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“Global food security and food safety:
The role of universities”

Patterns and Actors of Land Use Change in Emerging Frontiers in Southern Africa

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Abstract

With increasing competition between growing global demands for multiple land-based products and services, land use agents are increasingly looking for land which is considered as underutilised for crop production and not under conservation status. The dry forests and savannahs of Southern Africa are considered as one of the areas concentrating the remaining large-scale pools of these potentially available cropland. Agriculture linked to global markets is still limited in the region but rapidly growing. Distant actors are increasingly mobilised, including through large-scale land acquisitions – or “land grab” –, to overcome constraints on frontier development. Compared to humid tropics, tropical dry forests and savannahs have received little emphasis in the scientific agenda, international governance efforts and public awareness.

Here I will present preliminary results from the MIDLAND project (<https://erc-midland.earth>) which investigates the dynamics of the emerging land use frontiers – i.e. areas with abundant land and natural resources relative to labour or capital, and rapid land use change – in Southern Africa, with a focus on Northern Mozambique. We investigated the following questions:

1/ What are the logics of decision-making of actors that invest in and operate land use activities in emerging frontiers? This work builds on in-depth interviews with multiple actors along the chain of farm operations, from farm managers across Southern Africa to fund managers in finance centres in Europe.

2/ What are the rates and spatial patterns of land use change in Northern Mozambique, distinguishing smallholders from large-scale commercial actors operating in agriculture and forestry? This work builds on remote sensing processing covering the four northern provinces of Mozambique with Google Earth Engine.

3/ How land use and land tenure policies, in particular policies aimed at asserting the rights of local communities, influence the acquisition of land use rights (DUATs) from external investors? This work builds on the above maps of land use change and on land tenure and cadastral maps covering the same study area as in 2/ above.

I will then discuss insights from these results on pre-emptive governance of the frontier to foster resilient human-modified landscapes that sustain ecosystem services, food security, and livelihoods.

Keywords: Deforestation, land use

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