

0 25 50 75 100 Kilometers

Locations for panel surveys of key stakeholders in Samburu County, Kenya



CLIMATE & NATURAL RESOURCE USE

A long, dry season of COVID-19 in sub-Saharan Africa? The environmental impacts of the pandemic in the livestock sector in Northern Kenya

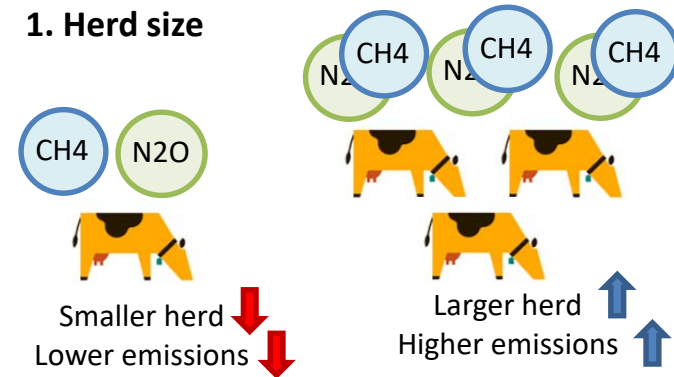
- Livestock are primary source of GHG emissions from agriculture in Africa, but impacts of COVID-19 pandemic on emissions have not been studied
- We conduct a panel survey and use crowd-sourced data on effects of COVID-19 on GHG emissions for pastoralist systems in Northern Kenya
- Three-part framework for assessing effects of COVID-19 on livestock GHG emissions:
 - Changes in herd size
 - Changes in feed availability
 - Changes in animal movement



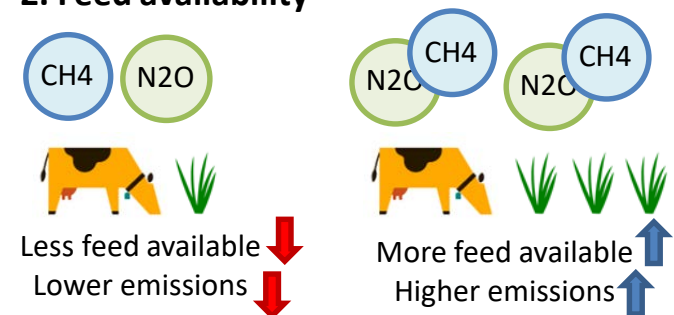
Michael W. Graham (m.graham@cgiar.org)
 Lutz Merbold (l.merbold@cgiar.org)
 Nathan D. Jensen (n.jensen@cgiar.org)
 Philemon Chelanga (p.chelanga@cgiar.org)
 International Livestock Research Institute (ILRI)
 Nairobi, Kenya

Our three-part framework

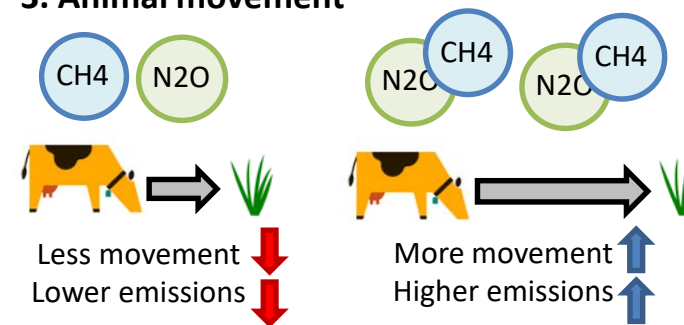
1. Herd size



2. Feed availability



3. Animal movement



GLOBAL AGENDA FOR SUSTAINABLE LIVESTOCK



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Context

- Government restrictions on human and animal movement within Kenya and across international borders, as well as associated socio-economic impacts, may impact GHG emissions from livestock
- Pastoralist systems depend on movement for access to resources across seasons
- COVID-19 may differ from other external shocks (e.g., drought) because it primarily affects mobility

Methods and Objectives

- Use panel and crowd-sourced (KAZNET) data to assess COVID-19 effects on livestock GHG emissions from pastoralist systems in Samburu County, Northern Kenya, following three-part framework
- Develop guidelines for estimating changes in GHG emissions due to future shocks (e.g., zoonotic disease outbreaks, climatic events)