreign aid spending is increasingly routed through these organizations, rather than directly to local or national governments, in order to promote civil society, and these organizations often play key roles in chains of aid delivery for sustainable development

and natural resource management in developing countries (Banks, Hulme, & Edwards, 2015; Brass, 2012; Gibson, Andersson, Ostrom, & Shivakumar, 2005). However, scholars have rarely studied the impacts of this support on local decision-making using quantitative methods (Wright & Andersson, 2012). While scholars are increasingly interested in understanding the role of NGOs in developing country governance, much recent local-level research has focused on relationships between external NGOs and local citizens, such as the effects of NGO activities on women's empowerment (Goldman & Little, 2015), political participation (Boulding, 2014), and voting behavior (Brown, Brown, & Desposato, 2014). As important as these questions are for understanding the impacts of NGO activities on local communities, the relationship between NGOs and local governments remains largely understudied, despite the importance that local government policy for quality of life in decentralized contexts.

It is widely acknowledged that multi-purpose local governments in developing countries often have underfunded mandates in the natural resource sectors, and lack the human and financial resources for environmental governance (Andersson et al., 2014; Larson, 2002; Manor, 2009). At the same time, NGOs are able to make considerable contributions to local capacity by financing projects, paying the salaries of local government employees, and buying equipment, among other things. In this way, outside organizations may be in a position to fill the "capacity gap" that prevents some local governments from managing resources effectively (Child, 2009; Lindsey, du Toit, Pole, & Románach, 2009; Ribot & Larson, 2009). For example, in Nicaragua, Larson (2009) found that many local governments lacked the resources to hire personnel for forest governance, and some municipal authorities reported lacking the technical capacity to

monitor forests, review logging requests, and manage other problems. The municipalities with considerable forest resources often tend to be the poorest and most underfunded, and municipal governments in these areas tend to receive funding for forestry from external donors. Furthermore, donor pressure is often seen as a key motivator behind decentralizing authority to local actors, which is justified in part on the grounds of making government more responsive to local needs (Dickovick, 2014; Larson, Barry, Dahal, & Colfer, 2010). Given these facts, and insofar as the financial and technical constraints on local actors impede their responses to policy problems, it is tempting to assume that support from NGOs to local governance actors will generally improve responsiveness. However, in the case of donor funding to local governments for natural resource governance, there are several reasons why this support could sometimes harm the responsiveness of local governments to local needs.

First, the interests of NGOs and other external actors may not always align perfectly with local interests regarding resource use. This is seen especially where NGOs and other external donors exhibit a rigid pro-conservation bias, and push for highly protective policies without regard for local livelihoods (Larson, 2005). Furthermore, a mismatch between local policy preferences and the preferences of an external donor is problematic for responsiveness given the fact that donors may often wield considerable power and use it to guide the policy decisions of local governments. According to Larson (2009), Danish donors threatened to withdraw funding for forestry from several Nicaraguan municipalities if the local governments did not pursue specific policy initiatives mandated by the donor in the forestry sector. Pacheco (2009) suggests that the decentralization reform in Bolivia that transferred authority over forests to local

governments has created a situation in which many municipalities have a relationship of dependence with external donors such as NGOs. Finally, previous research suggests that development aid is often fraught with informational asymmetries, one of which is a lack of understanding of local conditions by transnational NGOs, donor agencies, and contractors (Balboa, 2014; Gibson et al., 2005).

These findings highlight an important aspect of the story regarding NGO funding and local governance: NGOs and other external donors are not simply benign financiers, providing the financial means for communities to pursue local policy goals. To assume that external funding will necessarily lead to more responsive governance simply because local governments are fiscally constrained is to ignore the fact that donor organizations may use funding as a mechanism to pressure local governments and further their own policy preferences that do not always align with local needs, and they may not always understand local contexts. In the case of environmental NGOs in developing countries, this means that NGOs and donors may prioritize outcomes that can be measured in terms of short-term environmental gains, possibly neglecting the less tangible (albeit crucial) support for local self-governance institutions (Pasgaard, 2015; Wright & Andersson, 2012).

The discussion above outlines ways in which NGO funding can impact the responsiveness of local resource governance to local needs, and illustrates a potential tension in the relationship between external funding and local responsiveness: while donors to local governments may fill a “capacity gap” that constrains local government responses to policy problems, these funders may seek to further their own policy goals in a way that could steer local governments away from responding to local preferences.

While it is easy to find instances in which NGOs have promoted or stymied responsive governance, the existing local governance literature lacks a systematic empirical investigation of this relationship across a large number of municipalities. Furthermore, explanations of the effects of NGO funding on local governance will be more robust if they consider how external funding interacts with local politics. Specifically, to understand how NGO involvement might affect local governance outcomes, we advance the existing literature by paying attention to the local political context in which the support is offered, and particularly the political motivations of local politicians to prioritize natural resources in the local political agenda.

In advancing and testing this theoretical approach, which we more fully explain in the next section, we seek to expand on the existing environmental governance literature in one more crucial way. Most of the recent empirical literature examining decentralized governance of natural resources has focused on contexts in which authority has been devolved to local groups of resource users, not to multi-purpose local governments (Araral, 2009; Baland, Bardhan, Das, & Mookherjee, 2010; Ricks, 2016; Van Laerhoven, 2010). This literature is motivated by the realization that local resource users are often able to engage in effective collective action in order to solve common-pool resource problems (Ostrom, 1990; Poteete, Ostrom, & Janssen, 2010), and by the fact that devolution of authority to local user groups with the hope of achieving this collective action is a common policy tool in many countries. Recent research on the role of NGOs, donors, and other external actors in these contexts has focused primarily on whether external forces can “induce” local collective action, and the existing findings are mixed (Barnes & van Laerhoven, 2013, 2014; Wright & Andersson, 2012). As important as

these questions are, the answers will tell us little about how external actors may shape local governmental policy in Bolivia, Guatemala, and many other developing countries in which large-scale policy reforms have granted management authority to locally elected multi-purpose governments (municipal, provincial, regional governments, etc.) rather than local groups of resource users. By examining forest governance in Bolivia and Guatemala context, we will articulate and test a theory that accounts for the unique and important role played by local politicians and local governments in many decentralized countries.

III. THEORETICAL APPROACH

Based on the existing literature discussed in the previous section, we assume that donor NGOs will tend to have their own policy preferences (as well as potential informational problems at the local level) with respect to natural resource governance, and that these preferences will not always be perfectly congruent with the needs of local resource users. We also assume, based on the same evidence, that providing funding to local governments is a method through which external NGOs can exert influence in local policy processes. However, we do not mean to argue that NGO funding will always cause local governments to be more responsive to NGO preferences and less responsive to local resource user preferences. Instead, we argue that the degree of political pressure on local politicians from local groups in the forestry sector determines whether NGO funding may impede the responsiveness of local government or not.

We view the local government executives—the mayors—and the political pressure that they face in the forestry sector as key in our study for several reasons. Mayors are chosen in municipal elections every five years in Bolivia and every four years in Guatemala, and they can stand for reelection in both countries. Mayors in both countries

work alongside the municipal council (the local legislative body), and mayors in both countries often have the final say for setting the municipal policy agenda and allocating the substantial funds provided to municipal governments under the decentralization policy of each country. Finally, mayors often receive the brunt of local political pressures in forestry and other sectors. Taken together, these facts suggest that the mayor will face political pressure from local groups in the forestry sector when those groups are present in the municipality and when forestry is a salient issue, and that the mayor will have an electoral incentive to respond to these demands and the authority to do so.

Perhaps the most important choice facing politicians is whether or not to prioritize natural resource governance over other activities. Previous literature points to two important findings regarding this decision process. First, natural-resource governance is often a low priority for local politicians, and this indifference drives decisions regarding the financing and provision of services in the natural resource sectors (Andersson, Gibson, & Lehoucq, 2006). Second, politicians who do prioritize and take an active role in resource governance tend to do so in response to political incentives. The strongest motivation is the pressure exerted by organized local groups representing those who have a stake in natural resource governance outcomes (Andersson et al., 2009). Where groups demand that local officials prioritize resource governance, politicians may see an opportunity to gain or maintain political support. But where these groups are absent, or where they are overpowered by other groups whose goals run counter to natural resource governance (such as those representing agricultural interests, in the case of forestry), politicians will have little to gain from prioritizing natural resources.

While it is impossible to perfectly generalize across local contexts in Bolivia and Guatemala, mayors commonly face political pressure in the forestry sector from organized interest groups representing local timber harvesters (sawmill and chainsaw operators), indigenous groups, and peasants. Although the specific needs of these interest groups will likely differ between local contexts, they could demand that the municipal government undertake such activities as granting formal harvesting rights to local smallholding loggers who had previously operated informally or used short-term permits, collecting royalties or even expelling large logging companies from outside the municipality, identifying forested lands that can be designated as municipal forest reserves or indigenous territories, adjudicating disputes between forest users and agricultural interests such as ranchers and soybean growers who typically clear forested land for fields and pastures, or controlling unauthorized forest clearing by ranchers and farmers, to name a few examples. Andersson and Ostrom (2008) describe two contrasting cases in Bolivia that illustrate how mayors can be responsive (or unresponsive) to local forestry interests in this context. In San Rafael, the mayor used his powers under the Bolivian decentralization law to establish a large forest reserve in the municipality, involve local resource users in the policy planning process, and grant formal harvesting rights to local users so that they could begin to harvest and sell forest products legally. In the nearby municipality of Samaipata, the mayor had not taken similar steps to prioritize the needs of local resource users, and had instead chosen to focus on urban infrastructure and tourism. Following previous work, we conceptualize political pressure exerted by local organized groups representing stakeholders in the forestry sector as a key

determinant of whether a mayor will choose to follow either the path of San Rafael or of Samaipata (Andersson et al., 2009; Andersson & Ostrom, 2008).

This political story has important implications for the arguments outlined above regarding the impact of NGO funding on local government responsiveness. While existing research that we discussed in the previous section suggests that NGO involvement can sometimes serve the policy preferences of the NGO that may differ from local preferences, and can ultimately lead to less responsive policy outcomes, this should be unlikely where politicians perceive the political pressure exerted by organized local groups. Because these political incentives are their primary motivation, it is unlikely that local officials will allow NGOs to steer the local government towards policies that are incompatible with community preferences. In these communities, local politicians will represent community interests in local policymaking around forestry, preventing a situation in which local government funds are spent contrary to the policy preferences of the community.

But where natural resource governance is not a salient issue to organized local groups, local politicians will not face political pressure to take such an active role in this sector. In these cases, politicians have little to lose by accepting material support from NGOs, but the influence of these external actors in local natural resource policy may go relatively unchecked by the mayor. This means that NGO funds may be spent in accordance with the policy goals of the NGO rather than those of local resource users, potentially leading to governance that is less responsive to local needs. For example, in municipalities where forestry is important for livelihoods but where an environmental NGO has substantial influence in local forestry policy, this might mean an outside NGO

providing payments to a municipality in exchange for the cancellation of logging concessions so that those forested lands can be managed as a protected area, as Kaimowitz et al. (1999) reported in the Bolivian municipality of San Ignacio de Velasco.

With this view as the basis, we formulate the following general hypothesis: **the effect of NGO funding is dependent upon the level of political pressure exerted by local groups in the forestry sector.** We expect that NGO funds will be associated with less responsive governance in municipalities where this pressure is low. At higher levels of community pressure, NGO funding will be associated with negligible or even positive effects on responsiveness.

IV. DATA AND METHODS

We draw upon survey data from local governance actors in 100 randomly selected municipalities in Bolivia (out of a total of 314) and 100 randomly selected municipalities in Guatemala (out of a total of 331). We employ two survey waves administered in 2001 and 2007.¹ The surveys were administered in an interview format to local mayors and forestry officials in each municipality. In the Bolivian municipalities, we also surveyed local community representatives from Comités de Vigilancia (Municipal Oversight Committees), the grassroots organizations charged with monitoring the local government under the Popular Participation Law. For the Guatemalan cases, we administered this same survey to representatives from the local development council and municipal development councils. As we explain below, some of our models also utilize local-level forest cover data for these two countries as a control. Drawing upon the theories outlined in the previous section, we develop three models with which to test the relationship

¹ Andersson et al. (2014) compared survey responses to census data on several variables that appeared in both data sources, and found the survey responses were highly accurate.

between NGO funding, local political contexts, and responsive governance. Table 1 shows descriptive statistics for the variables used in our regression models.

Although our data were collected several years ago, the governments of Bolivia and Guatemala during our study period were representative of Latin American governments at the time (and up to and including the present)—Bolivia in the early 2000s had not yet turned to the more left-leaning style of governance that has characterized the last several years. This fact, in combination with the facts discussed in section I regarding the role of decentralization in these two countries, means that Bolivia and Guatemala are an ideal setting in which to test our theory. With these facts in mind, the reader should keep in mind that our intention is to use Bolivia and Guatemala during this particular time period as a setting in which to test our general theory regarding NGO funding and local government responsiveness, not to make specific policy recommendations for either country today.

[Table 1 About here]

Model 1: Explaining responsive governance

In order to capture the association between NGO funding and local governance responsiveness, local citizens' councils in each municipality were asked to rate the responsiveness of the local government to rural needs in the forestry sector on a five-point scale. In Bolivia, the local citizen councils are called municipal oversight committees (Comités de Vigilancia) and consist of elected representatives from each of the formal grassroots organizations (one for each small community) that exist within the municipal territory. These grassroots organizations (Organizaciones Territoriales de Base) elect one representative each to participate in the municipal oversight committee. These members of the committee elect a president, who has an *ex-officio* seat on the

municipal council. The mandate of the oversight committee is to ensure that the central government transfers to the municipal government are spent according to the needs and preferences of the citizenry at large (urban and rural) and that administrative costs do not exceed 10 percent. In Guatemala, the local citizen councils are called community development councils (COCODEs) and municipal development councils (COMUDEs). Local COCODEs and COMUDEs were created by legislation in 2002 as a system of interest aggregation at the community level. Typically, COCODEs are formed by community meetings which select representatives to a committee which acts as the “coordinating organization,” and COCODE representatives also serve on the COMUDE along with the mayor, municipal council representatives, and other important local organizations at the municipal level. These organizations select a series of goals for development and express these goals to the municipal government and are also responsible for informing communities on the mayor’s priorities and performance. The averaged rating for each municipality among surveyed local citizen council members is the dependent variable for Model 1.

While this measure of local government responsiveness is imperfect, it is based on a specific question of local government performance in meeting local needs in a specific sector (forestry) and for a particular group of citizens (rural community dwellers), and the respondents are democratically elected representatives who are formally accountable to their member grassroots organizations and independent of the local government. Members of the Comités de Vigilancia, the COCODEs, and the COMUDEs are the ideal informants for a question on local government responsiveness because they have detailed knowledge of what the local government does through direct

access to the local policy process. Additionally, they represent the rural communities formally and know them well. And finally, they are politically independent of the municipal government. We believe that in general, these actors are likely to have an informed and objective opinion of municipal government responsiveness to their respective local communities. Because the livelihoods, needs, and policy preferences of local stakeholders in the forestry sector may differ widely between communities, and because expenditure-based measures do not necessarily tell us about how congruent local government actions are with local needs and preferences, we must measure the perceptions of responsiveness among local citizen councils. Although there are some notable exceptions, relatively few studies measure the responsiveness of local governance in this manner (Andersson, 2004; Crook & Manor, 1998).

We employ a dummy variable indicating whether or not external NGOs (organizations originating outside the municipality) donated money or goods to the local government for forestry projects during the current mayor's administration, as reported by the mayor in each surveyed municipality. The purpose of our survey question was to measure the presence or absence of NGO funding in the forestry sector rather than the specific type of NGO providing funding, and the question was worded accordingly. Qualitative observations in the field indicate that environmental or developmental NGOs are typically the organizations making these contributions. Based on our general hypothesis outlined in the previous section, we model the marginal effect of NGO donations as moderated by political pressure from the local community in the forestry sector. In order to measure community pressure, surveyed mayors were asked to rate the

frequency with which community organizations expressed their demands in the forestry sector to the local government on an ordinal scale.

We also control for several political, economic, and biophysical factors. Recognizing that NGOs often do much more than providing financial resources to local governments, we control for the level of communication between NGOs and the local government. Mayors were asked to rate the frequency with which NGOs expressed their preferences in the forestry sector to the local government, on an ordinal scale. Previous research employed similar measures, and found a strong association between NGO communication and local forest governance outcomes (Andersson, 2004). Similar work also suggests that supervision by the central government motivates local politicians to prioritize forest governance (Andersson et al., 2006). Surveyed mayors and local forestry officials reported the number of officials from the central government monitoring forest governance in the municipality. This continuous variable is log-transformed to induce linearity.

We also acknowledge that local officials may face incentives that discourage action in the forestry sector. Agriculture is important to many local economies and is also the primary driver of deforestation. Citizens and local governments often have much to gain financially from agricultural development, and local politicians may be reluctant to respond to local needs in the forestry sector if they perceive pressure to prioritize agriculture. In order to account for this, mayors and local forestry officials were asked to rate, on an ordinal scale, the importance of agriculture in the municipality.

Because many municipalities likely face financial and technical constraints that limit their responsiveness in the forestry sector, we control for local government capacity.

Mayors were asked to rate the importance of local taxes on individuals as a source of local income. This measure is a proxy for local government capacity, and is also meant to capture the degree to which local governments have the financial resources to hire staff, purchase equipment, and implement forestry programs (Andersson et al., 2014).

Finally, it is reasonable to expect that the extent of forest resources in a municipality will impact the choices made by local officials in regard to forest governance. Accordingly, we control for the proportion of forested land in the municipality during the year of each survey wave using forest cover data from Hansen et al. (2013).

We evaluate Model 1 using data from Bolivian lowland municipalities in 2001 and 2007, and from all other Bolivian and Guatemalan municipalities in 2007. Because our measure of governance responsiveness only appears on the 2001 survey for municipalities in lowland Bolivia, observations for other Bolivian and Guatemalan municipalities in 2001 are excluded from the model. We employ a linear random effects model with varying intercepts by municipality to account for the clustered data structure. To account for heterogeneity between countries, we include a dummy variable for Bolivian municipalities.

Models 2-3: Understanding NGO influence

While Model 1 tests our general hypothesis that NGO donations will impede responsiveness where community pressure is low, the next two models are meant to show a more detailed picture of the causal mechanism. If local governments face financial constraints that limit their responsiveness, and if NGOs are able to provide funds, then why should NGO donations ever lead to less responsive outcomes? We argue that the key to understanding this apparent relationship is to examine the influence of donor

organizations on local policy processes. Specifically, the literature reviewed in the previous section suggests that donor organizations wield considerable influence in recipient communities, that their policy goals often differ from those of local citizens, and that highly influential outside organizations can undermine local preferences. We present two models with which to explore these claims.

Model 2 tests the argument that by contributing material resources, NGOs earn influence over local policy processes. Local governance actors in each surveyed municipality in 2007 were asked to rate, on an ordinal scale, the influence of NGOs in the forestry sector in the municipality. Our dependent variable is the averaged response on this survey question for each municipality. Our key independent variable is a dummy indicating whether or not NGOs donated money or goods to the municipality for forestry projects, as reported by the mayor in each surveyed municipality. **We hypothesize that municipalities which received donations from NGOs will score higher on the NGO influence variable.** Recognizing that frequent communication between NGOs and local governments may allow NGOs to influence policy regardless of the financial resources provided, we control for this communication using the same NGO communication variable included in Model 1. Because the political-economic context of local communities likely influences the willingness of local officials to work with nongovernmental organizations in forestry, we control for the importance of agriculture in the municipality, using the measures described in the previous section. We also include a dummy variable indicating whether the municipality is in Bolivia. We evaluate Model 2 using OLS regression. We employ White's (1980) robust standard errors to account for

the heteroskedasticity detected in this model using the test devised by Breusch and Pagan² (1979).

Whereas Model 2 explains the determinants of NGO influence, Model 3 explores its effects. Specifically, we attempt to show the mechanism by which NGO influence impedes responsiveness. **Our hypothesis is that while greater community involvement in local forestry decision making will be associated with outcomes that are more congruent with the preferences of the community and thus more responsive, this positive association will not be as strong where NGOs wield disproportionate influence. In other words, the influence of outside organizations can act to “crowd out” local voices.** In order to test this argument, we employ the same dependent variable included in Model 1: local governance responsiveness. We model this outcome as a function of the involvement of the local community organizations in planning with the local forestry office. Local governance actors were asked to rate the frequency of this collaboration on an ordinal scale. Because our theory is that the level of NGO influence in the municipality moderates the positive effect of community involvement on responsiveness, we include an interaction term with the same measure of NGO influence used as the dependent variable in Model 2. As outlined for Model 1, we control for several political, economic, and biophysical factors that may influence responsiveness. We also include a dummy variable indicating whether the municipality is in Bolivia. We evaluate Model 3 using OLS regression. Because our measure of NGO influence, a key variable in Model 2 and Model 3, was not included in the 2001 survey, these two models are cross-sectional for 2007 only.

² BP statistic = 11.595. $p < 0.05$.

V. RESULTS

The results of Model 1, as shown in Table 2 and Figure 1, support our hypothesis that NGO donations impede responsiveness where community pressure is low. At low levels of community pressure, the marginal effect of NGO donations on responsiveness is negative and statistically significant ($p < 0.05$). As community pressure exceeds a value of about 3, which indicates that community organizations expressed opinions to the mayor in the forestry sector “from time to time,” the marginal effect is no longer statistically different from zero.

[Figure 1 about here]

[Table 2 about here]

Figure 2 shows quantities of interest from Model 1, simulated with community pressure held at 1 (a low value) and all control variables held at their means. Point predictions and 0.10 confidence intervals were generated using the Zelig software package (Imai, King, & Lau, 2007). For municipalities with this low level of community pressure, NGO funding is associated with less responsive governance. The substantive difference between the two predictions corresponds to more than two thirds of one standard deviation of the dependent variable.

[Figure 2 about here]

Model 2 and Model 3 provide evidence for the mechanism by which NGO donations undermine responsiveness in some contexts. The results of Model 2, as shown in Table 2, support the argument that NGOs earn influence over local policy processes by

donating material resources. The association between NGO donations and NGO influence is positive and statistically significant ($p < 0.05$). The model predicts that on average, municipalities receiving NGO donations should score roughly a half a point higher on the NGO influence scale compared to municipalities that did not receive NGO donations.

[Figure 3 about here]

As seen in Figure 3, the results of Model 3 support the hypothesis that the marginal effect of community involvement in forestry planning is only significant at low levels of NGO influence. Community involvement exerts a statistically significant and positive marginal effect at low levels of NGO influence. As NGO influence exceeds a value of about 3, which indicates that NGOs have “some influence” in the forestry sector, the marginal effect of community involvement is no longer statistically significant at the 0.05 confidence level.

VI. DISCUSSION

The results reveal a nuanced picture of the relationship between NGO funding and governance responsiveness. As Model 1 suggests, where local officials lack political pressure from organized local groups, NGO funding for forestry is associated with less responsive policy outcomes. The results of Model 2 suggest that donors do earn influence over local policy processes in the forestry sector by donating. And the results from Model 3 suggest a mechanism by which disproportionate NGO influence may hinder responsiveness to local needs: by overpowering or “crowding out” local involvement in forestry planning and governance. The relationships suggested by Model 1 and Model 2 are robust even when we control for the frequency with which NGOs expressed their preferences in the forestry sector to local officials.

The interactive results of Model 1 suggest that where officials are sufficiently motivated by pressure from below to get involved in forest governance, they appear to provide a healthy counterbalance to the influence of NGOs, ensuring that funds are not spent in ways that undermine responsiveness. Our analysis of the municipalities of Bolivia and Guatemala suggests that the pressure exerted on local politicians by organized community groups matters a great deal for responsive governance, especially where external actors are involved.

It is worth noting that although higher levels of community pressure seem to diminish the negative marginal effect of NGO funding, the results did not show a positive marginal effect of NGO funding on responsiveness even at the highest levels of community pressure. In other words, NGO funding seemed to harm responsiveness in the worst case scenario (minimal community pressure) and had no effect in the best case scenario (high community pressure). In our view, this study is an early step towards understanding the role of external funds in local governance responsiveness. Many local governments in developing countries lack the financial resources to respond to community needs. Future work should examine these relationships between donors and local governments further, and attempt to identify conditions under which NGO funding may actually have a positive effect on responsiveness.

Limitations

It is important to note that NGOs are strategic about where they choose to work (Bebbington, 2005; Gibson et al., 2005; Wright & Andersson, 2012). Some NGOs will even seek out communities in which natural resource governance may already be fairly responsive but where measureable governance success is likely, and will tend to avoid localities in which resource governance is politically challenging or even unfeasible

(Andersson, 2013). This means that NGOs will often concentrate in those communities in which local groups are well-organized and demanding action. NGOs may also seek out poorer (i.e. needier) regions, which coincidentally may be areas where government is less responsive to citizens. In other words, NGO activity is not randomly assigned. This selection issue could potentially bias attempts to quantify the effects of NGO funding on governance responsiveness.

We think that it is unlikely that selection alone is driving the results of this study for two reasons. First, we control for the level of local political organization around forestry as well as the importance of agriculture in the municipalities in our sample, which are both strong indicators of the political feasibility of forest governance. Second, if selection alone is driving the results through the mechanism discussed above, NGO activity should be associated with positive outcomes, rather than the negative outcomes that we find. Third, although NGOs may target needier regions, we do control for local government capacity in Model 1. Nonetheless, future research efforts should examine and model this selection process. Furthermore, even if selection alone is not driving the results, care should be taken in interpreting our estimates as necessarily causal. Because we rely upon observational data and lack an effective instrument or similar identification strategy, it is impossible to rule out the possibility of some kind of selection bias or confounder. In other words, while we have uncovered associations that are consistent with our causal theory, we have not definitively found a causal relationship between NGO activities and responsiveness.

VII. CONCLUSION

In Bolivia, Guatemala, and many other developing countries that have devolved management authority of natural resources and other goods to local multi-purpose

governments, the key question is whether or not local governments are “up to the job” (Larson, 2002). In our view, the answer to this question must be complex and conditional, and must account for local political context as well as the involvement of external actors and their policy priorities. This is because in decentralized contexts, the ways in which local governance systems respond to external involvement depend upon politics.

Specifically, we find that the sector-specific political pressure that organized local groups exert on officials is a crucial determinant of the effects of external funding on the responsiveness of local policy. Where this political pressure is low, our findings paint a rather pessimistic picture of the effects of NGO funds. This means that donor NGOs are not simply benign financiers who provide funding to local governments while allowing local actors to formulate policy in accordance with community preferences. Instead, the results suggest that these organizations exert influence over local policy processes by donating. Where local groups do not pressure local officials on forestry issues, this influence can result in negative outcomes as the policy preferences of donors overpower those of local citizens.

This calls into question the ability of external donors to improve responsiveness in all local contexts. While more financial resources can certainly help local governments to better address problems, political pressure from below (rather than money from above) is what motivates officials to prioritize the needs of the community in regard to natural resource governance.

Our findings have important policy implications for local governments, NGOs, and donors concerned with the challenges of promoting sustainable local governance of natural resources. While NGOs are an increasingly popular channel for delivering

development aid, donors should understand that NGOs have their own policy preferences that may overpower local preferences in some contexts. Where local politicians are not politically motivated to prioritize natural resource governance, NGOs may not always be the best vehicle for aid delivery. Furthermore, to ensure that external support does not crowd out the influence of local actors, NGOs should actively promote local citizen participation in policymaking in the communities where they offer monetary support to local governments. And finally, local officials should understand that external monetary support is not enough to guarantee responsive governance, and that local politicians play a crucial role in translating local citizens' expressed demands into responsive public policy.

While we have highlighted the conditions under which NGO support can work against responsiveness, it is important to keep in mind that *responsiveness* and *effectiveness* are conceptually and empirically different. Even where NGO support steers local governments away from responsiveness to local preferences, NGOs may be promoting policies that are very beneficial from the perspective of environmental conservation. There is no doubt that the work of many NGOs in the developing world can help to further environmental protection goals. While we cannot examine the potential tradeoffs between local responsiveness and environmental effectiveness in this study, we hope to call attention to the fact that responding to the livelihood needs of local resource users is an important aspect of environmental policy if it is to be both effective and equitable.

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TABLES

Table 1: Descriptive statistics for sample of municipalities in Bolivia and Guatemala.					
Statistic	N	Mean	St. Dev	Min	Max
Responsiveness	241	3.5	1.0	1.0	5.0
NGO funding	209	0.4	0.5	0	1
NGO communication	221	2.6	1.4	0	5
Community pressure	246	2.7	1.2	0	5
Central government personnel	224	1.8	5.0	0	50
Local capacity	244	2.8	1.4	0	5
Importance of agriculture	241	2.9	1.5	0	5
Forest cover	224	31	24	0	100
NGO influence	192	2.1	1.0	0	5
Community involvement in planning	192	2.5	1.2	1	5

Table 2: Municipality-level regression model results examining the correlates of municipal government responsiveness and NGO influence in the forestry sector.

	Model 1	Model 2	Model 3
	Dependent variable: Governance responsiveness	Dependent variable: NGO influence	Dependent variable: Governance responsiveness
NGO funding	-0.945** (0.423)	0.448** (0.190)	
Community pressure	-0.102 (0.098)		
Local capacity	-0.007 (0.053)		
NGO influence			0.147 (0.169)
Community involvement in planning			0.338** (0.141)
NGO funding * community pressure	0.235* (0.141)		
NGO influence * community involvement			-0.057 (0.057)
NGO communication	0.018 (0.067)	0.267*** (0.066)	
Central government personnel monitoring (log)	0.104 (0.101)		0.142 (0.089)
Importance of agriculture	0.128** (0.054)	0.067 (0.052)	0.078 (0.052)
Forest cover	0.005 (0.003)		-0.001 (0.004)
Bolivia	-0.188 (0.192)	-0.315* (0.168)	-0.122 (0.168)
Constant	3.444*** (0.382)	1.271*** (0.241)	2.505*** (0.404)
N	171	139	154
R2		0.293	0.150
Adjusted R2		0.272	0.109
Residual Std. Error		0.867 (df = 134)	0.930 (df = 146)
F Statistic		13.904*** (df = 4; 134)	3.682*** (df = 7; 146)
Log Likelihood	-248.554		
AIC	521.109		
BIC	558.809		

*p < .1; **p < .05; ***p < .01

FIGURES

Figure 3: Model 3 results – marginal effect of community involvement on governance responsiveness, conditional on NGO influence. Community involvement in local forestry planning has a positive association with responsiveness, but the association diminishes as NGO influence increases.

APPENDIX A: ROBUSTNESS TESTS

This section describes the post-estimation checks we performed to test the robustness of the results. The results appear to be robust to alternative model specifications, the removal of high-influence outliers, and the use of robust standard errors for Model 2 because it exhibited heteroskedasticity.

First, we identified high-influence outliers in each model, indicated by a Cook's (1977) distance greater than $4/n$, and re-ran each model excluding these observations. This test corroborated the original results. The removal of eleven cases in Model 2 and six cases in Model 3 actually yielded slightly stronger results. Standard errors were smaller, and the estimated effects of our variables of interest were slightly larger. For Model 1, the removal of eleven cases resulted in slightly larger standard errors, but the variables of interest were still statistically significant in the same direction as the original results.

Second, we checked each model for heteroskedasticity. Breusch-Pagan tests gave statistically insignificant test statistics for Model 1 and Model 3, suggesting homoskedasticity (Breusch & Pagan, 1979). The same test on Model 2 gave a statistically significant test statistic ($p < 0.05$), indicating heteroskedasticity in this model. Accordingly, we present this model in our paper with White's (1980) robust standard errors to account for heteroskedasticity.

Third, we plotted the residuals from each regression. All three sets of residuals follow a normal distribution.

Finally, we re-ran each regression using several alternative model specifications.

For Model 1 and Model 3, this meant including three additional control variables that were not included in the results we present in the paper but that could potentially be related to local government responsiveness in the forestry sector: elite education, population (logged), and the proportion of the municipal population that is urban. Our measure of elite education is consistent with the variable employed by Andersson et al. (2014), who use the same data set. The inclusion of these additional controls did not change the results for Model 1 or Model 3. We also re-ran each model, dropping one control variable at a time. The results from all three models remained unchanged.