



# Global Burden of Animal Diseases (GBADs) en la región del CVP

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#### **Background**

- Imagine a situation:
  - Where the scale of investments on animal health are based on gut feelings at best, guesses at worst...
  - We rely on **perceptions** to **allocate the resources** to diseases and animal health problems to achieve our goals...
  - And when the animal health investment and allocations have been made there are no systematic ways to capture data and information to evaluate our successes or failures.
- This is reality for animal health the Global Burden of Animal Diseases programme aims to fill this void of data and information for animal health and One Health







#### **History of GBADs**

- A series of presentations and papers over the 2010s
- Technical item at the OIE 84<sup>th</sup> General Session in 2016 with a resolution
- Development of a partnership between WOAH (Formally OIE) and The University of Liverpool leading to support for the development of the concept during 2018/19 for a 10-year program
- Investment of Phase IIa for the period of 2021/22 by the Bill and Melinda Gates Foundation and FCDO for a proof of concept
- Additional funding for rollout activities from Brooke, ACIAR, European Commission, Fleming Fund





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#### What is GBADs?

- GBADs is a multi-national and transdisciplinary consortium co-led by the
  University of Liverpool and the World Organisation of Animal Health (WOAH)
  funded by the Bill and Melinda Gates Foundation, UK's FCDO, European
  Commission, Australia's ACIAR, Canada's IDRC and Brooke
- **GBADs** generates estimates of the social and economic burden of animal diseases through an innovative framework that provides data and information to support sustainable animal health investment opportunities that achieve sustainable development goals (SDGs)







**GBADs** seeks opportunities to improve investments, allocation of resources and evaluating successes



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## What motivates the GBADs program?

Our livestock keepers, consumers and the environment need:

- **Investment plans** which ensure there are adequate animal health systems
- Allocation of resources to problems that most affect their health and wellbeing
- **Evaluation** of animal health investments to ensure they are delivering on societal outcomes







### Do you know?

- The biomass of your livestock?
- The economic investment in cattle, sheep, goats, pigs and poultry?
- What the level of production loss is in your dairy sector?
- How much your poultry sector spends on veterinary products?
- Which diseases have the biggest impact on production?
- How the current animal health and disease problems impact the wider economy and food supply?



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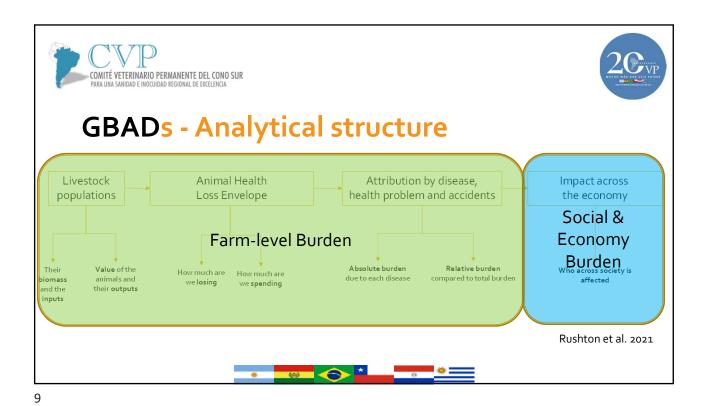




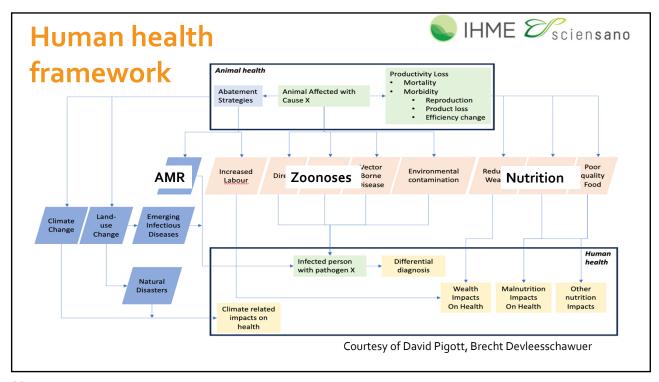
## How are we addressing these needs?

- **GBADs** is establishing a systematic framework for assessing the burden of animal diseases to:
  - enable informed decision-making to support livestock sector productivity and reduce health impacts
  - improve equity for small scale livestock and aquaculture producers, particularly women
  - enhance production efficiency by respecting the scarcity of natural resources
  - reduce the impact of farming on the environment





Livestock population <u>Information</u> <u>Analysis</u> <u>Data</u> Species level **Populations** Population Distribution Age structure models Poultry Sheep Cattle Pigs All other Aquaculture Sex structure species Production Population Classification Biomass Ontology LSU systems Breeds Beef **Dual purpose** All other Dairy Weight Investment systems Population Price US\$ models Farm-level Input/ Net Current Population Ideal economics Output production models Input/ Input/ & population relationship loss dynamics Output Output Farm-level Growth & budget Expenditure production enterprise Animal Health Loss potential models Envelope Productivity Prices change Ontology Disease Cause & Disease Infectious Non-infectious External prevalence impacts Population & & health risk factors diseases forces diseases Attribution incidence Epidemiological models burdens Value chain analysis Wider Supply & Who manages Economy and trade Partial equilibrium models demand responses the burden? economy impacts



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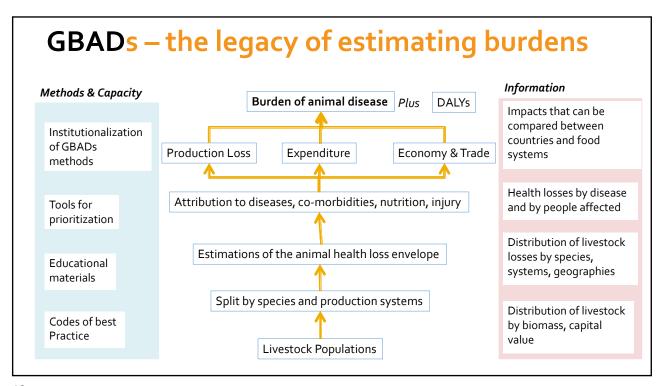




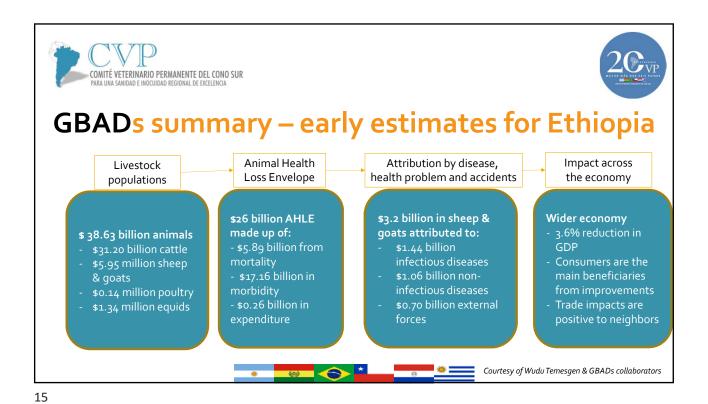
#### Adding value through information provision

- **GBADs** is generating data and information to help understand the livestock sector and the impact of animal diseases
- This information is available through prototype dashboards at a global, sector and national level (see <a href="https://gbadske.org/dashboards">https://gbadske.org/dashboards</a>)
- Three levels of prototype dashboard are being developed
  - Global level burden estimation
  - Sector level estimation based on major producers of key commodities
  - Country level estimation across all species
- Summary information is provided and where data are available this can be disaggregated by species, age and sex groups









Case Study Countries

Republic of Ire anc OOO The Netherlands
United Kingdom

Mexico Colombia

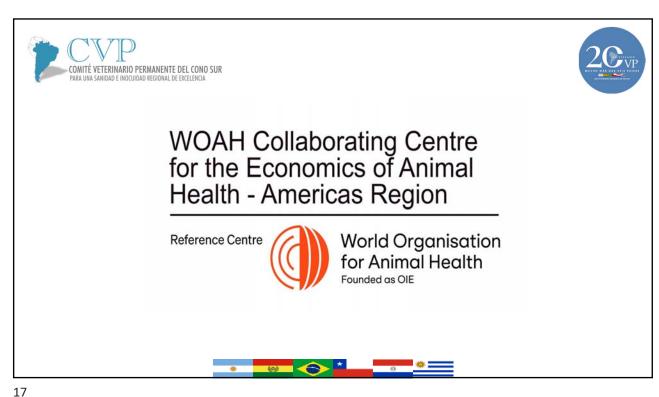
Peru Brazil

South Africa

Being initiated

Key
Ongoing

Being initiated









# **Collaborating Centre Key Partners**

- Kansas State University
  - Dustin L. Pendell Department of Agricultural Economics
- University of São Paulo
  - Silvia Helena Galvão de Miranda Department of Economics, Business and Sociology
- University of Brasília
  - Vitor Salvador Picão Gonçalves Faculty of Agronomy and Veterinary Medicine
- Universidad Nacional Autonoma de México
  - José Luis Dávalos Flores Department of Business, Economics and Rural Development Faculty of Veterinary Medicine and Husbandry
- Washington State University
  - Thomas L. Marsh School of Economic Sciences, Paul G. Allen School for Global Health







#### GBADs - a call to arms

- We cannot do this alone
- We need you to work with us in partnership
- We need you to join with us on investments on data sharing, testing of information and education materials
- We need you to help us to develop and encourage a cadre of young people
- This is an exciting time, a time of change
- GBADs is an exciting and ambitious program it is one of exploration and discovery
- We want you to enjoy being part of the GBADs team and journey





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