

# The Burden of Animal Disease in Working Equids – Ethiopia

University of Liverpool: Institute of Infection, Veterinary and Ecological Sciences, University of Liverpool

## About the Project

Working horses, donkeys and mules are a critical part of the global economy contributing towards livelihoods, food security and access to water. Animal diseases (defined as infectious disease, injury, and nutritional deficiencies) have a detrimental impact on welfare as well as constraining the ability of working livestock to contribute to the social, economic and cultural outcomes of society. Understanding how to effectively and efficiently address these impacts requires systematic data collection and analysis in order to quantify and understand the burden of animal diseases on working equids. A four-year project is presented which will initiate the estimation of the Burden of Animal Diseases of Working Equids. The project will be supported by the Global Burden of Animal Diseases (GBADs) programme and The Brooke.

## Outputs

1. Classify working equids into different livestock systems
2. Improve population estimates and the capital investment in working equids
3. Determine the current level of inputs and outputs in each system
4. Determine the potential level of inputs and outputs in each system
5. Estimate of the health loss envelope by system at Ethiopian national level
6. Where data are available, attribute diseases to the health loss envelope

## Outcomes

1. A standardised, holistic approach to assessment of the burden of animal diseases in working equids will be created
2. Valuable information will be created to enable assessment of relative impacts on society of interventions in animal health and welfare issues of working equids.

The Burden of Animal Diseases in Working Equids project will provide a powerful basis for evidence-based decision-making in animal health, livestock production and the livestock sector in general. It will achieve this through presenting the animal health burden of working equids in standardised terms of its economic components: production loss; expenditure; and trade. Through working in collaboration with the wider GBADs programme, the information will be linked to the GBADs portal. This will allow users to examine this burden: by the type of farmer and consumer; in different geographical regions; and in different time periods. Therefore, it will allow societies to monitor the burden of animal diseases in smallholder farming systems and by gender, providing a system that will give clear indications of success of animal health interventions.

## Person Specification:

### Essential skills

- Field experience working with livestock
- A working understanding of animal health systems in low- and middle-income countries
- Relevant undergraduate qualification (e.g. biological sciences, veterinary medicine)

### Desirable skills

- Understanding of the concepts of livestock production, planning and budget allocation

- Working experience in the Ethiopian or Kenyan context including basic proficiency of a local language
- Experience with working equids is not a requirement, a broad understanding of the contribution of working livestock will be beneficial.

The successful candidate will be primarily based at the Liverpool Campus. Significant periods of time will be spent doing fieldwork abroad. While the primary country of interest is Ethiopia, if security concerns dictate, this project will revert to Kenya. Due to the travel/location(s)/nature of the project we especially encourage applications from international candidates or those with a large degree of travel in their background.

Through this project you will be connected to a global community of animal health experts from Universities, NGOs and international organisations such as the OIE and the FAO. Read about the GBADs programme here: <http://www.animalhealthmetrics.org>

The University of Liverpool is committed to providing an environment which recognises and values people's differences, capitalises on the strengths that those differences bring to the institution and supports all staff and students in maximising their potential to succeed. This commitment is made with specific reference to a person's age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religious belief and non belief, sex and sexual orientation. The University is committed to fulfilling its obligations under the Equality Act 2010.

The Institute holds a silver Athena SWAN award in recognition of on-going commitment to ensuring that the Athena SWAN principles are embedded in its activities and strategic initiatives.

For more information please visit The University of Liverpool's website

<https://www.liverpool.ac.uk/study/postgraduate-research/studentships/animal-disease-in-working-equids/>

Or FindAPhD

<https://www.findaphd.com/phds/project/the-burden-of-animal-disease-in-working-equids-ethiopia/?p123812>

Applicants should send a CV and a covering letter with the names and contact details of at least 2 referees by email to [pgrapps@liverpool.ac.uk](mailto:pgrapps@liverpool.ac.uk)

Closing date 1<sup>st</sup> November 2020.

#### **Supervisors:**

- Primary – Professor Jonathan Rushton (UoL)
- Secondary – Dr. Gina Pinchbeck (UoL)
- Secondary – Dr. Klara Saville (The Brooke)

#### **Funding Notes**

This 4 year PhD would be suitable for a UK, EU, or international graduate with a degree in biological sciences or veterinary medicine and suitable English language qualifications. This PhD is jointly funded by The Brooke and the University of Liverpool. Funding covers

University of Liverpool fees, a tax free stipend of up to £24,000 and associated operational costs.