

Subsidized Land Titles, Social Institutions, and Land Formalization in the Democratic Republic of Congo

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Sector(s): Political Economy and Governance

Sample: 483 households

Target group: Families and households

Outcome of interest: Asset ownership Service provider performance

Intervention type: Subsidies Administrative reform Formalization services

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Partner organization(s): Provincial Government of Kasai-Central

Formal land rights are often considered key to economic progress and good governance, yet property rights remain rare; in sub-Saharan Africa, only about ten percent of land is formally titled. Little is known about land formalization in sub-Saharan African cities, where land is more valuable and reliance on social institutions is weaker than in rural settings. In Kananga, Democratic Republic of Congo (DRC), researchers conducted a randomized evaluation to test the impact of a subsidized land titling program on both starting and completing land registration, as well as on citizens' participation in social institutions. Being offered a land titling subsidy substantially increased the number of citizens who began the property registration process and obtained a land title, while decreasing participation in social institutions and worsening citizens' evaluations of chiefs.

Policy issue

Property rights are considered crucial for economic development and good governance. However, they remain rare, especially in sub-Saharan Africa, where only about 10 percent of land is formally titled. Weak property rights may discourage citizens from investing because of fears of expropriation. Given their importance, organizations such as the World Bank have supported land registration campaigns in low- and middle-income countries. Yet despite these efforts, land formalization rates remain very low. Some argue that citizens may achieve tenure security informally through membership in social institutions and customary land rights, which can function as a substitute for formal titles. To understand the relationship between land titling and social institutions, there is a need to study the demand for formal titles in Africa more systematically.

Context of the evaluation

The DRC, often considered a fragile state, had the fourth largest population in Africa in 2023. The country also faces severe financial challenges, with weak fiscal capacity: its tax-to-GDP ratio ranked 188th out of 200 countries between 2000 and 2017. The evaluation took place in Kananga, the capital of Kasai Central province. With a population of 1.6 million, Kananga is the 4th-largest city in the DRC. The average monthly income there is US\$106.

As in the rest of the country, Kananga's fiscal capacity is weak and land formalization rates are low. In 2017, fewer than 16 percent of residents held formal land titles. Like other African cities, Kananga is urbanizing rapidly, driving up property prices: the average property value among participants in the intervention was US\$5,700. Despite rising property values, most citizens refrain from obtaining a title because the process is burdensome and costly. Some citizens reported paying 10 times more than the official price of a title. The lack of formal land titles creates problems for both citizens and the government. Kananga's residents remain at risk of dispossession—more than 25 percent of study participants reported a legal dispute over property. Citizens also had difficulty accessing formal finance because they lacked property titles for collateral. Like many African cities, Kananga's property rights regime is fragmented, with an urban core surrounded by peripheral areas—known as *chefferies*—where state presence is weak and customary land rights are presided over by chiefs.

As elsewhere in Africa, citizens of Kananga are embedded in a dense network of social institutions. They routinely participate in churches, mutual aid societies, and Rotating Savings and Credit Associations (ROSCAs), and contribute to community events such as weddings and funerals. Past research on rural Africa shows such institutions can provide informal insurance. Local elites, known as avenue chiefs, are also prominent, and prior work highlights their role in land governance. For this reason, some argue participation in these institutions may substitute for formal land rights. A crucial question is therefore how participation in these institutions shapes the demand for formal land titles in urban settings.



Cadastral surveyor measuring a respondent's plot in Kasai-Central, DRC

Details of the intervention

In partnership with the Provincial Government of Kasai Central, researchers conducted a randomized evaluation that offered citizens the opportunity to obtain land titles at a reduced price for a limited period.

Randomization was conducted at the household level in 364 neighborhoods using satellite imagery. After changes in government eligibility requirements, 483 households qualified for the program and were randomly assigned to either the subsidy group or the comparison group. In the subsidy group, 254 households were offered a subsidy to cover land title costs. At the time of the study, the official price of a land title was US\$100. Within the subsidy group, households could choose among three formal land titles at reduced prices:

1. **Certificat d'Enregistrement (CE):** a formal land title conferring the highest legal recognition of property ownership. The average subsidized price was US\$75—a 92.5 percent reduction from costs of up to US\$1,000.
2. **Contrat de Location:** a three-year contract between the citizen and the government, which can lead to a CE if citizens make annual payments over three years. The average subsidized price was US\$40.
3. **Acte de Vente Notarié:** a document providing proof of land acquisition. The average subsidized price was US\$20.

In the comparison group, 229 households still had the option of obtaining a land title through the regular procedure.

Prior to the intervention, a baseline survey (July–December 2017) collected information on urban chiefs, public goods, property characteristics, demographics, governance, experiences with taxation and payments to the state, political beliefs, and participation in social institutions. After the program ended, the research team conducted two endline surveys with property owners (March 2019–February 2020). These surveys asked about views of and engagement with the government and city chiefs, participation in social institutions, and tenure security. Researchers also drew on administrative data from Kasai Central's cadastral and land titling offices.

Ethical Considerations. In addition to approval from an institutional review board, researchers sought and obtained local ethical approval from the University of Notre-Dame du Kasai, Kananga's oldest university. In his letter of support, the University's academic dean wrote that the project "will help to understand the importance of private property," adding that it "does not hurt the local culture." As compensation, participants received about US\$2 per survey hour.

Results and policy lessons

The program's design allows for the study of both the demand for land titles and their effects. Specifically, the researchers addressed two main questions: (1) Does reducing barriers to formalization increase demand for formal land titles? (2) How does land titling interact with citizens' participation in social institutions?

Starting the property registration process and receipt of land titles. Citizens randomly offered a subsidized land title were 44 percentage points (5,000 percent) more likely to initiate the titling process—a costly outcome in itself—compared to 1 percent in the comparison group. They were also 13.7 percentage points (3,100 percent) more likely to obtain a title, compared to nearly 0 percent in the comparison group. Demand for titles was higher among richer, more educated households, and those with higher-value properties. The gap between demand and actual receipt of a title likely reflects a combination of poor coordination across government offices, weak bureaucratic incentives, and the program's logistical challenges. Overall, reducing the price and the barriers citizens face to obtaining a formal title reveals substantial latent demand for formalization, indicating the time and money required to secure a title discouraged citizens from pursuing formalization.

However, this significant increase in program take-up masks results that varied depending on citizens' participation in social institutions and their relationships with urban chiefs.

Participation in social institutions. Citizens who were offered a land titling subsidy and who belonged to a mutual aid society, made contributions to churches, or contributed to weddings and funerals were more likely to start the land titling process relative to the comparison group. However, while participation in social institutions predicted demand for titles, it did not lead to a corresponding increase in the actual receipt of land titles. These results challenge the argument that participation in informal insurance institutions reduces demand for formal titling. Demand for formalization was, in fact, higher among citizens with higher baseline levels of participation in these institutions.

Connections to chiefs. Citizens with closer connections to their local chiefs—for example, those who knew their chief's name or whose chiefs were longtime residents of their community—were more likely to start the titling process. This suggests citizens saw chiefs as intermediaries who could help them get titles. However, other characteristics of chiefs affected citizens' chances of obtaining a land title. Chiefs affiliated with a political party reduced citizens' chances of getting a land title. While citizens may have believed chiefs could help them obtain land titles, chiefs' incentives may conflict with citizens' desire for titles.

Social effects. The program affected citizens' participation in and perceptions of the same institutions that shaped program take-up. First, being offered a land titling subsidy reduced citizens' participation in ROSCAs by 7.5 percentage points (23.4 percent) relative to the comparison group average of 32 percent. The program also lowered church contributions by 9.1 percentage points (16.5 percent) relative to the comparison group average of 55 percent. Second, citizens offered the land titling program saw chiefs 16.8 percentage points (or 25 percent) less favorably relative to the comparison group's average view of 67 percent. Together, these results indicate citizens exit social institutions when given the opportunity to formalize their land and cast doubt on the idea that formal titling and social institutions may be complements. Citizens of Kananga preferred land formalization to informal institutions, which they were willing to exit if they got titles. Formalization may offer citizens an exit option from informal institutions.

Perhaps the most important lesson is that citizens have high demand for formal land property rights in Kananga, and yet are stymied in their efforts to obtain property titles by high prices, excessive red tape, and bureaucratic incentives. As urbanization proceeds at a sweeping pace in sub-Saharan Africa and land values continue to rise, cities face formalization bottlenecks. However, the significant increase in take-up induced by the program indicates that carefully designed reforms aimed at simplifying the land titling process and reducing bureaucratic discretion have the potential to significantly expand formalization. Reflecting this, in 2017, DRC's government provided guidance about setting ceilings on prices for land titles and standardizing the process, in which the guidance resembled the intervention from this study. While based on a single-city intervention, these results can inform larger titling campaigns. Reforms that make the land titling process simpler and consider differences between urban and rural land formalization could be useful as sub-Saharan Africa continues to urbanize at a rapid pace.