

FUTURE RESILIENCE TO DISEASES OF ANIMAL ORIGIN: THE ROLE OF TRADE

INFORMATION NOTE¹

Key points:

- The COVID-19 pandemic has underscored the risk that animal diseases pose to human health. A 2012 study estimated that some 56 zoonoses (i.e. diseases affecting human health that originate in animals) were together responsible for around 2.5 billion cases of human illness and 2.7 million human deaths a year. The impact of COVID-19 has far eclipsed that of other recent outbreaks of such diseases. Experts warn that zoonotic pandemics may become more frequent due to factors including further environmental degradation, intensive farming practices, and the effects of climate change.
- WTO rules recognize the right of WTO members to take measures to protect human, animal and plant health. The [Agreement on the Application of Sanitary and Phytosanitary Measures](#) (SPS Agreement) underscores their right to take measures to address the health risks arising from the spread of zoonoses through international trade in animals and animal products, including wildlife, while aiming to avoid unjustified trade barriers.
- The SPS Agreement strongly encourages WTO members to base their SPS measures on certain international standards. In the area of animal health and zoonoses, it recognizes the standards developed by the [World Organisation for Animal Health](#) (OIE).
- According to both the [World Health Organization](#) (WHO) and the [OIE](#), the COVID-19 pandemic is being sustained through human-to-human transmission and not through international trade in animals and animal products. Based on currently available information, and with the support of expert advisory groups, the OIE does not [recommend](#) that any COVID-19-related sanitary measures be applied to the international movement of live animals or animal products without a justifying risk analysis. Trade in animals and animal products can take place safely if risk reduction measures are applied based on international standards.
- Risks associated with trade in animals and animal products, including wildlife, may increase when animal disease risks are not monitored and controlled. The OIE Working Group on Wildlife and other international organizations are examining how better to address sanitary risks linked to wildlife trade. Efforts are also being made to address illegal wildlife trade.
- Around 20 per cent of livestock production is lost due to animal diseases every year – leading to an estimated annual economic loss within the sector of about US\$ 300 billion. The impact of COVID-19, which primarily affects people, has already dwarfed these figures. Global economic output is projected to shrink by 4.5 per cent in 2020 because of the pandemic, according to estimates by the IMF. As of 6 October 2020, WTO economists expect global trade to [contract by 9.2 per cent](#) in 2020.
- Recognizing that managing risks related to emerging diseases of animal origin requires multi-sectoral and multi-institutional cooperation, the [Food and Agriculture Organization of the United Nations](#) (FAO), the OIE and the WHO are collaborating on a [One Health approach](#), while the WTO houses the [Standards and Trade Development Facility](#) (STDF), a global partnership which helps developing countries to engage in safe trade. Trade in animals and

¹ This document has been prepared under the Secretariat's own responsibility and is without prejudice to the positions of WTO members or to their rights and obligations under the WTO.

animal products was worth US\$ 367.5 billion in 2018, with important implications for livelihoods, food security and nutrition worldwide.

- The SPS Committee and other WTO committees provide fora for members to discuss trade measures adopted to address the risk of COVID-19 and other zoonoses, thus helping to ensure that trade measures contribute to enhancing future resilience and prevention. Specific trade concerns related to animal diseases and zoonoses, including emerging diseases, and their effects on trade, account for [35 per cent of all trade concerns raised in the SPS Committee](#).

1 OVERVIEW

This information note explores trade issues associated with the spread of diseases of animal origin and the international framework in place to address them. It seeks to map actions being taken to control these diseases so as to ensure safe trade in animals and animal products, including in wildlife. The note is not exhaustive, but, rather, is an overview of the current issues and the status of legal frameworks and planned future actions to control the spread of zoonoses through trade.

2 DISEASES OF ANIMAL ORIGIN AND PUBLIC HEALTH

Not all animal diseases affect human health, nor is the emergence of human diseases that originate in animals anything new. The OIE estimates that 60 per cent of human infectious diseases are zoonotic;² at least 75 per cent of emerging infectious diseases in humans (including Ebola, human immunodeficiency virus (HIV) and influenza) have an animal origin. In fact, three of the five new human diseases that emerge every year are of animal origin.³

A 2012 [study](#) by the [International Livestock Research Institute](#) estimated that some 56 zoonoses were together responsible for around 2.5 billion cases of human illness and 2.7 million human deaths a year. Other well-known recent zoonoses include Ebola, MERS (Middle East respiratory syndrome) and SARS (severe acute respiratory syndrome). By the time it was contained in July 2003, SARS, with an average 15 per cent mortality rate, had reached 26 countries and taken some 900 lives. The largest and most complex outbreak of Ebola in 2014-16, with an average 50 per cent [mortality rate](#), took around 11,000 lives.

COVID-19 is the latest in a series of such outbreaks, and certainly the one that has had the greatest impact on human life and health since the 1918 influenza pandemic. While COVID-19 is of animal origin, its spread is sustained by human-to-human transmission. By early October 2020, the [WHO estimated that there had been over 37 million confirmed cases of COVID-19, and over one million deaths](#).

Zoonoses can originate from different sources, including domesticated animals, farm animals and wildlife. Zoonotic diseases may also be transmitted between farmed animals and wildlife: for example, avian influenza viruses are shared by poultry and wild birds, including migratory birds, and African swine fever affects both farmed pigs and wild boar.

Wildlife zoonoses can be influenced by many factors, including demographics, with human population expansion; [encroachment on the natural habitats of wild animals](#), [climate change](#), [land-use change and loss of biodiversity](#) and deforestation; and human behaviour, such as the consumption of wild and exotic meats.⁴ A host of zoonotic diseases are believed to be linked to these factors, including the Nipah virus, which causes illness ranging from asymptomatic infection to acute respiratory illness and fatal encephalitis, and HIV, which causes acquired immunodeficiency syndrome (AIDS).

Multiple risk factors contribute to the potential spread of transboundary animal diseases and zoonoses, including movements of people and uncontrolled movements of animals across borders.

² In [Taking a Multisectoral, One Health Approach: A Tripartite Guide to Addressing Zoonotic Diseases in Countries](#), the Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (OIE) and the World Health Organization (WHO) define zoonotic diseases as: "Infectious diseases that can be spread between animals and humans; can be spread by food, water, fomites, or vectors".

³ See <https://www.oie.int/en/for-the-media/onehealth/>

⁴ See e.g. [The World Health Report 2007](#) and "[Emerging and re-emerging zoonoses](#)" (accessed on 28 October 2020).

International trade, particularly [trade in live animals](#), if not regulated in line with the principles outlined in the WTO SPS Agreement, can pose a risk of disease transmission.

3 TRADE POLICY AND SAFE TRADE IN ANIMALS AND ANIMAL PRODUCTS

How can we allow trade to flow while ensuring that it does not inadvertently contribute to the spread of diseases?

The WTO [SPS Agreement](#) was negotiated to ensure that measures affecting trade taken by governments to protect human, animal and plant health and to ensure food safety do not create unnecessary barriers to international trade.⁵ The SPS Agreement requires such measures to be based on science and strongly encourages the use of international standards, guidelines and recommendations; national SPS measures that conform to these standards are presumed to be consistent with the provisions of the SPS Agreement.

The SPS Agreement also allows governments to take provisional measures when there is insufficient scientific evidence, for example in situations of emerging diseases. However, such provisional measures should be reviewed as science evolves, and adapted to the new scientific information that may become available over time.⁶

The SPS Agreement recognizes the [international standards developed by the OIE](#) for animal health and zoonoses.⁷ The [OIE was established in 1924](#) in response to a trade-related outbreak of [rinderpest](#) in Europe. The then 28 signatories agreed to [notify the OIE of their sanitary situations](#) and recognized the importance of knowledge-sharing and international collaboration to address such animal diseases. Today the OIE has 182 members and its [objectives](#) include ensuring transparency in the global animal disease situation and safeguarding world trade by publishing health standards for international trade in animals and animal products.⁸ OIE standards are based on scientific evidence and are adopted by OIE members at the annual OIE General Assembly. The OIE has several specialist commissions which review current scientific information, prepare the draft standards and address scientific and technical issues raised by members.⁹

The [OIE World Animal Health Information System \(WAHIS\)](#) records and makes publicly available cases of animal diseases and zoonoses reported by OIE members.¹⁰ Respecting the OIE's notification requirements for animal diseases can contribute to the containment of disease outbreaks. Measured, science-based responses to disease notifications are therefore crucial.

Even when human health is not at stake, the cost of animal diseases is often high. A 2016 [survey](#) conducted by OIE of its then 180 member countries highlighted that 101 of them had suffered a major disease outbreak since 2000. The OIE estimated that the cost incurred by both the public and private sector of controlling the 128 outbreaks for which figures were calculated totalled US\$ 12.1 billion. According to the OIE, about 20 per cent of livestock production is lost to animal diseases annually – an economic loss of about US\$ 300 billion per year.¹¹ The impact of COVID-19 – which is now predominantly affecting people, not animals – will dwarf these estimates of direct economic

⁵ It builds on the General Agreement on Tariffs and Trade (GATT) [Article XX\(b\)](#), which recognizes the right of WTO members to protect human, animal and plant health. Other WTO agreements also contain provisions for health protection measures.

⁶ See OIE, [Scientific and Technical Review Vol. 39\(1\)](#) "Ensuring safe trade in animals and animal products".

⁷ It also recognizes the international standards established by the [Codex Alimentarius Commission \(Codex\)](#) for food safety, and the [International Plant Protection Convention \(IPPC\)](#) for plant health. These three standard-setting bodies play an important role in providing advice to governments on the basis of the latest scientific evidence.

⁸ Bucher, K., Tellechea, D., Caya, F. and Stratton, J. (2020), "Implementation of OIE international standards: challenges and opportunities for monitoring", in [Scientific and Technical Review Vol. 39\(1\)](#) "Ensuring safe trade in animals and animal products" (accessed on 28 October 2020).

⁹ More information on the specialist commissions and on the standard-setting process is available at <https://www.oie.int/standard-setting/overview/introduction-to-specialist-commissions/>.

¹⁰ Cáceres, P., Tizzani, P., Ntsama, F. and Mora, R. (2020), "The World Organization for Animal Health: notification of animal diseases", in [Scientific and Technical Review Vol. 39\(1\)](#) "Ensuring safe trade in animals and animal products" (accessed on 28 October 2020).

¹¹ See https://www.oie.int/fileadmin/Home/eng/International_Standard_Setting/docs/pdf/Observatory/Safe_trade_for_sustainable_development.pdf.

losses. WTO economists expect world merchandise trade [to decline by 9.2 per cent](#) in 2020. The IMF estimates that global economic output will shrink by 4.5 per cent this year. Even if future growth manages to return to the pre-pandemic trajectory, the lost economic activity will measure in the trillions of dollars.

The economic costs of disease outbreaks can be further increased by unnecessarily trade-restrictive measures, i.e. when trading partners adopt import restrictions in response to disease outbreaks that go beyond what is needed to avoid disease introduction and spread. Such restrictions tend to be adopted quite quickly but removed much more slowly once a disease outbreak is over, increasing their costs. Concerns about possible trade effects can thus lead to underreporting or delayed reporting of disease outbreaks, as countries try to avoid these negative consequences of transparency. The [OIE 2016 survey](#) cited above highlighted that 68 OIE member countries had faced disruptions in international trade after a disease outbreak. It also indicated that a number of countries stated "that the losses caused by a disease outbreak continued to have an impact on their trade, with some saying that they never regained their original markets. Seven countries reported that trade was still affected after a disease outbreak had ended and that their previous markets had not been regained".¹²

The SPS Agreement requires transparency in relation to trade measures and allows trading partners to submit comments on draft SPS measures to avoid unintended economic impacts.¹³ When WTO members have concerns regarding SPS measures that are constraining, or have the potential to constrain, their exports, they often raise them as specific trade concerns (STCs) in the WTO Committee on Sanitary and Phytosanitary Measures (SPS Committee).¹⁴ WTO members regularly raise such concerns about measures adopted in response to disease outbreaks to diffuse trade tensions and work towards a solution.

Specific trade concerns related to animal diseases and zoonoses, including emerging diseases, and their effects on trade, account for [35 per cent of all trade concerns raised in the SPS Committee](#). While some of these concerns are resolved quite quickly after being raised in the Committee, others can be more difficult to solve. For example, an STC on [general import restrictions due to Bovine Spongiform Encephalopathy \(BSE\)](#) was raised at 38 meetings between 2004 and 2020. While initially there was much uncertainty about the spread of BSE, as scientific evidence became available and OIE standards were adopted and revised, concerns regarding unjustified barriers and long delays in approvals for imports of beef were reiterated many times, illustrating the high and long-lasting economic costs often associated with such trade restrictions. Fourteen of the 49 SPS-related formal WTO disputes initiated by members have related to animal health issues.¹⁵

4 THE RESPONSE TO COVID-19

The development, discussion and adoption of international standards takes time, especially for newly emerging diseases for which scientific information is initially not yet available. At the beginning of the COVID-19 pandemic, not much information about the routes of transmission was available, and it was not clear whether trade restrictions might be needed to reduce the risk. The OIE has prepared a [questions and answers](#) page which provides easy access to the latest information for its members and to the interested public.

Based on available information, and with the support of expert advisory groups, the OIE does not recommend that any COVID-19-related trade restrictions for the international movement of live

¹² Rushton, J. and Gilbert, W. (2016), "[The Economics of Animal Health: Direct and Indirect Costs of Animal Disease Outbreaks](#)", Paris: paper presented at the OIE World Assembly, 22-27 May 2016, page 10.

¹³ Alcalá, R. and Martínez-Hommel, M.-B. (2020), "The World Organisation for Animal Health: notification of animal diseases", in [Scientific and Technical Review Vol. 39\(1\)](#) "Ensuring safe trade in animals and animal products" (accessed on 28 October 2020).

¹⁴ See www.wto.org/spis for information on the SPS Committee. Further information is available in [Facilitating trade through regulatory cooperation: The case of the WTO's TBT/SPS Agreements and Committees](#), in [Transparency in the WTO SPS and TBT Agreements: The Real Jewel in the Crown](#) and in Gobind Daswani, A. and Bucher, K. (2020), "International regulatory cooperation: contribution of the OIE and the WTO Agreement on the Application of Sanitary and Phytosanitary Measures and SPS Committee", in [Scientific and Technical Review Vol. 39\(1\)](#) "Ensuring safe trade in animals and animal products" (accessed on 28 October 2020). Individual STCs can be searched for in the [SPS Information Management System](#).

¹⁵ Stanton, G. and Prakash, G. (2020), "World Trade Organization disputes related to animal diseases", in [Scientific and Technical Review Vol. 39\(1\)](#) "Ensuring safe trade in animals and animal products".

animals or animal products be introduced without a justifying risk analysis.¹⁶ The OIE recommends that evidence-based risk management principles be applied to international movement of live animals and products from animal species demonstrated to be susceptible to infection with COVID-19.

The OIE has also established a comprehensive [COVID-19 portal](#) to provide information on current and planned activities, including its collaboration with FAO and WHO on a worldwide cross-sectoral [One Health Approach](#) to prevent and control health threats of direct or indirect animal origin affecting humans.

Since February 2020, several members have [notified COVID-19-related trade measures](#), including 26 SPS measures. In an [analysis of SPS and technical barriers to trade \(TBT\) notifications](#) submitted by WTO members in response to COVID-19, the WTO Secretariat noted in May 2020 that initially, a few WTO members had imposed restrictions on imports or transit of certain animals and animal products, from affected countries, in some cases requiring sanitary certificates. As more scientific evidence about the transmission of the COVID-19 virus has become available, some WTO members have reviewed and/or removed their initial restrictions on trade in animal products. Since April 2020, most COVID-19-related SPS notifications have been trade-facilitating, with many members announcing an easing of import procedures, including the increased use of electronic certification to facilitate safe trade.

In June 2020, the SPS Committee held an [information-sharing session](#) on COVID-19. Speakers emphasized the importance of maintaining and facilitating safe agricultural and food trade to mitigate the pandemic's negative effects on food security and livelihoods. In this context, many voiced a strong call for WTO members to adhere to the core principles of the SPS Agreement – including transparency and the requirement for any measures taken to have a scientific basis – in the design and implementation of their COVID-19 response measures. Speakers from the [Codex Alimentarius](#), the [International Plant Protection Convention \(IPPC\)](#), the [OIE](#) and the [WHO](#) explained their responses to the pandemic and presented their SPS-related guidance.

5 REGULATION OF WILDLIFE TRADE

COVID-19 has focused attention on wildlife and its role in the emergence and spread of zoonotic diseases. There have been calls for bans on wildlife trade, and in some cases on "wet markets" (typically these are open-air markets selling fresh, perishable, rather than non-perishable, produce, and, in some cases, live animals), reflecting the desire to reduce the risk that new diseases will emerge, now that their potential to affect public health and disrupt lives has become more evident to the general public.¹⁷

In the case of domestic or farmed animals, disease outbreaks are monitored and controlled, depending on the capabilities of veterinary authorities and other related actors at the national level. Large volumes of trade in animals and animal products take place safely, following international standards and national requirements. In contrast, there is often no similarly close surveillance of the health of wildlife. This limits chances to detect and report diseases in wildlife, and to collect data and knowledge, which are key for the management and control of such diseases.

Unregulated or illicit trade in animals – whether farmed, domestic or wild – implies a higher risk of spreading disease. Since the outbreak of the pandemic, some experts and international institutions have called for closer controls, in particular of trade in illicit wildlife, given that such trade does not necessarily respect existing sanitary requirements, and thus undermines governments' efforts to prevent disease transmission.¹⁸

¹⁶ According to the [Codex Alimentarius](#), the international food standards body recognized by the SPS Agreement, "[i]t is highly unlikely that people can contract COVID-19 from food or food packaging". The Codex Alimentarius has developed international best practices to guarantee food hygiene, including in relation to viruses in foods, and these practices provide a framework for safe trade in food products.

¹⁷ In a related development, the Netherlands is planning to shut down the [mink industry](#) as a result of COVID-19.

¹⁸ See, for example: [https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196\(20\)30122-4/fulltext?dgcid=raven_jbs_etoc_email](https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(20)30122-4/fulltext?dgcid=raven_jbs_etoc_email); https://wedocs.unep.org/bitstream/handle/20.500.11822/32218/UNEP_COVID.pdf?sequence=1&isAllowed=y; <https://www.unenvironment.org/news-and-stories/story/there-are-no-winners-illegal-trade-wildlife>.

Wildlife trade is an [important source of income and nutrition in many regions](#), covering a wide range of products, from fish and wild meat as sources of protein, to fibres, skins, shells and other inputs used in the garment and other industries. Global wildlife trade can be hard to estimate since it ranges in scale from local barter to major international routes, and often relies on informal, unregulated or illegal networks. [Legal wildlife trade in the European Union](#) alone is estimated to be worth EUR 100 billion (US\$ 112 billion) a year.¹⁹ A [2016 UNEP-INTERPOL](#) report estimates the value of illegal wildlife trade at between US\$ 7 and US\$ 23 billion per year.²⁰

As explained above, the SPS Agreement provides a legal framework for trade in animals, and its coverage extends to aquatic animals, wild fauna and their products.²¹ The OIE develops the international standards recognized by the SPS Agreement for safe international trade in terrestrial and aquatic animals and their products, and its mandate includes wildlife as well as farmed and domestic animals

In April 2020, responding to the COVID-19 pandemic, the OIE Wildlife Working Group issued a Statement on Wildlife Trade and Emerging Zoonotic Diseases.²² It highlights the severe socio-economic consequences of recent outbreaks of diseases at the human-animal-ecosystems interface, stemming from poorly regulated wildlife trade. Recognizing that wildlife trade is highly complex and carries both benefits and risks, the Group emphasizes the need to support legal, sustainable and responsible wildlife use by providing sound guidance, standards, risk assessment and risk management tools.

The OIE has initiated a work programme, the [Wildlife Health Management Programme](#), to reduce and manage risks of spill-overs between wildlife, livestock and humans, while ensuring the protection of biodiversity. The OIE is working towards promoting the use of good practices in wildlife trade and facilitating the implementation of integrated wildlife surveillance systems, as well as towards improving knowledge on viruses circulating in wildlife through research. This work aims to produce new guidelines, and if necessary international standards, which will cover the transportation, capture, farming, marketing and consumption of wildlife, and to raise awareness on best practices.

Recognizing that wildlife diseases may have a serious impact on animal and public health and can adversely affect wildlife conservation, the OIE considers that disease surveillance in wildlife should be considered as important as disease surveillance in domestic animals. Aiming to increase transparency in this regard, the OIE has been collecting information on wildlife diseases since 1993, and has developed [guidelines for wildlife disease surveillance](#). There is also a separate OIE interface that monitors wild animal diseases, the [WAHIS \(i.e. World Animal Health Information System\)-Wild Interface](#). This system allows OIE members to share and access information about the presence of diseases in wild animals.

Looking at wildlife trade from a different angle, the *Convention on Trade in Endangered Species of Fauna and Flora (CITES)* is an international agreement that aims to ensure that international trade in wild animals and plants covered by the convention does not threaten their survival. CITES and the WTO have cooperated on a joint publication to show that global trade and environmental regimes can support each other and work coherently to achieve shared objectives.²³ CITES covers over 36,000 species of wild animals and plants, 97 per cent of which can be traded²⁴ provided that such trade is legal, sustainable and traceable, including through a prior scientific assessment of the potential impact of trade on the species' survival. While it does not cover domestic trade, CITES does regulate trade in listed species of wild animals that are [farmed, ranched or bred in captivity](#). Parties to CITES have developed guidelines covering the transportation of live animals with a view to addressing animal welfare concerns, but there are no specific sanitary requirements regarding trade under the convention. Public health and veterinary quarantine measures are not covered by CITES.

¹⁹ Duffy, R. (2016), "[EU trade policy and the wildlife trade](#)", Brussels: European Parliament.

²⁰ See also <https://cites.org/eng/prog/iccwc/crime.php>.

²¹ WTO SPS Agreement, [footnote 4](#).

²² OIE (2020), "[Statement of the OIE Wildlife Working Group, April 2020: Wildlife Trade and Emerging Zoonotic Diseases](#)", Paris: OIE.

²³ See [CITES and WTO, \(2015\), Enhancing Cooperation for Sustainable Development](#).

²⁴ CITES (2019), "[Remarks of CITES Secretary-General Ivonne Higuero for WCO IT/TI Conference](#)", 14 June 2019, Baku, Azerbaijan

Since the outbreak of the COVID-19 pandemic, the need to integrate sanitary requirements into the international framework for wildlife trade has [been discussed](#). It has been suggested that parties to CITES might wish to explore how [CITES' role in regulating wildlife trade could contribute to other regulatory objectives](#), such as mitigating the risk of disease spread. In addition, CITES [cooperates with the OIE](#) on an integrated approach to sanitary measures for trade in wild animal products, and this cooperation could be expanded.

Finally, other environmental degradation concerns such as deforestation and habitat and biodiversity loss have also been linked to an increased likelihood of future pandemic outbreaks.²⁵ Such issues are covered by other multilateral environmental agreements, in particular the [Convention on Biological Diversity](#) (CBD), which contains its own legal frameworks that are relevant for trade in wildlife. Parties to the CBD are currently in the process of developing the 2021-30 framework that will provide the basis for future work under the CBD.

6 ONGOING INITIATIVES TO MANAGE EMERGING DISEASE RISKS

COVID-19 is not the first disease to have emerged with an animal source, although it has been the most severe known,²⁶ testing the framework put in place in reaction to earlier disease outbreaks. This framework includes the WHO's [International Health Regulations \(IHR\) 2005](#), which was revised after the SARS outbreak in 2003. The IHR is an agreement among 196 countries to work together for global health security.

Through the IHR, countries have agreed to build their capacities to detect, assess and report public health events. The WHO plays the coordinating role in the IHR and, together with its partners, helps countries to build capacity. The IHR also include specific measures to limit the spread of health risks to neighbouring countries, and to prevent unwarranted travel and trade restrictions so that traffic and trade disruption is kept to a minimum. Following a World Health Assembly Resolution adopted in May 2020,²⁷ the WHO Director-General convened a committee to review the functioning of the IHR during the COVID-19 response; and the implementation of the relevant recommendations of previous IHR Review Committees. This committee began its work in September 2020.

Humans and animals share the same ecosystems and are affected by many of the same microbes. The One Health approach²⁸ recognizes that such disease threats affecting humans and animals are best handled jointly by professionals with a range of expertise who are active in different sectors, such as public health, animal health, plant health and the environment. This approach, which emerged at the beginning of the 2000s, takes into account that to effectively detect, respond to and prevent outbreaks of zoonoses, epidemiological data and laboratory information should be shared across sectors. Government officials, researchers and workers across sectors at the local, national, regional and global levels should implement joint responses to health threats.²⁹

At the global level, the WHO, FAO and OIE work together to promote multi-sectoral responses to food safety hazards, risks from zoonoses, and other public health threats at the human-animal-ecosystem interface, and to provide guidance on how to reduce these risks. In a [2010 Tripartite Concept Note](#), the three organizations agreed to work more closely together. They stated that the "emergence of new or the re-emergence of existing animal diseases, including zoonoses, the growing threat of transboundary animal diseases, the impact of environmental changes and globalization, as well as new societal demands related to food security, food safety, public health and animal welfare, emphasize the critical need for collaboration between the three organizations".

²⁵ See for example <https://www.nationalgeographic.com/science/2019/11/deforestation-leading-to-more-infectious-diseases-in-humans/>; <https://www.weforum.org/agenda/2020/03/biodiversity-loss-is-hurting-our-ability-to-prepare-for-pandemics/>; <https://www.independent.co.uk/voices/animal-markets-wildlife-trafficking-coronavirus-biodiversity-disease-a9460121.html>.

²⁶ WHO (2020), "[WHO Director-General's opening remarks at the media briefing on COVID-19 – 27 July 2020](#)", Geneva: WHO.

²⁷ <https://www.who.int/teams/ihr/ihr-review-committees/covid-19>.

²⁸ "(T)aking a multisectoral, One Health approach means that all relevant sectors and disciplines across the human – animal – environment interface are involved to address health in a way that is more effective, efficient, or sustainable than might be achieved if not all relevant sectors were engaged. Taking a multisectoral, One Health approach includes ensuring balance and equity among all the partners." FAO, OIE and WHO (2019), [Taking a Multisectoral, One Health Approach: A Tripartite Guide to Addressing Zoonotic Diseases in Countries](#), Rome, Paris and Geneva: FAO, OIE and WHO.

²⁹ WHO (2017), "[One Health](#)", Geneva: WHO and OIE "[One Health 'at a glance'](#)", Paris: OIE.

In 2017, [the three organizations committed](#) to providing multi-sectoral, collaborative leadership in addressing health challenges. Through a [2018 memorandum of understanding](#), they agreed to step up joint action, with a strong focus on tackling antimicrobial resistance. Recognizing that, although the risks of emerging zoonoses had long been known, many countries lacked the capacity to implement multisectoral and multidisciplinary collaboration needed to address these risks, the three organizations developed the [2019 Tripartite Guide to Addressing Zoonotic Diseases in Countries](#). While focused on zoonotic diseases, this guide also covers other health threats at the human-animal-environment interface, including antimicrobial resistance and food safety. It recognizes that key factors to allow for a sustainable application of One Health approaches include political will and sufficient resources.

Another multi-stakeholder partnership bringing together diverse stakeholders from across agriculture, health, trade and development is the [STDF](#). The STDF, a multi-agency initiative, promotes improved food safety, animal and plant capacity in developing countries by helping their imports and exports to meet SPS requirements, based on international OIE (as well as [Codex Alimentarius](#) and [IPPC](#)) standards, guidelines and recommendations. The STDF provides funding for the development and implementation of innovative and collaborative SPS projects at global, regional and country level that are based on demand and help to leverage expertise and additional resources. Future projects, for instance, could help developing countries to set up systems that reduce the risks of new diseases emerging by improving monitoring and control and better regulation of wildlife trade, based on OIE standards.

The STDF is also working on the [use of electronic SPS certificates \(SPS e-cert\)](#); its global "e-phyto" and "e-vet" projects are being led by the FAO, the IPPC and the OIE, with support from the World Bank Group, international organizations including WTO and industry groups. The pandemic and related reductions in air traffic have made the use of original paper certificates difficult in many cases. This has led several WTO members to expand the use of electronic certificates.³⁰ Of the [259 COVID-related communications and notifications](#) that members have submitted to date,³¹ 72 are about SPS measures. About two-thirds of the notified COVID-related SPS measures are trade-facilitating.

Collaborative approaches such as those described above provide the foundation for safe trade in animals and animal products. This trade was worth US\$ 367.5 billion in 2018,³² with important implications for livelihoods, food security and nutrition worldwide.

7 CONCLUSION

The existing guidance for trade in animals and animal products and the international legal framework are built on the recognition that safe trade in animals and animal products is possible, based on the implementation of science-based interventions to manage risk. Implementing existing guidance and developing more detailed standards and guidance for particular risk factors requires engagement at the international level, and investment to ensure that domestic, regional and global public, veterinary and environmental health systems are well prepared and have a solid basis for collaboration.

The SPS Committee provides a forum where WTO members can exchange information and discuss their approaches to the SPS measures adopted to address the risk of COVID-19 and other zoonoses; other WTO committees can serve as discussion fora for related issues. By providing a "peer-review mechanism", whereby WTO members can comment on other members' SPS measures and share relevant information on good practices and scientific evidence, these exchanges can help to improve the quality of regulation in this area, thus ensuring that trade measures contribute to enhancing future resilience to diseases of animal origin.

³⁰ More information on this is available in several recent WTO information notes, available at https://www.wto.org/english/tratop_e/covid19_e/covid19_e.htm#reports.

³¹ By 29 October 2020.

³² Exports of animal products (defined as chapters 1 to 5 of the [Harmonized System](#)) in 2018, [COMTRADE](#) data, including intra-EU trade.