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Livelihood dynamics and child nutrition in east african drylands: evidence from a panel survey in the karamoja border region of Kenya and Uganda

JOSEPH KYANJO¹, AGNETA HÖRNELL², ALICE TURINAWA³, DENNIS MPAIRWE⁴, STEPHEN
MWANGI MUREITHI⁵, INGRID ÖBORN⁶, KRISTINA LINDVALL⁷

¹Umea University, Epidemiology and Global Health, Uganda

²Umea University, Food, Nutrition and Culinary Science,

³Makerere University, Agribusiness and Natural Resource Economics,

⁴Makerere University, Uganda

⁵University of Nairobi, Kenya

⁶Swedish University of Agricultural Sciences (SLU), Crop Production Ecology, Sweden

⁷Umeå University, Sweden

Abstract

Background: Livelihoods in parts of the East African drylands are shifting from pastoralism towards a more sedentary, mixed and non-farm portfolio. Implications of these dynamics for child nutrition remain under researched in these high-burden settings.

Objective: The aim of the study was to assess livelihood strategy dynamics and their implications for child nutrition in the Karamoja border region of Kenya and Uganda.

Methods: The study used data from a baseline and a follow-up survey, covering 861 households and children aged 6–59 months (n=673 at baseline and n=575 at follow-up) across four study areas in Kenya and Uganda. Principal component analysis followed by k-means cluster analysis was used to identify household livelihood strategies. Anthropometric data from the two surveys on weight and height/length was utilised to determine the nutritional status of the children.

Results: Four livelihood strategies were identified; 1) market-oriented pastoralism, 2) diversified agro-pastoralism, 3) small-scale pastoralism and 4) non-agricultural. These differed by location and socioeconomic position and were associated with child nutrition status. Market-oriented pastoralism and diversified agro-pastoralism had significantly higher proportions of children who were neither wasted, underweight, nor stunted.

Conclusion: Livelihoods in the study area are diversified, dynamic and shaped by agro-ecological conditions and seasonality. There were significant transition and retention into the most socioeconomically disadvantaged and less nutritionally remunerative livelihoods, confirming that households in the low socioeconomic position may be trapped in low return livelihoods with limited chances of moving out. Effective development interventions should be targeted to support the unique needs of each livelihood group.

Keywords: Agro-pastoralism, Child nutrition, Livelihood strategies, Principal component analysis, Socioeconomic position

Contact Address: Joseph Kyanjo, Umea University, Epidemiology and Global Health, P. O. Box 7062 kampala Uganda, 256 Kampala, Uganda, e-mail: joseph.kyanjo@umu.se