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Decentralization in a Weak State: Traditional and State Governance in the DRC

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ABSTRACT: What characterizes local governance in the Democratic Republic of the Congo? This paper provides descriptive evidence to describe and quantify the local organization of the state in 134 rural small towns and large villages in four provinces of the DRC. We present rich data on state and local governance, taxation, public good provision, and citizens' perceptions of governance. Three stories emerge. First, contrary to the failed state image, the Congolese state has a significant presence in the rural localities surveyed and demonstrates a high level of administrative capacity. Second, we present the hierarchical organization of state agents and the relative independence of traditional chiefs. Third, we identify key challenges in local governance, namely lack of democratic accountability, high levels of corruption, and an acute lack of financing. **Keywords: JEL Codes:** H11, H70, O17, P48.

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1. Introduction

When analyzing the governance situation in the Democratic Republic of Congo (DRC), policy experts and social scientists typically label the country as a "weak" or "failed" state. This characterization is largely driven by the challenges the state faces in terms of political instability, corruption, and low revenue mobilization. Additionally, the wider society experiences extreme poverty and significant barriers to accessing education and healthcare. Despite the country's abundant natural resources, they have yet to be developed to drive sustained economic growth and widespread prosperity. The succession of opposition leader Félix Tshisekedi after controversial elections in 2018 was initially seen as a source of optimism. However, social transformation has been limited, and the country continues to struggle with persistent issues. Solidyfying the stale image, the DRC is often immortalized as a textbook example of a "predatory state" (Peter B Evans, 1995).

It is therefore common to assume that local governance in the Democratic Republic of Congo (DRC) would be equally failed or absent, given the country's characterization as a "weak" or "failed" state. After all, a failed state fails exactly because it is "despotic" in the sense that political elite fail to undertake routine negotiations with civil society, or it lacks "infrastructural" power in the sense that it cannot penetrate the civil society to implement political decisions (Michael Mann, 1984). However, recent ethnographic studies by Kristof Titeca and Tom De Herdt (2011) and Jean-Pierre Olivier de Sardan (2011) have challenged this perspective and spearheaded evidence of "real governance beyond the failed state." Their research program highlights the role of contested state and non-state actors in providing local governance, the very opposite of a power vacuum. Furthermore, the concept of "state scarcity" (Noah L Nathan, 2023) encourages marginal view of state capacity, as opposed to average, suggesting that areas with limited governance can actually experience greater impact from local state interventions.

Building upon the intellectual tradition of "real governance" in the DRC, we embarked on a quantitative examination of local governance in rural areas of the country. What is the level of local state capacity in these areas? How do non-state institutions, such as traditional governance, compare to state structures in terms of governance? And, what are the challenges faced by both state and non-state actors in providing governance in rural localities of the DRC? We hope that our systematic empirical investigation contributes to a more nuanced understanding of important governance questions, which have previously only been studied qualitatively, on a case by case basis, or in cross-country studies.

The rural localities in the DRC provide a valuable setting to study local state capacity. The

country has implemented a decentralized system since 2012, in which both traditional and state officials are responsible for separate local jurisdictions. By examining localities that have recently come under the purview of the central state and those that remain under the control of traditional governance, we have the opportunity to assess local state capacity. This is crucial for gaining insight into the political contest between state and non-state actors and how it contributes to local state capacity. Additionally, it allows us to understand how local state capacity relates to the broader, country-wide image of the "failed" state.

In order to systematically gather evidence of the local governance landscape, we designed surveys that assess multiple dimensions of state capacity for both government and household respondents. These dimensions included the availability of state services, personnel characteristics, bureaucratic structure, collective action, and attitudes towards governance, as well as outcome measures of public goods and economic development. During the summer of 2022, our team of researchers from Marakuja Kivu Research conducted surveys of 1,072 households and 532 local leaders in 134 localities (67 towns and 67 large villages) in the provinces of North and South Kivu, Kasai, and Kasai Central. In addition to the locality, government agent, and household surveys, we also assessed attitudes towards governance through a behavioral game, consisting of a series of standard public goods games augmented with real audio messages from authority figures. We also collected all available administrative and financial records from each locality, as well as qualitative reports on local governance from our enumerators.

Our data reveals a nuanced picture of local governance in the DRC that challenges traditional assumptions. Contrary to the commonly held perception of a weak and failed state, our results show that the Congolese state has a significant presence in the rural localities surveyed and demonstrates a high level of administrative capacity. Our findings document the presence of various government agents across localities, who perform a variety of state functions and exhibit high levels of administrative proficiency. Additionally, we observed the existence of government financial paper records, marriage statistics, and other basic demographic records. Despite the recent construction of public goods, the level of public service provision remains insufficient. These findings offer important insights into the local state capacity and governance dynamics.

Our study further examines the organization of local governance. By asking government agents about the relationships among superiors and subordinates, as well as their priorities and understanding of the decentralization process, we observed that village administration tends to be less complex and hierarchical compared to town administration. Village heads exhibit a stronger connection to the internal administration, however, they often lack links to higher-level

state governments. On the other hand, towns possess a more diverse array of connections and appointment patterns to the central, provincial, territorial, sectoral, and even traditional governments, which explains the less independence in comparison to villages where the village heads appoint a significant portion of their agents directly.

Finally, our data uncover three critical challenges that face local governance in rural localities in the DRC. Firstly, there is a notable absence of democratic accountability. The majority of local leaders are not elected but rather appointed by traditional or provincial leaders. Furthermore, a considerable number of government agents hold their positions due to familial connections, and have appointed family members to positions as well. Despite leaders dedicating a significant portion of their time to engaging with community members, there is a disconnect between citizens' preferences for public goods and those of their leaders.

Secondly, corruption is prevalent in the local governance landscape. Both government agents and citizens report widespread corruption and government agents admit to engaging in corrupt practices themselves. It is estimated that government agents earn more in bribes than in their official salaries. This pattern is likely to persist due to the fact that only half of the agents surveyed receive an official salary.

Thirdly, our findings indicate a severe shortage of financing in towns and villages. Leaders lack the resources to significantly expand the state and revenue and expenditure across localities are minimal. In predominantly agricultural settings, citizens have limited additional income that can be mobilized by government agents, even with their administrative capacity and the bribes they already pay. This highlights how corruption may be crowding out legitimate resource generation.

Additionally, it is noteworthy to mention that despite the challenges posed by the lack of democratic accountability and widespread corruption, citizens remain active and engaged. They report high levels of participation in public works and display a willingness to contribute to public goods, as evident in their responses in the behavioral games. Our qualitative reports from enumerators further reinforce this observation, highlighting that citizens are eager to participate and contribute once the governance challenges have been addressed. These findings offer a glimmer of hope and suggest that there is a strong foundation to build upon in promoting better governance and improving local state capacity.

Our examination of the local governance in the Democratic Republic of the Congo (DRC) reveals not a "failed state" but a state that is present but limited in its capabilities. Despite facing challenges with individual incentives and collective resources for public projects, the bureaucracy comprises personnel who engage in developmental interventions. This administrative capacity

and the organizational architecture form an infrastructural foundation of a working state. Although this seems innocuous, this foundation is precarious and vulnerable to aspects of state motives.¹ On the one hand, the abundance of paper records and population statistics demonstrates rudimentary, yet noteworthy, administrative capacity of the state, whose record-keeping can be used to increase the returns of the state for collective interest. On the other hand, in an environment where leaders are appointed, lack of democratic accountability makes "legibility" (James Scott, 1999) easier to be used against the collective interest and deepen corruption.

Similar predisposition can be seen in the organizational structure of town bureaucracies. The appointment of local leaders by upper-level governments can foster the flow of innovative practices from the central government, particularly in the context of the DRC where fiscal resources are engrossed in Kinshasa and mining-heavy provinces.² However, this interconnectivity can also be detrimental, especially if the upper-level government is corrupt and seeks to retain control over local leaders and citizens. The hierarchy and labor specialization in towns help to eliminate redundant tasks, but it also highlights the need for effective communication and follow-up processes. We acknowledge the significance of this organizational heterogeneity in the context of Congolese decentralization reform, particularly as town agents transition away from traditional leadership structures, leading to an increased competition for tax revenues between the state government and traditional chiefs.

Our research aligns with the literature on the inputs of state capacity, as discussed in works by Francis Fukuyama (2013) and Elissa Berwick and Fotini Christia (2018), and provides further evidence for the concept of state capacity as measured through extractive (taxation), coercive (military), and administrative (bureaucratic) capacities, as advanced by Jonathan K Hanson and Rachel Sigman (2021). We hope to use our findings to contribute to the current discourse surrounding state-building in contexts of limited statehood (Thomas Risse and Eric Stollenwerk, 2018). As recent literature has focused on the role of armed governance in providing public goods in such areas (Raúl Sánchez De La Sierra, 2020, Christopher Blattman, Gustavo Duncan, Benjamin Lessing and Santiago Tobón, 2021), our research expands the understanding of state-building by

¹This infrastructural capacity is one aspect of Mann (1984)'s "infrastructural power" as referenced in the earlier paragraph. The capacity to influence civil society to implement political decisions, it comprises other foundational aspects such as centrally-organized services that are carried out through a division of labor, literacy of population, creation of systems of currency to facilitate the exchange of goods, supply of effective systems of communication and transportation.

²Pierre Englebert and Emmanuel Kasongo Mungongo (2016) reported that top three revenue-contributing provinces of Katanga, Kinshasa, and Bas-Congo also enjoy the largest amount of "retrocession" or profit-sharing funds to their provinces. Additionally since the decentralization reform which constitutionally mandated 40% of these provincial "retrocession" funds from the central government to be further downstreamed to the lower-level decentralized entities, only 3.1% of funds were on average transferred in 2011. This suggested stratified, highly skewed revenue mobilization.

exploring the interaction between the early state and traditional governance. This interaction sheds light on the contractual process and the reciprocal relationship between the state and society. Specifically, our evidence highlights the significance of the early interaction between the state and traditional leaders in shaping the future organization of power and the capacity of the early state, providing a deeper understanding of this relationship.

As the state expands its reach and delegates its power, it often encounters communities with existing forms of governance institutions. In many African countries, traditional chiefs are such a local governance institution that holds authority independent of, and sometimes predating, the state. States are faced with a crucial decision, whether to replace traditional leaders and institutions with state administrators or to integrate them into the state structure (Catherine Boone, 2014, Soeren J Henn, 2022, Soeren J. Henn, Gauthier Marchais, Christian M Mugaruka and Raúl Sánchez de la Sierra, 2023). Our research explores the reaction of traditional leaders to the state's announcement of replacement and how state leaders navigate building their authority while the previous leaders may still be present. In large towns in the Democratic Republic of Congo, chiefs can play a vital role in state-building (Pablo Balán, Augustin Bergeron, Gabriel Tourek and Jonathan L. Weigel, 2022). We emphasize the potential for optimizing the existing infrastructural capacity that is present even in rural areas as decentralization policies are implemented.

The present study provides valuable insights into the governance dynamics in large villages and small towns. This research fills an important gap in the literature by shedding light on the unique characteristics of governance in smaller towns. The importance of this research is further emphasized by the fact that smaller towns play a critical role in the rural-urban migration chain (Bert Ingelaere, Luc Christiaensen, Joachim De Weerdt and Ravi Kanbur, 2018, Cristina Udelsmann Rodrigues, 2022), as well as in contexts of mining booms (Joshua Kirshner and Marcus Power, 2015) and insecurity (Timothy Raeymaekers, Ken Menkhaus and Koen Vlassenroot, 2008), both of which are prevalent in Eastern DRC. Further research is needed in this area, given the differences between smaller towns and larger cities with regards to the provision of public goods (Alison E. Post and Nicholas Kuipers, 2022), as well as the important role that emerging towns can play in these types of contexts (Tanu Kumar and Matthew Stenberg, 2022).

Finally, our findings contribute to the discourse surrounding decentralization reform in a context of limited state capacity (Englebert and Mungongo, 2016). The implementation of governance reforms, including decentralization, can be challenging for states with limited capacity. However, decentralization, in the right institutional environment, has the potential to bring about significant benefits of increased accountability and reduced corruption (Pranab Bardhan, 2002).

Given the imperfect institutional environment in which this policy is implemented, it is essential to approach decentralization reform with caution in the context of limited state capacity.

2. Decentralization Policy and Traditional Governance in the DRC

The Democratic Republic of the Congo (DRC) has experienced various systems of local governance since the colonial period. In the previous 20 years the country has embarked on an ambitious decentralization program and has established a system where both traditional and state officials are in charge of separate local jurisdiction. This makes the DRC an especially informative context to study decentralization and the trade-offs between traditional and state governance.

Characteristics of the country and the limited capacities of the central state make the DRC a suitable, yet vulnerable, setting for decentralization. The DRC covers an enormous geographical area (2.345 million km², more than four times the size of France, the largest country in the European Union). The capital, Kinshasa, is located in the far west of the country; vast parts of the country are covered with rain forest; and the road network is poor, making over-land travel impractical. The country also boasts an incredible heterogeneity in its population (e.g., over 200 spoken languages). Regional, cultural, linguistic, and religious differences lead to different preferences for public good and governance that are difficult to grant by a central actor. Additionally, the DRC has been plagued by extremely low levels of governance capacity making governing effectively from the center implausible. These realities, along with political negotiations following the Second Congo Wars, have led to the establishment of an ambitious decentralization reform post 2005. It is important to note that the weakness of the Congolese state also affects the implementation of these reforms, a fact to which we will return to in this paper.

Decentralization in the DRC begins with the provinces, the highest level of decentralized administrative unit. Governed by elected governors and provincial legislatures, the 26 provinces raise their own revenue and implement public goods. Below the province are territories (*territoires*) and cities (*villes*) governed by appointed territorial administrator (*administrateur de territoire*) and mayors (*mairies*), respectively. The local governance we focus on in this paper is found within the territories. Territories consist of several chiefdoms (*chefferies*) which are also decentralized units, meaning they can raise their own revenue and decide over the implementation of public goods. Chiefdoms are governed by traditional rulers, kings (*mwami* sing., *bwami* pl. in the Kivus; *mulopwe* sing., *balopwe* pl. in the Kasais)³, and have two entities: an executive college composed of the chief and aldermen appointed directly by the chief; and a chefferie council that is directly

³Some chiefdoms are instead called a sector (secteur) which is governed by a sector chief (chef de secteur).

elected by the public. The traditional leaders of the chiefdoms have enjoyed privileges similar to mayors since 2008. For instance, traditional leaders receive service passports, social advantages, and other official symbols. Chiefdoms themselves are further divided into groupements and villages governed by traditional groupement chiefs and village chiefs (*chefs de village*). These (largely) hereditary leaders act as agents of the chiefdom, are in charge of land allocation, provide justice in non-criminal cases, levy taxes, and organize the provision of public goods. They form part of a traditional governance system that has a long history in the DRC and has had a changing relationship with the state.

In the colonial era, traditional chiefs often played an intermediary role between their communities and the colonial power. During the post-colonial rule of Mobutu Sese Seko their de jure influence generally declined, but weakness of the central state allowed many traditional leaders to retain de facto influence. Since the fall of the Mobutu regime and the ascension of Laurent-Desiré and Joseph Kabila, traditional governance has regained prominence. Traditional governance is now an established part of the state structure and recognized in the constitution. With some exceptions, specifically in Kasai, traditional leaders and Joseph Kabila (president from 2001 to 2019) have grown to rely on each other to stay in power. Traditional rulers began acting as intermediaries for the new political parties, and gained influence at high levels of government. For example, in Maniema, the governor created a "council of sages" composed of traditional leaders to help ease ethnic tensions, but in reality this council began acting as a shadow government that replaced the official administration. At the national level, traditional leaders are overseen by the Ministry of the Interior, although traditional leaders have been pushing for a Ministry of Customary Affairs to be created. In areas governed by customary rule, traditional leadership tends to most of the day-to-day needs, although the central government does provide some socio-economic services (e.g., schools, hospitals, etc.) and security (military and police). When the central government wants to operate in areas under customary rule, they generally have to negotiate with the traditional leaders for access.

However, not all local governance is purview of traditional authority, some localities fall under the jurisdiction of the state. Most notably, towns (*cités*) have since the colonial period been assigned to state governance. Towns are governed by state administrators (*bourgmestre*) appointed by provincial and central governments.⁴ They are able to levy taxes and can decide on the use of some of the funds for public good provision.

As a result, some localities—villages—fall under traditional governance while others—towns—

⁴The current constitution requires these administrators to be elected, but no such election has yet taken place.

fall under state governance. This paper provides empirical evidence to compare the two. Importantly for the analysis in this paper, between 2008 and 2012, the Congolese government reorganized the decentralization system and with it the distinction between villages and towns (now called *communes*). Every locality with a population of at least 20,000 was designated as a town and thus assigned state governance⁵. In the process, many localities that were previously designated as villages were now designated as towns. We focus on such localities that were villages before 2008–12 and became towns and compare them to localities that were also villages before 2008–12 but whose population fell short of the 20,000 threshold and therefore remained villages and under traditional governance.

Ultimately the implementation of the decentralization reform has been extremely lacking and many towns have not yet been assigned an administrator. Even ten years after the reform, most towns are not yet "operational towns," meaning they don't have a state administrator yet, and are missing other structures required for a functioning town. The data we present below confirms this. These "would-be" towns often inherit the administrative structure of villages because they are still within the area of authority of the traditional chief. Furthermore, qualitative interviews with central government officials indicate that Kinshasa's fiscal interest determines the operationability of a town. We therefore interpret the treatment of being designated a town in 2012 as a *signal* of future state involvement rather than necessarily actual state involvement.

3. Data Collection

Data was collected from 134 localities in 4 provinces of the DRC (covering 279,295 km², or slightly larger than the United Kingdom). Sample selection included the universe of known 67 communes or "towns" (state-governed) in the four provinces, balanced with 68 agglomerations or "villages" (traditionally governed). The distribution of locality in each province is presented in Table I below. Figure 1 presents a map with the location of each locality in our sample.

Data collection took place between May and August 2022. Figure A1 in the Appendix shows a detailed timeline of data collection activities. Congolese researchers from the research organization Marakuja Kivu Research visited each locality in teams of two.

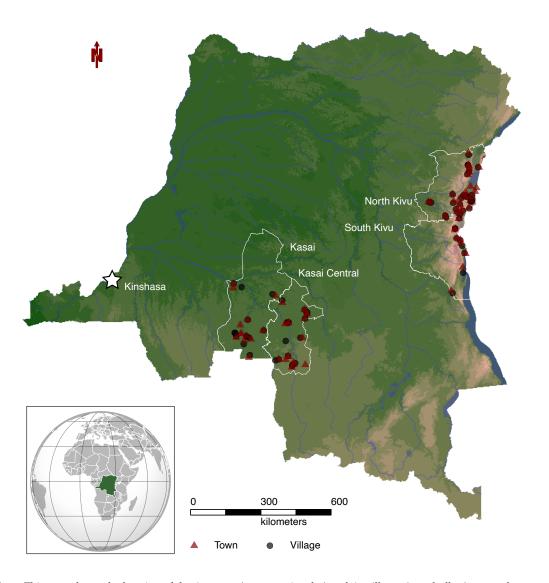
In each locality, 8 household heads were selected at random to participate in our survey. To increase representativeness, each team of two enumerators was specifically instructed to divide themselves further into two distinct parts of the locality, one to an area with densest population,

^{5&}quot;Loi organique n° 08/016 du 07 octobre 2008 portant composition, organisation et fonctionnement des Entités Territoriales Décentralisées et leurs rapports avec l'Etat et les Provinces"

Table I: Localities surveyed

Province	Number of	Number of
	towns	villages
North Kivu	26	26
South Kivu	10	10
Kasai	14	14
Kasai Central	16	16
Total	67	67

Figure 1: Map of sample localities



Notes: This map shows the location of the 67 towns (maroon triangles) and 67 villages (grey bullets) across the 4 provinces of North Kivu, South Kivu, Kasai, and Kasai Central in the DRC. The capital city of Kinshasa and the continent of Africa at inset are added for geographic elaboration.

and another to that with least dense population. Within these population density strata, each enumerator conducted a simple random sampling of 4 households in the locality, following every fifth house after a public point of interest. Enumerators would then return as a team and interview 4 community leaders to complete in the survey. These 4 leaders comprise the locality head (bourgmestre in the case of town or chief in the case of village/agglomeration), their administration secretary, their treasurer, and the head of a sub-administration. The 4 leaders in each locality also provided information for a locality survey, one per locality. At the end of data collection, we collected 1072 household surveys, 536 leader surveys, and 134 locality surveys.

Additionally, in each locality, enumerators asked local leaders whether they have organizational charts of the local bureaucracies and financial documents of their budgeting process. We then asked if we could take pictures of these documents or if they could draw their organizational chart if a printed version did not exist. Appendix Figure A2 show both examples.

Furthermore, with each household head the enumerators were trained to conduct a series of simple behavioral games. These games were played with real audio messages from the relevant locality leader and real money. Household heads were asked to contribute real money in public pot in order for us to infer the legitimacy of different leadership, and to keep the remainder of the money in their own pocket. At the end of each series, one game was realized at random: household heads obtained the remainder of their own contribution, and the contribution was paid out to the locality leaders. Appendix Figure A3 shows the template of the transcribed audio message to be read by authority figures in relevant local languages, and then recorded and played before households participate in the behavioral game.

The use of public goods games to assess the legitimacy of authority leaders is rooted in the concept of legitimacy. Legitimacy is a fundamental aspect of politics and development that refers to citizens' belief in and justification of the rightfulness of rule (Tom R Tyler, 2006, Margaret Levi, Audrey Sacks and Tom Tyler, 2009). Despite its significance, measuring legitimacy is challenging because it is that which makes citizens obey an authority. It involves both *subjective beliefs in* and *the justification of* the rightfulness of rule.⁶ Recent developments of lab experiments in political

⁶Legitimacy, defined descriptively, is the subjective belief about political authority and obligations. Max Weber (1964) stresses the importance of legitimacy, because belief in some social configuration produces social regularities more stable than those resulted from self-interest or from mere rule following. Legitimacy, defined normatively, is the justification of political authority. Since legitimacy legitimizes authority, Allen Buchanan (2002) argues that the justification process must appeal to a moralized epistemology. Joseph Raz (1985) argues that justifying legitimacy needs two theses: (1) political authority must enable subjects to better comply with the reasons that apply to them if they accept the authority's rule as authoritatively binding, rather than by trying to follow the reasons which apply to them directly ("normal justification thesis"), i.e. an authority generates a duty to be obeyed, (2) rule should be based on reasons which already independently apply to and are relevant to the subjects when followed ("dependence thesis"). Purely descriptive or normative legitimacy is criticized for its limitation to the requirement of the other.

science have attempted to measure legitimacy through behavioral games that allow participants to act as authorities and make decisions with randomized payoffs and costs of compliance (Eric S Dickson, Sanford C Gordon and Gregory A Huber, 2015, 2022). Because we want to measure the legitimacy of *real* authority figures, we improve upon Robert Blair (2018)'s conceptualization of public good games with randomized, real authority voices.

After finishing data collection we asked enumerators to write a short report (2-3 pages) on their experience and perception of decentralization in the field and to contrast their experience of state governance vs. traditional governance. This allowed enumerators to express additional insights that did not fit into the standard survey format. The authors of the two best reports received a bonus payment.

4. Descriptive Evidence

A. Local Governance in the DRC at a Glance: A Present but Limited State

We begin by presenting overall characteristics of state presence in the rural towns and large villages in our sample. Our data show a state that is remarkably present across localities and shows willingness for developmental activities, but is ultimately shackled by structural problems and limited resources.

Table II provides summary statistics of the 134 localities and 532 leaders in our sample. Panel A shows locality characteristics. We successfully sampled localities around the decentralization cutoff of 20,000 inhabitants. The localities in our sample have an average population in 2021 of almost 26,000 with the median at 21,545. In line with the decentralization rule towns in our sample are larger than villages with an average population of almost 34,000 compared to 18,000.

These localities are still predominantly rural with on average over 70% of their economic activity coming from agriculture ranging from 28% to 95%. Most fields lie outside of the locality center, averaging at almost half a hectare per person. The average daily wage for manual work is \$1.59 with the median being \$1.11. Figure A4 in the Appendix further shows the distribution of non agricultural activities.

A sizeable presence of the state is evident across our localities. Most localities have some state personnel stationed in them and the median number of state government agents being present is 18. Three quarters of localities have police officers, with virtually all towns having police present while slightly more than half of villages do. Furthermore, our sample of agents surveyed

⁷Table A₁ in the appendix shows the data separately for towns and villages.

Table II: Summary statistics of infrastructural state capacity

Statistic	Mean (1)	St. Dev. (2)	Min (3)	Q1 (4)	Median (5)	Q3 (6)	Max (7)
Panel A	: Locality	Characteris	tics (N =	134)			
Population							
in 2005	14,995	(10,880)	1,000	7,134	13,000	20,000	66,923
in 2012	19,723	(12,159)	3,704	11,494	16,851	23,519	68,000
in 2021	25,937	(16,713)	6,000	14,646	21,545	28,969	114,000
# Households	5,825	(5,484)	149	2,200	4,500	7,488	35,000
Agriculture (% of households)	74.6	(14.4)	28.2	64.2	77.9	86.0	95.2
Agricultural land (m ² per capita)	4,870	(9,964)	12	100	375	4,469	52,000
Daily manual wage (\$)	1.59	(1.86)	0.34	0.75	1.11	1.52	14.66
Probability of existence of							
Bourgmestre	0.21	(0.41)	0	0	0	0	1
State Personnel	0.92	(0.28)	0	1	1	1	1
Military	0.45	(0.50)	0	0	0	1	1
Police	0.75	(0.43)	0	1	1	1	1
Number of state personnel	53	(90)	0	5	18	67	596
Number of police agents, if exist	10	(9)	2	5	6	10	63
# Schools per 1,000 people	0.64	(0.76)	0.08	0.32	0.48	0.72	7.63
# Health centers per 1,000 people	0.18	(0.14)	0.00	0.08	0.14	0.22	0.87
# Markets per 1,000 people	0.04	(0.08)	0.00	0.00	0.03	0.06	0.87
# Weddings yearly per 1,000 people	1.13	(1.33)	0.00	0.23	0.59	1.49	7.10
# Bars per 1,000 people	0.40	(0.51)	0.00	0.10	0.25	0.48	2.91
Personnel Profile	0.06	(0.20)	0	1	1	1	1
Male	0.96	(0.20)	0	1	1	1	1
Age	49.82	(11.72)	14	42	50	58	86
Married	0.96	(0.19)	0	1	1	1	1
Years of education	10.76	(3.21)	0	9	12	12	17
At least some college education	0.19	(0.39)	0	0	0	0	1
Party-affiliated	0.26	(0.44)	0	0	0	1	1
Tshisekedi coalition, if party-affiliated	0.42	(0.50)	0	0	0	1	1
Part of ethnic majority in locality	0.73	(0.44)	0	0	1	1	1
Born in same territory they govern	0.93	(0.25)	0	1	1	1	1
Work and employment characteristics							
Finite time horizon	0.80	(0.40)	0	1	1	1	1
Work hour/week	31.06	(13.12)	0	24	30	40	92
Time proportion on tasks (%)							
Administrative	28.10	(19.30)	0	15	25	40	100
Internal meeting	11.22	(6.52)	0	7	10	15	50
Leadership	8.51	(5.80)	0	5	10	10	60
Community meeting	24.23	(16.33)	0	15	20	30	80
Public site visit	9.00	(7.03)	0	5	10	15	40
Public works	6.85	(5.77)	0	2	5	10	30
Non-public administration	9.44	(10.66)	0	3	5	10	85
Labor incentives							
Received salary	0.48	(0.50)	0	0	0	1	1
Annual salary if received (\$, 2021)	543	(558)	3	102	362	862	3,041
Promotion incentives exist	0.15	(0.28)	0	0	0	0	1
		(0.13)	0	0	0	0	1
Training exists for underperformers	0.04	(0.13)	U	U	U	U	_

Notes: This table presents the summary statistics (mean, standard deviation, minimum, first quartile, median, third quartile, and maximum) of the social, economic, and political organization of our sample localities. Panel A displays the characteristics of the 134 localities in our sample, towns and villages combined. Panel B displays the characteristics of 532 government agents in our sample localities. Responses for Panel A are derived from a collective survey of the locality, for which 4 members of locality leaders provided one collective answer for each locality. Responses for Panel B are derived from an individual survey with each of the 4 members of the locality leaders. Bourgmestre is town leader, selected per the 2012 Decentralization Policy to head the administration of a town. State personnel comprises government bureaucrats appointed by the central, provincial, or territorial governments (level-0, level-II). Tshisekedi-coalition is authors' recoding of responses to the political party to which government respondents belong, equalling one if UDP's (Union for Democracy and Social Progress, Union pour la Démocratie et le Progrès Social in French) or UNIS (Union for the Congolese Nation, Union pour la nation congolaise in French). Currency responses were recorded in Congolese Francs and presented in US Dollars (1 USD = 1,989 Congolese Francs). Collaborative culture is the average of three questions in 1-10 scale normalized to [0,1] of how much agents collaborate with locality heads, how afraid agents ask questions to illuminate unclear directives (reverse scale), and how afraid agents tell news that locality heads might not want to hear (reverse scale).

showed that in addition to the chief or mayor in charge, each locality had an administrative and a finance secretary, illustrating bureaucratic sophistication. The agents we surveyed also demonstrated a high degree of administrative capacity in local governance. In contrast to the view of the Congolese state as incapable, we found evidence of a wealth of local records being kept, from detailed financial documents and organizational, to complete household rosters of the localities. 55% of sample localities (36 villages and 38 towns spread proportionally across all four provinces) have accounting of public tax and expenses. This administrative capacity is often seen as a building block for a developmental state (Scott, 1999) because it can allow the state to mobilize local resources for development projects, yet it could also be misused by a predatory state or predatory officials to extract resources for private gain.

Public good coverage per capita does not speak for a developmental state. Public good coverage is low, even by developing country standards. Localities feature 0.64 schools per 1,000 people⁸ and 0.19 health centers.⁹ Figure A6 in the Appendix shows the number and quality of public goods by type across villages and towns.

However, the low public good provision is not due to a lack of recent activity by authorities which speaks to some developmental ambitions by the local state. Figure 2 shows the construction of public goods in our sample localities in the last 20 years. One can observe a flurry of new construction across all major public good categories. An average locality in our sample has seen 3.9 new schools, 2.7 new health centers, 1.6 new markets and 2.6 new roads constructed in the previous 20 years. Figure A7 in the Appendix shows a public good construction by type separately for towns and villages.

Panel B of Table II presents government agent characteristics. Chiefs, mayors, and their administrative and financial secretaries are almost exclusively male, on average 50 years old and not affiliated to a political party. At least 70% belong to the ethnic majority and the vast majority comes from the same district as the locality they are in charge of.

Government agents self-report to work about 30 hours per week and spent the majority of that time on administrative tasks (28%) and community meetings (24%). The rest of their time is almost equally divided between internal meetings, leadership, public site visits, public works and

 $^{^8}$ A seminal study which investigated the effects of school construction on years of education and wages recorded the construction of 1.98 schools per 1000 children (extensive margin, 505 children per school) in 1973 in Indonesia (Esther Duflo, 2001). Using a contemporary figure and a neighboring developing country of Uganda in 2015, there are 1.6 schools 1000 people (Lee Crawfurd, 2017). Simple arithmetic using our sample household reporting 4.8 children on average per household in an average locality of 25,937 residents with 5,825 households, the 0.64 schools per 1,000 people translate to 4.8×5825 children per $0.64 \times 25937/1000$ schools implies an oversubscribed school serving 1,684 children per school. The US has about 100 children per school.

 $^{^9}$ This number is very likely below the safe guideline of recommended 1 hospital bed per 1000 people as the majority health centers reported by government respondents were clinics or health posts.

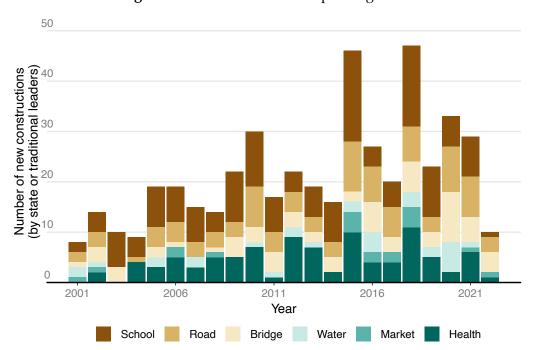


Figure 2: New construction of public goods

Notes: This stacked bar chart plots the number of new construction of public goods, by type of goods, in each year. For each category of public goods, described in the legend and color-coded in the chart, government respondents answer the years of construction and the institutions responsible for constructing them. We include only construction by state governments or traditional leaders and exclude those built by NGO or churches. School is any type of schools ranging from kindergarten to university. Water is water and sanitation infrastructure, such as toilets, pipes, and water treatment plans. Market is wet market selling food products and small appliances. Health is any type of center believed to improve health and well-being, ranging from hospital and clinics to health posts and traditional healing services.

non-public administration. Figure A8 in the Appendix visualizes the work allocation separately by the agents' role and whether they are in a town or village. The findings reveal a fuzzy division of labor within the administration, with some government agents specializing in specific tasks but are still responsible for other tasks. This suggests a relatively simple administrative specialization.

Only half of the government agents in our sample receive a salary and for those that receive a salary the average yearly salary is \$543 the median being \$362—about \$1 per day. Furthermore agents report little promotion incentives or opportunities for training, but the majority reports a collaborative work culture.

The findings of our study on the locality characteristics and government agents is a perhaps surprising picture of a present state in large villages and towns in rural Congo. A typical locality has an assortment of governance personnel present who are quite busy with an array of tasks and demonstrate considerable administrative capacity, *even* as only half of these agents receive a salary and there are limited opportunities for professional development. Further, the state has undertaken a significant amount of public good provision, yet the service provided are still inadequate to serve all of the population to appropriate standards.

B. Organization and Structure of Traditional and State Governance

We now take a more detailed look at the organization of the state in our sample localities. Table III presents details on the bureaucracy and its organization. Here we separate the data by villages and towns and show the mean for leaders in towns and villages separately as well as the results of a t-test on the difference in means. This gives us a more detailed look into the traditional and state governance structure.

First, we look at the number of leaders in each locality over time and their tenure. Localities have on average 1.5–2 traditional chiefs who stay in power 12 to 17 years¹⁰, and more than 60% of them come from the same ethnicity as the majority of the localities' population. Village chiefs and higher level groupement chiefs are largely similar on these dimensions and there is no significant difference across towns and villages meaning that the traditional structure itself was largely unaffected by recent decentralization in towns.

Mayors of recently decentralized units, however, are quite different than traditional chiefs. Their average tenure is lower, though this is partly due to the more recent installation of state authority in these localities. They are also less likely to come from the majority ethnicity at only 40%. Furthermore, village heads in our sample were all male, whereas 6% of mayors were female. The differential patterns on education and party affiliation were observed more starkly in the heads of locality, in which town leaders have 1.6 years more education than village leaders (baseline of 10 years), and none of the village leaders being affiliated with the President's political party (as compared to the rate of 1 in 2 among politically-affiliated town leaders).

Locality leaders are rarely elected, even though the Congolese Constitution requires mayoral election. Instead, village heads are primarily appointed by traditional leadership (73% of village heads in our sample), while mayors are appointed by the provincial government (41% of mayors in our sample) or the traditional leadership (36%). Again, we see the slow implementation of the decentralization reform having not yet completely displaced traditional influence, despite differences in reported principals in the state versus traditional governments. Village chiefs report a higher independence in the form of their ability to appoint agents (37% vs 8%).

Panel B measures the organizational complexity of the bureaucracy by looking at the flow of government information and communication across governments. One strong indicator of the cascading of central government mandate is knowledge of the decentralization policy. When asked about current decentralization reform, leaders show mixed levels of knowledge with only

¹⁰Note that this last number is truncated by the fact that many of these leaders are currently in power and their tenure is still growing.

Table III: Organizational complexity of town and village bureaucracies

	Town		Village		
	Mean	S.D.	Mean	S.D.	Significance
	(1)	(2)	(3)	(4)	(3)-(1)
Panel A: Personnel A	Appointn	nent			
Leader turnover					
# Chiefs, if any since 2005	2.05	(1.71)	1.66	(1.01)	
Chief tenure, years	12.9	(10.6)	15.7	(11.5)	
Chiefs part of ethnic majority	0.65	(0.48)	0.66	(0.48)	
# Groupement chiefs, if any since 2005	1.73	(1.25)	1.62	(0.77)	
Groupement chief tenure, years	17.4	(18.7)	16.8	(7.71)	
Groupement chiefs part of ethnic majority	0.62	(0.49)	0.59	(0.50)	
# Bourgmestres, if any since 2005	1.60	(0.91)			
Bourgmestre tenure, years	7.20	(5.80)			
Bourgmestres part of ethnic majority	0.39	(0.50)			
Selection mechanism					
Locality head is elected	0.14	(0.35)	0.04	(0.21)	*
Appointed by secteur	0.06	(0.24)	0.07	(0.26)	
Appointed by traditional chief	0.36	(0.48)	0.73	(0.45)	***
Appointed by governor	0.41	(0.50)	0.09	(0.29)	***
Number of reported principals	3.09	(1.49)	2.66	(1.34)	*
Principal = secteur	0.38	(0.52)	0.42	(0.56)	
Principal = traditional chief	0.27	(0.45)	0.35	(0.54)	
Principal = territoire	0.53	(0.50)	0.35	(0.48)	**
Principal = governor	0.32	(0.59)	0.09	(0.29)	***
Head's ability to appoint agents	0.08	(0.27)	0.37	(0.69)	***
Principals' influence on locality head	6.56	(1.93)	6.12	(1.82)	
Panel B: Flow of information	and con	nmunica	ation		
Knowledge of Decentralization Policy					
Knows which subnational units are part of "ETD"	0.49	(0.28)	0.49	(0.27)	
Knows functions of "ETD"	0.43	(0.24)	0.41	(0.23)	
Head of locality coordinated at least once per month					
with Provincial Government	0.48	(0.5)	0.36	(0.48)	***
with Territorial Government	0.76	(0.43)	0.66	(0.47)	**
with Traditional Government	0.73	(0.45)			
with Commune Government			0.53	(0.5)	
Locality agent communication with head					
for work, at least once per week	0.78	(0.33)	0.79	(0.31)	
for social purposes, at least once per week	0.50	(0.38)	0.56	(0.38)	
Network statistics of head of locality					
Degree	3.92	(2.11)	4.76	(1.96)	**
Eigenvector centrality	0.75	(0.34)	0.87	(0.26)	**
Closeness	0.12	(0.06)	0.14	(0.08)	**

Notes: This table presents the summary statistics (mean and standard deviation) of bureaucracy characteristics in towns and villages, as well as the statistical significance of the t-test difference in means between the two samples. Panel A describes the personnel appointment feature of the bureaucracy, and Panel B describes the flow of information from the central government and the communication structure with other governments. Groupement is a collection of villages, level-IV subnational unit, one below the traditional chief, towns, or "secteurs" which are rural districts that lack the characteristics of traditional leadership (level-III). Bourgmestres are town leaders. "FTD" is Decentralized Territorial Entity (Entité Territoriale Décentralisée), a subdivision of the territory (level-II) which obtained local autonomy due to the Decentralization Reform, which can be a large urban city ("ville"), a town ("commune"), traditional kingdom ("cheffreie"), or a non-traditional district ("secteur"). Four network statistics are reported of the head of the locality, based on the self-reported structure of their principals as well as on that reported by the three other government respondents in each locality. The network is drawn and the network measure of the head of locality is computed. "Degree" computes the average reported connection that the head locality has with other agents. "Eigenvector centrality" measures the influence of locality head, higher when head of locality is connected to agents which are also themselves more connected, and is shown to correlate with political selection and vote share (Cesi Cruz, Julien Labonne and Pablo Querubin, 2017) as well as diverse arrays of social and economic outcomes (Matthew O Jackson et al., 2008). "Closeness" is another measure of centrality of the locality head, the reciprocal average distance to all other reported nodes in each locality.

about half of responses correctly describing the composition and functions of the subnational units that are subject to the reform.

Leaders report regular but infrequent contact with higher levels of governance with town leaders being significantly more likely to have coordinated with the provincial or territorial government over the last month.

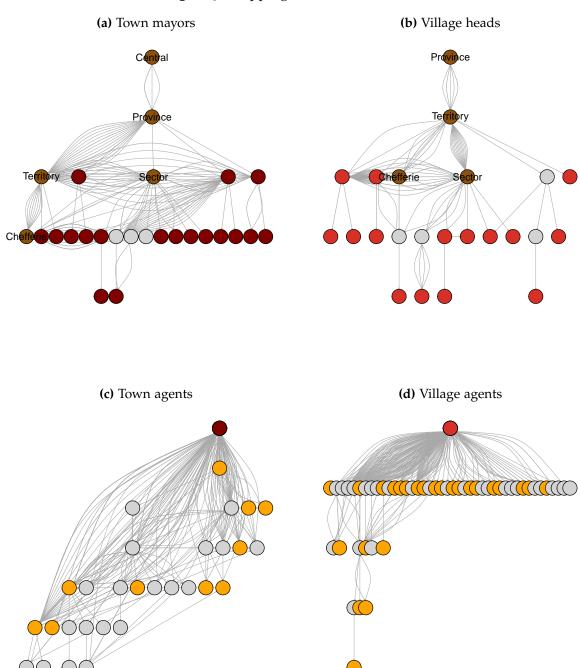
The network structure of locality heads can also reveal how important they are in transmitting information in their internal administration. Village heads are more connected to their agents and their principals, reporting on average 4.76 degrees of connection as opposed to 3.92 degrees for mayors. Furthermore village heads are more central, as measured by their eigenvector centrality and closeness, which indicate that they are have more connections to the network of administrators in their localities.

How does the larger network structure look like across all our sample localities? Figure 3 visualizes this superset of bureaucratic networks in our sample of 134 administrations. Each node, depicted in either maroon or red, represents the head of a locality of the same appointment type. The figure shows that village heads have more connections within their internal administration as shown in Panels A and B, however, they have limited connections with higher-level state governments. On the other hand, towns have a more diverse network than villages, with links to central, provincial, territorial, sectoral, and even traditional governments. This is reflected in the fact that town leaders assign greater influence to their superiors than village leaders do.

Panels C and D provide a closer examination of the internal administration of towns and villages. The diagrams depict the connections between the heads (maroon or red) and all unique agents of the bureaucracy who perform similar functions and have the same appointment type. Orange nodes represent agents appointed directly by the locality heads, while grey nodes represent those appointed by upper-level governments. The town administration reveals a high degree of hierarchy between its agents, while the village administration displays a simple bilateral authority structure between village heads and their directly appointed agents. Despite their simplicity, village heads enjoy more independence as they appoint many of their own agents.

The level of specialization within the administration is further analyzed in Figure A8. Our observation reveals a limited differentiation of tasks and responsibilities among the various functions of the bureaucracy. There is still a certain degree of overlap in responsibilities, with one personnel tasked with duties that are also performed by another function in government. This level of specialization contrasts with the complex, multi-functional bureaucracy seen in the central government. In rural villages, less than 30% of the government functions are considered to have

Figure 3: Mapping bureaucratic network



Notes: These network diagrams represent the Congolese bureaucratic administration in our sample of 134 localities. Panel A combines all self-reported bureaucratic networks of representative mayors (maroon), who answer questions about their principals (brown). Each edge connects two leaders, who is distinguished from another by his function and who appointed him. Multiple lines connecting the same two nodes indicates repeated reports of principal structure. Similarly, panel B draws the network for all village heads in the sample (red) who answer the same questions about their principals (brown). Gray nodes are other government appointees. Panels C and D draw the network for the agents of town and village governments. Similar to Panels A and B, each node of the network represents bureaucrats of the same function and appointment. Orange nodes represent government agents who are appointed directly by the town or village agents, whereas gray nodes again represent other government appointees (of the higher-level governments).

a simple, multi-functional structure, which includes judiciary, public works, police, and military. Meanwhile, the complexity of town governments is slightly higher, at 43%. The likelihood of having dedicated offices for each function is even lower, with rates of 0.21 for villages and 0.35 for towns.

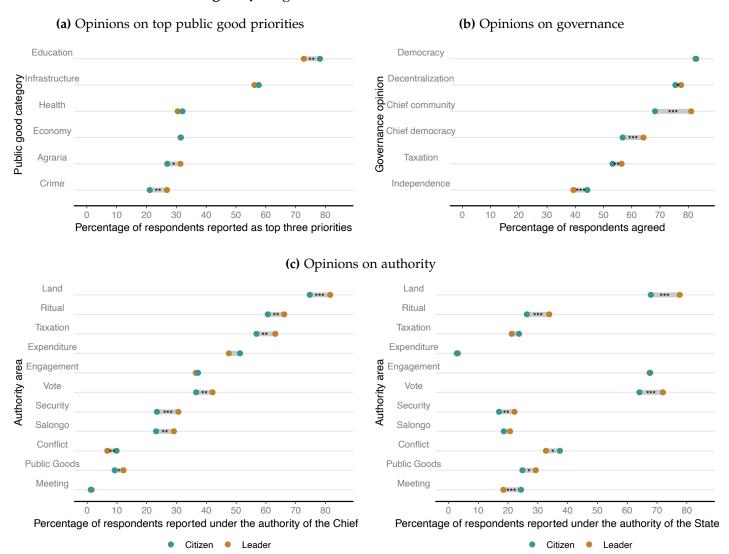
What picture of local governance organization emerges from these tables and figures? The analysis of local governance organization reveals a simple bureaucratic structure in both towns and villages, as seen from the appointment and communication connections. However, a distinction between traditional and state governance is noticeable. State leaders are part of a larger network connected to higher levels of government and have less independence in decision-making. In contrast, traditional leaders are more isolated and autonomous. Both settings have their advantages and disadvantages. Being more independent and insular can allow traditional governance actors to enact local reforms and innovate without interference from higher levels of authority. On the other hand, oversight by higher level could limit excesses and mismanagement, especially when locality heads are connected to the upper-level governments above and indirectly below through the latter's appointed agents. The connectedness of state officials can help them implement complex reforms that require higher level support but could limit their ability to do the right thing when superiors are corrupt.

C. Challenges to Local Governance

We now turn to the challenges of local governance that emerge from our data.

First, there is an apparent lack in democratic accountability. Virtually none of the local leaders are elected but instead selected by traditional or provincial leaders. This is despite the constitution mandating the election of commune mayors. Furthermore a significant portion of government agents received their position from a family member and many appointed family members to jobs. While leaders do spend over a quarter of their time meeting community members there seems to be a disconnect between citizens' preferences over public goods and their leaders'. Figure 4 compares the opinions of citizens to those of their leaders. Citizens see education as a higher priority than their leaders while leaders have a higher priority for combating crime and improving agriculture. If democratic accountability was functioning well, we would see smaller differences in priorities between leaders and citizens. Citizens and leaders also have significantly different views on overall governance (Panel B) and who should be in charge of various public services (Panel C) further documenting a disconnect. This lack of democratic accountability is especially concerning given the high levels of insularity by some local leaders—especially village chiefs—

Figure 4: Alignment between citizens and leaders



Notes: This figure shows the alignment between citizens (household respondents) and leaders (government respondents) on which public goods they consider top priorities (Panel A), on attitudes about governance (Panel B), and on the areas of authority of traditional leaders and the state government. The x-axis in each panel is the percentage of respondents. In Panel A, a list of priorities are read aloud to respondents, from which they choose three that they consider most needed fixing in their localities. In Panel B, respondents were asked series of questions on their attitude about whether different dimensions on governance are good in Likert scale. In Panel C, authority areas are categorized into attributing land, leading ritual/spritual activities, collecting taxes, spending on public expenditure, engaging citizens in local discussions, influencing votes in elections, coordinating salongo (weekend public cooperation to achieve public tasks, e.g. road-cleaning; picket), maintaining security from external attacks, resolving local disputes and conflict, constructing and maintaining the use of public goods, discussing problems.

Table IV: Summary Statistics of Challenges to Local Governance

Statistic	Mean (1)	St. Dev. (2)	Min (3)	Q1 (4)	Median (5)	Q3 (6)	Max (7)
Panel A: Challenges fro	m survey	of governn	nent age	ents (N =	532)		
Malfeasance							
Nepotism							
Received job from family members	0.68	(0.47)	0	0	1	1	1
Gave job to family members	0.64	(0.48)	0	0	1	1	1
Perception of corruption (bribe-taking)							
Frequency reported for other agents [0-1]	0.43	(0.25)	0	0.25	0.42	0.58	1
Self would do the same = 1	0.87	(0.23)	0	0.75	1	1	1
Bribe amount, per demand (\$)	27.71	(31.58)	0	2.35	13.74	45.83	176.92
Enough money for top priorities	0.05	(0.17)	0	0	0	0	1
Satisfied with govt. help for top priorities	0.18	(0.22)	0	0	0.11	0.33	1
Panel B: Challenge	es reporte	d by housel	nolds (N	(= 1072)			
Number of tax payments	0.32	(0.56)	0	0	0	1	4
Tax payment amount in 2021 (\$), if paid tax	56.95	(79.92)	0.20	13.33	30.18	62.86	402.34
Amount paid in other fees/bribes in 2021 (\$)	22.01	(30.84)	0.50	4.52	9.80	22.62	125.67
Bribed other agents past month	0.19	(0.39)	0	0	0	0	1
		` /				O	1
Panel C: Aggregate financir	ng challen	ges in locali	ity (N =	74, Miss	ing = 60)		
Total fiscal revenue in 2021 (\$)	10,331	(24,966)	0.25	447	1,995	9,805	163,772
from land and property tax	3,110	(13,833)	0.00	78	352	1,276	116,989
from sales and duty tax	2,414	(4,223)	0.75	73	475	2,510	21,362
from manufacturing establishments	1,365	(3,494)	0.00	51	299	1,110	27,937
from retail establishments	1,380	(2,546)	0.01	62	255	1,603	14,547
from service establishments	497	(1,566)	2.51	45	151	337	11,561
from central government transfer	301	(489)	0.28	6	45	461	1,508
from provincial government transfer	158	(323)	0.01	23	50	102	1,508
Total fiscal expenditure in 2021 (\$)	8,768	(24,032)	0.13	190	843	8,028	155,156
for development	5,573	(17,024)	2.51	90	421	3,280	135,265
for government personnel	803	(1,444)	1.03	44	273	979	9,882
Total fiscal revenue in 2015 (\$)	9,654	(25,992)	0.18	251	1,078	8,792	178,019
Total fiscal expenditure in 2015 (\$)	7,623	(14,844)	0.23	172	614	8,470	63,336
Total fiscal revenue in 2009 (\$)	4,596	(9,093)	0.05	197	709	4,659	55,295
Total fiscal expenditure in 2009 (\$)	3,989	(7,976)	0.13	119	367	4,140	46,751
Per capita fiscal revenue in 2021 (\$/cap) (i.e. tax burden per person)	0.37	(0.61)	0.00	0.02	0.09	0.31	3.43
Per capita fiscal expenditure in 2021 (\$/cap)	0.30	(0.55)	0.00	0.01	0.03	0.24	3.25

Notes: This table reports the summary statistics (mean, standard deviation, minimum, first quartile, median, third quartile, and maximum) of challenges to local governance. Panel A displays the challenges from surveys of government agents. Panel B displays the challenges reported by household respondents. Panel C displays aggregate financing challenges from locality surveys, of which only 74 localities reported because the financial documents existed at time of survey, whereas the remaining 60 localities did not have records of financial services or had lost them in conflict. In Panel A, perception of corruption (bribe-taking) was an average of four actions of state services (marriage statistics, meetings, public good construction, and public good usage). For each of the activities, enumerators asked how frequent other agents demand bribe, its amount if any, and finally to capture self-action, if respondents would do the same. In Panel B, household respondents were shown a list of tax schedule (Appendix Figure A5) and asked if they paid taxes to any of the listed activities. Tax payment amount adds the amount of tax paid at establishment and user fee per unit time. Amount paid in other fees/bribes records other fees demanded by officials outside of the official tax payments. Bribing "other agents" refers to the community heads ("nyumbakumi" in Swahili, literally ten households) or police. In Panel C, financial statistics were asked of locality leaders following the simplest templates which allowed distinction in public finance management. Notable are central and provincial government transfers, which are constitutional mandates of the Decentralization Reform to share tax profits across the decentralized localities. Per capita fiscal revenue is total fiscal revenue divided by population in 2021, which captures individual tax burden. Per capita fiscal expenditure is total fiscal expenditure divided by population in 2021, which captures individual benefit from public spending.

discussed in the previous section and the lack of potential oversight it entails. If government agents are not closely monitored by their superiors and citizens can't hold them accountable either, malfeasance can easily emerge.

This is precisely the second government challenge we observe: high levels of corruption. Table IV provides evidence from government agent and household surveys. 43% of government agents we surveyed report that other agents in the same position as them take bribes and 87% of these admit to potentially doing the same. The amount of bribes request per demand is quite high with a mean of \$28 and a median of \$14 given price levels and wages in the localities. Citizens confirm widespread corruption, with 13% reporting having had to pay a bribe to the community leader in the past year and 19% having made a payment to other government agents (8% to the police) in the past month. Interestingly, the amounts households report to have paid per year to the community head correspond closely to what government agents report per payment received. Extrapolating these numbers using each locality's population estimates suggests that government agents earn considerably more in bribes than in official salary. Considering that half the agents in our sample do not receive a salary and the low pay for those that do, the presence of widespread corruption should not come as a surprise.

However, the lack of democratic accountability and high degree of corruption have not resulted in apathetic and disengaged citizens. Table A2 in the Appendix show summary statistics on households and their views on and participation in local governance. Over 80% of citizens report regularly participating in the weekly public works program Salongo and report doing so out of a sense of duty. Furthermore, citizens respond to their leaders when asked for contribution. In our behavioral game we provided different prompts by authority figures that encourage contribution to public goods. Citizens were more likely to contribute if their locality head encouraged them to (Figure 5).

Third, our evidence suggests an acute lack of financing in towns and villages. Panel C in Table IV presents data on localities' revenues and expenditures for the subset of localities for which we have accounting documents (74 out of 134 localities). Leaders simply do not have the resources to significantly expand the state. On average, annual town revenue is less than \$10,331 or \$0.37 per citizen. The median revenue per year is only \$1,995.¹¹ This is largely due to the limited economic activity and ability to raise taxes from citizens with little cash-flow. Revenue is generated through various taxes on land and property, sale and retail, manufacturing and

¹¹Note that this is conflicting with what households report in Panel B. Of the citizens that pay taxes (32%), the average yearly tax burden is \$57. This mismatch could either be because citizens pay some of these taxes to other state agents or because state agents do not record these payments in their accounting documents.

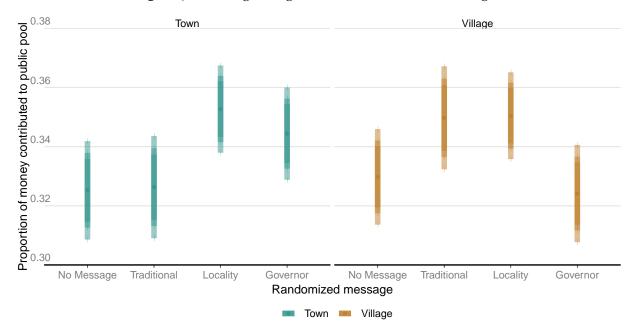


Figure 5: Public goods game with randomized message

Notes: This figure plots the means and the confidence intervals of the distribution of contribution from the public goods game in towns and villages. The x-axis shows which randomized voice recording of leaders encouraged citizens to contribute to the public pot. After hearing the message (or not, to be intended as a control group), each household played 2 practice rounds of the game. The game was then played 5 times with different endowment amounts (400, 600, 800, 1000 = \$0.50, and 1200 Congolese francs with randomized order), one round of which was then realized at random. The amount kept by the citizen would then be kept, and the remaining amount, along with 7 other household contributions in the same locality, would be paid to the locality leader. The figure plots the proportion of endowment contributed from all 5 rounds of the game.

services. In a pre-dominantly agricultural settings, citizens have little additional income that government agents can mobilize even with their considerable administrative capacity in addition to the payments they already make in the form of bribes. Thus, while we find that government agents use their administrative capacity to extract resources from citizens for their private gain, there is little evidence that they similarly mobilize resources for local development. Corruption is likely to crowd out legitimate resource generation.

Leaders also lament the lack of funds and support from higher levels of government. Given the low level of public good provision more funds are needed to spur development. Ultimately given the limited tax base these funds will likely have to come from outside the community. \$459 of profit-sharing funds ("retrocession") from central and provincial government transfer per year simply would not be enough.

5. Conclusion

This paper provided a wealth of data on local governance in large villages and towns in rural DRC. We surveyed 532 government agents and 1,072 households across 134 localities.

The research findings highlight the present yet precarious state of governance in rural areas of the Democratic Republic of the Congo. Our study documents the presence of various government agents across our sample localities, who are charged with performing various state functions and exhibit substantial administrative proficiency. Nevertheless, these agents face significant challenges due to a lack of financial support, as only half of them receive a salary, and those who do receive a meager compensation. This absence of structural support has presumably led to widespread corruption and the near non-existence of local taxation. As a result, government agents are unable to expand the state and provide essential services to the population due to a scarcity of resources.

The local governance situation in the Democratic Republic of the Congo presents a challenging scenario. The limited resources available to government agents hinder their ability to provide essential services to the citizens of rural villages and towns. The lack of adequate salary and support also exacerbates the issue, as it forces agents to rely on local resources to supplement their income. Combined with a lack of democratic accountability and insularity of many locality heads this situation leads to a predatory state that does not serve its citizens, despite having a considerable infrastructural local capacity for development. However, with the proper support and resources, this capacity could be leveraged for local collective interest.

In the absence of drastic changes coming from the central and provincial state in the DRC, two paths for local change could vitalize local governance. Firstly, the recent decentralization reform could be further embraced through increased empowerment of local leaders, enabling them to collect taxes and control their own funds, as well as through the organization of elections for decentralized units. Secondly, local governance in the DRC still largely rests in the hands and on the shoulders of traditional chiefs, who are present in virtually every village in the country. Possessing considerable local authority and administrative capacity, they could be made a more active and constructive part of state governance. This would tap into their potential and put the DRC on a path towards a developmental state.

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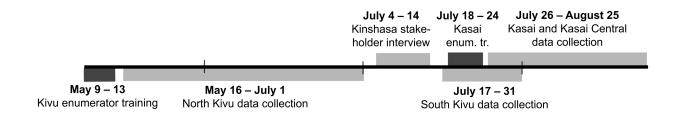
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6. Appendix

A.. Appendix Figures

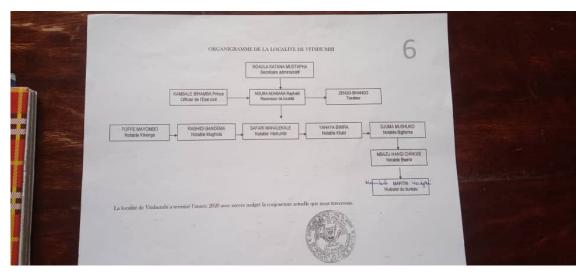
Figure A1: Data collection timeline



Notes: This figure shows data collection timeline in 2022. Bars below the arrow of time indicate enumerator training and data collection for North and South Kivu provinces. Bars above the arrow of time indicate qualitative interviews with stakeholders in Kinshasa, and enumerator training and data collection for Kasai and Kasai Central provinces.

Figure A2: Sample organizational chart

(a) Printed



(b) Hand-drawn



Notes: This figure shows two samples of organizational chart of (a) the town administration of Vitshumbi, Rutshuru Territory and (b) the village administration of Kitsimba, Lubero Territory, both in the North Kivu Province.

Figure A3: Template audio transcription

Mesdames et messieurs, chers compatriotes,

Moi c'est [nom]. Je suis [position] en charge de [responsabilité] dans la [province/localité]. Je vous appelle et vous sensibilise aujourd'hui en vous tous à participer à la création de fonds publique et de caisse du trésor publique, par le paiement de taxes et de la contribution que chacun peut faire pourque l'État puisse avoir le moyen de continuer à développer notre [province/localité] en particulier, et la République Démocratique du Congo en général. Donc les représentatifs qui passent, il faut les accueillir et essayer de participer pour que nous-même nous soyons les garants de développement de notre pays et de notre [province/localité].

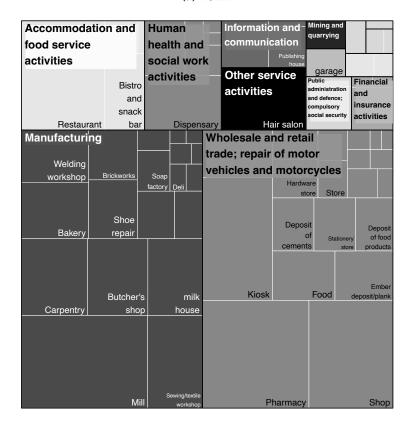
Ladies and gentlemen, dear compatriots,

My name is [name]. I am [position] in charge of [responsibility] in the [province/locality]. I call and urge you today to participate in the creation of public funds and the public treasury, through the payment of taxes and the contribution that each one can make so that the State have the means to continue to develop our [province/locality] in particular, and the Democratic Republic of Congo in general. Therefore, we must welcome the representatives who pass by and try to participate in this contribution so that we ourselves are the guarantors of the development of our country and our [province/locality].

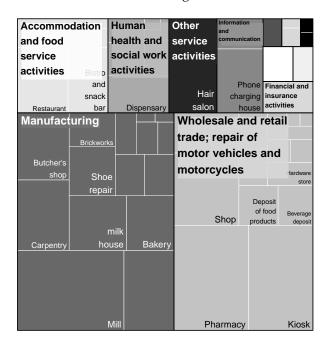
Notes: This figure shows the transcription of the template audio message read by authority figures to encourage citizens to contribute in the public goods game. Messages are obtained from each governor and each locality leader such that household members will receive messages from the relevant authority figures in their localities. The template was given in French and would be read aloud in relevant local languages (Swahili in the Kivus and Tshiluba in the Kasai, although even more local languages in localities with a large presence of that ethno-linguistic majority were also used.)

Figure A4: Non agricultural activities in each locality type

(a) Town

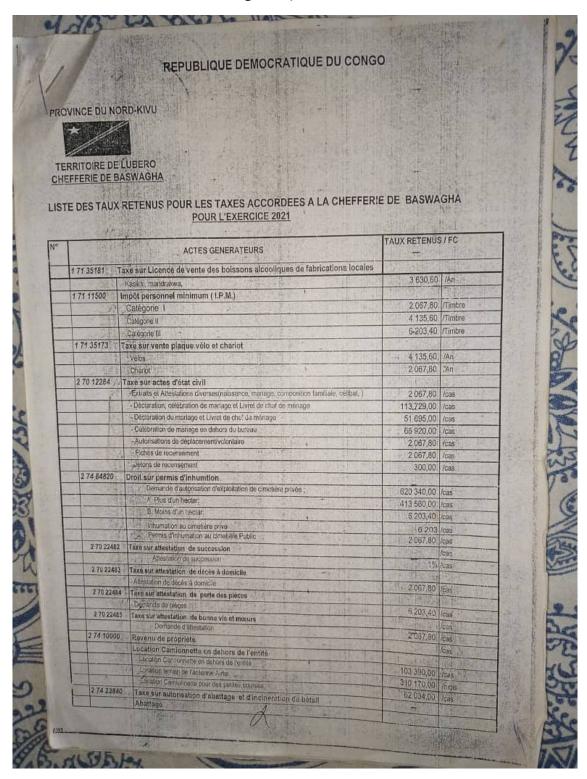


(b) Village



Notes: This figure shows the size of non agricultural activities in all 67 towns (Panel A) and 67 villages (Panel B) in our sample. Government respondents were asked if each of the listed manufacturing, trade and service activities is operative in their localities. Responses were coded as 0 or 1, summed across all sample localities, and drawn in boxes to proportion. The list of activity is obtained from the schedule of taxable activity as circulated across chiefdoms in the DRC, obtained through authors' qualitative pilot interviews. Appendix Figure A5 provided an example. The grouping of industry follows authors' own mapping of each industry to the ILO International Standard Industrial Classification (ISIC) code.

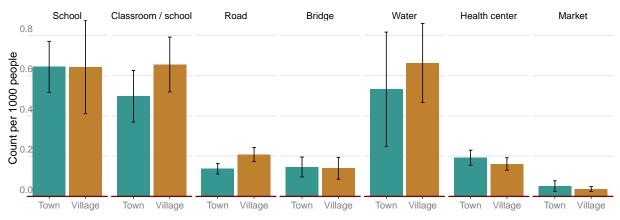
Figure A5: Tax code



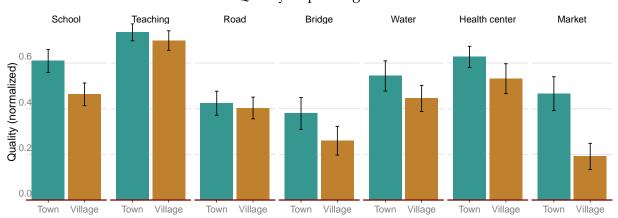
Notes: This figure shows the first page of the tax code from 2021 which circulates in all villages and towns to show which non-agricultural activities are included in the fiscal mobilization efforts of the government. The unit and tax amount are formally indicated.

Figure A6: Summary of public goods and services in each locality type

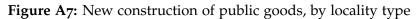
A. Number of public goods per 1000 people

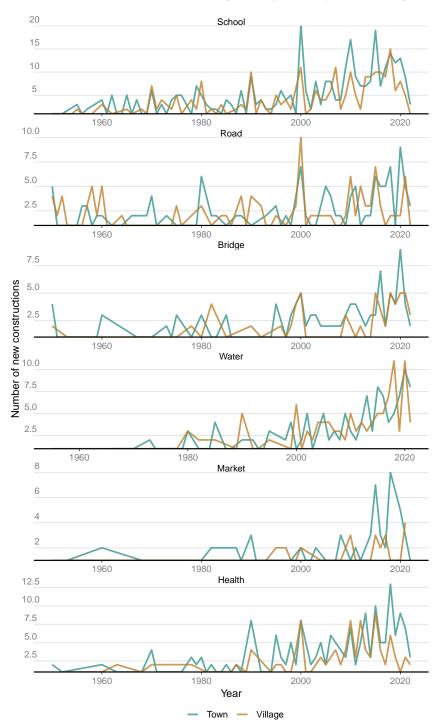


B. Quality of public goods



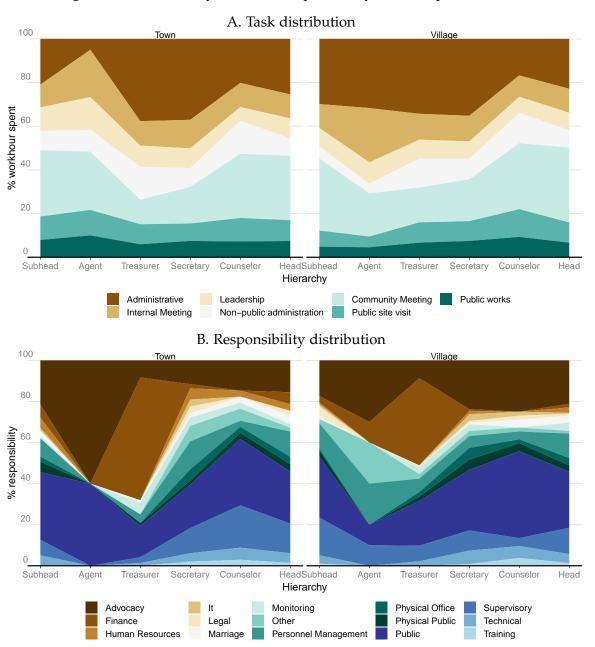
Notes: These bar charts describe the average number (Panel A) and the average quality normalized [0,1] (Panel B) of public goods in each type of locality in our sample of 68 towns and 68 villages. School is any type of schools ranging from kindergarten to university. Water is water and sanitation infrastructure, such as toilets, pipes, and water treatment plans. Health is any type of center believed to improve health and well-being, ranging from hospital and small clinics to traditional healing services. Number of village chief and groupement chief indicate the cumulative number of chiefs since 2005.





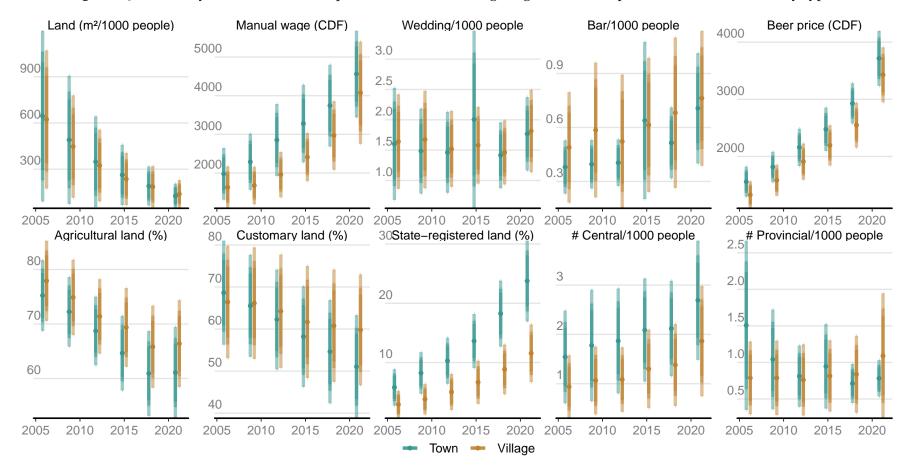
Notes: This figure plots the number of new construction for each type of public good in all towns and villages (pooled) from our survey of 134 localities.

Figure A8: Bureaucracy Task and Responsibility Profile (Specialization)



Notes: This figure plots the bureaucratic specialization of agents in towns and villages. Panel A plots the percentage of work hour spent by different types of agents in the locality. Panel B plots the percentage of responsibility by different types of agents in the locality.

Figure A9: Summary of economic development outcomes and higher government representation in each locality type



Notes: These line graphs describe our various measures of economic development in each type of locality in our sample of 68 towns and 68 villages. The trajectory for each locality is drawn on the translucent line on the plot background, whereas the thick maroon and black solid lines describe the average outcomes for all the towns and villages in our sample respectively.

B.. Appendix Tables

Table A1: Summary statistics of infrastructural state capacity, by locality type

	Town			lage	0
	Mean	S.D. (2)	Mean	S.D. (4)	Significance
Devel A. Yes	(1)	. ,	(3)	(4)	(3)-(1)
Panel A: Loc	anty Cna	racteristic	5		
Population in 2005	19,621	(12,730)	10,440	(5,896)	***
in 2012	25,597	(12,750)	13,570	(6,105)	***
in 2021	33,688	(19,009)	18,187	(8,921)	***
# Households	7,987	(6,483)	3,663	(3,013)	***
Agriculture (% of households)	70.4	(15.4)	78.7	(12.2)	***
Agricultural land (m ² per capita)	5395	(10465)	4345	(9486)	
Daily manual wage (\$)	1.91	(2.4)	1.26	(0.97)	**
Probability of existence of					
Bourgmestre	0.37	(0.49)	0.04	(0.21)	***
State Personnel	0.96	(0.27)	0.85	(0.40)	*
Military	0.54	(0.50)	0.36	(0.48)	**
Police	0.94	(0.24)	0.57	(0.50)	***
Number of state personnel	74.3	(114.1)	29.1	(36.7)	***
# Schools per 1,000 people	0.64	(0.52)	0.64	(0.95)	
# Health centers per 1,000 people	0.19	(0.15)	0.16	(0.13)	
# Markets per 1,000 people	0.05	(0.11)	0.04	(0.05)	
# Weddings per 1,000 people	1.13	(1.31)	1.13	(1.36)	
# Bars per 1,000 people	0.41	(0.49)	0.39	(0.52)	
Panel B: Governm	ent Agen	t Characte	eristics		
Personnel Profile					
Male = 1	0.94	(0.23)	0.97	(0.16)	*
Age	50.2	(12.1)	49.5	(11.4)	
Married = 1	0.96	(0.19)	0.96	(0.19)	
Years of education	11.4	(3.05)	10.2	(3.26)	***
At least some college education	0.26	(0.44)	0.12	(0.33)	***
Party-affiliated	0.30	(0.46)	0.23	(0.42)	*
Tshisekedi coalition, if party-affiliated	0.44	(0.5)	0.40	(0.49)	
Part of ethnic majority in locality	0.71 0.93	(0.45)	0.75 0.94	(0.44)	
Born in same territory they govern	0.93	(0.26)	0.94	(0.24)	
Work and employment characteristics Finite time horizon	0.78	(0.42)	0.82	(0.39)	
Work hour/week	32.3	(13.9)	29.9	(0.39) (12.2)	**
•	02.0	(10.5)		(12.2)	
Time proportion on tasks (%) Administrative	28.8	(18.8)	27.4	(19.8)	
Internal meeting	11.3	(6.81)	11.1	(6.23)	
Leadership	9.13	(6.61)	7.90	(4.81)	**
Community meeting	22.5	(15.7)	26.0	(16.8)	**
Public site visit	9.09	(6.91)	8.91	(7.15)	
Public works	7.09	(6.01)	6.6	(5.52)	
Non-public administration	9.73	(11.5)	9.15	(9.79)	
Labor incentives					
Received salary	0.50	(0.50)	0.46	(0.50)	
Annual salary if received (\$, 2021)	624.80	(655.07)	455.06	(415.72)	**
Promotion incentives exist	0.15	(0.26)	0.15	(0.29)	
Training exists for underperformers	0.04	(0.13)	0.03	(0.13)	
Callahamatina miltum	0.65	(0.15)	0.66	(0.16)	
Collaborative culture	0.00	(0.10)	0.00	(0.20)	

Notes: This table presents the summary statistics (mean and standard deviation) of the social, economic, and political organization of our sample localities, as well as the statistical significance of the t-test difference in means between the two samples. Panel A displays the characteristics of the 134 localities in our sample, towns and villages combined. Panel B displays the characteristics of 532 government agents in our sample localities. Responses for Panel A are derived from a collective survey of the locality, for which 4 members of locality leaders provided one collective answer for each locality. Responses for Panel B are derived from an individual survey with each of the 4 members of the locality leaders. Variable definition follows that of Table II.

Table A2: Summary Statistics of Households

	Town Village					
	Mean S.D.		Mean	S.D.	Significance	
	(1)	(2)	(3)	(4)	(3)-(1)	
Household characteristics						
Household size	7.90	(2.75)	7.81	(3.18)		
Years of education	8.50	(4.01)	8.30	(3.81)		
Asset wealth index	0.54	(0.18)	0.51	(0.18)	***	
Farmer = 1	0.52	(0.5)	0.61	(0.49)	***	
Trader = 1	0.11	(0.31)	0.07	(0.26)	**	
Teacher = 1	0.07	(0.26)	0.08	(0.27)		
Government worker = 1	0.02	(0.14)	0.01	(0.09)	*	
Owns land title = 1	0.07	(0.26)	0.05	(0.21)	*	
Dispute resolution = State	0.31	(0.46)	0.05	(0.22)	***	
Dispute resolution = Chief	0.50	(0.50)	0.80	(0.40)	***	
Religious organization = 1	0.62	(0.49)	0.63	(0.48)		
Savings Group = 1	0.42	(0.49)	0.37	(0.48)		
Voluntary association = 1	0.23	(0.42)	0.24	(0.43)		
Regular Salongo participation = 1	0.77	(0.38)	0.80	(0.36)		
Reason = Duty	0.93	(0.26)	0.95	(0.23)		
Reason = Social pressure	0.13	(0.34)	0.12	(0.32)		
Reason = Fear of punishment	0.10	(0.30)	0.09	(0.28)		
Perception of socio-conomic mobility,	position	0-10				
Respondent	4.53	(1.72)	4.32	(1.73)	**	
Respondent's parent	4.90	(2.08)	4.74	(2.05)		
Respondent's child	7.66	(1.65)	7.50	(1.69)		
Trust, 0-10						
People of same ethnicity	6.60	(1.77)	6.68	(1.66)		
Locality chief	6.43	(1.68)	6.45	(1.71)		
Traditional government	6.00	(1.88)	6.19	(1.97)		
Central government	5.38	(2.16)	5.33	(2.13)		
Provincial government	5.26	(1.9)	5.23	(1.92)		
Governor	5.02	(2.01)	5.08	(1.99)		
Army	5.37	(2.37)	5.40	(2.29)		
Police	5.23	(1.91)	5.03	(1.86)	*	
Courts	4.20	(2.04)	4.29	(2.03)		
Perception of authority, 0-10						
Governor influence	4.18	(3.53)	3.99	(3.39)		
Traditional chief influence	6.61	(3.33)	7.12	(2.96)	***	
Satisfied with governor	5.61	(3.17)	5.52	(3.03)		
Satisfied with chief	6.94	(2.97)	7.34	(2.72)	**	
Governor corruption	4.70	(2.41)	4.65	(2.29)		
Traditional chief corruption	3.41	(2.25)	3.22	(2.26)		
Governor ability	4.86	(2.13)	4.91	(1.99)		
Traditional chief ability	5.66	(2.08)	6.04	(1.97)	***	
Bourgmestre ability	6.50	(4.22)	6.25	(1.5)		
Village chief ability	6.45	(3.91)	6.39	(3.1)		
Number of household respondents	53	36	53	26		

Notes: This table presents the summary statistics (mean and standard deviation) of the household characteristics from our sample of 1072 households in 134 localities, as well as the statistical significance of the t-test difference in means between the two samples. Asset wealth index is the normalized [0-1] index which contains the level of household assets (toilet, water, roof, electricity, flooring). Salongo is weekend public cooperation to achieve public tasks, e.g. road-cleaning; picket.



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