Global Burden of Animal Diseases

Briefing Note, September 2020

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Acknowledgements

Purpose

GBADs will enable society to examine animal health and the disease burden from a fresh perspective, and indicate the individuals and communities which are the most impacted. It will describe the burden in economic terms and demonstrate how animal health is associated with agricultural productivity, smallholder household income, the empowerment of women and the equitable provision of a safe, affordable, nutritious diet.

GBADs will measure and improve societal outcomes from livestock and have a positive impact on the Sustainable Development Goals contributing to a world in which there is Zero Hunger (SDG2), Good Health and Well-being (SDG3), Gender Equality (SDG5); Decent Work and Economic Growth (SDG8); and Responsible Consumption and Production (SDG12).
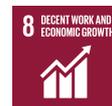
Livestock production and aquaculture are critical to human nutrition and health. These animals play critical roles in society, providing income, food, clothing, building materials, fertilizer and draught power. Across the world, 1.3 billion people are directly dependent on food animals for their livelihoods, of whom 600 million are small-holder farmers in some of the world's poorest countries. The health of their animals is under constant pressure from communicable and non-communicable animal diseases, inadequate access to feed, forage and clean water, injuries and predation. For these vulnerable people, poor animal health leads directly to poverty and malnutrition, exposure to zoonotic disease risk, poor health and reduced welfare. Aside from the animal keepers, unhealthy animals themselves suffer. Furthermore, at global level the lower productivity of diseased animals contributes to climate change and environmental degradation, as more resources are required to produce a unit of output.

In response, hundreds of millions of dollars are invested on an annual basis to mitigate animal diseases and health problems, yet where this money is being spent, to address which problems and what effect it is producing is poorly documented and badly understood across the livestock and aquatic sectors, most especially amongst vulnerable smallholder animal keepers. There is an absence of a systematic process to determine the burden of animal health issues and diseases, and their consequent impact on human nutrition, health and wellbeing. How the burden is apportioned between smallholders and the commercial sector, by region and by gender, is also largely unknown. This limits the ability of both the public and private sector to target resources at specific social, economic and environmental issues that have the most significant impact on human wellbeing.

In recognition of these facts, at the 84th General Session of the World Organisation for Animal Health (OIE) in 2016, the 182 Member Countries adopted Resolution n.35[1], creating a mandate for the "development and testing [of] a methodology to determine the global burden of animal diseases in order to address deficiencies in economic information on national and world impact of animal diseases". In response, OIE has supported the development of GBADs, which has built a network of key individuals in global leadership roles across public policy, private sector strategy and academia. These people are committed to seeking improved animal health system outcomes, disrupting old power models and harnessing the engagement of the distributed community of animal health decision-makers, producers and other stakeholders to permanently transform decision-making in animal health investments. The members of the GBADs network have significant experience in the fields of the economics of animal health, population modelling, animal disease classification and the prioritisation of disease intervention. GBADS will build on these areas of expertise, using scientific, economic, and risk analysis methods.

The GBADs concept is already generating interest and support. Of more than 150 key animal-health decision makers across Governments, NGOs and the private sector surveyed in 2019, over 90% said they would use GBADs analysis to support decision making[2], and 80% would also consider sharing data to support the GBADs programme.

GBADs will be guided by the successful human Global Burden of Disease (GBD) studies. GBD has redefined the way the global community assesses human disease priorities and plays an important role in support of resource mobilisation and allocation. GBADs will create information on the economic burden of livestock and aquaculture diseases in order to achieve evidence-based decision-making. GBADs data will be securely and sensitively handled, and the information produced will be supported by tools for data interpretation. This comprehensive approach will enable users to make judgements on their investments, optimizing the economic efficiency of the livestock sector and minimizing adverse impacts on the environment and public health. The information generated will be granular: categorized by the type of farmers and consumers affected and also the gender balance of burden. An emphasis will be placed on smallholders and the poor consumer. It will help smallholder livestock keepers allocate their scarce resources to those health issues that are economically important to their livestock production enterprises and therefore have impact on their livelihoods.

This ambitious and achievable programme has a ten-year vision to 2030 and sets a clear pathway towards sustainability through use by countries, buy-in from the private sector, and commitment by international organisations and the global community. Integration of this system into business as usual for OIE Member Countries will be supported by the adoption of best practice international standards for economic assessment of animal health in OIE Terrestrial and Aquatic Animal Health Codes that use the GBADs methodology as a basis.

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[1] See page 170 : https://www.oie.int/fileadmin/Home/eng/About_us/docs/pdf/Session/2016/A_RESO_2016_public.pdf

[2] www.animalhealthmetrics.org/surveys