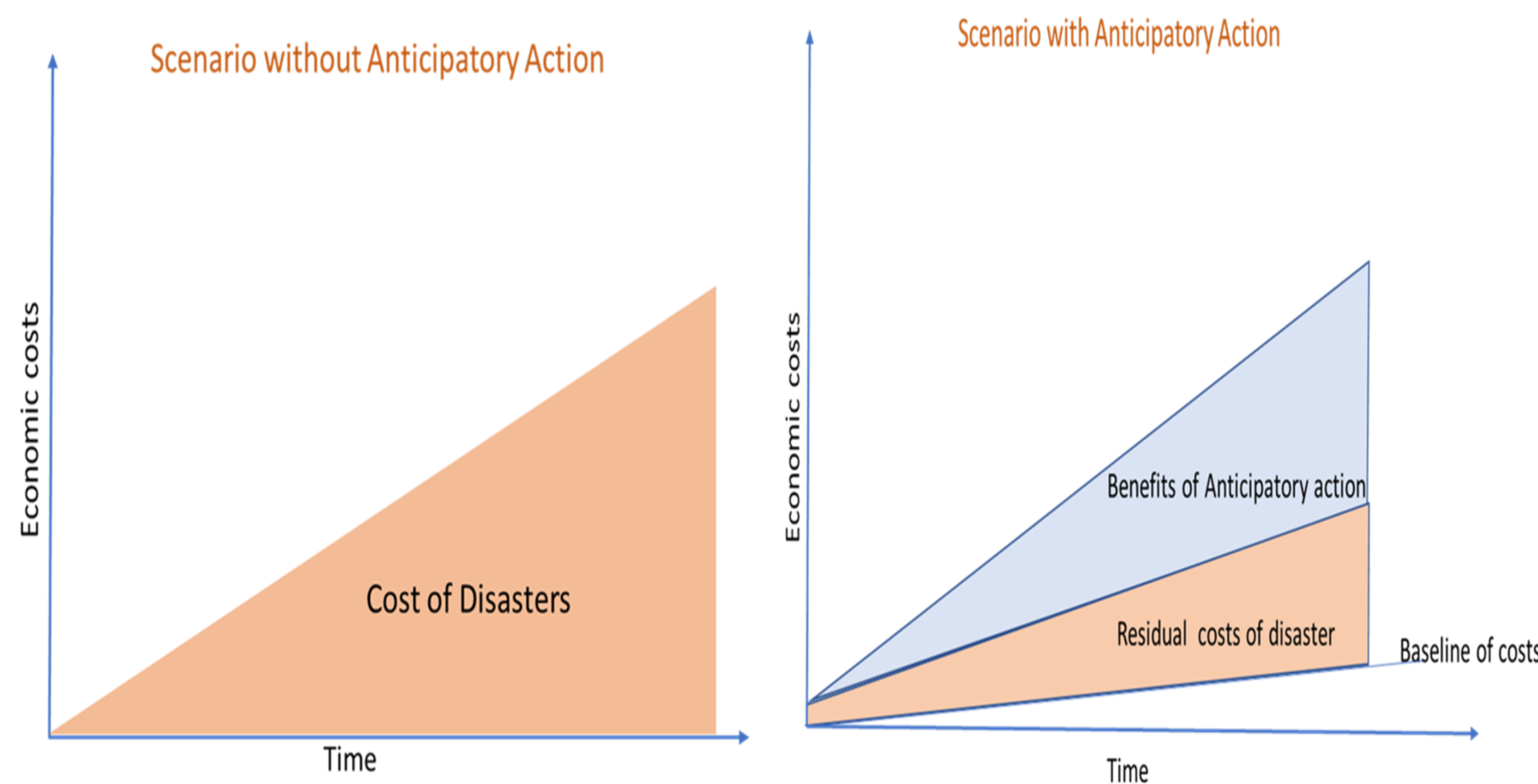


Assessing the effectiveness of drought anticipatory action in Uganda's agro-pastoral drylands: A cost-benefit analysis

Puff Ray Mukwaya
University of Edinburgh
p.r.mukwaya@sms.ed.ac.uk



Source: Adapted from Wreford et al. (2010)

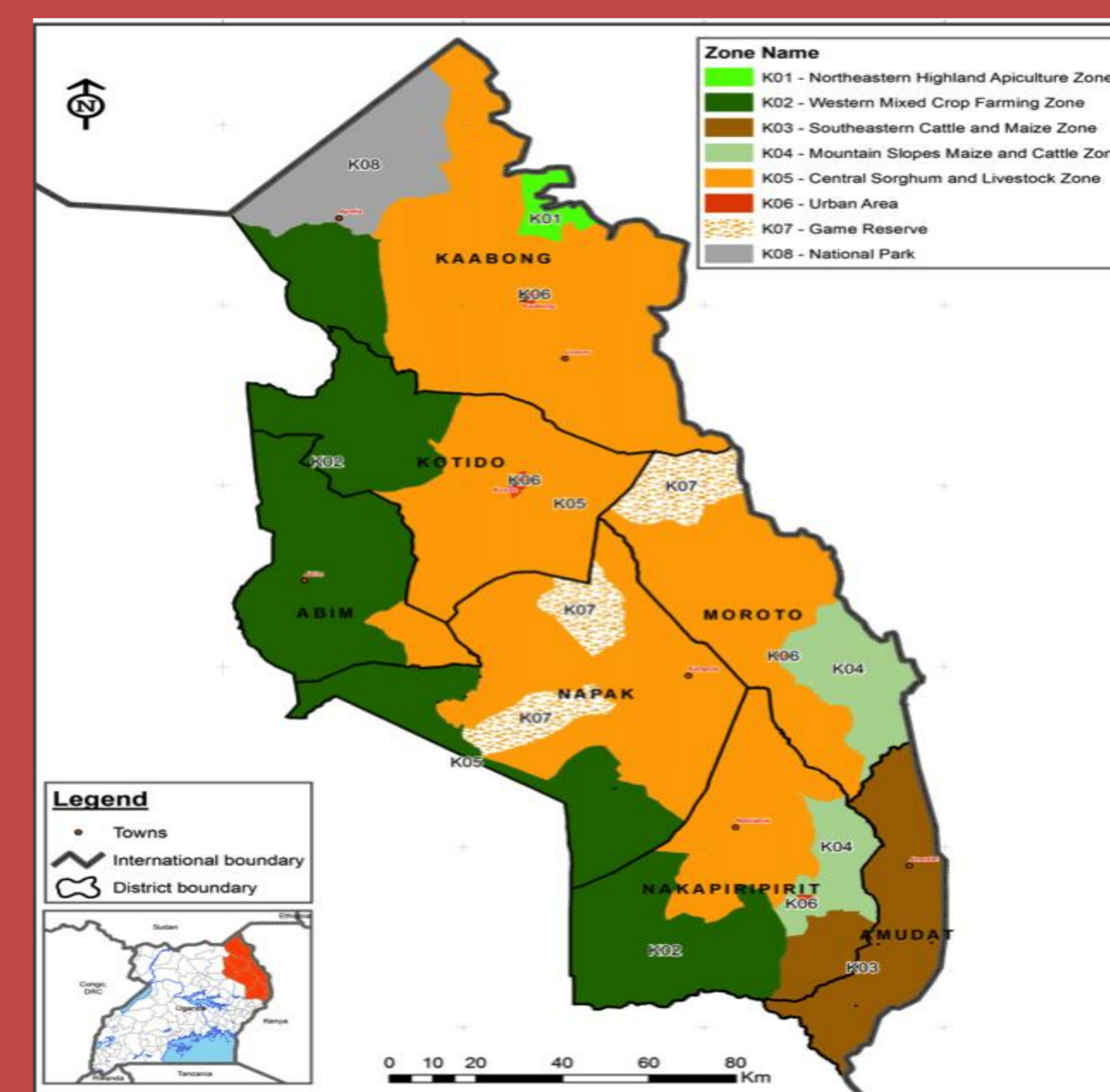
Challenges

- Generalized reluctance for a shift to proactive actions (Anticipatory humanitarian action) from reactive actions
- The quantitative costs and benefits of AA are unclear and are majorly deterministic
- Actors in Anticipatory Humanitarian action space can advocate for reforms in public financing mechanism for Disaster risk reduction (Climate risk financing strategy)
- Relevant ministries in Uganda utilize the results to justify the FMD risk strategic plan.

Methods

- Quantitative analysis:** Monetary valuation, Sensitivity Analysis
- Secondary data from National the Uganda Bureau of Statistics, Ministry of Agriculture Animal Resources and Fisheries (MAAIF), Uganda, and the epidemiological and economic variables were collected from the literature.
- Stochastic model to adequately represent potential impacts and benefits
- Relaxed assumptions:** lack epidemiological and unreliable data.

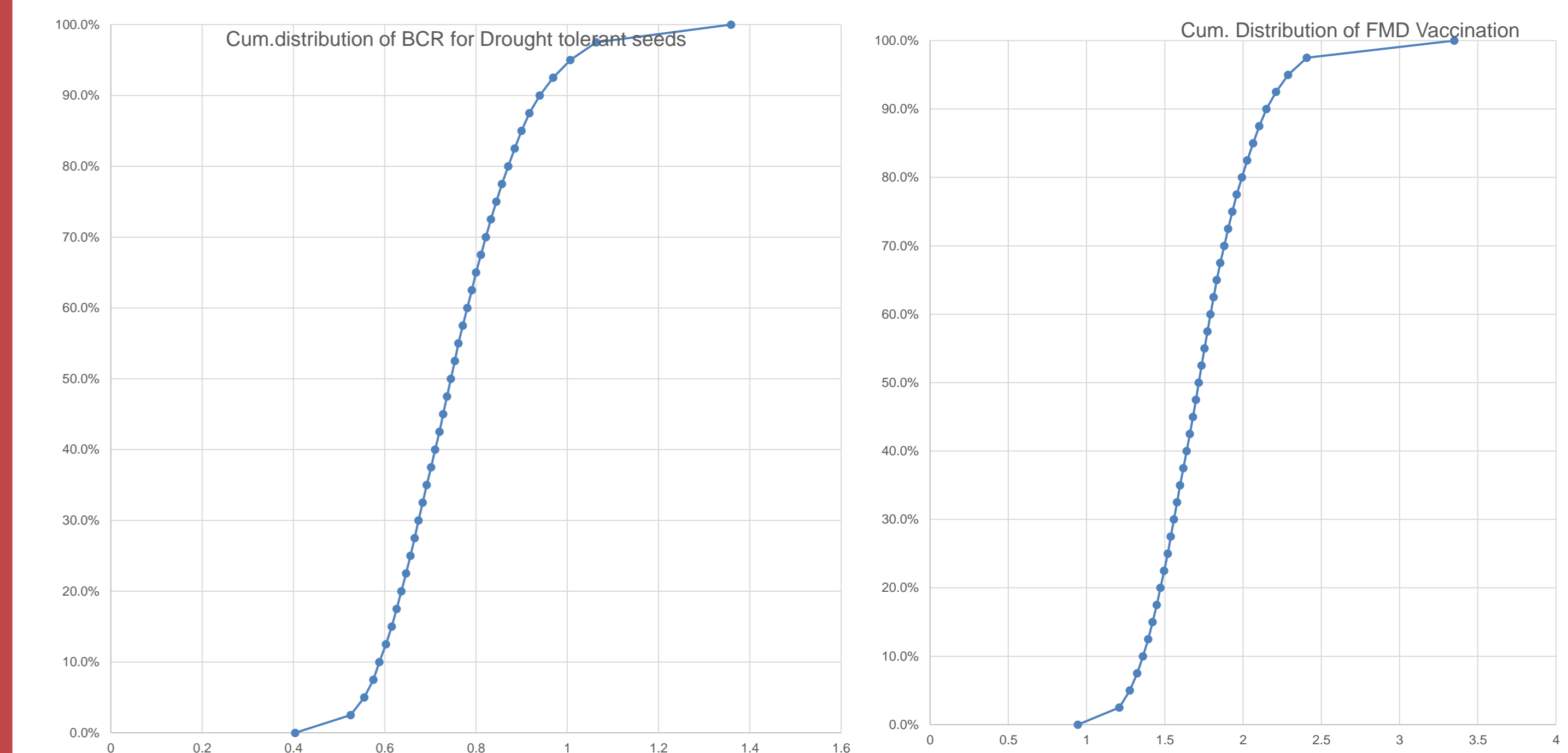
- The benefit-cost ratio (BCR) for the drought tolerant seeds <0 zero if indirect benefits are excluded.
- Livestock FMD vaccination provides a BCR (mean 1.44) excluding savings from averted trade losses and outbreak control costs
- High negative sensitivity of vaccination costs and training costs: suggest that long term investment in extension infrastructure and would improve the BCR for AA intervention
- Benefits of livestock vaccination measure are realized if the intervention is complemented with livestock productivity interventions



Source: FEWSNET (2013)



Livestock vaccination



Cumulative distributions of BCR for drought tolerant seeds and FMD

Recommendations

- AA can contribute to autonomous adaptation - coherence of AA and Adaptation
- Need to account for the potential impact- potential private sector –crowding out
- Account of the disbenefits of Anticipatory action and changes in vulnerability

Reach

- Ministry of Agriculture and Animal Industry and Fisheries in Uganda- Risk based strategic plan

Partners



THE UNIVERSITY of EDINBURGH
The Royal (Dick) School
of Veterinary Studies

Global Agriculture and
Food Systems