

# Accountability Beyond Democracy: Examining Citizen Sanctions on Traditional Leaders in Sierra Leone\*

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## Abstract

Do citizens sanction undemocratic traditional leaders, and how? Are these sanctions associated with institutional quality and public good provision? Our study employed a survey experiment involving 900 individuals from 79 villages in Sierra Leone. Our research highlights the repertoire of political actions available to community members to punish their village leaders. We found that citizens prefer to call higher authorities rather than sanctioning their leaders directly. They also employ direct sanctions, such as public blame and economic measures, though to a lesser extent. Furthermore, our research highlights the influential role of village leaders' councilors in shaping these sanctioning preferences. Lastly, we explore how differences in sanctioning preferences at the village level relate to institutional quality and public goods provision. In summary, this study contributes to the literature on traditional political institutions by addressing a critical but previously understudied aspect: the strength of non-electoral sanctioning preferences.

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# 1 Introduction

In rural Africa, do citizens sanction undemocratic traditional leaders<sup>1</sup>, and how? Do these sanctions help sustain the quality of political institutions and public good provision? Recent developments in political science literature have underscored the significance of traditional institutions in public goods provision in Africa (Baldwin, 2016), particularly when these institutions exhibit features such as competitive selections (Acemoglu et al., 2014), inclusive decision-making processes (Magalomi et al., 2019; Börzel & Risse, 2021), and leaders being embedded in their communities (Baldwin & Holzinger, 2019; Baldwin, 2016). However, less attention has been given to accountability relationships (Baldwin & Holzinger, 2019). In the absence of term limits, the role of electoral accountability diminishes. However, other forms of accountability exist. First, leaders higher in the hierarchy can sanction their subordinates. Second, when well-embedded in their communities, a wider variety of socio-economic channels could be used by community members to sanction their leaders and hold them accountable.

This research endeavor seeks to delve into the intricate dynamics of community-based sanctions imposed on traditional village leaders (in the study zone they employ the term town chiefs, the term we will use in this paper), with a particular emphasis on distinguishing between two distinct sources of non-electoral accountability: indirect sanctions, involving complaints to higher authorities, and direct sanctions.

The study takes place in Sierra Leone’s Sherbro cultural area, in 79 small communities where town chiefs are deeply embedded in their communities. The study area is displayed in figure 1. We deployed a survey experiment in April and May 2023 with pre-registered hypothesis. The household survey experiment tests whether village members directly and indirectly sanction their town chief when they steal money from a community project. It also explores how sanctioning preferences are moderated by the behavior of chiefs’ councilors (the elders in the community) who generally serves as mediator between community members and the chief. By aggregating answers at the village level, we explore whether the strength of the village-level sanctioning preferences is associated with better institutions and public good quality outcomes.

Our study reveals that within communities, residents express their readiness to impose sanctions on their town chief, with a predominant inclination towards indirect sanctions and a

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<sup>1</sup>The reader might be surprised that traditional leaders are labeled as undemocratic. While it’s true that in some situations, traditional leaders are elected, in the majority of cases, there are no regular opportunities to change the incumbent, rendering their authority undemocratic (Lipset, 1959: 71). Specifically, in Sierra Leone, once elected, the traditional leaders holds the position for a lifetime or until retirement.

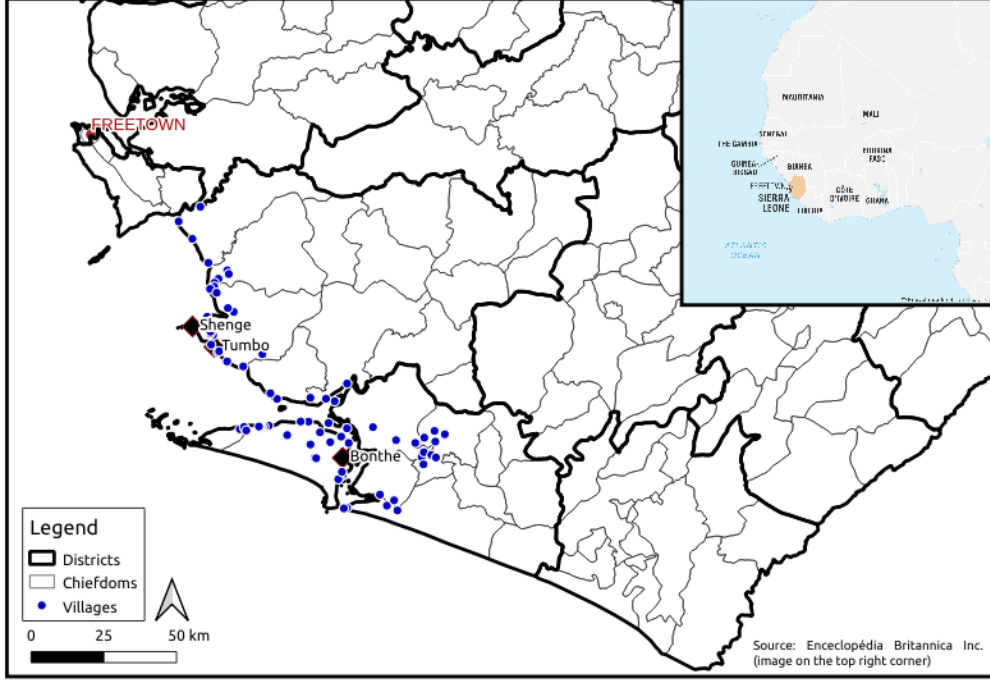


Figure 1: Map of Sierra Leone, with a focus on the study area, blue dots are the villages sampled.

secondary inclination towards direct sanctions involving public blame and economic measures. Further investigations underline the importance of chiefs' councilors in activating sanctioning preferences. The research design facilitates the exploration of potential underlying mechanisms. At the village level, our results suggest a stronger association between indirect sanctions and various political parameters compared to direct sanctions. In villages characterized by a stronger preference for indirect sanctions, decision-making forums tend to exhibit lower levels of inclusivity, with a higher proportion of participants hailing from the paramount and town chief's families. This preference is also associated with elevated levels of trust in the village chief and a reduced frequency of conflicts.

This study contributes to the extant body of literature on traditional political institutions, offering insights of broader relevance to the study of autocratic institutions. Specifically, our work delineates the array of political measures available to community members for disciplining their leaders. We augment existing theoretical frameworks by categorizing these sanctions based on the source of accountability they represent, distinguishing between top-down and bottom-up accountability mechanisms. Additionally, our research enriches the growing literature concerning advisory councils at the local level by elucidating their role in shaping collective actions.

The following section presents the theory and the hypotheses. Section 3 develops the in-

stitutional context. In section 4, we describes the research design. Sections 5 explains the results, and section 6 concludes.

## 2 Theory and hypothesis

Traditional political institutions, also labelled chieftaincies in the study area, are defined “as institutions whose legitimacy is partly based on their association with customary modes of governing a community. These institutions are political because they make decisions regulating and providing for the collective. They are traditional in the sense that they are popularly believed to be connected to custom” (Baldwin & Holzinger, 2019, p. p1758). The role of chieftaincies in allocating land, resolving local disputes and governing common resources is widespread across African countries (and beyond) and has increased in the past decades (Boone, 2014).

Due to their colonial history and their vertical structures promoting top-down accountability, initial research characterized chiefs as products of colonialism, acting as authoritarian figures (Mamdani, 1996). They emphasized their low popular support (Ribot, 2002) sustained by a lack of institutional alternatives for the population (Ntsebeza, 2005). Research has also shown that these institutions often underperform to ensure equal rights for all citizens because of the lack of electoral accountability (Ribot, 2002; Acemoglu et al., 2014). Indeed, leaders may be selected or elected, yet once they assume office, their tenure becomes lifelong. Using the conventional democratic definitions in political science, we categorize traditional leaders as undemocratic, aligning with the perspective presented by Lipset (1959: 71).

Nevertheless, the assertion that traditional leaders act as despots due to their absence of electoral accountability stems from a conceptual framework rooted in democratic theory. Yet, this conceptual framework is not without its challenges (Neupert-Wentz et al., 2022). This conceptual stretching (Sartori, 1970) might give a truncated vision on what basis chiefs are accountable to their community members. When fair and competitive, elections are a tool to select representative leaders and punish those with bad records or poor outcomes (Manin et al., 1999). Nevertheless, many traditional leaders are selected in rural Africa and rule for life. Being removed from office is an exception, not the rule. Furthermore, Logan (2013) showed that empirical findings do not fully support the “chief-as-despot” view. Indeed, using Afrobarometer data from 19 countries, she finds that traditional leaders “enjoy widespread popular legitimacy, and most believe that traditional authorities have an important role to play in local governance (Logan, 2013, p353)”.

On the other hand, recent works acknowledge that chiefs can behave as development brokers with a positive impact on their community (Baldwin, 2016). The characteristic of the decision-making process, electoral and non electoral sanctions are key elements providing accountability in chieftaincies. Baldwin et al. (2022) emphasizes the significance of advisory councils in shaping decision-making. Chiefs' decisions are not solely individual but are the product of consultations and discussions with advisers. They show evidence that chiefs can be persuaded by alternative views put forward by their advisers.

Aside from the decision-making process, other accountability channels were discussed as factors explaining the development broker model (Baldwin & Holzinger, 2019). Acemoglu et al. (2014) studies whether a higher number of ruling families in a chieftaincy leads to increased political competition and constraints on the power of the ruling chief. The case takes place in southern Sierra Leone, where families form alliances to secure votes in chief elections. The presence of multiple ruling families requires successful candidates to satisfy a broader range of interests. Empirical results indicate a positive relationship between the number of ruling families and outcomes such as education, economic development, child health, and social capital. They also highlight that places with fewer ruling families may have a dysfunctional civil society captured by elites.

Even in the absence of electoral accountability, leaders can be responsive to a wide share of stakeholders, as it was highlighted by Carlson and Seim (2020) in a field experiment in Malawi. In this paper, we extend our knowledge on the accountability mechanisms by exploring the non-electoral sanctions used by citizens to punish underperforming town chiefs. We draw a crucial distinction between indirect and direct sanctions. Indirect sanctions are formal and institutionalized non-electoral sanctions that exert pressure on chiefs higher in the hierarchy, compelling them to formally sanction the town chief. They have the potential to activate top-down accountability channels. On the other hand, a more informal channel is to sanction directly the town chief through complex socio-economic institutions (Tsai, 2007). The presence of reciprocity norms in communities where chiefs are well embedded gives birth to this latter type of sanctions (Tsai, 2007). We call them direct sanctions and have the potential to activate bottom-up accountability channels. Indirect and direct sanctions activate accountability mechanisms when they are effective in disciplining chiefs' behavior. In the following two sections, we lay out the direct and indirect sanctions that can be used against the town chief.

## 2.1 Indirect sanctions as an activation of top-down accountability mechanisms

Higher chieftaincy authority can suspend or revoke town chiefs. The paramount chief exercises governance over section chiefs, who, in turn, exercise authority over town chiefs. In instances where conflicts arise between the village chief and the community, the section chief assumes the initial responsibility to mediate and resolve the dispute. Should the dispute persist, the involvement of the paramount chief becomes necessary. In cases of severe transgressions, the town chief can face temporary suspension or removal from office, actions that the aforementioned authorities can execute. Consequently, when a chief has committed a theft, citizens inform these authorities, who can formally sanction the chief (Baldwin, 2016).

At the village level, the main traditional structure comprises the town chief and the councilors - the council of elders. The latter has an essential role in advising the chief in making decisions. Pressuring the council of elders can be an effective means for ordinary citizens to pressure the town chief.

## 2.2 Direct sanctions and bottom-up accountability mechanisms

Non-elites are indeed often able to directly hold their leaders accountable via a range of strategy (Arnall et al., 2013), and resistance, portrayed as the “weapon of the weak” by Scott (1985). Nevertheless, the *repertoire* of legitimate political actions available by ordinary citizens is not yet fully understood.

Tsai (2007) underlines that chiefs well embedded in their community can lead to good governance outcome. When social groups encompass political spheres, especially in authoritarian system, it creates shared obligations between the political elites and ordinary citizens. Chiefs must comply with those shared obligations to gain social, political, and economic status in their community and beyond. When such obligations are not met by the town chiefs, community members possess the agency to directly impose sanctions on their chief. Such sanction will directly impact the chief socio-political status and wealth. We underline three main forms that are not mutually exclusive but rather reinforcing each others.

The initial set of sanctions focuses on jeopardizing the chief’s access to community-based reciprocal institutions. These communities primarily rely on collective organization for farming and fishing activities, where cooperation is essential. An illustrative example is the rotational labor groups employed for rice harvesting, where individuals work on each other’s farms with the expectation of reciprocal assistance (Bulte et al., 2018). When trust in an individual

diminishes, the community restricts their access to these reciprocal institutions. Consequently, when the chief fails to act in the best interests of the community, it is anticipated that community members will cease their labor contributions to the chief's endeavors.

The second form of sanction leverages marriage institutions. By establishing familial connections with other households, individuals seek to acquire resources and influence. In instances where the chief loses respect or standing, community members refuse to enter into matrimonial alliances with the chief's family. They preserve their family from potential scandals and reduce the chief's overall influence.

The third set of sanctions targets, more specifically, the chief. The chief is a figure of authority within the village. When the chief is respected, it has the legitimacy to fulfill its duty. It can organize collective labor for village purposes, collect taxes, resolve conflicts, and implement and enforce by-laws. Questioning the chief's authority and not following its order is a strong message and has a significant negative impact on its power. Therefore, blaming the chief publicly, threatening the chief physically, refusing to pay local taxes, or working for collective labor are sanctions that threaten chiefs' power (Arnall et al., 2013; Bulte et al., 2018).

## 2.3 Expectations

Some of the hypotheses laid out in this section are pre-registered hypotheses on the EGAP platform. We expect non-electoral sanctions to either pressure chiefs higher in the hierarchy to formally sanction the town chief (activation of top-down accountability channels)<sup>2</sup> or sanction directly the town chief through complex socio-economic institutions<sup>3</sup>.

*Main hypothesis 1 (pre-register): When town chiefs do not behave in the interest of their community, village members sanction them through direct and indirect sanctions.*

Would ordinary citizens prefer indirect rather than direct sanctions? There are different mechanisms that could lead citizens to choose indirect sanctions preferably over direct sanctions. First, direct sanctions make them identifiable to the chief, whereas indirect sanctions are potentially anonymous. Due to the fear of retaliation, they might be more reluctant to use direct sanctions. Similarly, the utilization of indirect sanctions may also be perceived as less burdensome or costly in terms of implementation. Finally, it is also plausible that

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<sup>2</sup>It includes complaining to the elders, the section chief, and the paramount chief.

<sup>3</sup>It includes blaming and threatening the chief, refusing to work for the town chief, refusing to participate in collective labor, not paying local tax, and refusing to marry a chief member of the family.

chiefs occupying higher positions within the hierarchical structure may be more effective in imposing sanctions upon town chiefs compared to individual community members.

We expect community members to refrain from sanctioning their chiefs when councilors (council of elders) have already sanctioned them. Prior research has revealed that the pressure exerted by councilors effectively shapes and influences the behavior of town chiefs (Baldwin et al., 2022). Consequently, when councilors have already taken action, the efficacy of community members' pressure is diminished, leading us to expect their abstention from participating in such actions.

*Main hypothesis 2 (pre-register): When the council of elders blames the chief for her/his action, community members will be less willing to sanction the chief actively.*

Chieftaincies, in certain contexts, have been found to be deeply unequal. For example, higher customary status individuals tend to have greater land security (Honig, 2017; Albrecht, 2016), and women have weaker rights under customary justice systems compared to state legal systems (Baldwin et al., 2022). Consequently, we expect male, wealthy citizens, and community member with voting rights to more openly sanction their leaders compare to female, poor, and community members with no voting rights.

## 2.4 The consequences of well-functioning sanctioning preferences

If a village chief does not behave in the interest of his/her town, we expect community members to sanction him/her through various channels. The more sanctions are used, the more influential the pressure is, as the cost of behaving in such a way increases for the town chief. Therefore, at the village level, those sanctions might only be effective when a large share of community members shares the same *sanctioning preferences* and coordinates their actions, what we are calling strong village-level *sanctioning preferences*. Furthermore, villages will differ in the strength of direct and indirect sanctioning preferences. What are the consequences of strong direct or indirect sanctioning preferences on leaders' behavior? When sanctioning preferences are strong, the relative cost for leaders to undertake actions for their private gains increase. Therefore, we expect that it incentives pro-social leadership (in the sense of Kosfeld and Rustagi (2015)). Such a mechanism was revealed in a field experiment in Ethiopia by Kahsay and Bulte (2021) with elected leaders. However, whether a similar mechanism holds with leaders hardly removed from office and with different sanctions remains to be seen. Therefore, we hypothesize that strong sanctioning preferences is associated with greater responsive leaders and better-quality leaders.



*Main hypothesis 3<sup>4</sup>: In rural communities characterized by a greater propensity for direct or indirect sanctioning, there exists a positive correlation with elevated levels of institutional robustness and the quality of decision-making processes.*

Finally, we investigate whether sanctioning preferences are associated with higher public good provision such as peace or deforestation rates. For example, robust evidence shows the importance of monitoring and sanctioning institutions to maintain ecosystems in good health (Ostrom, 1990; Blanco & Walker, 2019; Kahsay & Bulte, 2021). However, research primarily focused on elected leaders. The project aims to broaden the scope of the theory to a broader set of bottom-up accountability mechanisms. It follows previous studies that have underline the relationships between informal accountability mechanisms at the local level and the provision of public good such as irrigation system (Lam, 1996).

*Main hypothesis 4<sup>5</sup>: Villages with stronger sanctioning preferences have higher provision of public good such as lower deforestation rates or lower rates of conflicts.*

### 3 Institutional context

The research is conducted in the Southern province of Sierra Leone, specifically in the Bonthe and Moyamba districts, encompassing 12 chiefdoms where data is gathered from 79 villages. Chiefdoms serve as the primary political entities in rural Sierra Leone and are overseen by paramount chiefs. Within each chiefdom, there are sections led by section chiefs, who hold a hierarchical position superior to the town chiefs. Town chiefs play a crucial role in maintaining village peace, resolving local disputes, collecting taxes, and promoting local development. Moreover, in our sample of villages, 41% and 31% of town chiefs respectively express their commitment to forest and biodiversity preservation.

Town chiefs are typically supported by councilors, formally labelled as the council of elders in 87% of the sampled cases (see table 1). This council consists of heads from major descent groups, as described by Leach (1994). Major descent groups are influential landholding entities that legitimize their status based on their historical arrival within the territory, with firstcomers being accorded greater legitimacy to claim positions of power within the region. Elders within these groups allocate land usage rights, mediate disputes related to land use, and represent the village in elections for new paramount chiefs (Leach, 1994). In each village, two notable leadership roles are the youth leader and the women leader. These positions

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<sup>4</sup>Pre registered hypotheses do not distinguish direct and indirect sanctions, but distinguish leader responsiveness and decision-making quality

<sup>5</sup>Pre registered hypotheses only include deforestation and do not distinguish direct and indirect sanctions.

carry the responsibility of coordinating communal activities and advocating for the concerns and grievances of their respective groups.

Table 1: Institutional and town chiefs' political characteristics

	Mean	Median	SD	Min	Max
<b>Leadership positions at the village level</b>					
Council of elders (in %)	86.84	-	-	-	-
Youth leader (in %)	100	-	-	-	-
Women leader (in %)	100	-	-	-	-
<b>Village chiefs' political characteristics</b>					
Previous town chief was suspended (in %)	23.94	-	-	-	-
Number of paramount chief ruling families	2.68	3	0.68	2	5
Number of village landowning families	4.37	3	3.54	0	17
Number of families having right to vote	7.89	6	5.62	1	30
Proportion of families having right to vote	0.85	1	0.23	0.12	1
Date of chief election	2012	2015	10	1982	2023
Succession period (in months)	11.05	8	14.11	0	84

*Notes:*

The table presents descriptive statistics of key institutional variables within our sample. The leadership position at the village level indicates the proportion of villages that have such a position. For instance, 86.84% of villages in the sample have a council of elders. We also provide the proportion of villages where a chief was suspended. It's important to note that families do not share the same political status in the study area. For each chiefdom (12 in total), we report the number of families eligible to compete for the role of paramount chief (paramount chief ruling families). At the village level (79 in total), we present the number of families that own land or can vote for the town chief, along with their respective percentages. Additionally, we include information on the date of the town chief election and the duration of the succession period.

Since the end of the civil war, there has been a trend toward using elections as the means to select town chiefs (Bulte et al., 2018). Families who own land and pay local taxes are granted the right to participate in these elections for town chief. However, many impoverished families may lack the financial means to pay these taxes, leading to other families paying on their behalf and thus gaining the voting privilege (Bulte et al., 2018). This dynamic explains the disparity between the number of landowning families and those with the right to vote. In approximately half of the villages, the entire population (100%) is eligible to vote for the town chief. Nevertheless, in a quarter of the villages, fewer than 58% of families possess this voting right, potentially impacting the quality of leadership.

Town chiefs hold lifelong positions. Nevertheless, within our sample of villages, a quarter of the town chiefs assumed their roles after replacing a chief who had been suspended by a

higher authority. Although we lack specific information regarding the circumstances leading to such suspensions, it underscores the real threat of being suspended by higher authorities. Therefore, indirect channels for sanctioning town chiefs may exert significant influence. Furthermore, approximately half of the surveyed town chiefs began their tenure after 2015, with succession periods spanning up to 8 months.

The Sherbro ethnic group predominates in most villages, with a smaller portion being of Mende ethnicity. The area is characterized by a fishing population with limited arable land for agriculture. Livelihoods are heavily dependent on mangrove forests, as the fishing population smokes fish for preservation, which requires substantial wood consumption. Poor road quality and the high cost of sea transportation hamper access to markets and cities. Despite the society's stratified structure, there are no significant socio-economic disparities between town chiefs and the average citizen. Town chiefs tend to have slightly higher levels of education, more children, greater employment rates, larger farms, or a higher number of livestock (see table 2). Nevertheless, their material wealth is relatively similar to that of their fellow citizens.

Table 2: Citizens and town chiefs' socio-economic characteristics and inequality measures.

	Citizens	Chiefs	Inequality
N	907	76	-
Age	39.64 (12.78)	49.41 (13.94)	12.8 -
Education (in year)	1.48 (3.47)	1.49 (3.39)	1.34 -
Number of children	3.16 (2.2)	4.11 (2.34)	1.28 -
Employed	0.13 (0.33)	0.21 (0.41)	0.18 -
Farm size (in ha)	1.91 (2.32)	2.39 (2.29)	0.76 -
House quality index	1.37 (0.91)	1.25 (1.16)	0.12 -
Material wealth index	1.35 (0.75)	0.97 (0.4)	-0.43 -
Number of livestock	8.52 (8.89)	11.77 (12.95)	5.07 -

*Notes:*

The citizens and chiefs columns display the average of the socio-economic indicators. Standard errors are in parenthesis. The inequality column represents the average of the difference between the chief indicator and the median of the citizen indicator in the same village.

## 4 Research design

We investigate whether and how community members sanction their leaders when deciding against their interests. However such an investigation faces various methodological challenges. First, the absence of official records and formal documentation about sanctions received by village chiefs is a significant challenge because it complicates the task of tracing and analyzing sanctioning incidents. Secondly, if the channels for imposing sanctions prove to be effective in disciplining leaders, instances of theft and subsequent sanctions may be relatively infrequent. This scarcity of observable events poses a challenge in evaluating the impact of sanctions on leader behavior. Thirdly, due to the undemocratic nature of the political system under examination, it is reasonable to anticipate that political actors may be hesitant to openly discuss such political behaviors. This reticence among key stakeholders

further complicates data collection efforts. To surmount these methodological impediments, we employ a novel approach that centers around a unique survey experiment designed to measure individual sanctioning preferences and the efficacy of non-electoral sanctions at the village level. Our methodological framework is distinguished by its comprehensive array of data collection instruments, encompassing focus groups, interviews, experimental survey tools, and real-world behavioral observations recorded in the field.

We conducted fieldwork in 79 communities in the Sherbro cultural area of Sierra Leone. It involved four teams of three enumerators between the 1<sup>st</sup> of April and the 18<sup>th</sup> of May 2023. Communities were randomly selected based on their proximity to mangrove resources and their population. Given our research focus on villages where the chief exhibits a high degree of integration within the community, in accordance with the stipulated scope conditions of our theoretical framework, we opted to exclude villages with over 200 households from our analysis. Additionally, due to methodological limitations, we excluded smaller villages with fewer than 20 households.

In each village, we randomly selected 12 heads of households to conduct the survey experiment. This sampling procedure uses two steps: 1) a listing survey (census) of heads of household, and 2) a stratified sampling on gender based on that list. Stratification ensures an even gender balance in the survey, which was crucial for examining gender-based variations in preferences for sanctioning chiefs. Moreover, the town chief is specifically chosen to participate in a village-level survey, during which questions about chieftom characteristics and the developmental status of the village were posed.

## 4.1 The household survey experiment

We devise a scenario aimed at representing a typical crime by village chiefs. In the context of development initiatives, numerous projects are implemented by non-governmental organizations (NGOs) in the form of monetary funds or tangible resources such as cookstoves, agricultural inputs, and mini-grids. A substantial body of literature in the field of development has examined the allocation (or misallocation) of these resources by elite figures (Platteau and Abraham, 2002). During the scenario’s design phase, key informants identified misallocations as a significant concern. Consequently, we constructed a scenario centered around a community project initiated by an NGO (a neutral actor) in which the chief appropriates a portion of the project’s funds for personal gain. Despite the fact that many NGO projects provide materials rather than direct monetary funds, we chose to simplify the scenario by focusing on the misappropriation of funds for ease of comprehension. The

scenario employs neutral language, and we explicitly instructed enumerators not to use the word “steal” in their local languages to prevent any potential bias in respondents’ answers. Each participant faces one treatment condition<sup>6</sup>. Table 3 summarizes the treatment conditions. The control condition represents a situation where the chief managed well the community project. Treatment 1 adds that the chief took a small portion of the money for his use during the project<sup>7</sup>. Treatments 2 and 3 mention the behavior of the council of elders. Finally, treatment 4 is similar to treatment 1, but the money taken is more significant. Treatment 1 and Treatment 4 are designed to investigate the identification of the spectrum of politically acceptable actions - the *repertoire* of actions taken by citizens to punish their chiefs. Additionally, they explore whether this spectrum is contingent upon the severity of the theft in question. Treatment 2 and Treatment 3, on the other hand, are geared towards discerning whether citizens’ preferences are influenced by the behavior of councilors.

Table 3: Table of control and treatment conditions. Enumerators translated the scenarios in the local languages.

Conditions	Details
<b>Control</b>	<i>In a village in Sierra Leone, an NGO developed a project for the development of the community. The town chief played a key role in managing the project at the village level.</i>
<b>Treatment 1</b>	<b><i>Control + During the project, the town chief took a very small part of the money for his benefit.</i></b>
<b>Treatment 2</b>	<b><i>Treatment 1 + The elders in the village went to the chief and sermoned him.</i></b>
<b>Treatment 3</b>	<b><i>Treatment 1 + The elders in the village did not sermoned the chief.</i></b>
<b>Treatment 4</b>	<b><i>Control + During the project, the town chief took half of the money for his benefit.</i></b>

Subjects are randomly selected in one of the treatment conditions. In addition, we use a block randomization on gender to ensure an equal share of males and females in each

<sup>6</sup>In the registered pre-analysis plan, two scenarios were mentioned: a community project and a land deal scenario. For the latter, a crucial observation made during the fieldwork stage was the inconsistency between the scenario presented and the prevailing contextual realities. Specifically, it was determined that the sale of lands, which formed the basis of the scenario, does not align with customary practices (lands can only be leased) and land transactions typically involve consultation with the paramount chief. Second, the scenario lacks a pure control, thus limiting the ability to isolate and assess the specific effects of the variables under investigation. As a result, in adherence to the registered pre-analysis plan, the detailed results of the land deal scenario are presented in the appendices for reference.

<sup>7</sup>Initially, we wanted to quantify the amount taken, but it led to a higher share of respondents not understanding the scenario.

treatment arm. This strategy is likely to increase the precision of the estimates and enables the exploration of the heterogeneity effect.

In Appendix B, the table shows the balance test for 13 covariates representing a range of socioeconomic and political variables. Overall, there is a great balance with none of the F test being statistically significant at the 5% level. However, there are some important exceptions. Respondents receiving treatment 1 are, on average, less trustful toward the chief and less employed than those in the control condition. Respondents receiving treatment 2 are, on average older than those in Treatment 3. Considering this source of imbalances, we control for these covariates in additional tests in appendix D.

To ensure the quality of the analysis, we asked two comprehension questions to assess whether the respondents understood the amount of money taken by the chiefs and the behavior of the elders. The analysis is undertaken only with the respondents who understood the scenarios. Appendix C presents data on the comprehension of the scenarios, including both the number and proportion of respondents who grasped the details. In general, 95% of respondents comprehended the specific amount of money stolen by the chief, and approximately 92% of respondents understood the actions of the elders within the scenario.<sup>8</sup>

After reading the scenario, enumerators ask five questions to the respondents:

- Outcome 1: to rate on a 1-5 scale, how much the respondent agrees with the chief behavior;
- Outcome 2: to state whether the citizens of that village should take any actions in response (dummy);
- Outcome 3: if yes, to specify the type of sanction (for half the sample - open ended question);
- Outcome 4 and 5 (main outcomes used in the paper): to mention the sanctions that are legitimate, and the one they would be able to undertake themselves from the following list of nine sanctions (six direct and three indirect sanctions): 1) blame the chief directly, 2) threaten the chief directly, 3) complain to an elder, 4) complain to the section chief, 5) complain to the paramount chief, 6) refuse to participate in collective labor, 7) refuse to work in the chiefs' farm, 8) refused to get married to a member of the chief's family, and 9) refuse to pay local tax. The order of the items is randomized.

This compilation of sanctions is derived from two primary sources of information: a) a review of existing literature, and b) focus group discussions conducted in the field, involving two

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<sup>8</sup>At the end of the experimental section, after the outcome measures, we asked the two questions testing the respondent's comprehension of the scenario.

separate groups consisting of 10 and 20 respondents, respectively. The literature review identifies instances where citizens took actions to penalize their chief, as well as sources of power held by these chiefs. It’s worth noting that the number of articles available for this purpose is limited, which led us to refrain from formalizing the outcomes of this review. The sources of power identified were transformed into potential leverage points held by the citizens. For example, the number of wives was viewed as a symbol of wealth and symbolic power. Consequently, refusing to marry the town chief could have a negative impact on the chief’s authority. During our fieldwork, we engaged key informants familiar with the region and asked them to review the list of sanctions, suggesting additions or deletions for actions they considered implausible. The analysis of the open-ended question allowed us to identify any significant actions that might have been omitted from our list. The results of this question, categorized for clarity, are provided in Appendix D. Most of the actions identified were already incorporated into our list. However, notable actions that emerged, such as “mobilize citizens in the village” (mentioned by 3% of respondents), “Report to the police” (4% of respondents), “Bring the case to court” (2% of respondents), and “Report to an NGO” (2% of respondents), were not included. Given the proportions of these responses, we believe that their absence is unlikely to substantially impact our results. In addition, we hold five focus groups with elders in the field to identify the perceived relative cost of each of these nine actions.

We made a deliberate differentiation between the perceived legitimacy of actions (outcome 4) and the self-reported capacity to execute those actions (outcome 5) for three primary reasons. Firstly, due to the substantial influence wielded by chiefs in the southern region of Sierra Leone, it was our supposition that respondents might be reticent to openly declare their intent to impose sanctions on their town chiefs. Consequently, we employed an indirect phrasing to gauge their attitudes regarding the roster of sanctions. This approach aimed to alleviate the potential for null findings arising from social desirability bias. Secondly, within the field of research on traditional political institutions, there exists a limited comprehension of non-electoral sanctions enacted by rural inhabitants to discipline their town chiefs. The *repertoire* of political actions is only partially documented. Therefore, the legitimacy question serves to appraise the spectrum of politically sanctioned actions, or the *repertoire* of available actions accessible to villagers for penalizing their town chiefs. The ability question (Outcome 5) provides a more refined evaluation of whether the respondent would feel sufficiently empowered, or possess the agency, to undertake these actions.



## 4.2 Empirical strategy

We estimate the effect of leaders' malevolence on attitudes towards the legitimacy of sanctioning behavior with an average treatment effect estimand. As there is covariate balances between the control and the treatment group, we use the following estimator, for respondent  $j$ :

$$GSI_j = \beta_0 + \beta_1 Z_j + \gamma_g + \gamma_v + \epsilon_j \quad (1)$$

With  $GSI_j$ , the outcome variable, is the number of direct or indirect sanctions chosen by the respondent  $j$ ,  $\beta_1$  is the Average Treatment Effect, and  $Z_j$  is a dummy variable indicating whether the participant  $j$  belongs to the treatment group 1 or the control group for the hypothesis 1 or the treatment arm 3 or 2 for the hypothesis 2.  $\gamma_g$  and  $\gamma_v$  are gender and village fixed effects accounting for the block randomization strategy. We use robust HC2 standard errors (Samii & Aronow, 2012). Robustness check includes cluster standard errors at the village level, along with the inclusion of covariates that were not balanced (appendix D).

To test hypotheses 3 and 4, we run a battery of statistical analyses to detect whether the results are consistent with the hypotheses. We use the following OLS regression:

$$Y_k = \beta_0 + \beta_1 S_{dir} + \beta_2 S_{indir} + \beta_3 X_k + \gamma_g + \epsilon_k \quad (2)$$

With  $Y_k$  being either a proxy of institutional and decision-making quality (for testing hypothesis 3), or public good provision (for testing hypothesis 4) for village  $k$ .  $\beta_1$  and  $\beta_2$  are the effects of the strength of the direct and indirect sanctioning preferences, and  $X_k$  are the set of control variables - population size, the proximity with the paramount chief, the number of ruling family, the year of the leader's selection, the proportion of the population with voting rights, inequality, and wealth, and  $\gamma_c$  chiefdom fixed effects. Contrary to the pre-analysis plan, we encountered difficulties implementing chiefdom fixed effects in two of the six analyses because of multicollinearity problems (13 chiefdoms for 72 units in two specifications). Appendix D summarizes the deviations from the pre-analysis plan. Furthermore, robustness checks include the share of women and the share of respondents with voting rights who answered the survey experiment because these factors are significant predictors of sanctioning patterns. We use robust standard errors in all empirical strategies.

### 4.3 Measurement strategy

The summary statistics and the details of the measurement strategy are shown in Appendix A. To test hypotheses 1 and 2, we aggregate the number of legitimate sanctions by type (direct and indirect).

For hypotheses 3 and 4, there is a need to proxy the strength of the sanctioning preferences at the village level. To measure such a concept, we average the individual responses in the survey experiment and, more precisely, the aggregated number of direct and indirect sanctions that community members are able to undertake. We use only the ability question (and not the legitimate one) as it is closer to real behavior. But robustness check includes measure using the legitimacy question. These measures are used as independent variables. As elucidated in the theoretical framework section, indirect sanctions represent a formal and institutionalized method for penalizing local leaders within the region. As a consequence, the mean count of indirect sanctions selected at the village level can be interpreted as the percentage of residents within that village who possess an awareness of their political entitlements and assert their capacity to exercise these rights. On the other hand, the average number of direct sanctions chosen can be understood as the strength of direct sanctioning preferences at the village level, i.e. the strength of villagers' resistance against leaders' malevolence.

The study employs a range of dependent variables that serve as proxies for either the quality of decision-making processes or the provision of public goods. Specifically, we utilize four proxies to assess decision-making quality. These include two metrics of descriptive representation, one gauge of leader responsiveness, and a measure of trust.

Descriptive representation is an indicator of real-world behavior observed in the field. To assess this aspect, we conducted a land planning activity, which, although not detailed in this paper, aimed to solicit preferences regarding development patterns and deforestation regulations. Notably, the town chief was tasked with convening four community leaders, recognized as traditional authorities, to facilitate this land planning activity. The proportion of these community leaders relative to the paramount or town chief constitutes the measurement of descriptive representation. Leader responsiveness is evaluated through a comparative analysis of survey responses. Specifically, we gauged how much the town chief altered their support for a land deal when faced with discordant preferences between community members and the paramount chief. This assessment provides insights into the responsiveness of leadership within the community. Additionally, we conducted a household-level survey to assess the level of trust vested in the town chief by members of the community.

Within the study area, a diverse array of public goods exists. Our focus narrows to two

public goods over which the town chief holds direct influence. First, as the custodian of village peace, we consider the stated frequency of conflicts within the village, as reported by the town chief. Second, given the town chief’s role in implementing bylaws and influencing land use, we investigate their potential impact on deforestation rates in the surrounding community areas. To quantify deforestation rates, we rely on data provided by Vancutsem et al. (2021) and measure changes in forest cover within a 6-kilometer radius of the village between 2015 and 2020.

## 5 Results

### 5.1 Citizens do sanction their leaders

#### General pattern

Table 4 presents the results of the formal statistical tests of the first hypothesis using village and block fixed effects. When comparing treatment 1 (stealing a small part of the community project money) with the control condition, we see a sharp increase in the number of legitimate sanctions of about 3.1. When disaggregating by the type of sanctions, the effect size is about 1.2 and 1.9 for the direct and indirect sanctions. All differences are statistically significant at the 0.1% level. Moreover, we also compare treatment 4 (stealing half of the community project money) with treatment 1 (stealing a very small part), to understand whether the sanctions is dependent of the gravity of the theft. We see an increase in the number of legitimate sanctions of about 0.7. When disaggregating by the type of sanctions, the effect size is about 0.3 and 0.4 for the direct and indirect sanctions. The differences are statistically significant at the 0.1% level for the general and indirect measures, and significant at the 1% level for the direct measures. The consistency of the findings extends to the use of the first, and second outcome measures (Appendix F) and the open question as an outcome measure (Appendix E and F). The majority of respondents deem a diverse range of sanctions as acceptable, with a noticeable inclination to penalize the chief more frequently in cases of more significant theft (treatment 4 vs treatment 1).

Taken together, the results are firmly in line with our first hypothesis: citizens do find that sanctioning their leaders - using a variety of channels, direct and indirect - as legitimate behavior. The results also underline that the more serious the theft is, the more sanctions are considered as legitimate.

Table 4: Average treatment effects of chief malevolence on the total number of legitime sanctions, the number of direct and indirect legitime sanctions against the town chief

	T1 - C			T4 - T1		
	General	Direct	Indirect	General	Direct	Indirect
Treatment	3.14*** (0.17)	1.2*** (0.09)	1.93*** (0.1)	0.7*** (0.14)	0.33** (0.11)	0.37*** (0.08)
Observations	362	362	362	332	332	332
R <sup>2</sup>	0.57	0.41	0.59	0.45	0.35	0.33
Control mean (for comparaisn)	0.59 (1.36)	0.1 (0.38)	0.49 (1.11)	3.66 (1.81)	1.26 (1.1)	2.39 (1.02)

*Notes:*

Three outcome variables are used: general, direct and indirect. General is the total sum of sanctions considered as legitimate. Direct is the sum of sanctions considered as legitime targetting directly the chief. Indirect is the sum of sanctions considered as legitimate targetting an higher authority. T1-C tests treatment 1 vs the control group, and T4-T1 tests treatment 4 vs treatment 1 (hypothesis 1). village and block fixed effects are used. Robust standard errors in parenthesis. \*p<.05, \*\*p<.01, \*\*\*p<.001.

## Indirect sanctions are the most frequently reported sanctions

We dig now into the questions of what type of sanctions are preferred by the respondents. Figure 2 illustrates in the panel A, the mean of the number of total, direct, and indirect sanctions considered as legitimate. In panel B, it displays the share of respondents who perceive the nine sanctions as legitimate across the control, treatment 1 and 4. These findings offer an important insight. Citizens state that they prefer to call higher authorities rather than sanctioning their leaders directly. The most widely chosen sanctions by around 75% of the respondents in the treatment groups are those where the citizen complains to a higher authority (the community elder, the section chief, or the paramount chief). Then, blaming the chief directly or stopping working on his/her farm is the second most widely sanction chosen. Conversely, despite occasional references in the existing literature, the employment of more severe measures such as threatening the chief physically, abstaining from collective labor, refraining from paying local taxes, or avoiding marital ties with members of the chief's family remains illegitimate sanctions among community members.

This evidence is also supported by other survey answers. For a random subset of the respondent, we asked how they would react if they were in such a situation. All the respondents raise an indirect channel: they would either complain to a tribal authority, an elder, or the section/paramount chief.

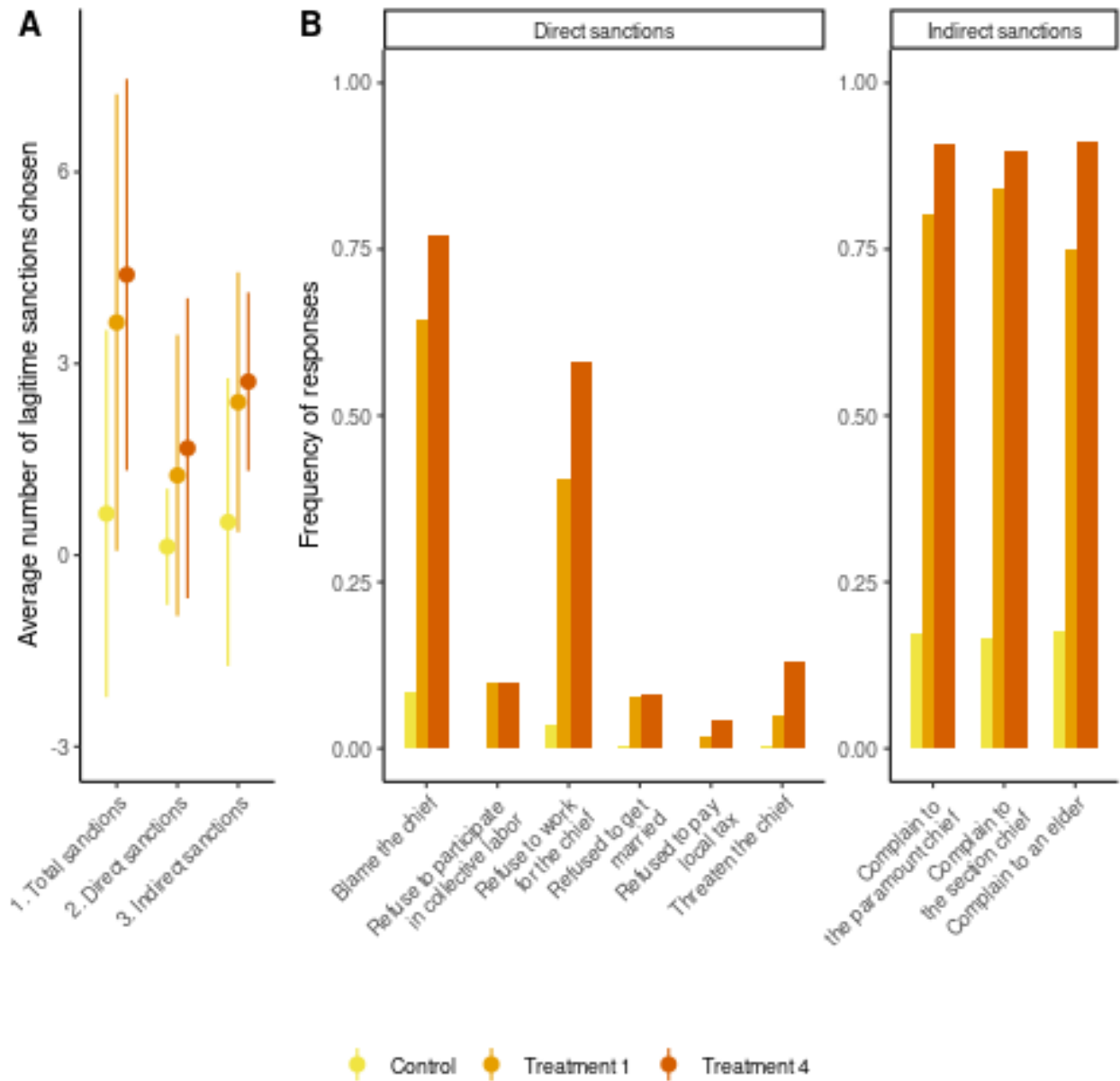


Figure 2: Panel A presents the average values of total, direct, and indirect sanctions considered as legitimate in the control, treatment 1, and treatment 4 conditions, with the dots representing these averages. The bars illustrate two standard errors. In Panel B, the figure displays the average legitimate sanctions per sanction type and treatment condition. Since the outcome in this case is a binary variable, no standard errors are shown.

## 5.2 The role of the elders

The analysis of the open-ended question indicates that a significant number of respondents views the elders as the appropriate figures to address when the town chief’s behavior is not in the community’s best interest. Rather than taking action themselves, many respondents express a preference for encouraging or awaiting the elders’ intervention when it comes to sanctioning the chief, as the following quotes suggest.

“Nothing much because the town Chief is the head of the village, only the elders will talk on behalf [of] us, the villagers.”

– One respondent receiving treatment 3

“Will talk to the youth leader about the chief’s behavior hopefully he (the youth leader) will take up the matter to the elders.”

– One respondent receiving treatment 4

To more formally test such patterns and dig deeper into potential mechanisms, we conducted an analysis to investigate the potential influence of elders on the sanctioning preferences of ordinary citizens, employing two comparisons. Firstly, we compared the responses between treatment 2, where the council of elders expressed blame towards the chief, and treatment 3, where the council of elders did not express blame towards the chief. Comparing treatments 2 and 3 allows us to explore whether respondents’ perspectives on the legitimacy of sanctions are contingent upon the behavior of elders. Secondly, we compared treatment 2 with treatment 1, which did not mention the behavior of the elders, as a robustness check analysis.

Contrary to our initial expectations, we did not find any evidence indicating that community members find a smaller quantity of sanctions as legitimate when the elders had already reprimanded the chief. Surprisingly, as displayed by table 5, the direction of the effects was opposite to what was anticipated. When comparing treatment 2 with treatment 3, the effect size for the number of total sanctions considered as legitimate was 0.5, statistically significant at the 1% level. The majority of this effect was driven by an increase in indirect sanctions preferences, approximately 0.3, which was also statistically significant at the 1% level. Although the effect size for the direct sanctioning measure was positive, it did not reach statistical significance. Overall, the effect sizes were 0.24 for both direct and indirect sanctions. The results are robust when using the sub-sample of villages that have a council of elders (approximately 90% of the sample).

For the second comparison, the effect sizes were relatively smaller. The general measure, the total number of sanctions considered as legitimate, yielded an effect size of approximately 0.3, with effect sizes of 0.2 for direct sanctions and 0.1 for indirect sanctions. Among these, only the effect sizes for the general measure and direct sanctions reached statistical significance at the 10% level. The reduced disparities between treatment 2 and treatment 1 can be attributed to the possibility that the societal significance of elders is relatively diminished within these communities. Nevertheless, the prominence of the first action emphasized by respondents, particularly their tendency to initially advocate addressing concerns with elders in open-ended questions, renders that explanation less tenable. A more plausible explanation is that survey participants may assume that the council of elders will intervene, even when not explicitly specified in the scenario. Overall, the findings align with prior scholarly investigations that underscore the significance of the elites for sustaining cooperation and mobilization (Goist and Kern, 2018).

Table 5: Average treatment effects of elders' behavior on the total number of legitime sanctions, the number of direct and indirect legitime sanctions against the town chief

	<b>T2 - T3</b>			<b>T2 - T1</b>		
	<b>General</b>	<b>Direct</b>	<b>Indirect</b>	<b>General</b>	<b>Direct</b>	<b>Indirect</b>
Treatment	0.48** (0.16)	0.19 (0.13)	0.29** (0.09)	0.29+ (0.15)	0.2+ (0.1)	0.09 (0.09)
Observations	310	310	310	331	331	331
R <sup>2</sup>	0.37	0.18	0.35	0.44	0.37	0.33

*Notes:*

Three outcome variables are used: general, direct and indirect. General is the total sum of sanctions considered as legitimate. Direct is the sum of sanctions considered as legitime targetting directly the chief. Indirect is the sum of sanctions considered as legitimate targetting an higher authority. T2-T3 tests treatment 2 vs treatment 3, and T1-T3 tests treatment 1 vs treatment 3 (hypothesis 2). village and block fixed effects are used. Robust standard errors in parenthesis. +p<.1, \*p<.05, \*\*p<.01, \*\*\*p<.001.

Appendix F display the results when using the first and second outcome variables. The result shows that the respondents disagree more with the chief behavior when the elders blamed the chief. However, the effect size is small and significant at the 10% level only. Furthermore, there is no effect when considering whether citizens should take any actions in response.



### 5.3 Legitimation and covering mechanisms

The observed pattern in our data can be attributed to a combination of two mechanisms<sup>9</sup>. The information-legitimation mechanism, and the covering mechanism, are not mutually exclusive but rather complementary. The first mechanism proposes that when elders take action against the town chief, it sends a signal to the villagers regarding the legitimacy of their grievances. Consequently, the villagers are more likely to feel justified in expressing their concerns. The second mechanism, the covering mechanism, posits that when villagers take collective actions, these actions are less likely to be perceived as isolated incidents and, therefore, less susceptible to retaliation by the town chief or other high-status individuals.

We explore the significance of these mechanisms by comparing the effect sizes of treatment 2 vs treatment 3 on the two outcomes (see figure 3): a) the number of sanctions considered as legitimate (outcome 4), and b) the number of sanctions the respondents feel able to undertake (outcome 5). The outcome 4 expresses the significance of the legitimation mechanism while the outcome 5 illustrates the potential importance of the covering mechanism. If the effect is only present for the outcome 4, it suggests that the legitimation mechanism might be at play while the covering mechanism not.

Figure 3 displays the results. We find that the effect of elders is particularly important for indirect sanctions. Secondly, the effect is significant for both outcomes suggesting that the legitimation and the covering mechanisms could be at play.

We find evidence supporting the validity of these mechanisms in select quotes from the open-ended questions, where the support of elders emerges as a crucial factor in shaping collective efforts aimed at maintaining social order. Respondents do not only condition their preferences on elders' action, but also their (stated) behaviors.

“I will report home to the elders and I will join the elders to sermoned the chief”

– One respondent receiving treatment 4

“I alone will not take any action because he is our chief, but if we came as one in the village we will take the action together”

– One respondent receiving treatment 4

The importance of the mobilization of fellow citizens was underlined by a women leader in a community we visited when asked what she would do in a case the elders did not blame the town chief.

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<sup>9</sup>we express our gratitude to Dylan Groves for inspiring the development of this section

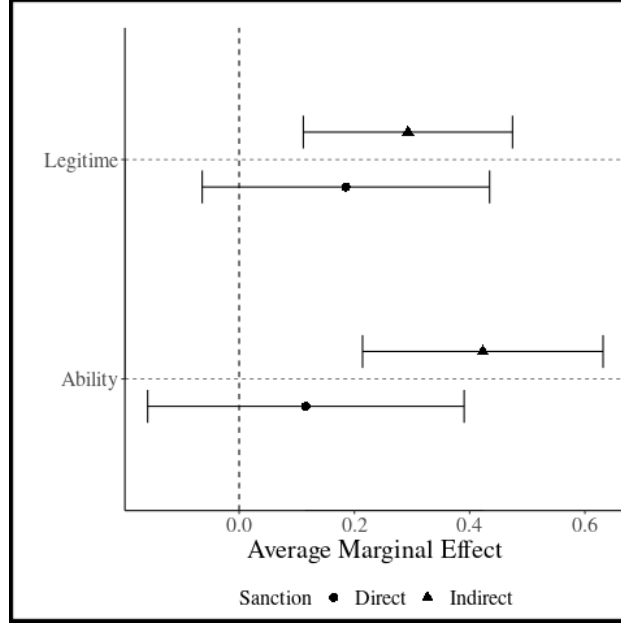


Figure 3: Average treatment effects of elders' behavior on the number of direct and indirect sanctions considered as legitimate (on the top), and the number of direct and indirect sanctions the respondent would feel able to undertake (bottom). Bars represent 95% confidence interval.

“If I am in similar situation , I will mobilize my fellow women to complain to the section Chief, if the section Chief fails to take action against the town Chief, we will report he (the section Chief) for not taking action against the town Chief. The money is meant for community project and not any body's personal gain. Nevertheless, if the town Chief had been good to the community, we will visit him and ask the reason for his action, but if he is that kind that doesn't care and don't respect the community people, we directly go to authorities higher than him to report the action.”

– One respondent receiving treatment 3

Our research reveals that the behavior of high status individuals shape respondents action when confronting to chiefs malevolence. Such individuals play a central in counterbalancing power dynamics in the case of elite control of formal institutions (Shapland et al., 2023). In stratified societies such as the one we study, respondents might not be equal in their sanctioning preferences and their responses to high status individuals. We analyze such patterns in the following section.

## 5.4 Voting rights and sanctioning preferences

The previous sections underlined the importance of collective action and of high-status individuals in facilitating and enabling such collective action. As a consequence, social groups' representation might differ if their preferences and ability to sanction the town chiefs vary. We examine whether community members possess similar preferences with regard to the quantity of direct and indirect legitimate sanctions by comparing the treatment 1 with control, and the treatment 2 with treatment 3 (moderating effects of elders). Specifically, we investigate the heterogeneous effects of gender, wealth, and political rights, which encompass the right to vote for the town chief. These variables represent our secondary hypotheses, which have been pre-registered.

Figure 4 displays, on the left side, the average marginal effects of chiefs' malevolence (treatment 1 vs. control) by voting eligibility on the number of sanctions considered as legitimate. On the right side, it shows the average marginal effect of elders behavior (treatment 2 vs treatment 3) by voting eligibility, on the number of sanctions considered as legitimate. The right to vote emerges as a significant predictor of an individual's attitudes towards direct and indirect legitimate sanctions when comparing treatment 1 with the control scenario. Community members possessing voting rights tend to consider on average 1 more direct sanction and around 0.5 indirect sanction as legitimate. Furthermore, only respondents with voting rights are responsive to elders' behavior, especially when considering indirect sanctioning preferences.

Appendix H presents the outcomes of the heterogeneity analysis and the results of a formal statistical test of the heterogeneous effects. Overall, we found that men are more likely to find a wider range of sanctions as legitimate and are generally more responsive to elders' behavior. Furthermore, contrary to our expectation, when the quantity of money stolen is small, poorer respondents are more likely to find a wider range of sanctions as legitimate. When the quantity of money stolen increases, the results reverse suggesting that wealthy people are more tolerant to small theft.

In stratified societies, the status of individuals does not come only regarding their wealth (especially in our case which is a very impoverished area), but from the status conferred by their lineages (Leach, 1994). First settlers tend to have higher land property rights and are more likely to be eligible to vote for their town chief (Bulte et al, 2018). Such status is associated with a greater quantity of sanctions considered as legitimate and a higher responsiveness to elders' behavior. Such heterogeneity in preferences was also found when comparing male vs. women. Baldwin et al. (2022) brought evidence of the importance of the

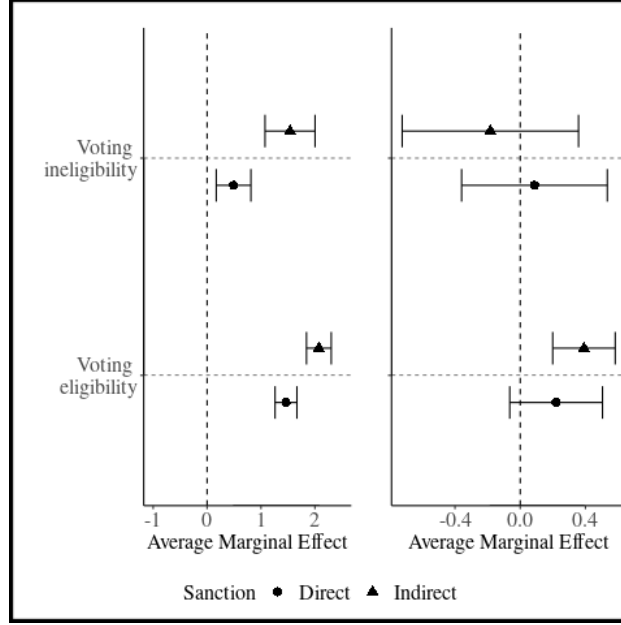


Figure 4: Plot of the estimated average treatment effects of chief malevolence (T1 vs. Control) on the number of direct and indirect sanction considered as legitimate (left plot) by voting rights and of the estimated average treatment effect of elders' behavior (T2 vs. T3) on the number of direct and indirect sanction considered as legitimate (right plot) by voting rights.

diversity of interests represented by advisory councils (elders in our case) for the inclusivity of decision-making and public-good provision outcomes. We bring evidence of the central role of elders in organizing collective action for punishing the town chief. The diversity of social groups that respond to elders' signal is also of a concern for decision-making outputs. In our study, we found that men, respondents with high income and voting rights are more likely to respond to elders' behavior suggesting a potential bias regarding the social-groups represented by the elites.

In the next section, we explore, at the village level, whether sanctioning preferences are associated with political phenomenon and relevant political variables.

## 6 Relationships between village-level measures, leaders' quality and decision-making outcomes

Our research revealed that community members express their intent to impose sanctions on their town chiefs when the chiefs' actions deviate from the communal interest. We investigated whether preferences for sanctioning town chiefs vary across different villages. If such variations exist, we sought to determine whether the heterogeneity in village-level preferences correlates with decision-making processes and the quality of public goods provision. As outlined in the measurement strategy, village-level preferences were quantified by aggregating responses related to the respondents' capacity to directly and indirectly apply sanctions against their leaders. The latter can also be interpreted as the average awareness and ability to use political rights.

We proxy village-level preferences by calculating the average number of sanctions considered legitimate across treatment arms (excluding the control arm). Figure 5 displays the distribution of village-level preferences toward directly and indirectly sanctioning the chief. It shows a wide heterogeneity in sanctioning preferences across villages. For direct sanctioning, the village-level measure range from 0 to 3 direct legitimate sanctions with a great variance. For indirect sanctioning, there is less heterogeneity. The measure ranges from 1 to 3 indirect legitimate sanctions, with most of the measure being from 2 to 3. Overall, the variation between villages is significant, especially considering the relatively small size of the study area and the fact that communities are culturally homogeneous. It also echoes feedback from the interviews and informal discussions undertaken with the enumerators who highlighted that in some areas ordinary citizens are not aware of their political rights (low level of indirect sanctioning preferences).

Figure 6 displays scatter plots of the marginal effects of the aggregated level of direct and indirect sanctioning preferences at the village level on the six main outcome variables. The results of the statistical associations are shown in table 6. The models control for the share of inhabitants with voting rights, population, a measure of wealth, inequality, and connectedness with the chieftom headquarter and use chieftom fixed effects for 4 out of the 6 models (when multicollinearity issues did not arise). Firstly, there is mixed evidence regarding the association between indirect sanctioning preferences and institutional quality. On the one hand, in villages where attitudes towards indirect sanctions are pronounced, the inclusivity of land planning leaders diminishes, as evidenced by an increase in the proportion of individuals from the town chief and paramount chief families participating in land planning activities. The effect size is substantial, with each unit increase in the independent variable

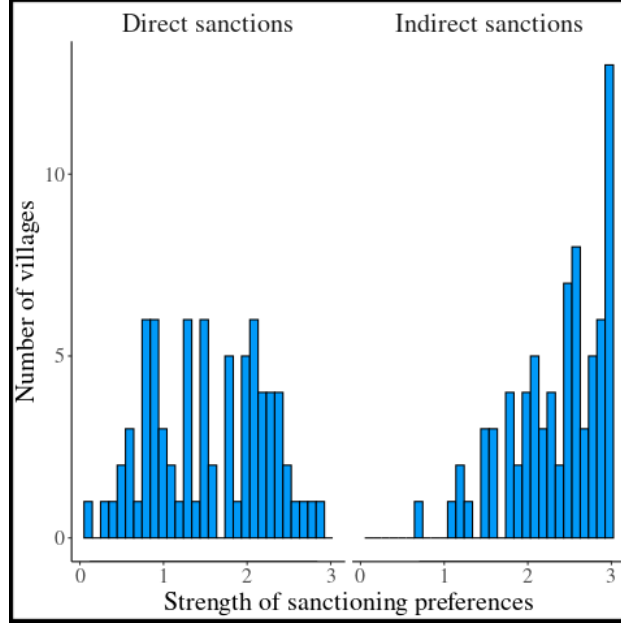


Figure 5: Histogram of the strength of direct and indirect sanctioning preferences at the village level.

corresponding to an 0.6 and 0.4 standard error reduction in inclusivity outcomes, a statistically significant finding at the 5% and 10% significance level. The outcome and independent variable also exhibit a strong correlation, with an  $R^2$  value of 0.16 in a bivariate regression analysis. On the other hand, we don't find any association between town chief responsiveness and indirect sanctioning preferences. Surprisingly, villages with higher indirect sanctioning preferences are positively associated with trust in the chief, an effect size of 0.76 statistically significant at the 5% level. Regarding the association with public good provision, we find an effect size of 1.1, statistically significant at a 0.1% level.

This preliminary statistical analysis is subject to several limitations, including the potential presence of omitted variable biases and reverse causation. Nevertheless, the identification of significant correlations between actual behavior observed in the field and the preferences for indirect sanctions at the village level suggests that such preferences may serve as an indicator of a noteworthy political phenomenon, namely, non-electoral accountability mechanisms. These correlations can be understood within various interpretative frameworks.

The outcomes are consistent with the notion that local chiefs are responsive to indirect sanctions. In anticipation of potential sanctions from higher-ranking authorities, chiefs may seek to appease them by involving their family members in decision-making processes. Our descriptive findings reveal that a quarter of the surveyed villages have experienced the removal of a town chief. In light of the tangible threat posed by higher-ranking figures within the

chiefdom, the performance of town chiefs appears to improve in villages where preferences for indirect sanctions are more pronounced, as evidenced by heightened levels of trust and reduced instances of local-level conflicts.

Nevertheless, our findings do not contradict an opposing narrative supported by the results presented by Acemoglu et al. (2014). These authors underscore that in chiefdoms characterized by low levels of political competition, civil society often becomes subject to elite capture. The observed increase in the involvement of paramount chief families in land planning activities within villages where preferences for indirect sanctions are more prevalent underscores the potential for such capture. In response to the fear of repression, villagers may express elevated levels of trust in the town chief and seek to avoid conflicts at the village level. Nevertheless, in our models we account for the intensity of the relationships with paramount chief family which reduces the plausibility of such an explanation.

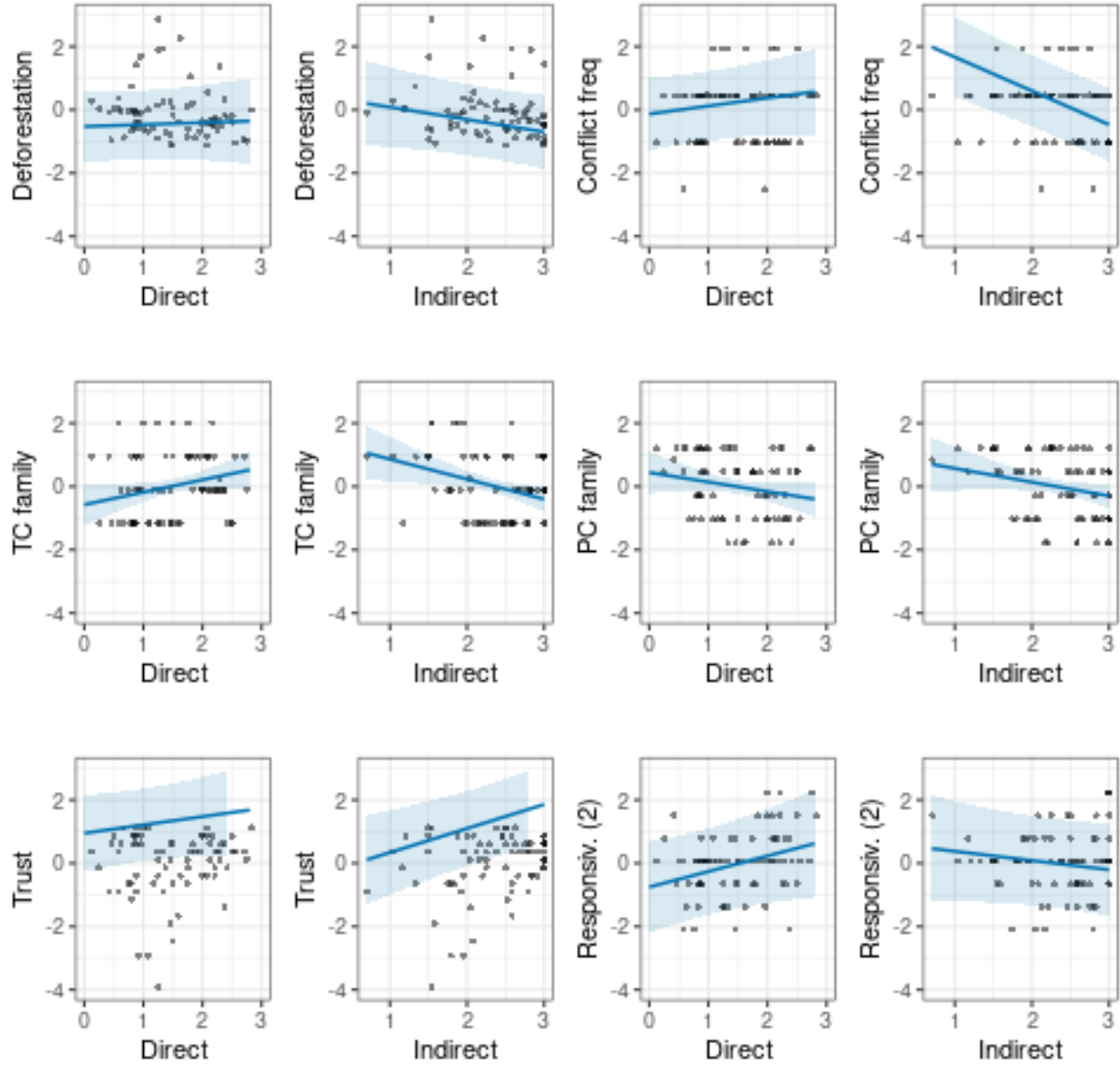


Figure 6: Scatter plot of the relationships between Direct and Indirect Sanctioning and 6 Outcome Variables, controlling for covariates (eq. 2, section 4.2) and using chiefdom fixed effects. Responsiv. (2) denotes the variation in support for a land deal, comparing scenarios where the paramount chief or community members oppose it. TC family represents the share of town chief family members selected for land planning activity, inverse measure. PC family represents the share of paramount chief family members selected for land planning activity, inverse measure. Conflict frq signifies the frequency of conflicts at the village level.



Table 6: OLS regression between direct and indirect sanctions and 6 political outcomes

	Institutional Quality				Public Good Provision	
	(1)	(2)	(3)	(4)	(5)	(6)
Direct	0.39*	-0.3	0.49	0.26	0.06	0.25
	(0.19)	(0.21)	(0.34)	(0.29)	(0.17)	(0.19)
Indirect	-0.63*	-0.43 <sup>+</sup>	-0.29	0.76*	-0.39	-1.07***
	(0.26)	(0.22)	(0.34)	(0.34)	(0.27)	(0.22)
Pop. (log)	0.1	-0.01	-0.35	-0.39	0.35	-1.09**
	(0.34)	(0.41)	(0.5)	(0.41)	(0.26)	(0.39)
Vote rights	-1.02	-0.27	0.51	-0.24	0.75 <sup>+</sup>	1.12*
	(0.74)	(0.61)	(0.77)	(0.83)	(0.44)	(0.55)
Time in office	0.02	0.03*	0	0.02	-0.02	-0.01
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
Link PC	-0.23	-0.44	-0.07	-0.05	-0.31	-0.02
	(0.27)	(0.28)	(0.4)	(0.29)	(0.31)	(0.23)
Wealth	0.04	0.03	0.03	0.1	0	-0.05
	(0.12)	(0.13)	(0.11)	(0.12)	(0.08)	(0.1)
Inequality	-0.66	-1.04	0.06	-1.32	0.31	-1.3
	(1.17)	(1.06)	(1.78)	(1.43)	(1.1)	(1.33)
Ruling family	-0.75	-0.27	0.35	-0.52	-0.51	0.62
	(0.5)	(0.49)	(0.77)	(0.42)	(0.92)	(0.77)
chiefdom FE	No	No	Yes	Yes	Yes	Yes
N	72	72	74	74	74	74
R <sup>2</sup>	0.18	0.21	-0.05	0.27	0.17	0.33

*Notes:* (1): Opposite of the share of town chief family members selected for the land planning activity, (2) Opposite of the share of paramount chief family members selected for the land planning activity, (3): town chief relative responsiveness between community members and the paramount chief (4): trust in the town chief, (5) deforestation rates between 2015 and 2020 in a 6-km radius, (6): village level conflict frequency. Robust standard errors in parenthesis, and chiefdom fixed effects for outcome 3 to 6. Chiefdom fixed effects are not included in outcome 1 and 2 because of multicollinearity issues. +p<.1, \*p<.05, \*\*p<.01, \*\*\*p<.001.

The empirical evidence pertaining to the relationship between the intensity of direct sanctioning preferences and the two categories of outcome variables presents a distinct and less definitive pattern. Our findings indicate that in villages where direct sanctioning preferences are more pronounced, town chiefs tend to involve fewer of their family members in land planning activities. This effect size is substantial, approximately 0.4 standard deviations, and it attains statistical significance at the 5% level. Nevertheless, the effect disappears when using paramount chief family members, leader responsiveness or trust as an outcome variable. Furthermore, we did not identify any statistically significant association between public goods provision and the strength of direct sanctioning preferences.

These observed patterns align with a narrative that posits town chiefs as responsive to the potential exertion of direct pressure at the village level. However, in concordance with the findings in the preceding section, the potency of indirect sanctioning preferences appears to hold greater importance than direct sanctioning preferences, as indicated by the strength of their associations with the six political outcomes.

Our results also corroborate those of Voors et al. (2018), who found that in villages with fewer lineage groups, quelling opposition and maintaining village cohesion is more achievable. In our context, a higher number of voting families corresponds to fewer conflicts within the village, signifying a more influential chief in such settings.

## 7 Conclusion

This study aimed to examine the extent to which ordinary citizens impose sanctions on their leaders and the methods they employ for doing so. Through the utilization of a survey experiment, our investigation revealed that ordinary citizens indeed engage in sanctioning their leaders, predominantly opting for indirect channels of sanctioning as opposed to direct approaches. This preference for indirect sanctions can be partially attributed to the relatively lower costs associated with this form of reprimand.<sup>10</sup> The inclination towards indirect sanctions among ordinary citizens can also be attributed to prevailing norms dictating acceptable behavior, which play a pivotal role in shaping the legitimacy of political conduct. Furthermore, our results indicate that the council of elders assumes a crucial role in initiating bottom-up sanctions. Specifically, when the elders themselves sanction a town chief, ordinary citizens exhibit a greater propensity to impose sanctions on their respective town chief.

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<sup>10</sup>We conducted focus group discussions with town chiefs and elders in 5 villages from the study area. In all of the focus group, they agreed that indirect sanctions were less costly than direct sanctions.

Additionally, our investigation explored the relationship between the heterogeneity in sanctioning preferences at the village level and decision-making processes, leadership dynamics, and the quality of public goods. We discovered a strong association between village-level preferences for indirect sanctions and the behavior of town chiefs, who are more inclined to involve members of their chiefly family (and the one of the paramount chief) in land planning activities. Moreover, the preference for indirect sanctions also correlates with higher trust with the chief and less conflicts at the village level. To a lesser extent, we found some evidence indicating that town chiefs tend to invite less member of their family when direct sanctioning preferences are stronger, yet no conclusive evidence emerged regarding its impact on the provision of public goods.

Overall, this study underscores the significance of non-electoral accountability mechanisms in contexts where chiefs are well embedded within their communities. Unpacking the black-box of accountability mechanisms in traditional political institutions is essential to improve the quality of such institutions. We suggest that upcoming research should further increase our understanding of bottom-up accountability mechanisms. More specifically, stronger research design enabling the identification of causal effects could dig into the way chiefs are responsive to sanctioning preferences.

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## Appendix A: Measurement strategy and summary statistics

### Dependent variables used to test hypothesis one and two

Table 7: Table of the measurement strategy for the main dependent variables used to test the hypotheses 1 and 2

Type	Name	Survey question	Range
DV 1	Number of direct legitime sanctions	<i>[After reading one of the five experimental scenario]</i> Some members of the village reacted in this way. In your opinion, is it legitimate? <i>Among the list of six actions, select all the answers that the respondents considered as legitimate</i>	{0, 1, 2, 3, 4, 5, 6}
DV 2	Number of indirect legitime sanctions	<i>[After reading one of the five experimental scenario]</i> Some members of the village reacted in this way. In your opinion, is it legitimate? <i>Among the list of three actions, select all the answers that the respondents considered as legitimate</i>	{0, 1, 2, 3}

### Independent and dependent variables used to test hypotheses 3, 4, and 5

Table 8: Table of the measurement strategy for the main dependent and independent variables used to test the hypotheses 3 to 5

Type	Name	Survey question	Range
IV 1	Village-level direct sanctioning preferences	Average of the number of direct legitimate sanctions in each village across treatment 1 to 4	[0; 6]
IV 2	Village-level indirect sanctioning preferences	Average of the number of indirect legitimate sanctions in each village across treatment 1 to 4	[0; 3]
DV 1	Trust in the chief	Standardized Average of the answers in the household survey: "How much do you trust your village chief on a scale from one to four?"	Numeric
DV 2	Leader responsiveness	Standardized difference in support for a land deal when endorsed by the paramount chief compared to when supported by community members	Numeric
DV 3	Representativeness of councilors chosen by the town chief in a land planning activity	The town chief was asked to select 4 community members to participate in a land activity. We report the number of those members that are part of the town or paramount chief family.	Numeric
DV 4	Conflicts frequency	Standardized measure of the question: How frequent conflicts are in the village on a scale from 1 to 4?	Numeric
DV 5	Deforestation between 2015 and 2020 (6-km buffer from the village)	From vancutsem (2021), we measured the difference of primary forest cover and regrown forest between 2015 and 2020 divided by 2015 forest. The measure is standardized.	Numeric

Table 9: Descriptive statistics

Variable	N	mean	min	Q1	Q2	Q3	max	NA
<b>Household level variables</b>								
Number of legitime sanctions	907	3.27	0.00	1.00	4.00	5.00	8.00	0
Number of legitime direct sanctions	907	1.19	0.00	0.00	1.00	2.00	5.00	0
Number of legitime indirect sanctions	907	2.08	0.00	1.00	3.00	3.00	3.00	0
Annual income (log)	907	3.64	0.00	3.43	3.72	3.95	4.78	0
Wealth	907	7.66	-4.07	-0.07	5.93	11.93	72.93	0
Age	905	39.64	18.00	30.00	38.00	48.00	85.00	2
Education	890	1.48	0.00	0.00	0.00	0.00	14.00	17
Muslim	907	0.91	0.00	1.00	1.00	1.00	1.00	0
Employed	906	0.13	0.00	0.00	0.00	0.00	1.00	1
Female	907	0.37	0.00	0.00	0.00	1.00	1.00	0
Right to vote	906	0.78	0.00	1.00	1.00	1.00	1.00	1
<b>Village level variables</b>								
Direct sanction preferences	77	1.54	0.12	0.88	1.50	2.12	2.83	0
Indirect sanction preferences	77	2.34	0.71	1.96	2.50	2.79	3.00	0
Leader responsiveness	76	-0.84	-3.00	-2.00	-1.00	0.00	3.00	1
Annual number of community meetings	76	7.08	2.00	3.75	6.00	10.00	20.00	1
Prize for resolving local conflicts	76	3.21	0.00	3.04	3.43	3.93	5.30	1
Trust in the town chief	77	3.63	2.33	3.50	3.75	3.83	4.00	0
Inclusiveness 1	75	0.27	0.00	0.00	0.25	0.50	0.75	2
Inclusiveness 2	75	0.60	0.00	0.25	0.75	0.94	1.00	2
Deforestation rates between 2015 and 2020	76	0.06	0.00	0.03	0.05	0.07	0.27	1
Paramount-town chief meeting frequency	77	0.71	0.00	0.00	1.00	1.00	1.00	0
Proportion of voters	77	0.78	0.25	0.67	0.83	0.92	1.00	0
Year of election	77	0.00	-1.00	-1.00	0.00	0.00	4.00	0
Population	77	0.00	0.00	0.00	0.00	0.00	1.00	0
Index of access to basic services	77	0.00	-1.30	-0.55	-0.29	0.18	4.07	0
Income inequality	77	0.34	0.11	0.26	0.33	0.40	0.57	0

*Notes:*

Descriptive statistics (mean, first, second, third quartile, minimum and maximum) of the main variables used to test the hypotheses. The household-level numbers of sanctions are the outcome variables used to test hypotheses 1 and 2. The other household-level variable refers to co-variates. Village-level sanctioning preferences are the two independent variables used to test hypotheses 3 and 4. The other village-level variables are either outcome variables or control variables.



## Appendix B: Covariate balances

Table 10: Randomization integrity

	Average					Std. mean diff.		
	C	T1	T2	T3	T4	T1-C	T2-T3	T4-T1
<b>Variable level test</b>								
Wealth	0.09	0.06	-0.03	-0.14	0.01	-0.04	0.11	-0.04
Tenure insecurity	3.19	2.98	3.02	3.24	3.3	-0.21	-0.22	0.32
Income	-2.71	-2.67	-2.69	-2.78	-2.65	0.05	0.09	0.01
Muslim	0.89	0.91	0.9	0.91	0.91	0.02	-0.01	0
Sherbro	0.52	0.44	0.49	0.49	0.51	-0.08	0	0.08
Trust in the chief	3.72	3.56	3.62	3.59	3.63	-0.16**	0.02	0.07
Trust in others	1.31	1.3	1.28	1.29	1.31	-0.01	-0.02	0.01
Employed	0.15	0.08	0.12	0.14	0.13	-0.06*	-0.02	0.05
Female	0.4	0.34	0.38	0.39	0.35	-0.05	0	0.01
Cash emergency	0.69	0.72	0.78	0.74	0.71	0.04	0.04	-0.01
Age	37.75	39.45	43.41	39.46	38.36	1.7	3.95***	-1.09
Education	1.25	1.22	1.63	1.34	1.96	-0.02	0.29	0.74*
Voting rights	0.73	0.74	0.81	0.81	0.8	0.01	0	0.06
<b>Global F test</b>								
F-test						1.61	1.09	1.14
p-value						0.08 <sup>+</sup>	0.37	0.33

*Notes:*

This table presents means across treatment arms (columns C to T4) and difference in means and two-sided t-tests for difference in means (columns T1-C to T4-T1) for a set covariates. P-values are unadjusted for multiple hypotheses testing. A global F-test and p-value are also provided at the bottom of the tables. <sup>+</sup>p<0.1, \*p<.05, \*\*p<.01, \*\*\*p<.001.

## Appendix C: Share of respondents who understand the scenarios

Table 11: Total number and share of respondents who understood the experimental conditions

	Control	T1	T2	T3	T4	Total
<b>Quantity of money stolen</b>						
	192	170	177	160	162	861
	<i>97 %</i>	<i>96 %</i>	<i>99 %</i>	<i>94 %</i>	<i>88 %</i>	<i>95 %</i>
<b>Behavior of the elders</b>						
	191	161	175	143	168	838
	<i>97 %</i>	<i>91 %</i>	<i>98 %</i>	<i>84 %</i>	<i>91 %</i>	<i>92 %</i>

## Appendix D: Deviation from the pre-analysis plan

Table 12: Table of the main deviation from the pre-analysis plan. The pre-registered hypotheses are laid out with their results using the specification described in the pre-analysis plan.

Pre-registered hypotheses	Test	Deviation from the PAP	PAP	Current
<b>H1:</b> <i>When undemocratic village leaders do not behave in the interest of the community they represent, citizens sanction them through a variety of social, economic, and political channels, preferably choosing the low cost ones</i>	$H_1 > H_0$	The current analysis includes village and gender fixed effects to account for the randomization strategy. Those fixed effects were not included in the PAP.	$p < .01$	$p < .01$
<b>H2:</b> <i>When the council of elders takes an active role in sanctioning the chief, ordinary citizens will be less willing to take an active role in sanctioning the chief. On the contrary, when the council of elders do not take any action, citizens will sanction their chief through a variety of social, economic, and political channels. Horizontal and bottom-up accountability mechanisms would substitute for each other.</i>	$H_1 < H_0$	The current analysis includes village and gender fixed effects to account for the randomization strategy. Those fixed effects were not included in the PAP.	$p < .95$	$p < .99$
<b>H3:</b> <i>Villages with a higher ability to sanction their chiefs are associated with higher responsive leaders.</i>	$H_1 > H_0$	In the current specification, the independent variable is disaggregated between direct and indirect sanctions. The current analysis does not use chiefdom fixed effects. It also focuses mostly on the second measure of leader responsiveness (easier to interpret)	(1) $p < .71$ (2) $p < .13$	
<b>H4:</b> <i>Villages with a higher ability to sanction their chiefs are associated with higher leadership quality</i>	$H_1 > H_0$	In the current specification, the independent variable is disaggregated between direct and indirect sanctions. The current analysis does not use chiefdom fixed effects.	(1) $p < .19$ (2) $p < .99$ (3) $p < .91$ (4) $p < .65$	
<b>H5:</b> <i>Villages with a higher ability to sanction their chiefs are associated with lower deforestation rates</i>	$H_1 < H_0$	In the current specification, the independent variable is disaggregated between direct and indirect sanctions.	(1) $p < .07$	

## Appendix E: Summary statistics of the open question outcome: “What actions would you take if you were in a similar situation?”

Table 13: Categorized Responses to the Open Question - What Would You Do in a Similar Situation?

Variable	N	Frequency	Percentage
<b>Collective Actions</b>			
Mobilize citizens	404	13	3 %
Town meetings	404	5	1 %
<b>Direct actions</b>			
Force give back money	404	80	20 %
Blame directly	404	49	12 %
Refuse to take orders	404	17	4 %
Vote against him	404	5	1 %
Attack the chief	404	4	1 %
Remove him from the project	404	3	1 %
Stop working for him	404	2	0 %
Fine him	404	1	0 %
<b>Indirect actions</b>			
Report to elders	404	97	24 %
Report to paramount chief	404	55	14 %
Report to section chief	404	53	13 %
Report to higher authorities	404	48	12 %
Report to village authorities	404	41	10 %
Ask for suspension	404	40	10 %
Report to police	404	16	4 %
Bring case to court	404	10	2 %
Report to NGO	404	8	2 %
<b>No actions</b>			
No actions	404	71	18 %
Preference for the chief giving back the money	404	37	9 %
Not understandable	404	1	0 %

*Notes:*

For half of the sample (N=404), after receiving the scenario, we asked an open question: What would you do in a similar situation? We categorized the actions into the categories reported in the table with the absolute and relative frequency.

## Appendix F: Analysis of the outcomes 1 and 2

Table 14: Treatment effects on how much respondents disagree with the chief's behavior (1) and on whether citizens should take any actions in response (2)

	T1 - C		T2 - T3		T4 - T1	
	(1)	(2)	(1)	(2)	(1)	(2)
Treatment	2.85*** (0.11)	0.75*** (0.03)	0.15+ (0.08)	0.04 (0.03)	0.45*** (0.08)	0.15*** (0.03)
Observations	362	362	310	310	332	332
R <sup>2</sup>	0.69	0.64	0.21	0.25	0.29	0.25

*Notes:*

Two outcome variables are used: (1) refers to a 1-5 scale about how much citizens disagree with chiefs' behavior (2) is a dummy outcome corresponding to whether citizens should take any actions in response to chief's behavior. T1-C tests treatment 1 vs the control group, T2-T3 tests treatment 2 vs treatment 3, and T4-T1 tests treatment 4 vs treatment 1. village and block fixed effects are used. Robust standard errors in parenthesis. +p<0.1, \*p<.05, \*\*p<.01, \*\*\*p<.001.

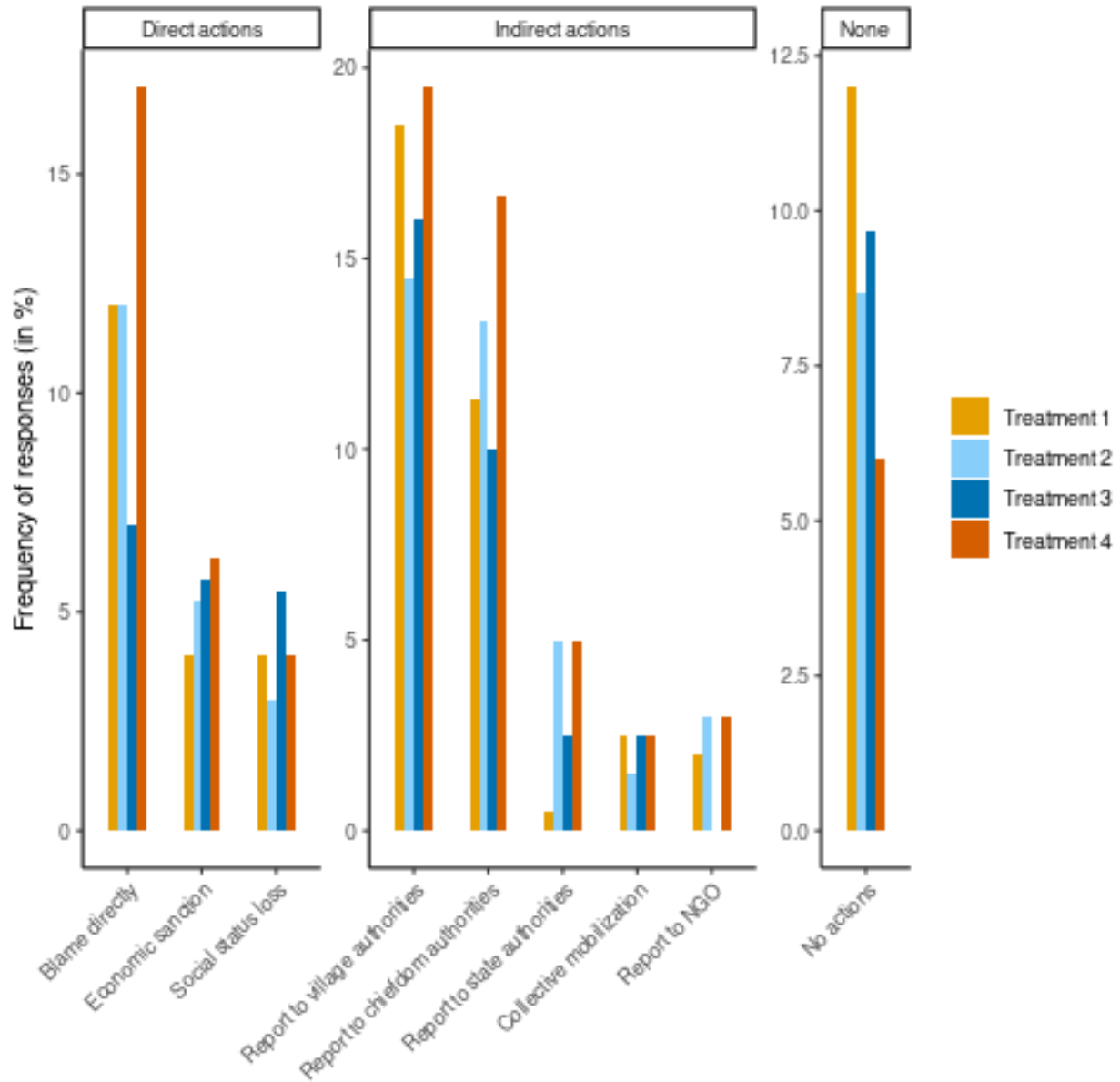


Figure 7: Categorized Responses grouped to the Open Question 'What Would You Do in a Similar Situation?' by scenario

## Appendix G: Robustness check for the statistical test of hypotheses 1 and 2

Table 15: Robustness check for hypothesis 1 using cluster standard errors. Treatment effects on the total number of legitime sanctions, the number of direct and indirect legitime sanctions

	T1 - C			T4 - T1		
	General	Direct	Indirect	General	Direct	Indirect
Treatment	3.14*** (0.24)	1.2*** (0.12)	1.93*** (0.14)	0.7*** (0.14)	0.33** (0.11)	0.37*** (0.08)
Observations	362	362	362	332	332	332
R <sup>2</sup>	0.57	0.41	0.59	0.45	0.35	0.33

*Notes:*

Three outcome variables are used: general, direct and indirect. General is the total sum of sanctions considered as legitimate. Direct is the sum of sanctions considered as legitime targetting directly the chief. Indirect is the sum of sanctions considered as legitimate targetting an higher authority. T1-C tests treatment 1 vs the control group, and T4-T1 tests treatment 4 vs treatment 1 (hypothesis 1). village and block fixed effects are used. Robust standard errors clustered at the village level in parenthesis. \*p<.05, \*\*p<.01, \*\*\*p<.001.

Table 16: Robustness check for hypothesis 1 using cluster standard errors and covariates that were not balanced. Treatment effects on the total number of legitime sanctions, the number of direct and indirect legitime sanctions

	T1 - C			T4 - T1		
	General	Direct	Indirect	General	Direct	Indirect
Treatment	3.2*** (0.24)	1.18*** (0.12)	2.02*** (0.13)	0.65*** (0.14)	0.28* (0.11)	0.37*** (0.08)
Observations	362	362	362	324	324	324
R <sup>2</sup>	0.57	0.41	0.61	0.43	0.34	0.33

*Notes:*

Three outcome variables are used: general, direct and indirect. General is the total sum of sanctions considered as legitimate. Direct is the sum of sanctions considered as legitime targetting directly the chief. Indirect is the sum of sanctions considered as legitimate targetting an higher authority. T1-C tests treatment 1 vs the control group, and T4-T1 tests treatment 4 vs treatment 1 (hypothesis 1). village and block fixed effects are used. Robust standard errors clustered at the village level in parenthesis. \*p<.05, \*\*p<.01, \*\*\*p<.001.

Table 17: Robustness check for hypothesis 2 using cluster standard errors. Treatment effects on the total number of legitime sanctions, the number of direct and indirect legitime sanctions

	<b>T2 - T3</b>			<b>T2 - T1</b>		
	<b>General</b>	<b>Direct</b>	<b>Indirect</b>	<b>General</b>	<b>Direct</b>	<b>Indirect</b>
Treatment	0.48** (0.17)	0.19 (0.14)	0.29** (0.09)	0.29* (0.14)	0.2* (0.1)	0.09 (0.09)
Observations	310	310	310	331	331	331
R <sup>2</sup>	0.37	0.18	0.35	0.44	0.37	0.33

*Notes:*

Three outcome variables are used: general, direct and indirect. General is the total sum of sanctions considered as legitimate. Direct is the sum of sanctions considered as legitime targetting directly the chief. Indirect is the sum of sanctions considered as legitimate targetting an higher authority. T1-C tests treatment 1 vs the control group, and T4-T1 tests treatment 4 vs treatment 1 (hypothesis 1). village and block fixed effects are used. Robust standard errors clustered at the village level in parenthesis. \*p<.05, \*\*p<.01, \*\*\*p<.001.

Table 18: Robustness check for hypothesis 2 using cluster standard errors and covariates that were not balanced. Treatment effects on the total number of legitime sanctions, the number of direct and indirect legitime sanctions

	<b>T2 - T3</b>		
	<b>General</b>	<b>Direct</b>	<b>Indirect</b>
Treatment	0.47** (0.18)	0.18 (0.14)	0.3** (0.09)
Observations	309	309	309
R <sup>2</sup>	0.37	0.17	0.35

*Notes:*

Three outcome variables are used: general, direct and indirect. General is the total sum of sanctions considered as legitimate. Direct is the sum of sanctions considered as legitime targetting directly the chief. Indirect is the sum of sanctions considered as legitimate targetting an higher authority. T1-C tests treatment 1 vs the control group, and T4-T1 tests treatment 4 vs treatment 1 (hypothesis 1). village and block fixed effects are used. Robust standard errors clustered at the village level in parenthesis. \*p<.05, \*\*p<.01, \*\*\*p<.001.



## Appendix H: OLS regression of the heterogeneous effect by gender, income, and voting rights

### Gender

Table 19: Heterogeneous treatment effects on the number of legitime sanctions by gender

	General		Direct		Indirect	
	(1)	(2)	(3)	(4)	(5)	(6)
T1-C	2.75*** (0.1)	2.9*** (0.12)	1.11*** (0.07)	1.21*** (0.08)	1.63*** (0.06)	1.69*** (0.07)
T2-C	-0.98*** (0.11)	-1.18*** (0.13)	-0.35*** (0.07)	-0.39*** (0.08)	-0.63*** (0.07)	-0.79*** (0.07)
female		-0.24 <sup>+</sup> (0.14)		-0.11 (0.09)		-0.13 (0.08)
T1-C*female		-0.39 <sup>+</sup> (0.22)		-0.25 <sup>+</sup> (0.15)		-0.14 (0.12)
T2-C*female		0.59* (0.26)		0.12 (0.16)		0.47** (0.16)
N	524	524	524	524	524	524
R <sup>2</sup>	0.63	0.64	0.45	0.45	0.65	0.66

*Notes:* T1-C tests treatment 1 vs the control group. T2-T3 tests treatment 2 vs the treatment 3. T4-T1 tests the treatment 4 against the treatment 1. The outcome variable is the standardized sum of all legitime sanctions. Standard errors in parenthesis. \*p<.05, \*\*p<.01, \*\*\*p<.001.

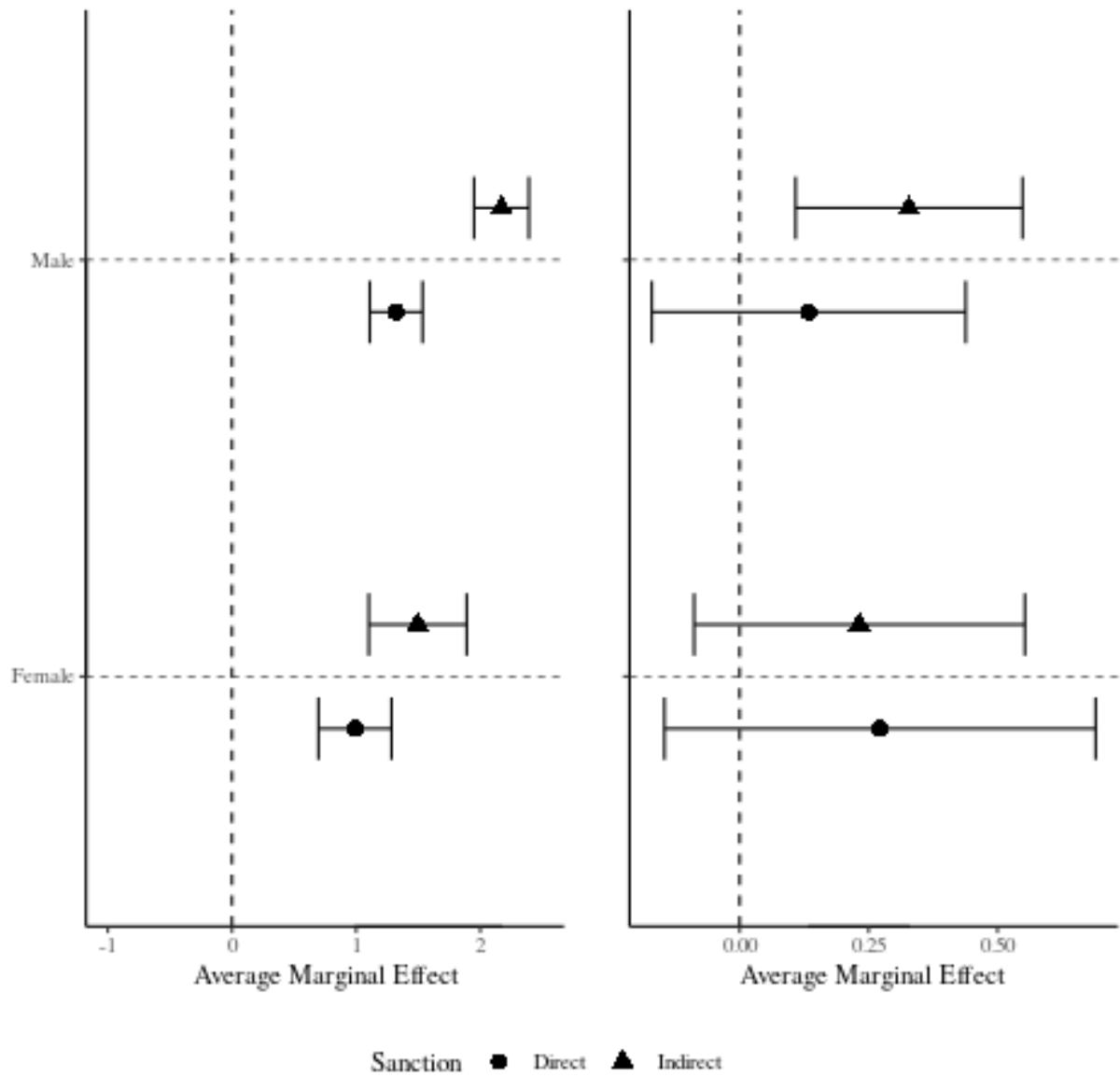


Figure 8: Plot of the estimated average treatment effects of chief malevolence (T1 vs. Control for the left plot and T4 vs. T1 for the right plot) on the number of direct and indirect sanction considered as legitimate by gender.

## Income

Table 20: Heterogeneous treatment effects on the number of legitime sanctions by income

	General		Direct		Indirect	
	(1)	(2)	(3)	(4)	(5)	(6)
T1-C	2.75*** (0.1)	3.28*** (0.23)	1.11*** (0.07)	1.27*** (0.15)	1.63*** (0.06)	2.01*** (0.13)
T2-C	-0.98*** (0.11)	-1.65*** (0.27)	-0.35*** (0.07)	-0.7*** (0.16)	-0.63*** (0.07)	-0.94*** (0.16)
income		0.09 (0.07)		0.05 (0.05)		0.04 (0.04)
T1-C*income		-0.22* (0.09)		-0.07 (0.06)		-0.15** (0.05)
T2-C*income		0.27** (0.1)		0.14* (0.06)		0.13* (0.06)
N	524	518	524	518	524	518
R <sup>2</sup>	0.63	0.64	0.45	0.45	0.65	0.66

*Notes:* T1-C tests treatment 1 vs the control group. T2-T3 tests treatment 2 vs the treatment 3. T4-T1 tests the treatment 4 against the treatment 1. The outcome variable is the standardized sum of all legitime sanctions. Standard errors in parenthesis. \*p<.05, \*\*p<.01, \*\*\*p<.001.

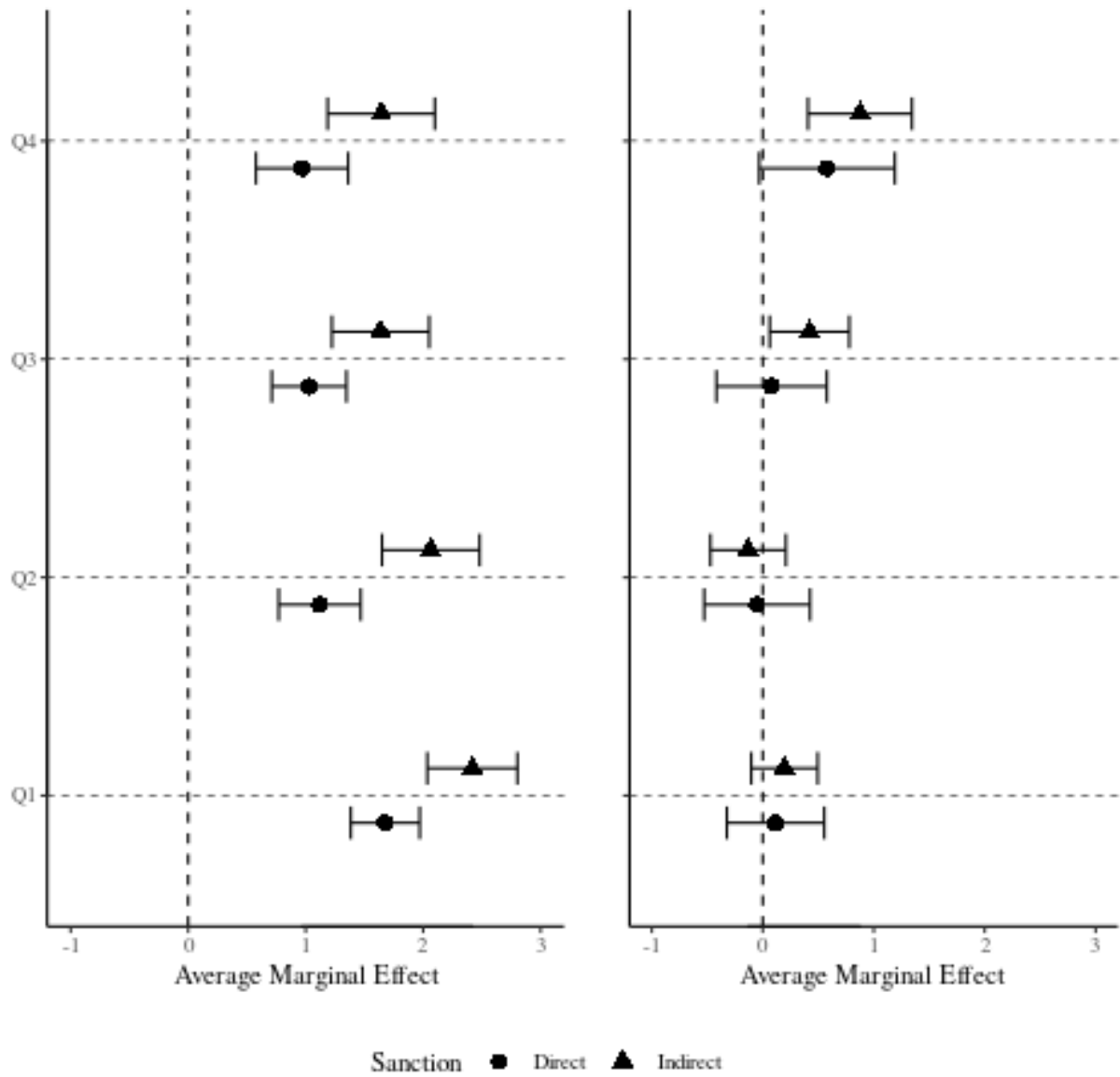


Figure 9: Plot of the estimated average treatment effects of chief malevolence (T1 vs. Control for the left plot and T4 vs. T1 for the right plot) on the number of direct and indirect sanction considered as legitimate by income.

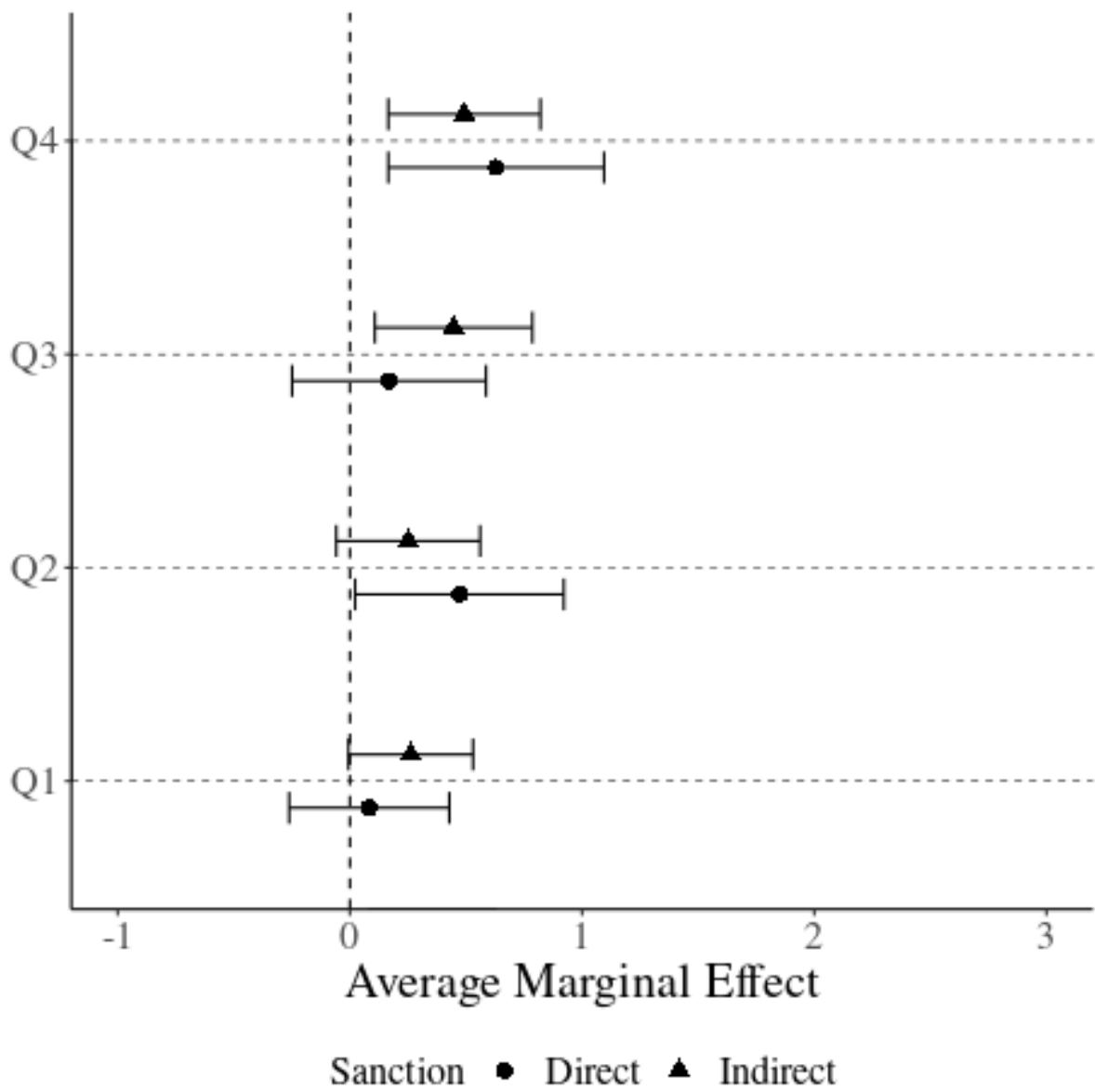


Figure 10: Plot of the estimated average treatment effects of elders behavior (T2 vs. T3) on the number of direct and indirect sanction considered as legitimate by income.

## Voting rights

Table 21: Heterogeneous treatment effects on the number of legitime sanctions by voting rights

	General		Direct		Indirect	
	(1)	(2)	(3)	(4)	(5)	(6)
T1-C	2.75*** (0.1)	2.1*** (0.22)	1.11*** (0.07)	0.66*** (0.16)	1.63*** (0.06)	1.46*** (0.13)
T2-C	-0.98*** (0.11)	-0.46 <sup>+</sup> (0.25)	-0.35*** (0.07)	-0.05 (0.14)	-0.63*** (0.07)	-0.39* (0.16)
vote		0.14 (0.18)		0.14 (0.11)		-0.03 (0.11)
T1-C*vote		0.86*** (0.26)		0.59** (0.18)		0.24 (0.15)
T2-C*vote		-0.73* (0.29)		-0.41* (0.16)		-0.32 <sup>+</sup> (0.18)
N	524	524	524	524	524	524
R <sup>2</sup>	0.63	0.64	0.45	0.47	0.65	0.65

*Notes:* T1-C tests treatment 1 vs the control group. T2-T3 tests treatment 2 vs the treatment 3. T4-T1 tests the treatment 4 against the treatment 1. The outcome variable is the standardized sum of all legitime sanctions. Standard errors in parenthesis. \*p<.05, \*\*p<.01, \*\*\*p<.001.

## Appendix H: Statistical results for hypotheses 3, 4, and 5

Table 22: OLS regression between direct and indirect sanctions and 10 political outcomes

	Decision making quality					Leadership quality			Public good provision	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Direct sanction	-0.13 (0.23)	-0.64*** (0.17)	0.15 (0.33)	0.39* (0.19)	-0.23 (0.2)	0.54* (0.25)	-0.07 (0.15)	-0.08 (0.19)	0.34+ (0.19)	-0.09 (0.2)
Indirect sanction	-0.15 (0.27)	0.11 (0.2)	-0.11 (0.36)	-0.72** (0.25)	-0.51* (0.24)	-0.31 (0.28)	0.91** (0.29)	0.64* (0.31)	-0.73*** (0.21)	-0.21 (0.27)
Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	74	74	74	72	72	74	74	74	74	74
R <sup>2</sup>	0.15	0.22	0	0.16	0.13	0.05	0.15	0.05	0.22	-0.07

*Notes:* (1): community meeting frequency, (2): participation rates in community meetings, (3): cost of village-level conflict resolution, (4): share of town chief family members selected for the land planning activity, (5) share of town and paramount chief family members selected for the land planning activity, (6): town chief relative responsiveness between community members and the paramount chief, (7): Shared interest with the town chief, (8): trust in the town chief, (9): village level conflict frequency, and (10) deforestation rates between 2015 and 2020 in a 6-km radius. Robust standard errors in parenthesis. +p<.1, \*p<.05, \*\*p<.01, \*\*\*p<.001.