CLIMATE CHANGE & GREENHOUSE GAS REDUCTION
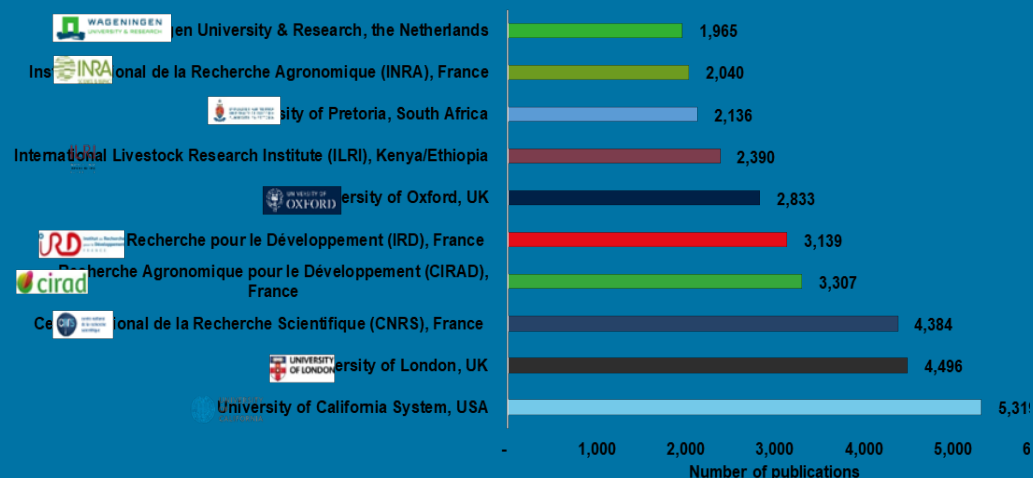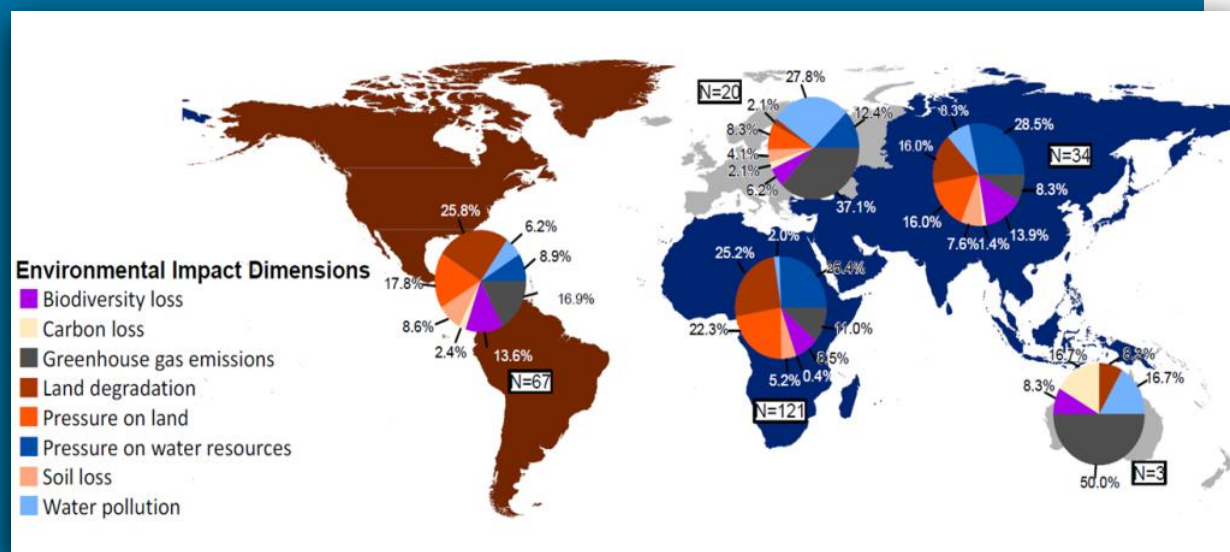
Evidence on sustainable livestock from LMICs is urgently needed to inform nuanced global discussion

Environmental Impact Dimensions
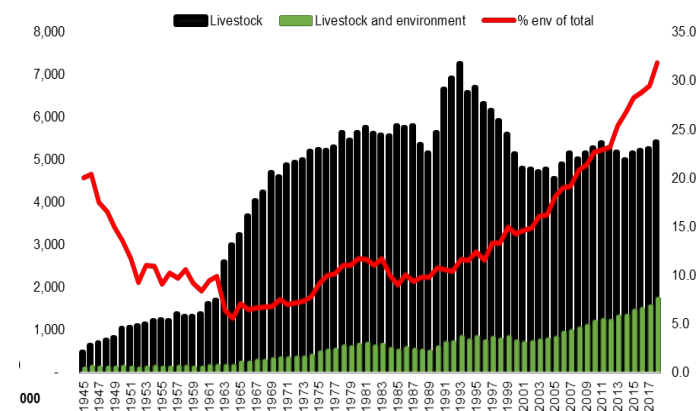- Biodiversity loss
- Carbon loss
- Greenhouse gas emissions
- Land degradation
- Pressure on land
- Pressure on water resources
- Soil loss
- Water pollution

- Wageningen University & Research, the Netherlands — 1,965
- Institut National de la Recherche Agronomique (INRA), France — 2,040
- University of Pretoria, South Africa — 2,136
- International Livestock Research Institute (ILRI), Kenya/Ethiopia — 2,390
- University of Oxford, UK — 2,833
- Institut de Recherche pour le Développement (IRD), France — 3,139
- Centre de coopération internationale en Recherche Agronomique pour le Développement (CIRAD), France — 3,307
- Centre national de la Recherche Scientifique (CNRS), France — 4,384
- University of London, UK — 4,496
- University of California System, USA — 5,31_

Number of publications

Context

- The livestock sector and its negative environmental and health impacts have been subject of growing global concern, reflected in intensive public and scientific discussions

- These negative narratives, mostly rooted in industrial livestock production systems and overconsumption of animal source foods (ASF) in Western countries, overshadow the various complex and often positive roles livestock plays in low and middle-income countries (LMICs)
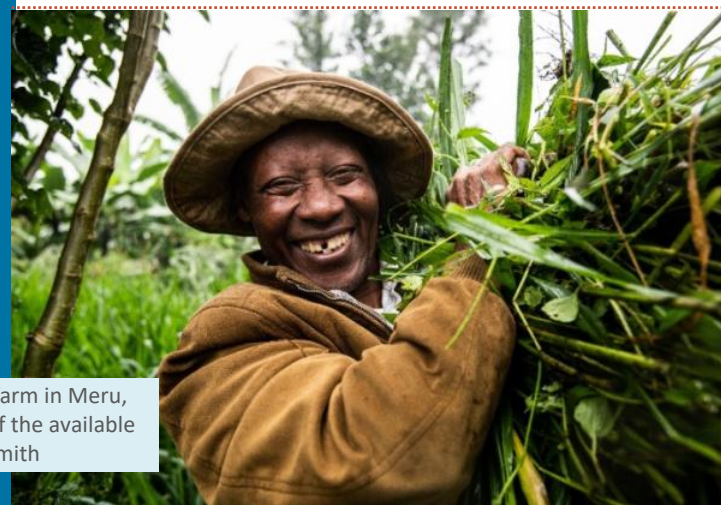
Our innovative approach

- We conducted a systematic literature search in the Web of Science to take stock of the global distribution of research on livestock and the environment (bar graphs)
- We complemented this with an expert survey with 260 respondents to explore global perceptions of environmental impacts of livestock, and available solutions (world map

Outcomes

- In many LMICs, there is still an opportunity to develop sustainable livestock development pathways that avoid the pitfalls of the industrial model.
- We demonstrate the urgent need for LMIC-specific evidence on livestock and the environment to inform a more nuanced global discussion and decision-making supporting sustainable livestock development
- We specifically call for locally-adapted, multi-disciplinary and people-centered research that is embedded in local development processes

Future steps

- Draw investors' attention to the need for accelerated investment in research on livestock and the environment from LMICs
- Use media to draw attention to available environmental management solutions for sustainable livestock

Simon Kiruja carries cut grass for his dairy farm in Meru, Kenya. Improved livestock feeding is one of the available environmental solutions Photo Georgina Smith

Partners CIAT, ILRI, KIT

Alliance

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RESEARCH PROGRAM ON Livestock

CGIAR

LIVESTOCK & ENVIRONMENT

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