

Building pastoralists' resilience to shocks for sustainable disaster risk mitigation: Lessons from West Pokot County, Kenya

Author links open overlay panel [Deborah Namayi Muricho^a](#) [David Jakinda Otieno^a](#) [Willis Oluoch-Kosura^a](#) [Magnus Jirstrom^b](#)

Show more

<https://doi.org/10.1016/j.ijdr.2018.12.012> [Get rights and content](#)

Abstract

Most pastoralists' in Sub Saharan Africa (SSA) are adversely affected by climate-change related shocks such as [droughts](#) and [livestock](#) diseases. These shocks lead to deterioration of livestock quality and even mass death of herds. This leaves pastoralists vulnerable as they derive most of their food and income needs from livestock, necessitating emergency disaster response and the need to build their long-term adaptive capacity. In most cases however, investments only focus on reducing risks and not on building long-term adaptation strategies. In this study, we analyzed factors affecting household resilience among the pastoralists of West Pokot County in Kenya. A focus [group discussion](#) and key informant consultations were held to understand community perspectives on the historical nature of climate-change related shocks. In addition, individual [household surveys](#) were done with 191 randomly selected households to obtain information on the shocks experienced by pastoralists, [coping strategies](#), long term adaptation strategies and external support, their uptake of these and the effect on their resilience. The household resilience index was constructed using Principal Component Analysis (PCA). An ordered [probit regression](#) was used to analyze the effect of [socio-demographic](#), [institutional factors](#) and adaptive practices on households' resilience. It was noted that years of formal schooling, household income, access to credit and extension and adaptive practices such as post harvest use of field crops for [grazing](#), enclosures, stocking improved breeds, bee keeping, ethno-veterinary practices and [afforestation](#) have a positive and significant effect in building household resilience to shocks. There is

therefore a need to [direct investment](#) to bolster pastoralists' own efforts towards building their resilience.

- **Previous** article
- **Next** article

Abbreviations

ASALs

Arid and Semi-Arid Lands

CIDP

County Integrated Development Plan

CTA

Technical Centre for Agricultural and Rural Cooperation

FAO

Food and Agriculture Organization of the United Nations

IIRR

International Institute for Rural Reconstruction

RIMA

Resilience Index Measurement and Analysis

SSA

Sub-Saharan Africa

WISP

World Initiative for Sustainable Pastoralism

NDMA

National Drought Management Authority

Keywords

Shocks

Vulnerability

Resilience

Pastoralists