

# Forty-five years of One Health-related research at the International Livestock Research Institute

Delia Grace<sup>1,2</sup>, John McIntire<sup>3</sup>

<sup>1</sup> Joint appointed scientist, International Livestock Research Institute, Kenya

<sup>2</sup> Professor Food Safety Systems, Natural Resources Institute, Kent, UK

<sup>3</sup> Independent consultant, California, USA

## Key findings

- ✓ The international community invested nearly US\$1.8 billion in global livestock research from 1975 to 2018
- ✓ most was invested at ILRI
- ✓ most of this was spent in sub-Saharan Africa
- ✓ and this had substantial and objectively verifiable impact

## Background

- Livestock are the engine of development, but animal disease is a major constraint to production and risk to human health.
- Epidemiological research has revolutionised management of livestock disease, but there is little synthesised evidence on the benefits of epidemiological research in low- and middle-income countries (LMICs)
- We reviewed 45 years research by the International Livestock Research Institute (ILRI), the only international agricultural research institute focused on livestock in LMICs.

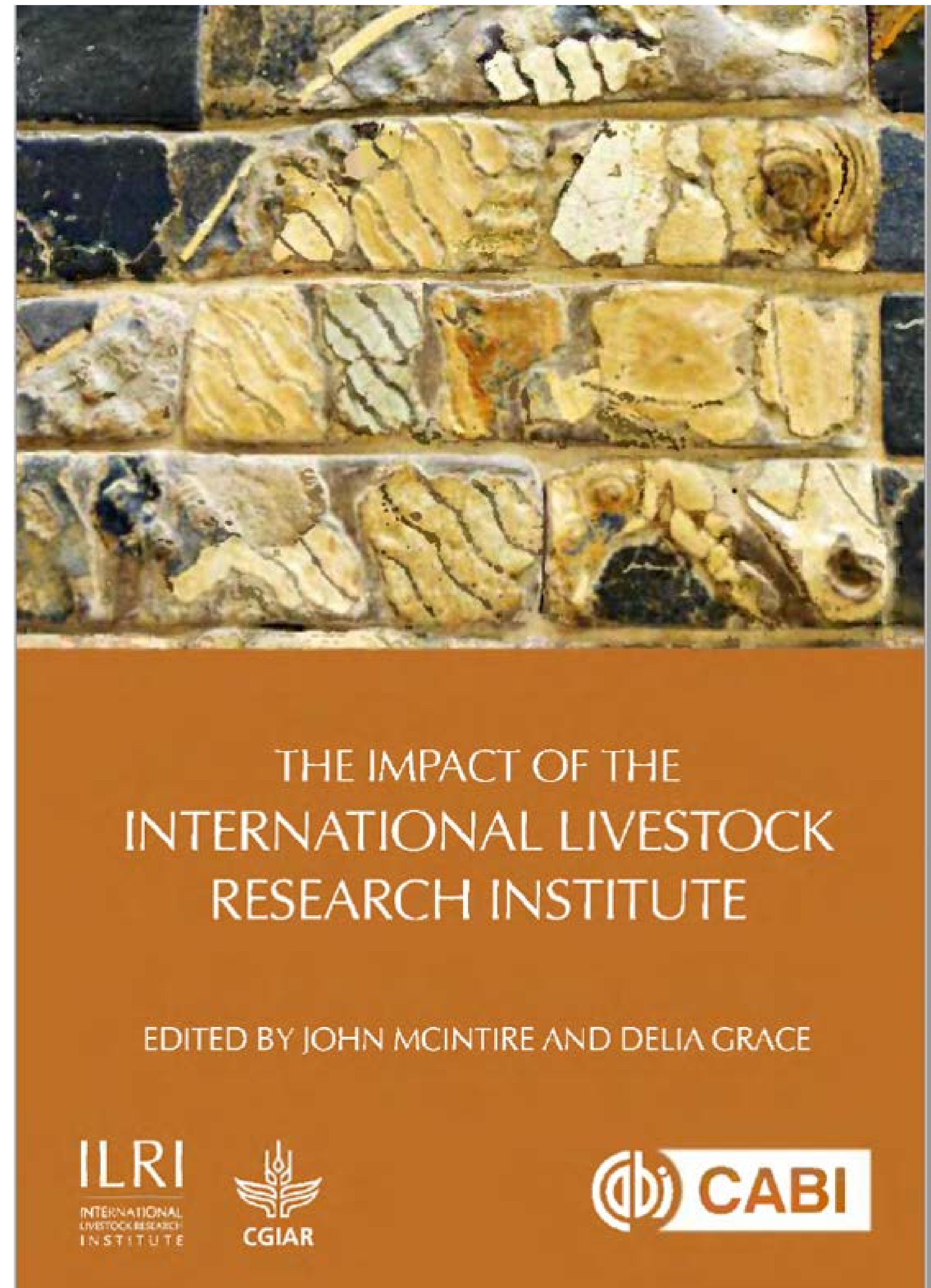
## Methods

Over four years, we engaged more than 70 expert authors, to document 45 years of livestock research at ILRI, resulting in a book, which was launched in 2021 (Figure 1).

Nine of the 18 chapters document epidemiological research into animal disease, showing the importance of epidemiology in livestock development

## Conclusion

The book captures ILRI benefits to research, capacity development and end users. It marshals substantial evidence to show that livestock research improved food and nutrition security, prosperity, and natural resource management in LMICs.



## Epi highlights

- Veterinary epidemiological and economic impact sciences increased understanding of infection dynamics and generated a wealth of methodologies and approaches that have since been applied in every corner of the world.
- One Health approaches estimated the burden and risk factors for neglected as well as emerging zoonoses, identified their drivers and developed strategies for reducing those risks
- Field research on trypanosomiasis determined that rational use of curative and preventive trypanocidal drugs is the most sustainable and scalable control
- Research on food safety elevated the importance of informal markets where most of the poor buy and sell, introduced risk assessment to LMIC, conducted dozens of burden studies and developed new approaches to managing food safety.

DOWNLOAD THE FREE BOOK AT  
<https://hdl.handle.net/10568/108972>

**ILRI**  
INTERNATIONAL  
LIVESTOCK RESEARCH  
INSTITUTE

 UNIVERSITY of  
GREENWICH  
NRI | Natural Resources Institute



This document is licensed for use under the Creative Commons Attribution 4.0 International Licence.  
July 2022