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Determinants of Pastoral Household Resilience to Food Insecurity: The Effect of El Niño on Afar Region, Northeast Ethiopia

TAGESSE MELKETO¹, MICHELLE BONATTI², MARTIN SCHMIDT², STEFAN SIEBER², MARCOS ALBERTO LANA², KLAUS MÜLLER³

¹ *Wolaita Sodo University, Rural Development and Agricultural Extension, Ethiopia*

² *Leibniz-Centre for Agricultural Landscape Research (ZALF), Germany*

³ *Humboldt-Universität zu Berlin, Albrecht Daniel Thaer-Institute of Agricultural and Horticultural Sciences (ADTI), Germany*

Abstract

Pastoralism in Ethiopia is under increasing pressure, caught in a downward spiral of resource depletion and diminishing resilience against shocks and stresses. Due to the natural events like El Niño and policy related factors, the pastoral economic systems are often subjected to food insecurity and vulnerable livelihoods. This contribution, therefore, identifies determinants of pastoral household resilience to food insecurity in Mille, Afar, Ethiopia. A cross-sectional survey using structured interview schedules on 99 randomly selected households was conducted. The data analysis consisted of principal component analysis and general linear model regression. It was found that the resilience capacity of households in the study area to food insecurity shocks is very weak. Family size in adult equivalents, age of household head, wealth status of the household, distance from the household residence to the local market premises, irrigation technology access, household engagement in soil and water conservation techniques, access to and utilisation of credit institutions, as well as the livestock diversification index significantly explain the variations in the resilience status of households. Intervention options in terms of support toward engagement of family labour for pastoral productivity, strengthening rural finance institutions, market infrastructure creation, extension support toward soil and water conservation, utilisation of irrigation for environmentally friendly agricultural production, and institutional support for diversifying livestock herding are recommended areas for intervention towards resilience development in the pastoral economic systems. This can be achieved by creating sufficient awareness and capacity building to foster effective engagement of stakeholders. Both governmental and civil society organisations have roles to play in addressing these issues.

Keywords: El Niño, food insecurity, general linear model, pastoralism, principal component analysis, resilience