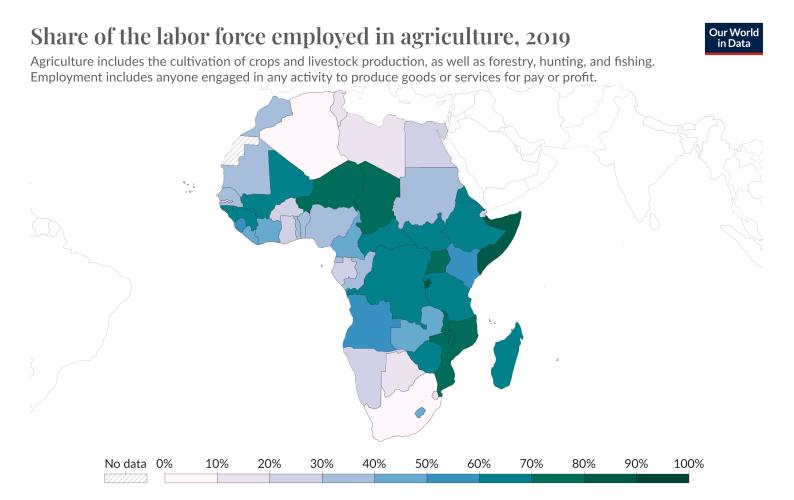


Land is the most important physical asset for the poor



Data source: Our World in Data based on International Labor Organization (via the World Bank) and historical sources OurWorldInData.org/employment-in-agriculture | CC BY

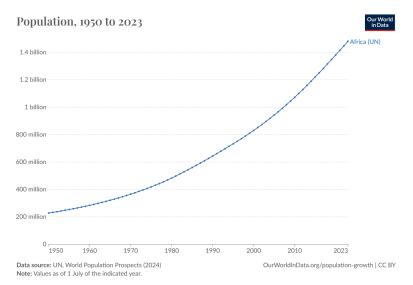
Agriculture is often the largest employment sector. Large share of smallholder farming.

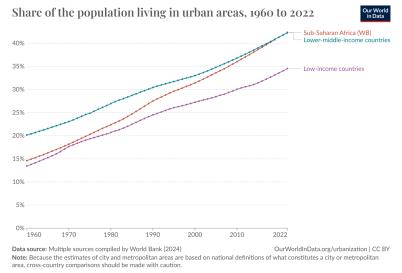
The traditional view of land markets in Sub-Saharan Africa

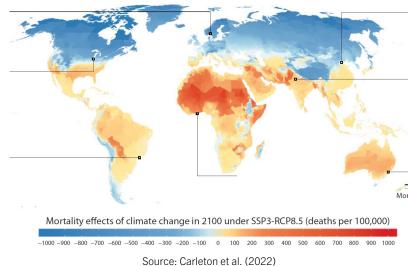
Land is abundant

Land markets are not important

Land access: a changing landscape



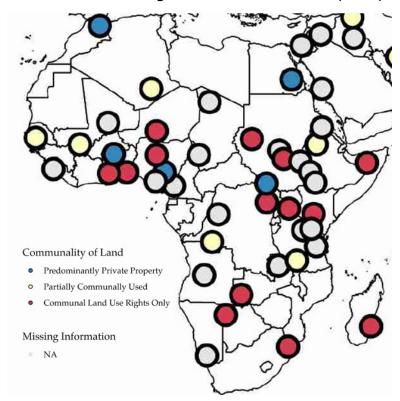




Increased pressure on land resources

Evolving land tenure

• From customary & communal property rights to formal & individual tenure



Historical land tenure

(Source: Le Rossignol et al., 2024)



Land formalization programs

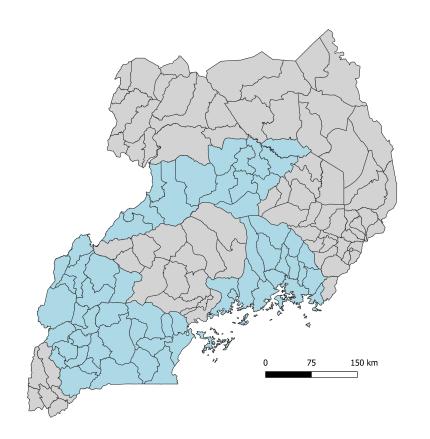
(Source: own data collection)

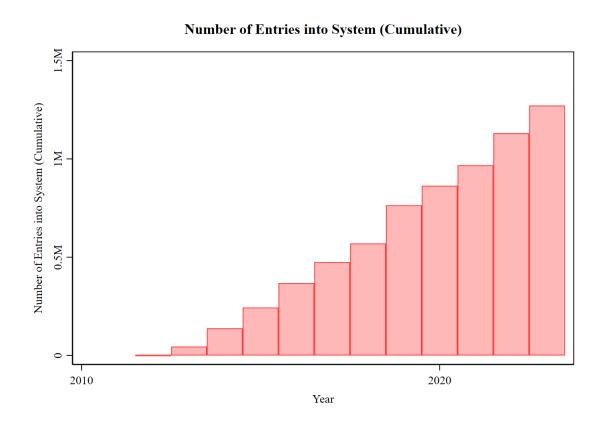


Formalization of land rights in Uganda

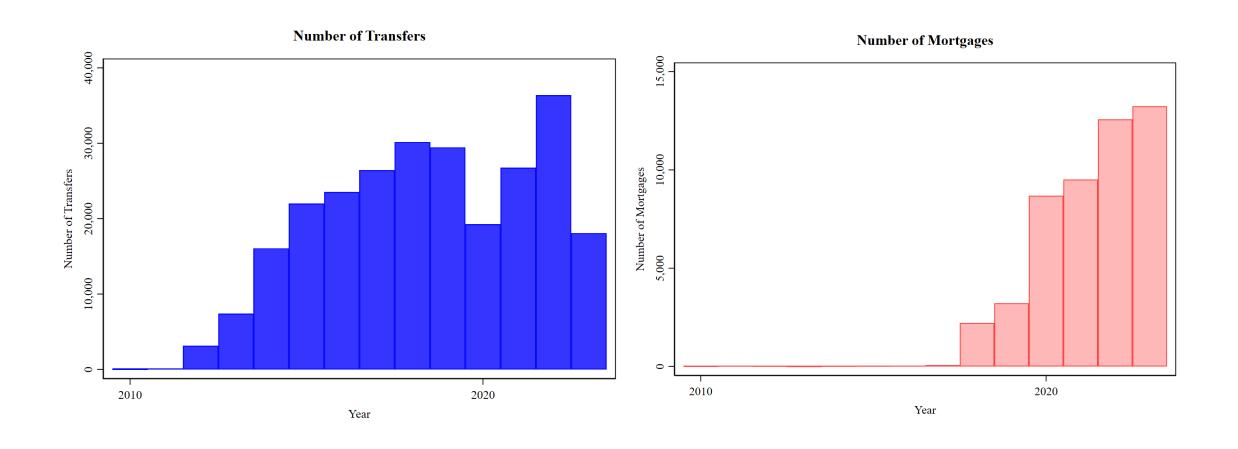
In collaboration with the Uganda Ministry of Lands, Housing, and Urban Development

• Creation of a digital land registry. Granular parcel-level database





The growth of formal land markets in Uganda



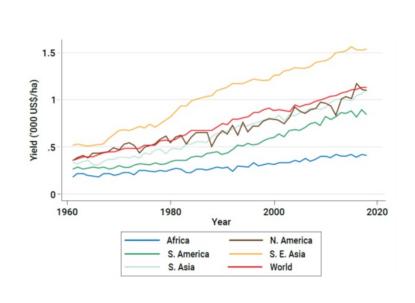
What effect do these changes in land tenure have on economic development?

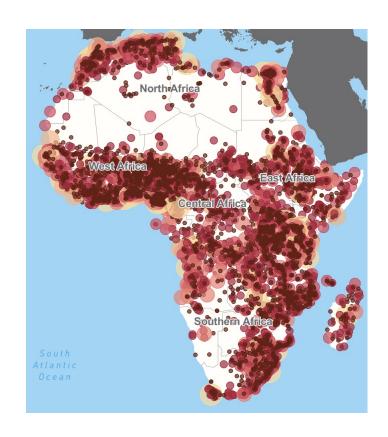




Implications for economic development?

(roadmap)







Agricultural productivity

(source: FAO)

Urbanization

(source: Africapolis)

Conflict

(source: ACLED)

PART 1

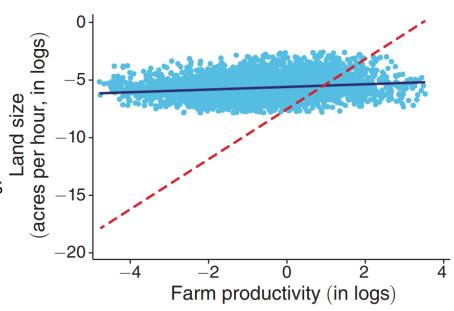
Land markets and agricultural productivity

Land misallocation?

- Agricultural productivity: low average and high dispersion
 - Productivity uncorrelated with farm size (Chen et al., 2023)

Misallocation?

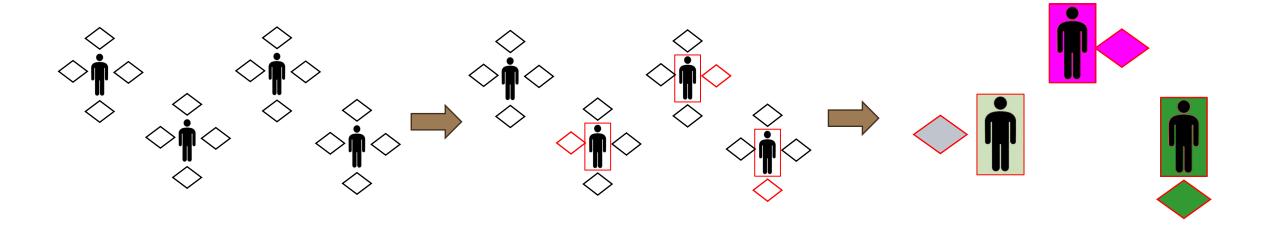
- Potentially, gains from markets reallocating land to better farmers
- Possible frictions: disputes, soil exhaustion, etc.
- **Experimental approach:** inducing land market transactions and studying their effects





Land rental markets: Experimental evidence from Kenya

(with M. Acampora and J. Willis)

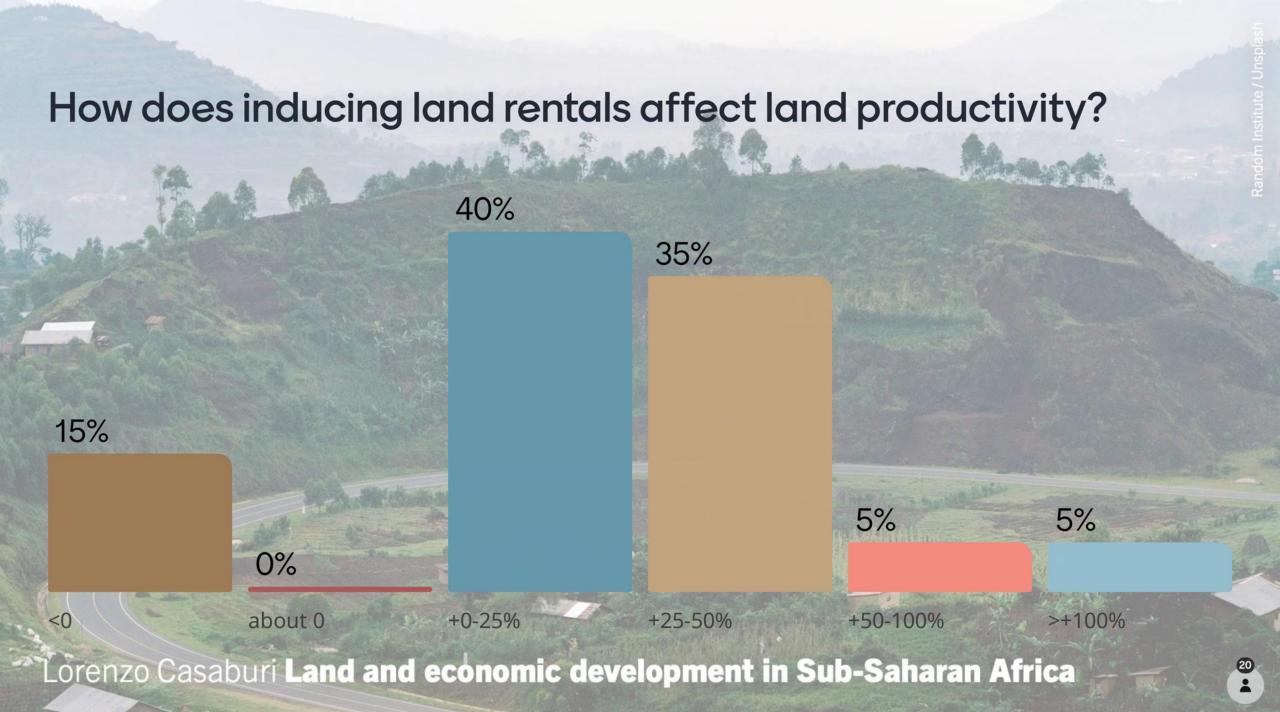


Listing: ~7,000 farmers in ~160 villages → info on plots and planned use for next season

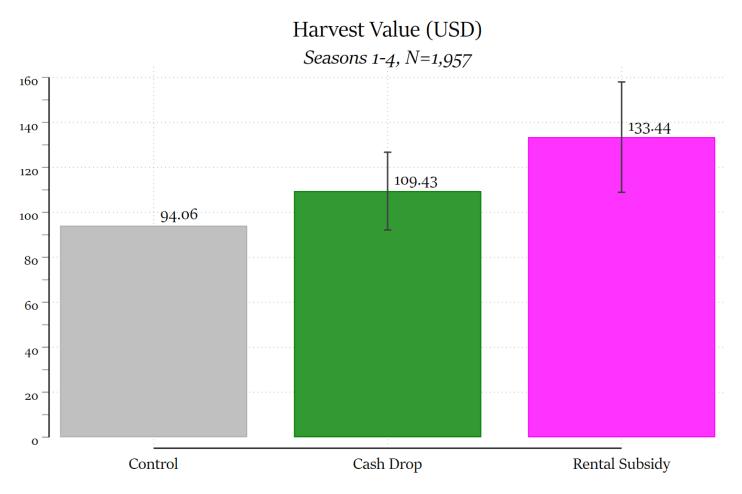
Sample: Focus on farmers interested in renting out extra plot (N=521) if they receive a rental subsidy (30% of average rental price)

Randomization:

- Conditional rental subsidy
- Unconditional cash transfer
- Pure control

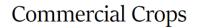


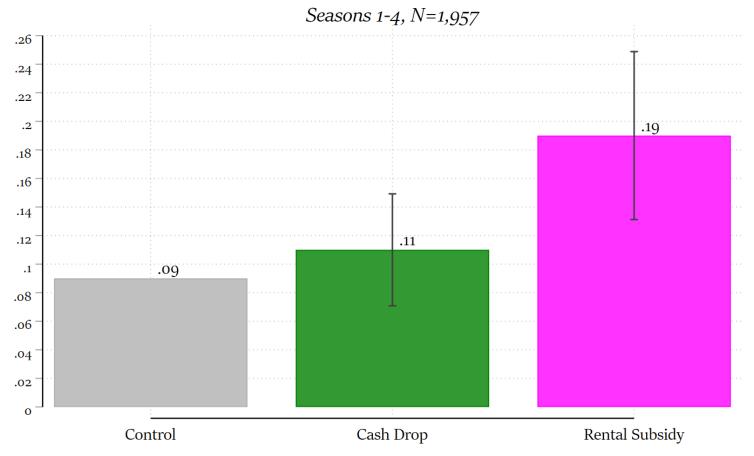
Experimental results: harvest value



By inducing rental transactions, the rental subsidy increased the harvest value on the plot

Experimental results: crop choice

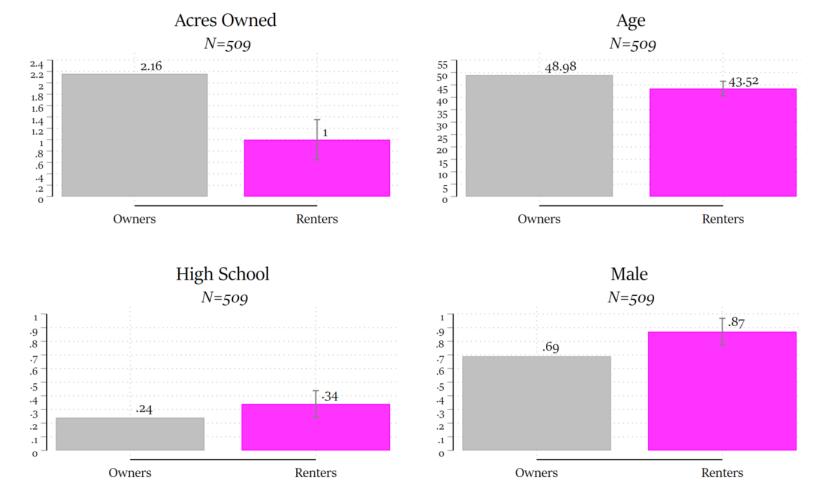




The rental subsidy raised the cultivation of commercial crops on the rented plot

Experimental results: Owners vs. managers

Renters Characteristics



Compared to owners, **renters** are:

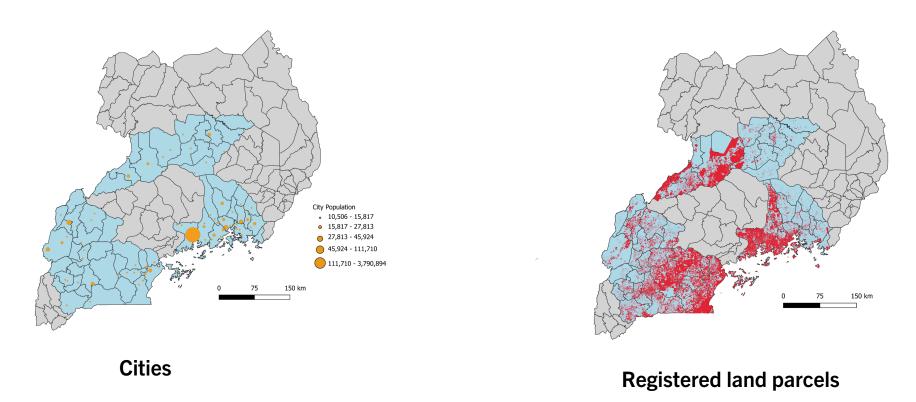
- Poorer (much less land)
- Younger
- More educated
- More likely to be male

PART 2

Land tenure and land use

Land tenure and urbanization

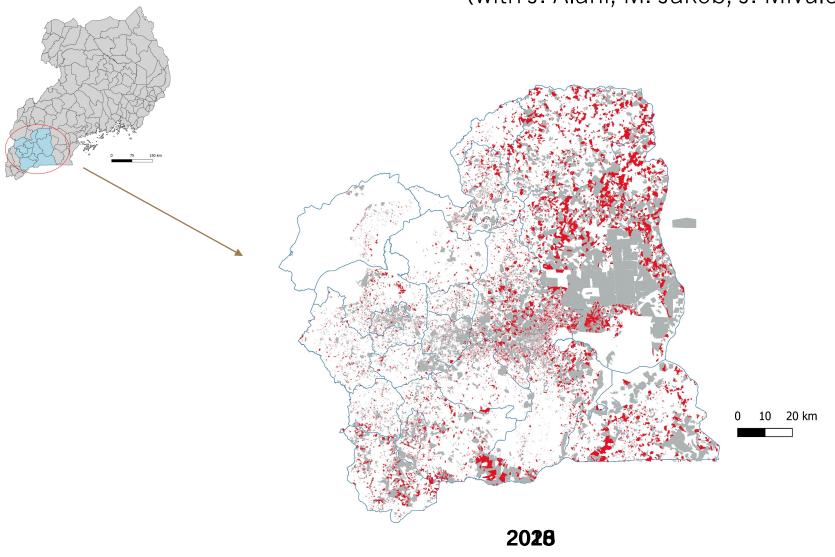
Spatial correlation between formal tenure and urbanization



• Is there a causal relationship? Which way?

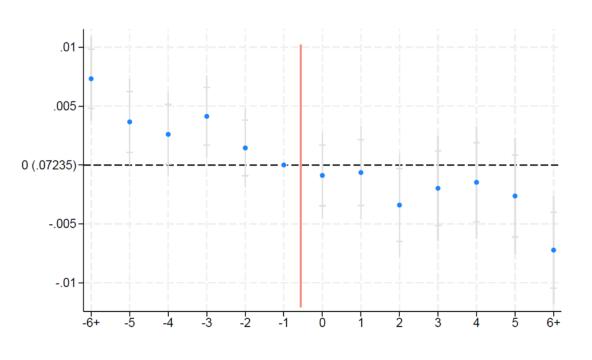
Conversions from customary to freehold tenure

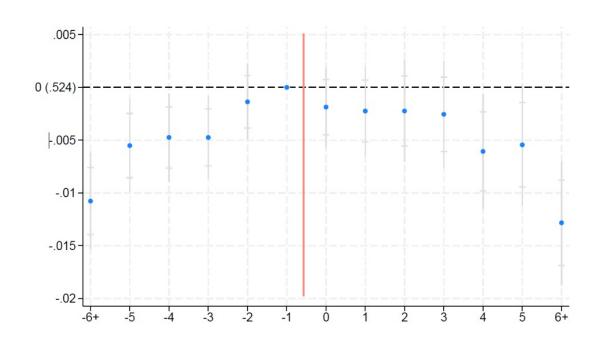
(with J. Alani, M. Jakob, J. Mivule, C. Namuddu)



Tenure conversions and land use

• Land use: Analysis of 10x10m pixel-level data





Crops

Buildings

PART 3

Land rights and conflict

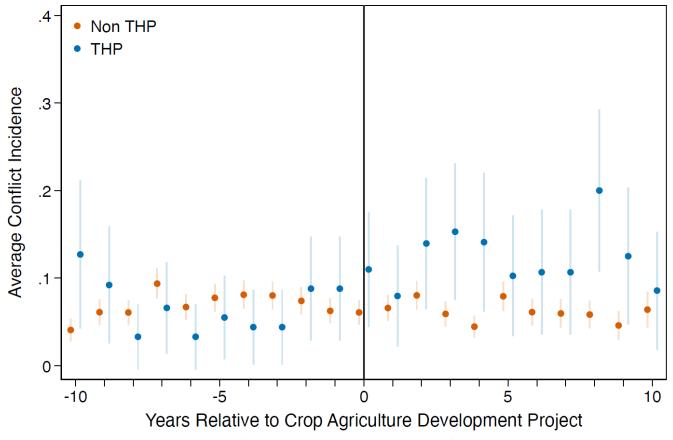
Land tenure and conflict

• The formalization of titles and the transition from communal to individual rights can lead to disputes and violence

- Concerns:
 - Elite capture
 - Insurance role of communal property rights (Le Rossignol et al., 2023)
 - International pressure
 - Conflict of interests across groups

Land tenure, land use, and conflict: recent evidence

Agricultural projects in areas with pastoral groups increase conflict (McGuirk and Nunn, 2024)



(Source: McGuirk and Nunn, 2024)

Conclusion

- Many countries in Sub-Saharan Africa are experiencing major changes in land tenure and a growth of land markets
- Potential trade-offs?
 - Economic efficiency
 - Inequality
 - Conflict
- Role of research
 - Experimental approach to inform evidence-based policy
 - Analysis of large-scale granular databases

Policy Responses

- Modernization of land registries and cadastral systems
 - Security of rights and transactions; taxation (Deininger and Goyal, 2024)
- Formalization of *common property* institutions
 - E.g., Demarcation of communal land, without individual rights (Hartman et al., 2024)
- Land use regulation
 - E.g., Uganda National Physical Plan 2021-2040

Thanks!

