Although animals play pivotal roles in providing food for a growing world population, they can harbor disease agents that pose threats to humans. In fact, in this still young millennium, the world has witnessed three major human pandemic threats of animal origin with significant economic, health, political, and social consequences: Severe Acute Respiratory Syndrome (SARS), Highly Pathogenic Avian Influenza, and Pandemic H1N1 Influenza.

These viral diseases raise concerns and fears within populations around the world because human fatalities from unusual contagious diseases are readily associated with severe epidemics and large death tolls that in the past accompanied the plague and the Spanish flu, among others. Nowadays, the media along with the adoption of mass-reaching communication technologies can create and facilitate hysterias by the widespread dissemination of information and misinformation regarding unusual diseases. Unfortunately, much less information is disseminated about the impacts of these diseases on livestock producers and associated disruptions to food supply chains that are internationally linked through global trade. A recent disease event makes for a good example: in 2009, Mexican authorities estimate that Pandemic H1N1 Influenza cost their economy over $2 billion USD, much of which came from foregone revenues in trade and tourism.

When diseases arise in food animals—especially those that can also infect humans—government authorities spur a number of measures to control their spread. Countries experiencing disease outbreaks suddenly face measures by neighboring countries to protect their citizenries as well as their productive assets. Some of the most common measures that countries impose on others to reduce the risk of disease introduction are trade (import) bans, revoked export licenses, temporary restrictions of import quotas, extended quarantine periods, stricter inspections of shipments, firmer application of
standard sanitary and phytosanitary measures, public awareness campaigns, and media-based advertisements dissuading people from purchasing and consuming certain animal food products or advising ways to deal with suspicious animal or human illnesses. With the aid of the Internet, blogs, chat rooms and information exchange platforms, panic has sometimes been disseminated to misinformed audiences, consequentially modulating meat consumption patterns that carry an economic impact on nations.

The evidence gathered so far in disease-infected countries suggests that diseases are able to cross borders regardless of the repertoire of direct and indirect measures enacted or levied. For example, wild bird migration, illegal animal trade, porous borders, international travel, and rising urbanization—most of which fall outside the remit of legislative and regulatory frameworks—have been identified as contributors to disease spread. While it is widely believed that foresight and prevention are critical to mitigate disease impacts, there seems to be very little agreement over the cost-effectiveness, viability, and functionality of investments in preventive schemes. In this context, making investments to improve animal health can help reduce risks to governments and societies.

Animal health services provided by national, regional, and international agencies help maintain healthy and productive animals that make important contributions to food production, income generation, job creation, economic growth, and poverty alleviation. As long as animals produce food to feed more people and generate income to buy food items, animal health will be considered one of the fundamental underlying activities supporting the basic human right to food.

Leaders around the globe need to be reminded that the precipitous descent of some of the world’s poorest countries into food insecurity, instability, and poverty raises the risks of potentially detrimental spill-over effects, ranging from a rise in illegal migration to organized crime. It is important to underscore that the promotion of comprehensive animal health has long been used by regional organizations, foreign countries, and multilateral institutions as a strategic tool when dealing with countries whose economies and societies are deeply intertwined with agriculture and livestock.

As for global health security, disease mitigation measures aimed at addressing threats and reducing risks of infectious pathogens that arise at the interface between animals, humans, and ecosystems will allow countries to exploit livestock production systems to produce safe food, generate income, and propel growth.