WORLD ORGANISATION FOR ANIMAL HEALTH
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SAFE TRADE FOR SUSTAINABLE DEVELOPMENT

the OIE and its contribution

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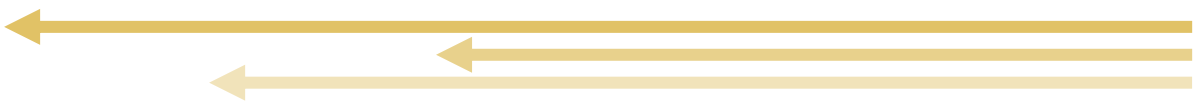

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Introduction

The countries participating in the International Conference on the Study of Epizootics, held in Paris (France) on 27 May 1921, recognized that *"the economic imbalance caused by the war and the immense reconstruction effort taking place in the world has the effect of intensifying trade. Animals are transported in large numbers, at considerable distances, for meat supply or breeding. As a result, each country must now pay attention not only to the health situation of its immediate neighbors but also to that of the whole world."* This observation led to the creation of the Office International des Epizooties (OIE) in January 1924.[1]

From its inception, the objectives of the OIE have been built around the mandates bestowed upon the organisation by its 28 founding Members and its current 182 Members, namely the development of scientifically-based standards to protect animal health and ensure a safer and transparent trade in live animals and animal products.

Over time, the *Terrestrial Animal Health Code* and later the *Aquatic Animal Health Code* - the OIE's publications containing the international standards adopted by the OIE Membership - have been expanded to cover a larger number of diseases, species of animal species and topics. In time, the *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals* and the *Manual of Diagnostic Tests for Aquatic Animals* were also developed and continue to be updated and published, providing countries with a harmonised approach to diagnostic laboratory methods and requirements for the production and control of vaccines and other biological products. OIE standards have become increasingly precise as scientific knowledge progresses, especially benefiting from advancements in the field of epidemiology, vaccinology and the performance of diagnostic tools, but also considering the growing importance of safe trade in animals and animal products.

Today, national Veterinary Services and governments more broadly use OIE standards as a reference to protect the health and welfare status of their animals and to facilitate safe trade. OIE standards were reinforced as the global reference in 1995 with the adoption of the *Agreement on the Application of Sanitary and Phytosanitary* (SPS) *Measures*, which explicitly encourages *World Trade Organization* (WTO) Members to use "standards, guidelines, and recommendations developed under the auspices of the *International Office of Epizootics* (OIE) for animal health and zoonoses" (WTO, 1995).

The following position paper outlines the role of the OIE in facilitating safe trade. First, the paper outlines present trends in global trade and the significance of international standards, as well as the challenges arising from their absence. It then elaborates on the positive externalities and linkages that derive from the OIE's mechanisms and action areas and their contributions to a secure and sustainable global multilateral regulatory mechanism. Finally, the paper concludes by summarizing how the promotion of safe trade contributes to the common goal of achieving the Sustainable Development Agenda by 2030, a transversal theme examined throughout the paper.

Trends in global trade

Globally, both livestock and aquatic animal production sectors continue to grow rapidly. In the last three decades, a rapid global expansion in production and consumption of animal products has led to a so-called *"livestock revolution"*, driven by population and income growth coupled with urbanization (FAO, 2019; FAO, 2011).

The global demand for agricultural products is projected to increase by 70%, with the aim to feed a population estimated to reach 9.1 billion by 2050 (FAO, 2019; UN, 2013). The demand is largely fuelled by the growing middle-class in developing countries, increased urbanization in the developing world and technological change and innovation (Msellati et al, 2012). While the significative demand is being met through expanding modern forms of intensive livestock production, traditional systems still exist in parallel (FAO, 2016). Similarly, the global demand for aquatic animal food is

[1] | In 2003, at the 71st General Session of the OIE, the membership resolved to change the common name of the Organisation from *"Office international des epizooties" to "World Organisation for Animal Health"*, maintaining the historical acronym *"OIE"* (OIE, 2015).

expected to grow exponentially, a sector that is also experiencing its own significative transformations known as the *'blue revolution'*. Globally, fisheries provide about 2.9 billion people with almost 20% of their average per capita intake of animal protein. (FAO, 2019). In addition, aquaculture is growing rapidly, with almost 50% of the world's supply of aquatic animals for human consumption now being derived from this activity.

These trends are anticipated to continue well into the next decades and to impact livestock, crop production, aquatic systems, the environment, public health, trade flows and, more broadly, the world food economy (Otte et al, 2017). Associated concerns include the demographic rise that will take place in the following decades (FAO, 2017), land use, human behaviour, threats brought about by climate change, societal expectations, shifting lifestyles and outbreaks of transboundary diseases and pests.

The scale of food and agricultural trade today is unprecedented: in real terms, international flows have increased around fivefold over the past fifty years (FAO, 2013).

Multilateral regulatory trade has been instrumental in the promotion of international cooperation in trade policies since the 1950s. Today, as in the past, the OIE plays a fundamental role in world trade landscape, as highlighted by the WTO's acknowledgment of the OIE as the standard-setting organisation for animal disease control and animal commodities. The association between the OIE, WTO, CODEX and IPPC resulted in the adoption of the WTO *Agreement on the Application of Sanitary and Phytosanitary Measures* (generally referred to as the SPS Agreement) in 1995. This Agreement encourages members to harmonise their sanitary and phytosanitary measures through the adoption of international standards, guidelines or recommendations. Over these decades, the work of the OIE has emphasised the importance of animal health and welfare.

Trade can provide countries with numerous benefits but can also increase the risk of the spread of animal diseases. For this reason, OIE standards aim to foster safe trade, protect animal health and ensure fair practices by avoiding unnecessary trade barriers.

The global multilateral regulatory mechanism is in the midst of reform. 2019, by all accounts, was an especially challenging year for the WTO, during which the organisation's members sparred over the increasing use of unilateral tariffs and questioned the current multilateral regulatory mechanism.

In addition, several WTO members are calling for a new decision-making approach as exemplified by the electronic commerce discussions[2] and the scope and application of the *Special and Differential Treatment* (SD&T) provisions.[3]

Furthermore, attention is progressively shifting to non-tariff measures (NTMs). The WTO (and its predecessor, the General Agreement on Tariffs and Trade (GATT)) is mandated to establish the rules governing the conduct of international trade with the objective of significantly reducing tariffs and other barriers to trade, as set out in the Agreement on Technical Barriers to Trade (TBT). Tariff reductions during the GATT rounds increased the relative importance and visibility of non-tariff measures (NTMs). The term "non-tariff measures" (NTMs) comprises all policy measures other than ordinary custom tariffs (UNCTAD, 2019), including in particular standards and regulations.

Globally, NTMs have become central to global trade and are at the forefront of a growing international debate. Non-tariff measures can often achieve important purposes as policy instruments, for instance the protection of human, animal and plant health, thus contributing to the achievement of the Sustainable Development Goals (UNESCAP, 2019). However, while any two countries may share the same objectives in their technical regulations and standards, they sometimes

[2] | The e-commerce debate revolves around the expanding digital economy and WTO's part in its regulations.
[3] | Under the SD&T, developing countries can benefit from different thresholds for specific products and commodities. However, none of the WTO norms defines a "developing country". Instead, each member can "self-designate" as one. This is disputed by WTO member countries.

apply different assessments or methods to ensure their correct implementation (OECD, 2015) which can foster regulatory divergencies and have serious detrimental impacts on trade. Furthermore, in some cases NTMs are used with a protectionist intent, becoming barriers for trade (Non-Tariff Barriers) that unnecessarily frustrate global trade (OECD, 2019). The current policy challenges for governments is to achieve regulatory and public policy objectives that will also allow them to optimize the benefits of trade for those involved; the degree of challenge will differ and depend on the national economy (importing and exporting) of each country.

Another source of on-going concern is linked to the rise of private standards. These standards are playing an increasingly important role in the governance of agricultural and food supply chains and challenge the SPS Agreement. Moreover, private standards generate a broadening of standards' sources and perspectives, as well as playing off greater regulatory divergence between countries.

Given the prevailing uncertainties and debates, the harmonisation of countries' sanitary legislation based on unique international science-based standards remains crucial to ensure that the expected growth of trade in animals and animal products takes place on the basis of internationally recognised principles.

To solve these challenges, the OIE provides its Members with a unique set of international standards developed in a consultative manner and adopted through consensus. OIE standards are based upon scientific-based principles for global trade and endeavour to avoid unnecessary sanitary barriers.

Why do we need the OIE's international standards?

The OIE's international standards improve the health and welfare of animals throughout the world, they improve the prevention and control of animal diseases, including those transmissible to humans (zoonoses) and contribute to ensuring secure and safe food systems worldwide with lower costs and greater economic opportunities. They play a key role in fostering global safe trade.

As it is challenging to quantify the impact of the use of OIE standards in the positive evolution of trade over time, explaining their value can be best done by identifying the problems that arise from

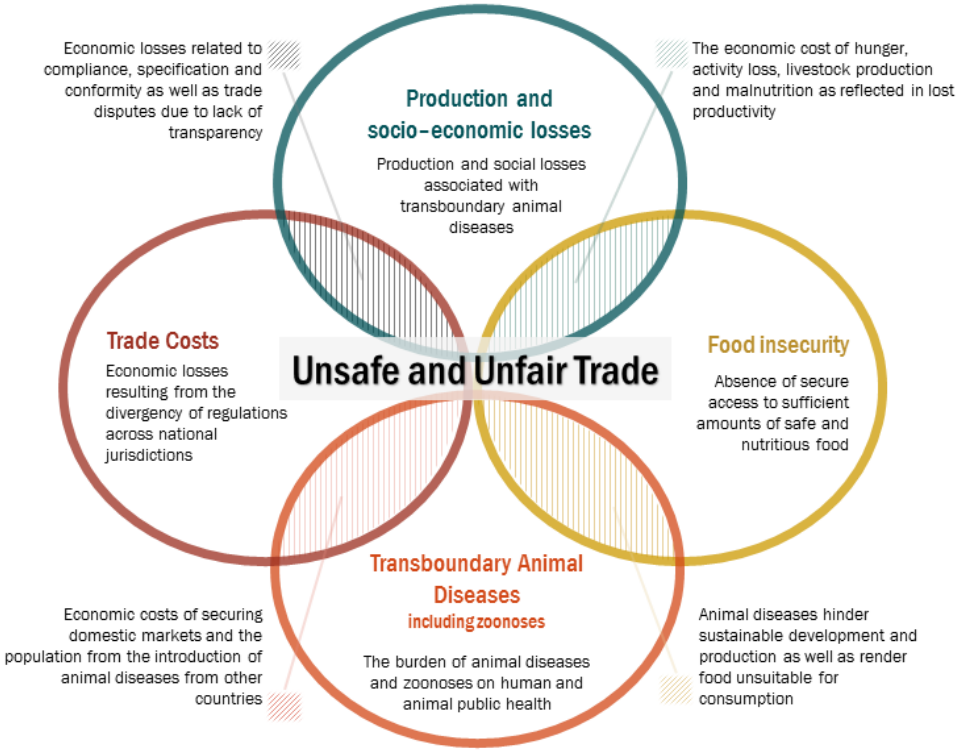


Figure 1.0 Unsafe and unfair trade

the non-use of OIE standards: the impacts of unsafe and unfair trade.

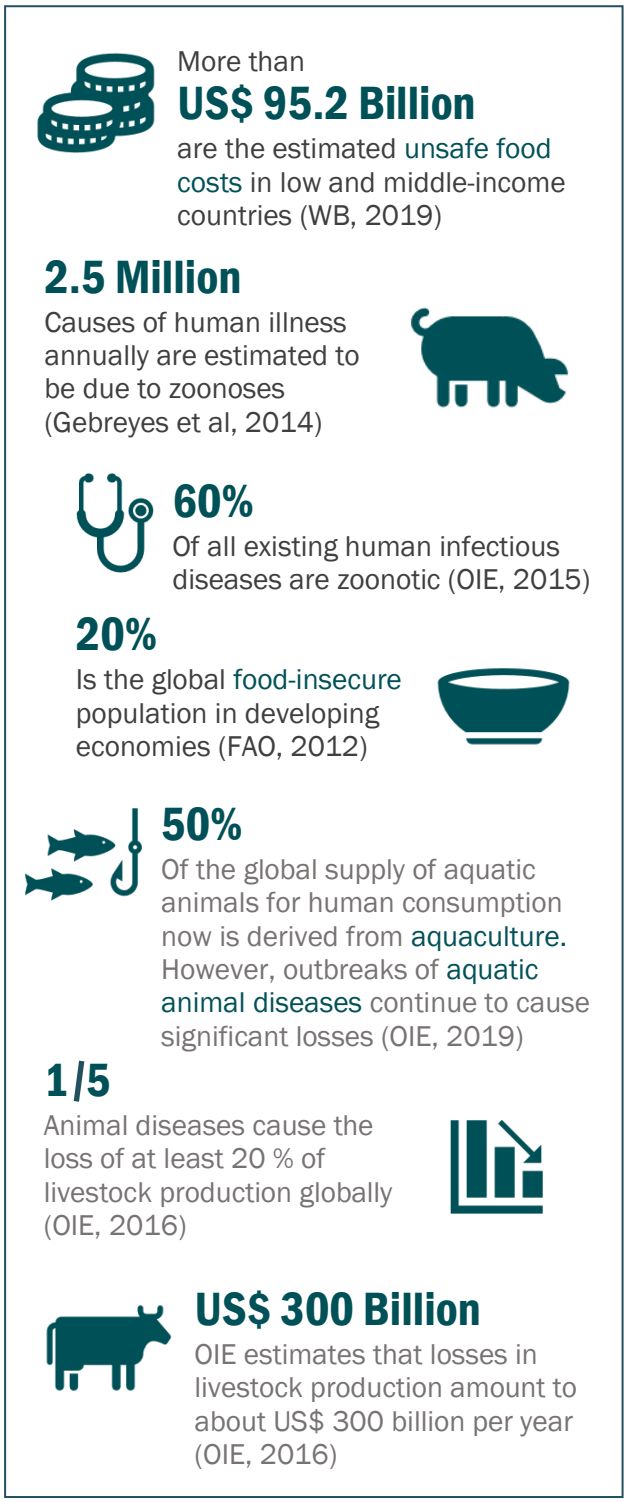


Figure 1.1. Overarching facts on impacts of safe trade

Unsafe trade can be defined as supplying goods and products which have not undergone a proper assessment of their safety and / or production practices. More specifically and in the case of the OIE, this includes live animals and products of animal origin that do not comply with the OIE's international standards.

Furthermore, **unfair trade** can be defined as trade barriers related to the non-application of international standards that lead to regulatory divergences. More generally, NTMs pose an obstacle to trade for exporting countries, both developing and developed countries.

1. Transboundary Animal Diseases, including zoonoses

Transboundary animal diseases (TADs) are a global public threat and represent a socio-economic burden permeating local and global food systems, sometimes with the potential for a zoonotic spill over. These diseases take a significant toll on developing countries and communities, which often rely on animals for their livelihoods and food security. Recent studies have shown that epidemic zoonotic diseases deepen poverty traps (Grace et al, 2017; Grace D et al, 2011) and further demonstrate how nearly all the human health burden of zoonotic diseases in least developed countries is due to endemic zoonoses (Grace D. et al, 2017). Although many examples of the human-animal relationship in multiple production systems exist, poor pastoral herders, for example, are extremely vulnerable due to their close contact with animals, their consumption of raw animal products and their limited access to health services (Idem: IFAD, 2009). This is a compounding issue inextricably linked to the achievement of the 2030 Sustainable Development Goals (SDGs): SDG 1 (No Poverty), SDG 2 (Zero hunger), and SDG 3 (Good Health and Wellbeing).

Highly contagious epidemic diseases occur with alarming regularity (Msellati et al, 2012) and have the potential to spread very rapidly and beyond national borders. A prime example is avian influenza. Although most viruses of this typology might cause only mild disease in poultry (low pathogenic avian influenza (LPAI) viruses), highly pathogenic avian influenza (HPAI) viruses, on the other hand, can cause epidemics that may spread rapidly, devastate local and regional production,

lead to severe trade restrictions and have substantial public health impacts. For reference, the H5N1 HPAI caused numerous infections and the H7N9 LPAI virus caused more than 600 registered human illnesses in China (OIE, 2016). HPAI is of considerable concern as the flow of migratory birds in multiple countries can led to several simultaneous outbreaks. Outbreaks that are not quickly brought under control have the potential to disrupt global trade and the world's poultry industry (McLeod & Hinrichs 2005) and culminate in a pandemic.

Transboundary animal diseases are constantly evolving and are a major challenge for the global community and its capacity in achieving the Sustainable Development Goals. With increasing globalization, the persistence of these diseases anywhere in the world poses a serious risk to production systems, food security and causing considerable societal harm – both in terms of health and livelihoods - and by jeopardizing international trade. Thus, these global issues demand strong international collaboration and exchange of information at the international level and strong Veterinary Services that can detect transboundary animal diseases and zoonoses. As such, surveillance, preparedness and response must be global and based on collective efforts. Information sharing is vital for developing a prompt and effective strategy to respond to a pandemic and to establish trust between countries in times of global outbreaks.

2. Production and socio-economic losses

The economic productivity of countries can also be severely affected by TADs. Such diseases harm animal production systems by compromising the availability and quality of terrestrial and aquatic animal products. In so doing, they not only jeopardize livelihoods of producers but can also have significant socio-economic consequences for the overall population. Moreover, they can cause substantial disruptions to trade, of special concern in countries where exports are a significant source of revenue, including of foreign exchange. These may become obstacles that hinder the achievement of SDG 8 (Decent work and economic growth) and SDG 12 (Ensure sustainable consumption and production patterns).

Below are a list of cases illustrating the socio-economic impacts of TADs:

A. The 1997 classical swine fever (CSF) outbreak in the Netherlands led to the culling of 11 million pigs and an estimated cost of $2.3 billion US dollars (Daniel et al, 2019). During the entire epidemic, 428 pig farms were infected, and 1,286 animals were preventively slaughtered with the livelihoods of numerous farmers being affected (Boender et al, 2014).

B. The 2014-2015 outbreak of HPAI was the largest poultry health disaster in the United States of America with an estimated cost over 1.1 billion US dollars (Ramos et al, 2017). It was estimated that the affected poultry farmers necessitated more than one year to recover (Idem, 2017).

C. The outbreak of foot-and-mouth (FMD) disease in the United Kingdom in 2001 had an estimated cost on agriculture and food chain sectors of over US$4.4 billion. In the course of the outbreak, many smallholder farms reported to have suffered great hardship and distress (Cumbria County Council, 2002).

D. Various infectious aquatic (fish) diseases have decimated 75% of the Chilean salmon farming industry, with more than US $ 700 million annual losses (World Bank, 2014) coupled with a significative increase in rate of job losses as consequence of the outbreak (Alvial et al, 2009).

E. A total of 5 million pigs in Asia have now died or been culled further to the 2018 outbreak of African Swine Fever (ASF) in China. This outbreak continues to pose a serious threat for the tens of millions of Chinese who rely on pig farming for their livelihoods.

F. A recent OIE study showed that 35 priority animal diseases were estimated to cost nearly USD 9 billion a year, equivalent to 6% of the

total value of the livestock sector in Africa (OIE, 2015).

Zoonotic TADs cause even more negative socio-economic impacts through human sickness and costs to public health systems. Governments invest scarce resources to control TAD outbreaks and undertake prevention measures; stakeholders such as farmers must cope with the negative impacts on their livestock production systems; and consumers are affected by local or widespread market disruptions caused by TADS, affecting product availability and price (FAO, 2016). Moreover, the associated health concerns are significative. Globally, it is estimated that one billion cases of illness and millions of deaths are related to zoonoses each year (Gebreyes et al, 2014). Furthermore, more than 60% of emerging infectious diseases that are reported are zoonoses (WHO, 2014). TADS and zoonoses can directly impact public health through infection or indirectly via the food supply chain.

Foodborne diseases are a specific example of the economic and social burden of diseases transmitted through the food systems, with some of animal origin (i.g, Salmonellosis). Contaminated food sources or ill animals can lead to unsafe foods and cases of foodborne diseases. Food stuff containing bacteria, viruses, parasites or harmful chemicals are responsible for various illnesses (WHO, 2015), with more than 550 million people falling sick annually worldwide. According to the World Health Organization, 420,000 people - one-third of which are children - die each year worldwide from foodborne diseases (WHO, 2015).

A recent World Bank study revealed that unsafe food burdens *low- and middle-income countries* (LMICs) by about $95.2 billion in lost productivity and medical expenses each year (WB, 2019). The paper calculated the burden of foodborne diseases under "productivity losses", based on the *disability-adjusted life years* (DALY) – a measure of overall disease burden in human patients, expressed as the number of years lost due to ill-health, disability or early death – and gross domestic product.

In the study, OIE PVS evaluation reports[4] were used as a proxy to comprehend the variation in the capacities of the public sector to manage domestic food safety risks. This is relevant given that national Veterinary Services are usually responsible for the safety of animal-source foods.

Drawing on the PVS reports of 93 countries, the study showed (Table 1.2) that countries with better performing veterinary public health and food safety management services are more likely to have a lower incidence of FBDs compared to

Income Category	Countries in sample	Countries with Adequate levels of Veterinary Service Funding	Average animal source food DALYs per 100.000 for countries with adequate funding	Average animal source food DALYs per 100,000 people for countries with inadequate funding
Low	20	2	228.1	597.1
Low Middle	35	5	177.1	293.2
Upper Middle	29	14	116.1	81.0
High	9	8	46.0	41.9
Total	**93**	**29**	**115.1**	**333.0**

Table 1.2 Average DALYs based on veterinary service funding by country category

Sources: World Bank, 2019. Based on OIE's *Performance of Veterinary Services* (PVS) assessments and Foodborne Disease Burden Epidemiology Reference Group estimates.

[4] | The *PVS Evaluation* is a core tool of OIEs PVS Pathway that entails a qualitative diagnosis on the country's compliance with the OIE standards on the quality of Veterinary Services.

inadequately funded Veterinary Services which tend to be more prone to the burden of animal diseases, which subsequently have strong long-term economic downturn.

The findings of the study stress three main aspects of unsafe trade:

- food-borne illnesses have considerable economic and social impact;
- the burden of these illnesses is unevenly distributed;
- there is a need for adequate investment in veterinary systems.

3. Food insecurity

There is a direct link between food safety and food security, the first being a key component of the second (FAO, 2019). *Food safety* entails ensuring that the food people consume is safe and secure from any type of contamination, including microbial, parasitic or chemical contamination (Rezaei, 2018).

Food security - a measure of the availability of food and individuals' ability to access it - is addressed by a standalone SDG (2, Zero hunger) but is related to all the SDGs (Perez-Escamilla, 2017), with a significant number of interconnected objectives related to agriculture and food.

According to recent estimates, about 1.2 billion people are severely food-insecure (FAO, 2019). The presence of unsafe food limits households' sources of food and raises the percentage of people who are vulnerable to food insecurity, as they cannot have access to the basic nutritional needs for a healthy life. Food insecurity also has effects on poverty. Drawing on estimates from 66 low- and middle-income countries, Pica-Ciamarra et al. (2014) observed that, in almost all countries, livestock was a major driver of GDP growth. The capacity of livestock production to alleviate poverty derives from the indirect benefits it brings and the use of animals for savings and build-up of capital, which enable people to escape poverty (Idem, 2014). In similar terms, aquaculture and fisheries provide a source of income and livelihood for 45 million people through direct employment and provide more than 180 million jobs in the global fish industry and aquatic animal products (World Bank, 2014).

Furthermore, there is a double burden for smallholder farmers. Animal diseases not only negatively impact smallholders' farmers when they consume unsafe food but can also damage their livelihoods. Approximately two-thirds of the developing world's 3 billion rural dwellers live in 475 million smallholder households, working on arable plots of less than 2 hectares (FAO, 2015). In countries with large rural populations, economic studies have explicitly demonstrated that small farmers will never be able to escape the poverty trap without access to broader market opportunities, including export opportunities. For smallholder farmers, trade of livestock and livestock products represents an essential means to escape poverty. Animals are often the most important part of poor farmers' assets and the death of a single animal can have devastating consequences for a vulnerable rural household (OIE, 2017).

Efficient and effective governance of Veterinary Services is a global public good and is fundamental to addressing food insecurity. Veterinary Services which operate under the tenets of good governance, including application of OIE standards, contribute to ensuring sustainable incomes, especially for the more vulnerable producers, to protecting assets, decreasing poverty and vulnerability, and improving food security (Forman et al, 2012).

4. Trade costs

Regulatory divergences from one jurisdiction to another can be an economic burden for countries. When differences in trade regulations exist, exporting countries must undertake numerous steps to fulfil and comply with the necessary requirements of the importing states. This entails collecting information on regulatory requirements in target markets, adjusting product specifications and undertaking various conformity assessment procedures to verify compliance (OECD, 2019).

These costs vary between countries but place a stronger strain on middle- and low-income countries (Idem, 2019). The G20 countries' regulatory frameworks and the corresponding non-tariff measures alter relative competitiveness to the advantage of exporters that are capable of efficient compliance with NTMs, therefore penalizing exports from Least Developed Countries (LDCs) and undermining the achievement of SDG on economic growth (Nicita & Seiermann, 2017). The costs associated with regulatory divergences are a key challenge to the implementation effects of the Sustainable Development Goals as they might not only affect productivity and growth (OECD, 2019) but also those Goals directly related to food safety and fair practices in trade (i.e. SDGs 2, 3, 12 & 17).

Information-related costs include the need to identify, collect and process the requirements of the standards by the target market. The costs related to specification, whereby the products in question must go through the corresponding processes to meet the relevant prerequisites, are also considerable. Such costs may be significant, ranging from the need to alter specific activities in the chains of food production, added labour, system upgrades or general logistics expenses. A final consideration are the costs associated with conformity assessment, whereby the products and production process must be proven to comply with the needed regulations.

All these costs may increase according to the level of transparency of the regulatory systems of the countries of interest, the transformation capacities of the local markets, the implementation speeds and the administrative burdens (OECD, 2019). Furthermore, implementing certain technical measures for one country does not ensure that it complies with other countries and/or regions and thus further increases the trade burden.

OIE international standards overcome challenges related to heterogeneity of regulations; they are developed through a recognized consensual process, scientifically justified and are accepted as benchmarks against which national measures and regulations are evaluated. Studies have shown that a similar level of protection of human and animal health could be achieved at lower costs if regulations were more similar or mutually recognized (UNESCAP, 2019). OIE international standards are a path to the harmonisation of sanitary measures worldwide, increased transparency and therefore to lower trade costs and increased economic opportunities.

The OIE as a facilitator for safe trade worldwide

Globalization and increased participation in global trade by developing countries have created the need for a far wider number of stakeholders to adopt and implement globally accepted international standards. In the ongoing debates and challenges surrounding WTO, the importance of international standards in safe trade needs to be highlighted and reinforced. As stated in the previous section, inadequate or insufficient regulations have a significant negative impact on public health, local economies and international trade:

- significant production losses and effects of the public healthcare associated with influx of TADs and zoonoses;
- greater vulnerability among food-insecure stakeholders (both producers and consumers);
- national and regional trade costs and conflicts due to regulatory divergencies and unfair trade;
- cross-cutting hurdle for developing countries, where livestock is not only a vital building block of the agricultural economy but is closely tied to the social and cultural life of millions of resource-poor producers.

A large proportion of these costs and adverse outcomes could be avoided by adopting harmonised standards that improve sanitary status and the way animal products are handled from farm to fork. The OIE explicitly wishes to contribute to this approach to trade by creating a level playing field. The standards contained in the OIE's *Terres-*

trial Animal Health Code and *Aquatic Animal Health Code* and corresponding *Manuals of Diagnostic Tests* should be understood both as rules and recommendations for improving rules for safer trade and at the same time animal health.

Building on its international standard-setting mandate, numerous activities of the OIE generate positive externalities that contribute to facilitating a safe and sustainable global trade. These areas can be divided into **(i) mechanisms** and **(ii) areas of action**.

Figure 1.2 OIE Mechanisms and Actions Areas that facilitate Safe Trade

OIE's *Mechanisms* cover the tools developed by the OIE to assist, monitor, observe and support the implementation of OIE international standards by its Members; *Action Areas* address specific topics that are an integral part of the organisation's global strategy. The non-exhaustive list hereafter provides examples of how the OIE's Mechanisms and Areas of Action promote safer and sustainable trade.

I. OIE Mechanisms

→ World animal disease notification system (OIE-WAHIS)

Ensuring safe and secure global trade requires clear knowledge of the origin of diseases, modern surveillance and monitoring systems, and transparent channels of communication among stakeholders to quickly alert authorities about outbreaks that could adversely impact trade among interested parties (Cáceres-Soto et al, 2017). The OIE's *World Animal Health Information System (OIE -WAHIS)* corresponds to a unique international platform which informs the global community of animal disease information for the purpose of securing safe international trade and safeguarding veterinary public health.

Through OIE-WAHIS, the OIE collects, analyses and publishes scientific information on control methods for animal diseases, including zoonoses. By collecting animal disease data of countries through OIE-WAHIS, the notification process generates an incomparable wealth of scientific information that contributes to the development of appropriate animal health management measures and international animal health standards (Cáceres-Soto et al, 2017). Data collected is used by OIE experts to identify priority areas for research in animals, aid in developing effective prevention and control methods for OIE-listed diseases and offer technical support activities including regional capacity-building.

OIE-WAHIS serves to also build credibility and trust between trading partners, secures transparency in the diseases-status of countries, facilitates regional and international access for animals and animal products as well as minimises misinterpretations which could lead to unjustified trade barriers. Recognising the importance of OIE-WAHIS, 22 non-OIE members and territories also report to the system, thus further contributing to global sanitary safety.

Diligent reporting and cooperation by countries through OIE-WAHIS contributes to protecting human health and quality of life, economic growth and securing international trade, as called for in the Sustainable Development Goals, in particular zero hunger (SDG 2), good health and wellbeing (SDG 3) and decent employment and economic growth (SDG 8).

→ Performance of Veterinary Services (PVS) Pathway

Considering the growing trade in animal-source foods and the global growth of livestock population, efficient and effective governance of Veterinary Services is a fundamental requirement for addressing animal health worldwide, related public health threats and facilitating secure trade of animal and animal products (Forman et al, 2012). The OIE's capacity building flagship programme - Performance of Veterinary Services (PVS) Pathway – offers countries with a series of proven tools and methods to evaluate, plan and provide estimated costs for improving their national Veterinary Services.

More concretely, the PVS Pathway empowers national Veterinary Services by providing them with a comprehensive understanding of their strengths and weaknesses using a globally consistent methodology based on international standards - a useful external perspective that can reveal gaps, inefficiencies and opportunities for innovation. This enables countries to take ownership and prioritize improvements to their animal health system. By supporting countries to make smart investments aligned with principles of aid effectiveness, the global community has an opportunity to sustainably improve the capacity of national Veterinary Services to assess, plan, resource, deliver, and periodically review system performance and accountability. They are then equipped with the workforce, governance structure and capacity to face current and future global health challenges, including ensuring safe trade.

In an increasingly interdependent world, disease management is vital and Veterinary Services play a crucial role. The inter-linkages and the centrality of animal health and welfare in a country's economy and the livelihoods of individuals highlights the far-reaching effects of the actions of the Veterinary Services (Brückner, 2012). By preventing animal diseases and protecting the animal health, Veterinary Services contribute to broader impacts such as poverty alleviation, economic development, reduced animal health risks, global food security and safer trade between trade partners. Well-developed Veterinary Services therefore play a key role in safeguarding animal, public health and safe trade.

Veterinary good governance is a necessary condition for socioeconomic development insomuch as it promotes the effective delivery of services and improves the overall performance of animal health systems (Msellati et al, 2012). Through their good governance, Veterinary Services are contributing to various Sustainable Development Goals, including, no poverty (SDG 1), zero hunger (SDG 2), good health and wellbeing (SDG 3), quality education (SDG4), gender equality (SDG5), decent work and enhancing economic growth (SDG 8), sustainable cities and communities (SDG 11), strong institutions (SDG16).

→ OIE Observatory on the implementation of OIE Standards

While the setting of international standards is a core mandate of the OIE, the Organisation also directs efforts to monitor implementation of these standards by its Members through the future OIE Observatory.

Through data collection and analysis, the OIE Observatory will analyse Member Countries' practic-

es in implementing OIE standards. It will also identify capacity assistance needs as well as successful practices and will evaluate the appropriateness, effectiveness, efficiency and relevance of OIE standards.

The OIE Observatory will enable the development of fit-for-purpose capacity building activities to contribute to the appropriation of standards by OIE Members. It will also inform the OIE standard -setting process to ensure that the OIE standards are continuously fit-for-purpose and relevant for OIE Members. More concretely, the OIE Observatory will deliver three key products:

- An *implementation review report* will be published on an annual basis and will provide a high-level summary about the current situation of the implementation of OIE standards, including identification of the major challenges and effective practices;
- A *thematic analysis* will offer a comprehensive and focused analysis on priority topics to better understand implementation challenges and to evaluate the quality and relevance of OIE standards;
- A *country portal* will supply information by country collected from existing public data on the implementation of OIE standards.

In time, the OIE Observatory will enhance the OIE's ability to determine the effectiveness and feasibility of its international standards for its Members. It will furthermore contribute to the appropriation of the standards by the countries and provide sufficient trust that other countries are complying with them. Collectively, this will build confidence between stakeholders partaking in the multilateral trade system, allowing for safer trade. The OIE Observatory will seek to build capacities of national Veterinary Services and their capacity to support the achievement of the following Sustainable Development Goals: no poverty (SDG 1), zero hunger (SDG 2), good health and wellbeing (SDG 3), decent work and enhancing economic growth (SDG 8), partnerships (SDG 17).

→ Strategic partnerships

As an international organisation with a global mandate, the OIE facilitates strategic partnerships worldwide to garner safe trade and expand OIE scientific-based practices and strategies towards the improvement of animal health and reducing the risk of diseases. International cooperation brings greater certainty and transparency, ensuring secure access to products in the markets, a constant flow of information and the development of global platforms for debate. Multi-stakeholder partnerships accelerate progress for the Sustainable Development Goals and are crucial for their achievement, as represented by SDG 17 (Partnerships for the goals).

The *Tripartite* can be used as a key example of the OIEs strategic partnerships. The FAO, OIE and WHO - the Tripartite - have been working together since the 1950s to manage and respond to complex health risks that require multi-sectoral and multi-institutional cooperation. The Tripartite recognizes that addressing health risks and responding to risks related to zoonoses requires strong partnerships and is vital to meet the health challenges of tomorrow and pave the road towards the 2030 Sustainable Development Agenda. Through the Tripartite, the organisations have fostered a multi-sectorial and multi-institutional cooperation, developed tools and mechanisms to enhance coordination, support their members and secure trade flows from diseases that impact the human-animal nexus.

Collectively, the OIE and FAO have developed the *Global Framework for Progressive Control of Transboundary Animal Diseases* (GF-TADs). This joint initiative was signed in 2004 to address increasing animal disease risks by combining the strengths of both organisations. Through this strategic partnership, FAO and OIE provide leadership in the control of priority TADs with global or regional im-

portance, facilitate collaboration and maximize synergies among the major organisations involved in animal and public health at global and regional level, and involve individual countries and communicate with stakeholders having specific interests in production, welfare, environment and trade in live animals or their products.

Another example of OIE's strategic partnerships are the historical collaborations between the OIE and organisations such as WTO, the Codex Commission Alimentarius (Codex) and the World Customs Organisation (WCO). Each inter-agency partnership is key to foster safe trade.

The historical agreement and collaboration with WTO are of clear strategic importance in the context of SPS Agreement. Collaboration between the WTO and *the three sisters* (Codex, IPPC and OIE) works towards promoting standard setting and the further use of harmonized SPS measures based on international standards of each of the collaborating organizations.

The collaboration between the OIE and Codex Commission Alimentarius (Codex) is centered on international standards on food safety. The OIE-Codex partnership is of importance as risks to human health and food safety may originate on the farm or at any later stage in the food production chain. This is a pivotal issue when it comes to ensuring international safe trade. Given that the OIE is responsible for developing standards in the field of animal health (including zoonoses) and Codex in the field of food safety, in the area of food safety and international trade, the standard-setting activities of the OIE and Codex are interdependent and complementary.

With a shared mission of protecting society while promoting trade, OIE and WCO have worked together in an inter-agency cooperation with the aim to foster trade facilitation in times of evolving global economic trade patterns. This partnership targets border agency cooperation and good governance practices regarding live animals, products of animal origin and veterinary medicinal products. As a result of this ongoing coordination with the WCO, transparency has been enhanced through the exchange of information and has highlighted the importance of national customs administrations for the development of Veterinary Services.

The OIE also works with international financing institutions, such as the World Bank Group. Working together to coordinate and synergize actions and investments to prevent and control the spread of animal diseases, the OIE and World Bank Group partner on a large number of global initiatives and strategies. Central to their collaboration is the commitment to horizontal systems strengthening, particularly through the PVS Pathway, to reinforce national Veterinary Services' capacity to effectively address priority animal diseases, and thus contribute to agricultural growth, enhanced nutrition and secured international trade.

As a founding partner of the Standards and Trade Development Facility (STDF) – alongside FAO, WHO, the World Bank Group and the WTO – the OIE's engagement in the STDF's global partnership helps to drive catalytic SPS improvements in developing countries that facilitate safe trade. The STDF's global platform, knowledge work and funding for innovative pilot projects provide valuable opportunities for dialogue, cooperation and learning on topics from electronic certification to invasive alien species and public-private partnerships, supporting the use of OIE's international standards. The STDF's Strategy for 2020-2024 offers a framework to deepen and expand this collaboration In addition, it is important to highlight OIE's Public-Private Progress (PPP) initiative. Public animal health services, with their limited resources, often find themselves struggling to meet the growing disease control demands placed upon them. In response, the OIE has developed its public-private partnership initiative to foster collaborations between public and private stakeholders with the aim to expand animal health services capacity. Strong public-private partnerships are instrumental in improving animal health systems and a cornerstone of OIE's strategic partnerships worldwide. By means of PPP, the public and private sectors establish joint responsibilities and

share resources in order to attain common goals and overcome difficulties.

→ Status Recognition

The official sanitary status of countries in respect of animal diseases has become a significant driver of animal health, public health and safe trade. Since 1996, the OIE has developed a procedure for the official recognition of country sanitary status that today covers six priority animal diseases.

Through the official recognition procedure for animal health status, evidence is provided that a country is transparent in its animal health status and can apply appropriate measures to ensure a smooth and safe trade flow. Obtaining the OIE official recognition of disease status is a crucial step in disseminating information regarding a country's capacity to facilitate national and international trade. Apart from the official recognition status, the OIE has also established a system allowing countries to proceed with self-declaration of disease freedom – a responsibility of OIE Members aligned with the guidelines provided by the OIE.

Recognition of the disease-free status of certain diseases is of great importance for securing safe trade. By procuring and maintaining its official status, a country demonstrates its capacity to comply with international standards and to control animal diseases in its territory, a key element for the country to develop its trade, secure animal health and welfare and thus promoting SDG 8 (Decent work and economic growth).

II. OIE Areas of Action

→ Global Strategies and Initiatives

In recent years, the OIE has developed several global initiatives and strategies that aim to safeguard the continuum of the animal-human nexus from across multiple dimensions, ranging from a global strategy on antimicrobial resistance to specific animal diseases. Given the global socioeconomic repercussions of these diseases or issues, from global trade disruptions to impacts in public health, an effective and coordinated global response is fundamental.

OIE Global strategies and initiatives include:

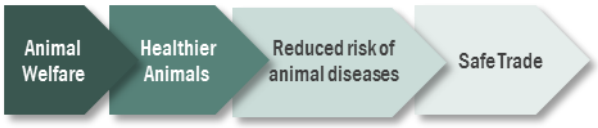
- Global initiative to control African Swine Fever (ASF);
- Global Strategy to Prevent Human Deaths from Dog-Transmitted Rabies;
- Global FAO-OIE Foot and mouth Disease (FMD) Control Strategy;
- Global Strategy for the Control and Eradication of *Peste des petits ruminants* (PPR);
- Roadmap for zoonotic tuberculosis initiative;
- Global Strategy on Antimicrobial Resistance (AMR) and the Prudent Use of Antimicrobials.

Because of the complexity and interconnectivity of each one of these issues, these global strategies and initiatives involve an array of holistic actions and partners, both private and public. The aim of these initiatives is to harmonise approaches among countries, coordinate capacity-building and share scientific-based roadmaps developed by the OIE and its strategic partners.[5]

By minimizing duplication and improving efficiencies by pooling resources and developing joint actions, countries can maximize their impact on these pressing issues, thereby safeguarding food production systems, improving food security and economic growth through the mitigation of animal diseases and the promotion of safe trade. The positive results of each these global strategies and initiatives produce significative synergies and interlinkages with most Sustainable Development Goals.

[5] | A number of OIE's global strategies and iniatives have been prepared under the GF-TADS in collaboration with experts and reference centers, regional and international organizations, policymakers and general stakeholders.

→ Animal Welfare



In a rapidly evolving and increasingly global marketplace, there are still many pressing issues related to animal welfare. Long-distance transport by sea, land or air can cause both physical and ethological problems in animals. In addition, along the production chain, there may be substandard or inadequate practices and facilities that cause unnecessary suffering to animals. On-farm activities that do not address animal welfare not only affect the general health of animals, but also can lead to misuse of antibiotics in turn leading to resistant bacteria, more foodborne diseases, and significant production losses.

By controlling animal diseases and ensuring the professional skills and practices of Veterinary Services, we ensure a sustainable population of healthy animals and achieve higher productivity with the same number of animals and thus reduce the impact on the environment.

The promotion of animal welfare is beneficial to both the animals and the agricultural, fishing and processing industries. Animal Welfare is an integral element of the OIE's mandate, intertwined with animal health, human health and welfare and the sustainability of socio-economic and ecological systems. Animal welfare is linked to several SDGs, with specific ties to SDG 14 (Life Below Water), SDG 15 (Life on Land) and SDG 12 (Keeling et all, 2019).

→ Antimicrobial Resistance

Resistant microorganisms carried by food-producing animals can spread to humans through consumption of contaminated food, direct contact with animals, or through the environment (WHO, 2017). Antimicrobial resistance (AMR) poses a worldwide health threat: its consequences, direct and indirect, can damage both human and animal health. Tackling AMR is crucial to achieving the Sustainable Development 2030 Agenda, as it hinders directly and indirectly significative number of the SDGs.

Animals are frequently subject to considerable amounts of antimicrobials (FAO, 2013; FAO 2015) and can act as an important reservoir of resistant genes. In addition, resistant bacteria can be introduced into the environment in several different ways, such as by applying livestock manure as fertilizer. The aquaculture sector, experiencing spectacular growth worldwide, is by far the most the extensive user of antimicrobials and represents another important source of resistant bacteria that may find their way into the environment. Furthermore, overuse and misuse of antimicrobial agents in the animal sector can dramatically accelerate the emergence of AMR.

Monitoring of antimicrobial use (AMU) is an important source of information that together with surveillance of AMR can be used for the assessment and management of risks related to AMR. The OIE Strategy on Antimicrobial Resistance is aligned with the WHO Global Action Plan and recognizes the importance of a "One Health" approach – involving human and animal health, agricultural and environmental needs. It outlines the goals to support and encourage stakeholders on antimicrobial usage. OIE standards on the responsible and prudent use of antimicrobial agents clearly establishes responsibilities of each sector and lays down rules for the harmonized surveillance of AMR in animals, both terrestrial and aquatic. Furthermore, the OIE has developed guidelines and a global database on antimicrobial agents intended for use in animals.

To reduce and monitor AMR is to foster safe trade. By ensuring high animal health standards through efficient veterinary services and continuous monitoring of both animal diseases and antimicrobial use, the OIE contributes to reducing the spread of resistant bacteria in international trade

in animals and animal products as well as in human populations.

→ Support to Biodiversity

Biodiversity is essential for sustainable development and human well-being, as embodied in SDG 15 (Life on land) and with linkages with each one of the SDGs (Convention on Biological Diversity, 2018). It mitigates and provides resilience to climate change; it supports human health, and provides jobs in agriculture, fisheries, forestry and many other sectors (FAO, 2016). Unsafe national and international trade has a direct effect on biodiversity, as pathogens can spread within and between wildlife and domesticated species. With the mandate to improve animal health, veterinary public health and animal welfare worldwide, the OIE, along with its Membership and other international organisations, have a key role to play in protecting biodiversity.

Conclusion

Safeguarding biodiversity and the interface between wildlife – domestic animals entails reducing uncertainties and the risks of contagious diseases that can later have broader socioeconomic impacts in international trade, rural livelihoods, native wildlife populations, and the general health of ecosystems (Karesh, W.B et al, 2005). An outbreak of foot and mouth disease could spread through a wildlife vector and have a production cost that is disproportionate to the country. In the field of aquatic animals, studies have shown that unregulated human-assisted movements of aquatic animals into new areas have been responsible for the spread of pathogens across geographical areas (Arthur & Subasinghe, 2002). This has resulted in significative economic losses to the actors involved and a burden to regional aquatic animal products markets (Idem, 2002).

The international trade landscape is constantly changing. Trade in animals and animal products undoubtedly play a key role in ensuring human livelihoods and well-being, economic growth,

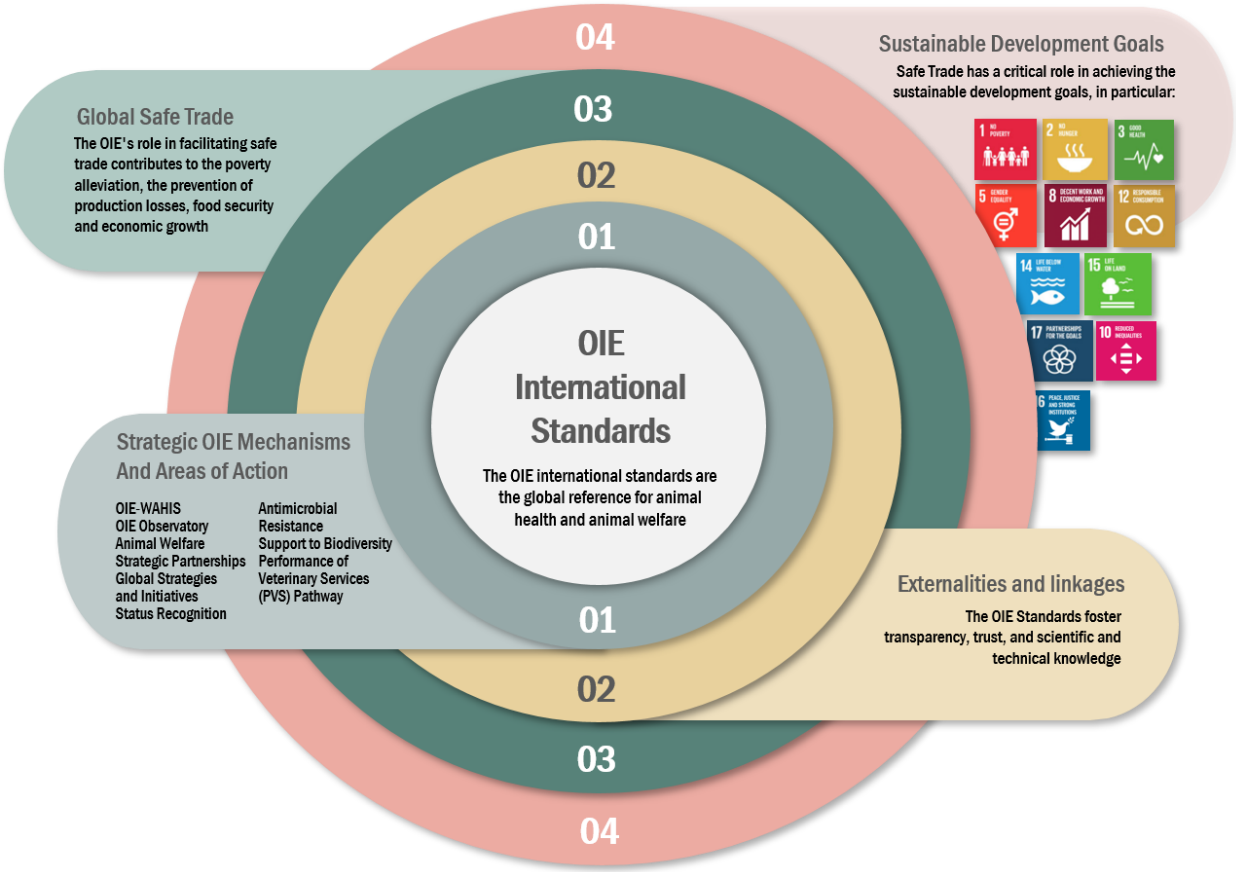


Figure 1.3. Safe trade has a critical role to play in the 2030 Agenda for Sustainable Development

food security and addressing the immense challenges of a growing global population. From strengthening livelihoods of local stakeholders to higher economic productivity for countries worldwide, global trade defines and influences the multidimensional needs of millions of individuals. Inadequate or insufficient regulations can lead to unsafe and unfair trade with a significant impact on public health, economies and international trade.

These include significant production and socio-economic losses, mounting trade related costs, greater livelihood insecurity, and the spread of transboundary animal diseases, including zoonoses. Their cumulative negative impacts undermine global efforts to achieve the global development. To overcome these challenges and issues, international standards are key to achieving global safe trade.

Since the organisation's inception, the OIE has engaged in global issues regarding animal health and welfare and broadened its array of actions to address this constantly evolving world. Recognized by the WTO as the leading international standard-setting organisation for animal health, the OIE continues to facilitate safe trade through its spirit of collaboration and its commitment to the latest science and to the promotion of transparency. OIE's ongoing work to promote safe trade through its international standards, mechanisms and areas of action constitute a comprehensive approach to the pursuit for safe trade and thus of the Sustainable Development Goals. These actions range from supporting Veterinary Services to fighting AMR and animal diseases alongside its key strategic partners. Through its actions, the OIE fosters a global trade system based on the principles of transparency, collaboration and safety.

At the same time, the OIE is aware of the controversies surrounding world trade and globalisation in general. While economists stress the beneficial nature of international trade, which contributes to increased wealth, some negative effects have been noted, including those that have an impact on the environment and issues related to animal protection/welfare. The OIE is therefore committed in the implementation of its Seventh Strategic Plan 2021-2025 to develop global regulatory approaches to safeguard the public good while limiting unnecessary impediments to trade. The international standards of the OIE contribute effectively to the global standards landscape and as expectations of regulatory convergence grow, the OIE will continue to advocate for the value of an international rules-based system for safe trade.

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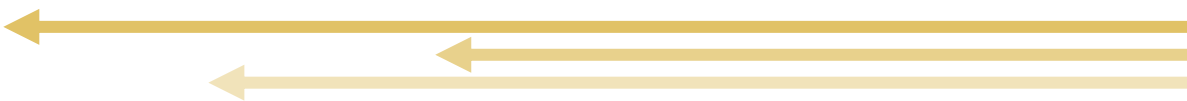

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