

Governance Challenges in the Ugandan Coffee Seed System

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Reference: Schäfer, R. (2025). Institutional Innovations and Cooperation in Colombian and Ugandan Coffee Seed Systems [unpublished master thesis, University of Hohenheim].

Background

- Coffee is Uganda's most important cash crop supported through national policies but increasingly exposed to pests, diseases & climate risks
- Robustness of coffee production questionable
- Improved varieties exist** (disease-resistant Robusta & Arabica), **but adoption remains low** (<10%)

Aims & Objectives

- Assess governance challenges** limiting farmer access to quality seed and seedlings
- Contribute to **understand how farmers access high-quality plants**, how the sector system is organised
- Identify leverage points** and **suggest improvements**



Fig. 1 (top): Aggregation of uncertified nursery beds without mother gardens, using improvised structures and resources



Fig. 2 (bottom): Heavily diseased coffee seedlings

Methodology

- Qualitative case study, purposive actor sampling, fieldwork in 2024
- 47 key informant interviews + 6 focus groups, field observations
- Participatory mapping with Process Net-Map tool
- Focus: actor interaction & governance bottlenecks
- Participants: researchers, nurseries, farmers, exporters, cooperatives, NGOs



Fig. 3: Map of Uganda showing Robusta-growing districts in green and Arabica-growing districts in red (UCDA, 2019)

Key Findings

Varietal Development

- Underfunded public institutions
- Limited facilities (labs, nurseries)
- Reliance on external partnerships

Propagation

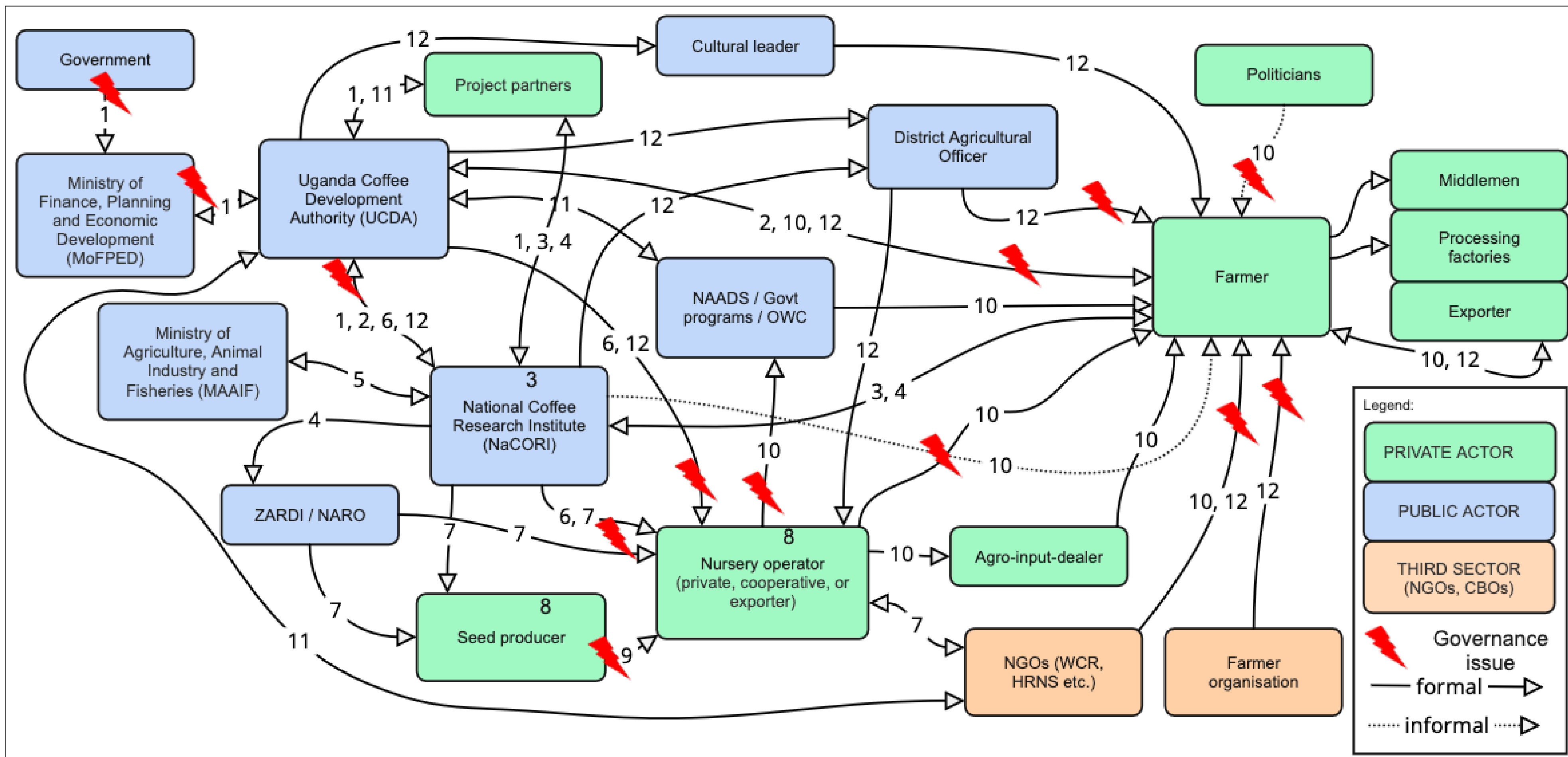
- Dominance of uncertified nurseries
- Weak enforcement of standards
- High costs for quality seedlings
- Limited incentives to certify

Distribution

- Informal channels = main source of seedlings
- Limited extension reach; farmers price-sensitive
- High information asymmetry & mistrust

Governance Challenge	Policy Implication
Fragmented institutional landscape	Strengthen institutional coordination & partnerships
Insufficient funding for public goods	Invest in breeding, propagation & extension capacity
Information asymmetry & mistrust	Enforce certification & improve extension and demonstration
Disincentives for formal nurseries	Provide fair pricing models / subsidies for quality seedlings & integrate informal nurseries
Limited reach of farmer organisations and extension	Revitalise farmer organisations to improve participation & dissemination

Results



Conclusion

Uganda's coffee seed system is constrained by **structural governance bottlenecks** across market, state, and community levels. **Strengthening institutional coordination** and **investing in infrastructure, propagation, and extension** are key to ensuring access to reliable, high-quality planting material and supporting sector transformation.



Fig. 4 & 5: Certified Robusta mother garden (left) and nursery beds (right)

Processes in breeding / varietal development:

- Funding:** The government and MoFPED establish budgets to be distributed to UCDA and subsequently to NaCORI. Partners provide additional funds.
- Defining breeding priorities:** UCDA collects the farmers' desires and demands for specific traits and characteristics and transmits them to NaCORI.
- Acquiring germplasm and external expertise:** NaCORI sources germplasm from research grounds, forests, and farms, or in exchange with international partners.
- Trials and zonal research:** Multi-variety- & multi-locational trials are carried out with between NaCORI, zonal research partners (ZARDIs), external partners (WCR), large farmers
- Variety registration:** NaCORI applies to the MAAIF's National Seed Certification Service for variety release after successful trials and examination.

Processes in multiplication / propagation:

- Nursery identification and certification:** UCDA and NaCORI certify nurseries, define annual production quantities, and ensure quality through ongoing inspections.
- Supplying foundation material:** NaCORI and ZARDIs deliver clones or seeds to establish mother gardens and seed lots to seed producers and nursery operators.
- Establishing mother gardens** or seed lots and initiating production
- Supplying seeds** to establish nursery beds (Arabica only)

Processes in distribution / dissemination:

- Supplying plantlets:** Nurseries or other actors supply young plantlets to farmers.
- Establishing of support programmes:** Public actors, often together with NGOs, development initiatives, or cooperate partners facilitate nurseries or distribute free plantlets.
- Extension services:** Extension agents promote improved varieties and provide training, e.g., on renovation practices