



Centre for
Tropical Livestock
Genetics and Health

CTLGH and the tropical poultry genomics programme

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Poultry webinar – 13th May 2021

Tropical poultry production:
research towards sustainable systems



THE UNIVERSITY
of EDINBURGH





About CTLGH

1. Strategic collaboration

- University of Edinburgh/Roslin Institute
- Scotland Rural College (SRUC)
- International Livestock Research Institute (ILRI)

2. Focus

- Development of tools and innovations to support genetic improvement in tropical smallholder systems
- Guided by downstream challenges and opportunities to develop relevant solutions (co-development of ideas with farmers facing programmes)

3. Key programmatic areas

- Dairy genomic programme
- **Poultry** genomic programme
- Health genetics programme
- **Reproductive technologies** programme
- Informatics and bioresources





CTLGH Poultry genomics programme

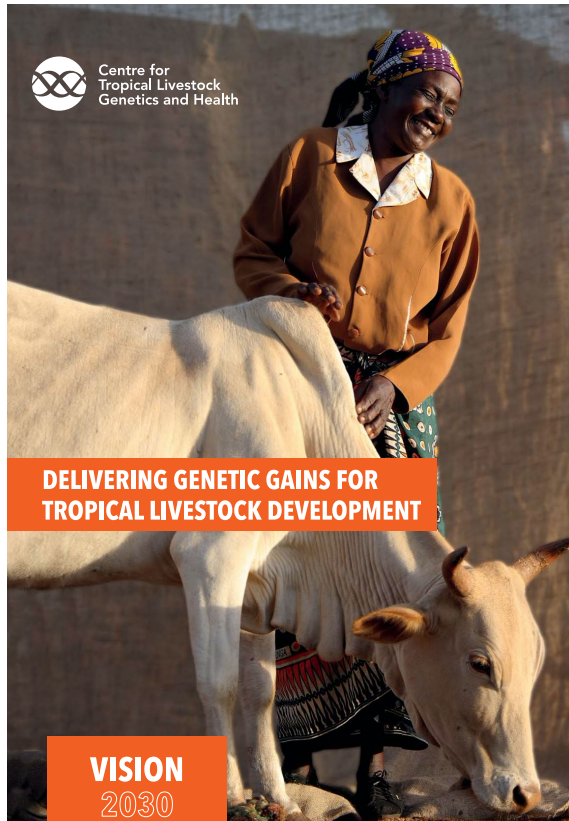
... genetic potential for improved productivity, adaptation and resilience

1. **Challenges:** Productivity, health, adaptation, efficiency and preference
2. **Focus:** Indigenous ecotypes, indigenous improved ecotypes, dual-purpose commercial hybrid, crossbred indigenous x commercial, commercial hybrids (**ACGG**)
3. **Outputs:**
 - New knowledge, innovations and genomic tools
 - Genomic resources
 - [cells lines, in vitro systems, genome manipulation and dissemination of germplasms]
4. **Lessons:**
 - Partnership/collaborations to mobilise and deliver science-based interventions in support of smallholder livestock development
 - Co-design and co-implementation with farmers-facing programmes
 - Impacts (scientific, beneficiaries, how to sustain interventions in a long term ...)



Centre for
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Vision 2030



Mission:

Development of tools, technologies and innovations to enhance productivity and resilience of tropical livestock systems for SHF in LMICs

Strategic objectives:

- Research and development
- Partnerships and collaborations
- Capacities and knowledge exchange

Research focus:

- Phenomics for tropical livestock systems
- Livestock genomes and genetic characterisation of key traits
- Advanced reproductive technologies and genome manipulation
- Strategies for deployment of genomics in breeding programmes
- Data systems (science, innovations, decisions, ...)

Long term strategic orientation and alignment:

- SDGs, Net Zero, resilient food systems, farmers/producers



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Thank you

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