bulletin

PANORAMA

#2021-1

Thematic portfolio

Global Burden of Animal Diseases (GBADs)

# PERSPECTIVES | # DOSSIER | # AROUND THE WORLD

OIE WORLD ORGANISATION FOR ANIMAL HEALTH
Protecting animals, preserving our future

The Commonwealth Scientific and Industrial Research Organisation (CSIRO) leads the aspect of the mission of the Global Burden of Animal Diseases (GBADs) programme that will describe the populations and production systems of livestock and aquatic animals. CSIRO will partner in this work with the Food and Agriculture Organization of the United Nations (FAO) and the International Livestock Research Institute (ILRI).

A great deal of livestock data has been collected over time; however, the quality ranges from poor to excellent. Since these data are held by many different organisations, in many different forms, and much of this information is not available in a harmonised or even organised and cohesive manner, it can be difficult to access.

Our team of international scientists will collate existing data from livestock and aquatic animal production systems, focusing on populations, productivity and prices of inputs (such as feed) and outputs (such as meat and milk). Diverse data sources will include public, non-governmental and private organisations at the global level; in particular for the case study country, Ethiopia. Our scientists will also identify any missing data that needs to be collected to provide a more comprehensive understanding of the burden of animal diseases.
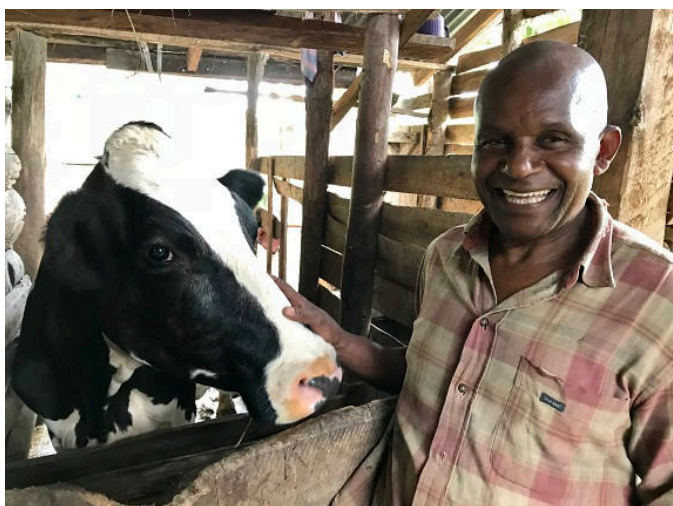
Ngairo and his dairy cow Mze, Mbeya region, Tanzania. © Jeda Palmer

Working closely with colleagues from the University of Zurich, Switzerland, we will develop a classification system for the different livestock production systems data, providing the basis for an estimation of the animal health loss envelope. Our analysis will provide information on the biomass of and economic investment into the animals in these production systems and, where possible, the gender roles involved in animal production. This will provide the basis for differentiating the burdens of animal disease between production systems, and highlight the gender balance of the burden.

The methodology developed will be embedded in models hosted by the prototype GBADs knowledge engine which is being developed by collaborators at the University of Guelph, Canada. The GBADs network of scientists will make this information publicly available by developing easy-to-use, Web-based, data visualisation dashboards and publishing articles in scientific journals. This will enable decision-makers and other interested stakeholders to easily access and understand the livestock data, assisting in evidence-based decision-making for investments and minimising adverse impacts on the environment and public health. It will also help smallholder livestock keepers to allocate their scarce resources to those health issues that are most economically important to their livestock production enterprises, and therefore have more impact on their livelihoods.

DOSSIER

Improved animal population data and production systems classification to support estimates of the burden of animal diseases

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for Animal Health
Founded as OIE

The OIE is an international organisation created in 1924 with a mandate from its 182 Members to improve animal health and welfare. Its activities are permanently supported by 329 centres of scientific expertise and 13 regional offices with a presence on every continent.

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