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Coping strategies and resilience for improving food security & dietary quality in rural Zambia

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Abstract

The 2023/24 El Niño driven drought had devastating impacts on Zambia's agriculture, triggering widespread crop failures, livestock deaths and a sharp rise in poverty. While households quickly adopted a range of coping strategies to mitigate food insecurity, resilience remains vital for long term stability.

In partnership with GIZ under the Food and Nutrition Security, Enhanced Resilience (FANSER) project, this study examined rural household coping strategies and perceived resilience during unusual weather events in Zambia's Eastern Province and Luapula, the latter less affected by drought. This included the influence of FANSER interventions on strengthening resilience during extreme weather events.

A mixed methods design was employed. In 2024, GIZ staff surveyed 1,009 households (401 FANSER participants and 608 non participants) on 15 predefined coping strategies. In 2025, 19 focus group discussions (FGDs) with women, men and adolescents, alongside seven household observations, provided richer contextual narratives.

The survey revealed that 79.2 % of Eastern Province households and 3.6 % of Luapula households reported experiencing the drought. Considering all types of shocks, coping intensity varied: Eastern households applied 1 coping strategy (treatment) versus 1.2 (control), while Luapula households applied 0.5 (treatment) and 0.4 (control) on average. Consumption based coping dominated: In Eastern households, 11.9 % of treatment and 18.2 % of control groups reported reduced diet quality; 18.9 % of treatment versus 27.3 % of control reported reduced food quantity or skipped meals. In Luapula, 20.2 % of treatment and 22.8 % of control reported reduced diet quality, and 19.1 % of treatment versus 23.8 % of control reported reduced quantity or skipped meals.

FGDs highlighted severe crop failures and soaring poverty levels. Beyond skipping meals and cutting food quantity, respondents cited borrowing money, selling productive assets, prostitution, child marriage, early pregnancy, and adolescents' turn to substance abuse. However, respondents highlighted adaptive practices that bolster resilience, such as cultivating home gardens or planting early maturing crop varieties. These qualitative accounts paint a more alarming picture than the quantitative data alone, underscoring the limitations of the survey in capturing the full spectrum of hardship. While less treatment

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households had to apply coping strategies, future interventions need to focus even more on climate resilience and adaptive coping strategies.

Keywords: Climate Change, coping, Dietary Diversity, Drought, Food Security, Nutrition, Resilience, Rural, Zambia