



Journal article 19th July 2024

# The impact of forage condition on household food security in northern Kenya and southern Ethiopia

This paper studies the causal link between forage condition and food security in northern Kenya and southern Ethiopia, and explores the mechanisms through which the effects occur.

Publisher Food Security

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This [paper](#) studies the causal link between forage condition and food security in northern Kenya and southern Ethiopia, and explored the mechanisms through which the effects occur. The study used weekly panel survey data collected over a period of 94 weeks (March 2021–December 2022) from drought-prone pastoral regions and estimated two-stage least squares instrumental variables regression to assess causal impacts.

We found that an increase in the normalised difference vegetation index – our proxy for forage condition – by 10% significantly reduced the likelihood of a household experiencing food insecurity by 12 percentage points. The main mechanisms through which improved forage condition increased food security were livestock productivity enhancement, reduced

prices of basic food commodities (cereals, legumes, and vegetables), and utilization of better coping strategies by households.

These findings suggest the need for interventions and initiatives aimed at boosting livestock productivity and reducing vulnerability to drought-induced poor forage conditions. Efforts focused on the monitoring of forage conditions and supporting market development for livestock feed are important for addressing the adverse impacts of drought and deteriorating forage conditions in the horn of Africa. Furthermore, the monitoring of drought conditions and shocks using high-frequency data has the potential for providing early warning and informing anticipatory action.

Citation: Alulu, V.H., Shikuku, K.M., Lepariyo, W. et al. [The impact of forage condition on household food security in northern Kenya and southern Ethiopia](https://doi.org/10.1007/s12571-024-01473-w). *Food Sec.* (2024). <https://doi.org/10.1007/s12571-024-01473-w>



Livestock in Lodwar, Kenya

Credit Image by Rob Hope/ REACH - CC BY 2.0

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