

Livelihood strategies, their dynamics and child nutrition in East African Drylands

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Introduction

- Livelihoods in East African drylands are changing. Households are increasingly combining or shifting between livestock, crop production and non-agricultural activities.
- This change is driven by instability, extreme weather, population growth, urbanization and land use change.
- Which livelihood strategies households pursue, how they change, and how child nutrition differs between them remain poorly understood.
- This limits design of development interventions tailored to the needs, challenges and opportunities of different livelihood groups.



Figure 1. Study area, Karamoja cluster of Uganda and Kenya

Materials and method

- A panel household survey was conducted in May 2022 (baseline) and February 2023 (follow-up) in Karamoja border region of Kenya and Uganda.
- Surveyed 861 households and 665 children in both rounds. Principal Component Analysis and k-means analysis were used to identify livelihood strategies represented by a combination of the different income generating activities.
- Child wasting, stunting and underweight were assessed using weight, height/length, age and sex, based on WHO Child Growth Standards.



Figure 2. Vegetation condition at baseline



Figure 3. Vegetation condition at follow-up

Results

- The four distinct livelihood strategies in the study area were:

- 1 Market-oriented pastoralism
- 2 Diversified agro-pastoralism
- 3 Small-scale pastoralism
- 4 Non-agricultural

- Children from market-oriented pastoralism and diversified agro-pastoralism had a significantly lower prevalence of undernutrition compared to non-agricultural and small-scale pastoralism strategies.

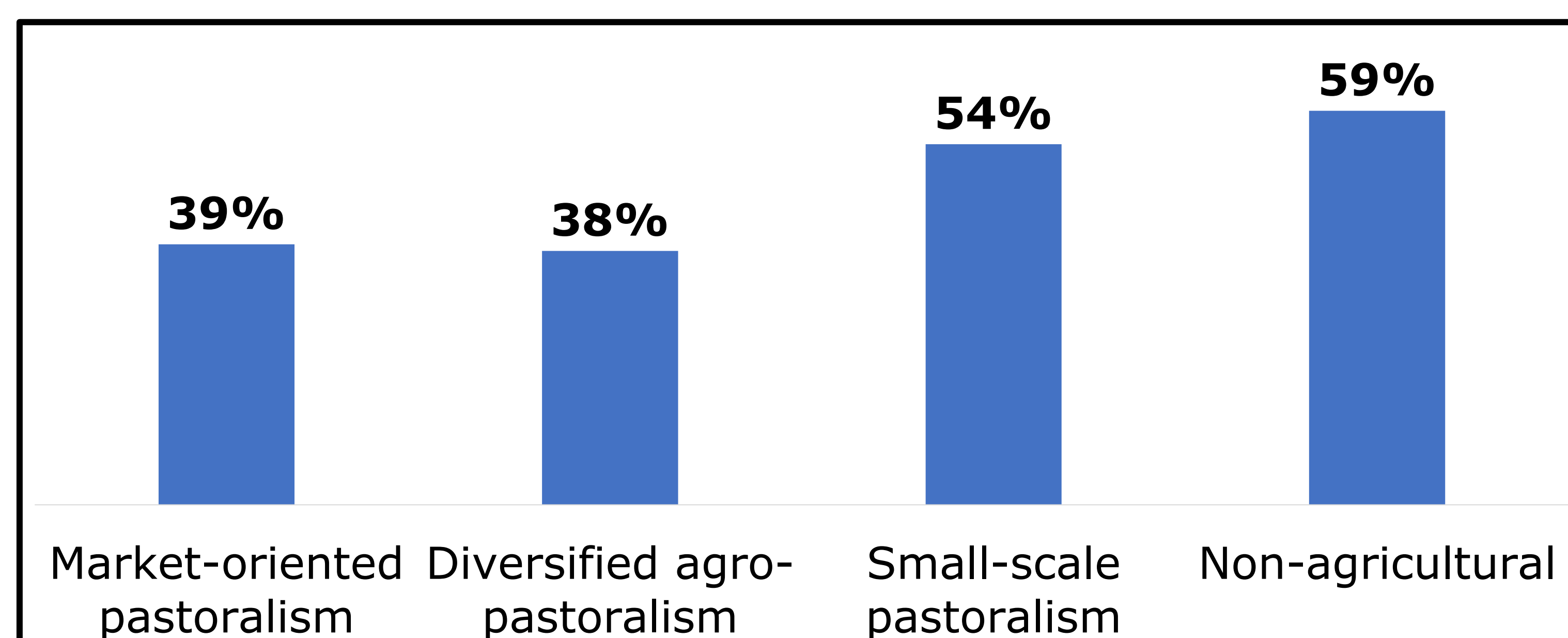


Figure 4. Proportion of undernourished children by livelihood strategy

- Overall, 56% of households changed their livelihood strategy between baseline and follow-up.
- Households transitioned away from crop and livestock-based livelihoods at baseline towards non-agricultural strategy at follow-up.

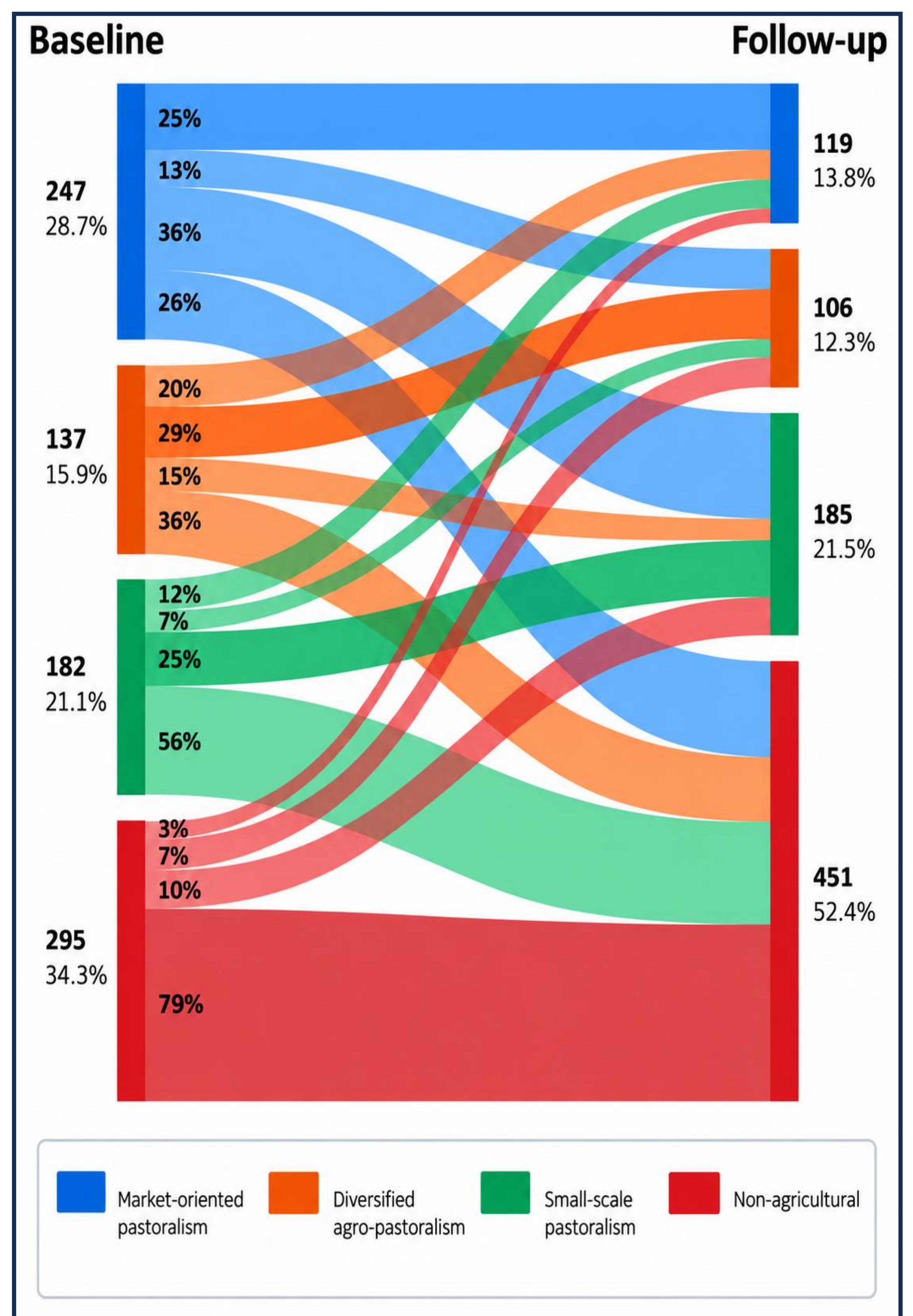


Figure 5. Livelihood strategy transitions from baseline to follow-up. Percentages show the proportion of households moving from each baseline strategy to each follow-up strategy

Conclusion

- Four distinct livelihood strategies which are diversified, dynamic and shaped by agro-ecological conditions and seasonality.
- Child undernutrition was highest among children in the non-agricultural livelihood strategy.
- Tailor interventions to strengthen livestock productivity and resilience among pastoralists, integrated crop-livestock production among agro-pastoralists, and access to viable income opportunities among non-agricultural households.

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