5 GOAL 15: LIFE ON LAND



5.1.1 Trade and life on land

15 LIFE ON LAND

Increased economic activity and consumption, in the absence of appropriate adaptation policies, may spur unsustainable resource use, deforestation, and environmentally harmful production processes posing risks to the ecosystems' health and biodiversity. Growing demand for products that are at risk of depletion or extinction and illegal trade may exacerbate the problem, as can harmful incentives, such as certain industrial and agricultural, including fossil fuel subsidies. A more globalized world also increases the risks of pests or diseases being introduced into areas not previously affected. Other drivers of biodiversity loss are sometimes associated with unfettered tradeinduced increases in demand, such as unsustainable agriculture and forestry, or the extraction of natural resources, as well as pollution from industrial activities, pesticides, and plastics. However, while an increase in the level of economic activity could affect the environment and biodiversity, open trade also raises per capita income, thus boosting public demand for a cleaner environment. Eliminating tariffs and other trade barriers also tends to increase the availability and lower the cost of environmentally friendly technologies embodied in imported capital goods or in the form of knowledge-based processes diffused by the movement of people.1

In particular, trade has the potential to propel economic transformation toward environmental sustainability and safeguard efforts to protect and restore biodiversity. Trade policies can promote sustainable agricultural practices and circular economy models, green infrastructure projects, resource-smart food systems and land restoration, and more energy efficient technologies. This can reduce demands on the biosphere. Legal and well-regulated trade in sustainable plant and animal products may also promote biodiversity conservation. Poverty itself is an important driver of environmental degradation, including deforestation, land degradation, and illegal wildlife trade.² Trade, by enhancing livelihoods, creates new economic opportunities, which can lessen the reliance on natural resources for economic growth.3 The creation and promotion of markets in biodiversity-based products (e.g., biodiversity prospecting and the commercialization of medicinal plants) generates important indirect incentives for conservation and sustainable use of components of biodiversity.⁴ Equally, international initiatives can increase investment in sustainable and more efficient production processes and prove instrumental in protecting biodiversity.

5.1.2 The WTO and life on land

Sustainable development and the protection and preservation of the environment are enshrined in the WTO's founding document, the Marrakesh Agreement Establishing the WTO. The WTO agreements also provide ample space for accommodating nontrade, and in particular environmental, concerns, including through measures aimed at protecting life on land. WTO rules applicable to biodiversityprotection policies include those of the Agreement on Agriculture, the Agreement on Technical Barriers to Trade (TBT Agreement), the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement), the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) and the Agreement on Subsidies and Countervailing Measures (SCM Agreement). WTO members are adopting trade measures to address biodiversity loss and ensure effective conservation efforts such as grants, direct payments, and nonmonetary support to protect biodiversity; technical regulations, standards, and conformity assessment procedures; sanitary and phytosanitary measures; import and export licencing, prohibitions, and guantitative restrictions; and intellectual property measures.5

Trade policies in support of biodiversity can contribute to the achievement of SDG15, as they are useful tools to help orient trade patterns in this direction. Based on the description of the trade measures notified under various WTO agreements, WTO members implement policies (such as regulating the import and export of wildlife, restricting the introduction of certain genetically modified crops, and applying restrictions on the exports of certain animal and plant species) to comply with multilateral environmental agreements (MEAs), such as the Convention on Biological Diversity (CBD) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), among others.⁶ By connecting producers to the rapidly growing global demand for such sustainable products, trade can also serve as a powerful financing tool for economic development

WTO Rules

The WTO provides a multilateral forum for countries to set common or compatible rules for trade and settle disputes on the application of these rules. The disciplines of the WTO agreements also promote good regulatory practices and provide opportunities for regulatory cooperation between WTO members, which is crucial to tackle these issues from a global perspective.

A measure (i.e., requirements affecting trade in products) taken by a WTO member may be found to be inconsistent with some of the basic WTO rules, e.g., because it discriminates between trading partners. Even then, however, it may be justifiable if it pursues an environmental or health objective, and if certain conditions are fulfilled. For example, the SPS and TBT Agreements regulate the way in which members adopt measures to protect animal and plant life and health, as well as technical regulations, standards, and conformity assessment procedures aimed at protecting biodiversity. These agreements recognize the right of WTO members to adopt such measures necessary to protect health and the environment, while aiming to ensure that they do not unjustifiably discriminate between trading partners or restrict trade more than necessary to achieve their objectives.

There is also an important link between the WTO TRIPS Agreement and the protection of biodiversity. IP rights play a role in encouraging access to genetic resources and the sharing of benefits from the use of those resources, as well as in contributing to the protection of traditional knowledge. Likewise, Article 20 of the WTO Agreement on Agriculture mandates continuing the negotiations with the aim to progressively reduce agricultural support and protection, which seek to build on the progress already achieved. Agricultural subsidies, which are linked to prices and production, often incentivize unsustainable production practices and are subject to disciplines at the WTO. Many of these subsidies have been destructive to the environment, encouraging a faster pace of land conversion, a loss of forests and of biological diversity. Other types of support measures, including environmental programmes, are exempt from reduction commitments on the grounds that they cause no more than minimal trade distortion. Negotiations to improve farm subsidy rules can therefore help contribute towards the conservation and sustainable use of biodiversity.

WTO jurisprudence has provided important clarifications, demonstrating that WTO rules give ample policy space to protect biodiversity. In one of the first disputes after the creation of the WTO in 1995, its Appellate Body clarified that "WTO members have a large measure of autonomy to determine their own policies on the environment (including its relationship with trade), their environmental objectives and the environmental legislation they enact and implement."⁷ Examples of biodiversity-related policies challenged before WTO panels include measures ensuring the protection of dolphins and seals, and the conservation of sea turtles.⁸

The WTO-led Aid for Trade initiative has also increased investment in sustainable and more efficient production processes in developing countries and has proven instrumental in protecting biodiversity. Other global partnerships such as the Standards and Trade Development Facility (STDF)⁹ hosted at the WTO, were established with other institutions to facilitate safe trade by helping developing countries implement the SPS Agreement.

in rural communities. At the same time, trade can provide incentives for the adoption of environmentally friendly production practices and, more broadly, for the sustainable management of biodiversity and ecosystems.¹⁰

Discussions on this topic are also held in many work areas of the WTO. Specifically, WTO committees are fora where members can discuss and resolve trade issues, discuss the implementation of the relevant agreements and, more generally, cooperate, exchange views and share best practices. Several WTO committees address biodiversity-related issues in their formal and informal meetings. For instance, the Committee on Sanitary and Phytosanitary Measures (SPS Committee) is currently discussing a proposal on how to respond to modern SPS challenges. These comprise topics such as the growing importance of sustainable agricultural practices and production systems, including their contribution to addressing climate change and biodiversity conservation.¹¹ Life-on-land-related concerns are also high on the agenda of the Committee on Trade and Environment (CTE), where governments discuss topics such as timber trade in tropical forests and land-use change triggered by trade in soy and palm oil. For instance, Indonesia and Malaysia have presented their initiatives related to sustainable management of forest resources in relation to palm oil production, highlighting international and national sustainability certification efforts in the field. WTO members have also heard from Colombia on a topic related to palm oil, when Colombia presented a pilot project aiming to avoid deforestation and enhance biodiversity synergies.¹²

A newly created forum for policy dialogue is the Trade and Environmental Sustainability Structured Discussions (TESSD), which currently includes 71 WTO members. The aim of the discussions is to advance work on trade and environmental sustainability, and one of the proposals was to place a greater focus on possible actions to reach biodiversity targets and support the sustainable use of natural resources.¹³ Action on plastics is also high on the agenda of WTO members which, in November 2020, launched the Informal Dialogue on Plastics Pollution and Environmentally Sustainable Plastics Trade (IDP). While the group does not focus on biodiversity issues as such, tackling plastics pollution would benefit action and conservation efforts in this area and contribute to ecosystem restoration.

Discussions in the TRIPS Council also focus on how the TRIPS Agreement and the CBD can be implemented in a mutually supportive way. The ideas put forward include amending the TRIPS Agreement to introduce specific disclosure requirements in patent legislation, to establish database on genetic resources and associated traditional knowledge, and/or to use national legislation and contractual arrangements.

Transparency in the WTO

Transparency is a key principle of all WTO agreements, and a core element of good regulatory practices. The implementation of the disciplines contained in WTO agreements promotes many elements of good regulatory practices, which are designed to ensure that measures are effective in achieving their expected outcome (including, e.g., conservation of biodiversity), and to avoid unintended consequences, such as environmental damage. The WTO agreements also encourage international regulatory cooperation that can contribute to reducing unnecessary barriers to trade.

In the context of the WTO, transparency is mainly achieved in two ways. The first mechanism is the trade policy reviews (TPRs). These are regular "peer reviews" of members' trade policies and practices that also take into account members' needs and the external economic environment. Measures aimed at sustainable trade and preventing biodiversity loss are often discussed in this format.¹⁴

The second mechanism in place is the so-called notifications. Under WTO agreements, members have to inform each other of specific measures, policies or laws they adopted or plan to adopt. Between 2009 and 2020 WTO members notified close to 1,500 measures with objectives relating to biodiversity and ecosystems. Figure 8 illustrates the incidence of these notifications across WTO agreements. Figure 9 further illustrates the number of notified measures per year.

Under the SPS and TBT Agreements, members shall notify others of the measures they adopt that may have a significant effect on trade, while still in a draft format. Members also need to inform others of emergency measures adopted when threatened by an urgent problem of health protection. This WTO transparency mechanism provides a unique opportunity for members to comment on trading partners' measures before their adoption. Members must also consider and respond to comments received from other members. This peer review mechanism contributes to better regulations at the national level that, in turn, can help avoid trade disruptions before they arise.



Figure 8. Biodiversity- and ecosystem-related notifications per WTO agreement



For example, in the context of the SPS Agreement, around 30 per cent of the regular and emergency notifications submitted refer to measures aimed at protecting animal health, plant health or a territory from other damage from pests, whereas about 22 per cent of the measures notified under the TBT Agreement refer to the protection of the environment or of animal or plant life or health. In order to facilitate access to trade measures notified by members, the WTO has created several transparency tools. Users can find information on, *inter alia*, trade measures related to biodiversity in the ePing SPS and TBT Platforms¹⁵ WTO Environmental Database¹⁶ the WTO MEA Matrix¹⁷ and the WTO QR database¹⁸ among others.



Figure 9. Biodiversity- and ecosystem-related notifications per year

Source: WTO Environmental Database.

Another avenue to enhance transparency, encourage policy dialogue among members and prevent trade tensions from escalating is the possibility to voice, within various WTO committees, trade concerns about other members' proposed or existing measures. In this regard, the SPS and TBT Committees often discuss trade measures, including some aimed at protecting natural resources and biodiversity, such as measures on palm and coconut oil, and on genetically engineered crops, regulation on renewable energies, systems prohibiting the presence of biotech products in products for infants and children, and approval procedures for genetically modified organisms and legislation on chemicals and pesticides.¹⁹

5.2 Trade topics and SDG15

5.2.1 Trade and protection of animal and plant life and health

International trade can impact biodiversity in several ways. If trade is sustainable throughout the value chain, it can play a role in preserving biodiversity. Sustainable protection of biodiversity requires protection of species or individuals, as well as of ecosystems, based on sound national policies, which are also implemented effectively. This can also contribute to avoiding overexploitation of natural resources and habitat degradation, especially in countries with weaker institutions. According to a UN report on progress towards SDGs, habitat loss from unsustainable agriculture is a main driver of biodiversity loss.²⁰ Certification, improved traceability, and information on areas such as production methods of traded products can contribute to meeting the increasing demand of consumers for sustainably produced products and, in parallel, drive sustainable practices. As a relevant forum for discussion, the SPS Committee is currently examining the impact of SPS policies on global issues such as biodiversity loss, and discussing challenges and opportunities related to new innovations in technology and the effects of climate change, among other topics, to ensure a transition to a long-term sustainable agriculture.

Animal and plant diseases and pests, as well as invasive alien species (IAS)²¹ can be vectored by trade unless appropriate measures are taken. Import requirements, such as SPS measures and technical regulations, standards or conformity assessment procedures, can contribute to tackling these adverse effects. By promoting science- and risk-based measures, WTO agreements can contribute to the protection of animal and plant life and health, and also to the protection of risk from IAS, therefore contributing to preserving biodiversity on land.

5.2.2 Trade and deforestation

Forests are vital for the sustainability of our world as they ensure food security, provide biodiversity habitat and raw materials for products, and play a key role in climate change mitigation. However, in only two decades, the world has had a net loss of almost 100 million hectares of its forests resulting mainly from the pace of agricultural expansion into intact ecosystems.²² Globally, biodiversity is being lost at rates unprecedent in human history, with around 1 million animal and plant species being threatened with extinction.²³ Deforestation is considered to be one of the main drivers of biodiversity loss, together with habitat loss from unsustainable agriculture, unsustainable harvest and trade and IAS.²⁴

In response, WTO members have been increasingly notifying policies supporting afforestation and sustainable forestry management (526 measures between 2009 and 2020).²⁵ These increased from 26 measures notified in 2009 to 75 in 2019. The topic seems to be of interest to both developing and developed countries with each group notifying about half of the measures. Such notifications include a wide range of measures from support schemes linked to conserving and restoring forest ecosystems and wildlife habitats, through standards for products derived from sustainable harvesting, to import and export bans and licensing requirements, as well as technical regulations ensuring that only legally harvested and marketed timber is traded.

One major factor of deforestation and land degradation is poverty. It is often the case that people and countries make an explicit trade-off, accepting long-term environmental degradation to meet their immediate needs, such as food production. Erosion in turn leads to a decline in agricultural productivity and income. In this regard, Aid for Trade programmes have the potential not only to empower farmers and lift them out of poverty, but also to contribute to reforestation and more sustainable forest and land management.²⁶

In the CTE, WTO members have discussed the topics of illegal logging, trade of illegally harvested timber, and sustainable forest management (including the role of "ecolabels"). An example of such discussions is the EU's experience sharing in signing Voluntary Partnership Agreements (VPA) as part of its Forest Law Enforcement, Governance and Trade (FLEGT), aimed at tackling illegal

logging and associated trade, which was noted by several members as a positive example of trade cooperation.²⁷ Information exchange facilitates understanding of how domestic legal instruments function and may result in other jurisdictions adopting similar projects. Some of the main EU trade partners have in fact issued or modified domestic legislation in line with the EU Timber Regulation.²⁸

In recent years, discussions have also started looking at sustainable supply chains to ensure that they do not lead to deforestation.²⁹ Furthermore, establishing appropriate SPS measures protect against introductions of plant and animal pests and diseases, and/or degradation of environmental and natural resources in a cost-effective manner. In the context of the SPS Committee, WTO members have discussed other members' requirements for the control of pests affecting hardwood trees, namely Asian and citrus longhorn beetles, as well as their recognition of pest-free areas. Discussions on these issues not only promote better national legislations, but also a more coordinated approach towards protection of ecosystems.

The role of trade in supporting the fight against deforestation has been one of the highlights at the November 2021 UNFCCC 26th Conference of Parties (COP26). The Glasgow Leaders' Declaration on Forests and Land Use was adopted - a package of economic and political commitments to end deforestation worldwide, with leaders representing over 85 per cent of the world's forests committing to halt and reverse deforestation and land degradation by 2030.³⁰ The package includes US\$ 12 billion in public funds to protect and restore forests, alongside US\$ 7.2 billion of private investment. Furthermore, the Forest, Agriculture and Commodity Trade (FACT) Statement was supported by 28 governments and the European Union, representing 75 per cent of global trade in key commodities that can threaten forests. FACT brings together agricultural producer and consumer countries to identify actions to reduce deforestation in supply chains, encourage investment in sustainable production and build new markets for sustainably grown products, as well as to enhance people's livelihoods and to support economic development and food security.

5.2.3 Trade and wildlife

International trade in wildlife is coming under increased scrutiny for its role in disease emergence and spread. The OIE estimates that 60 per cent of human infectious diseases are zoonotic; 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. While not all of these diseases originate in wildlife, habitat loss, land-use change, deforestation and human consumption of wild and exotic meats are thought to play a significant role.

At the outset of the COVID-19 pandemic, the OIE recalled the linkages of emerging zoonotic diseases with wildlife trade value chains, as well as the threat it represented to animal health and biodiversity.³¹ According to the OIE, there are more than 50 wildlife diseases which may have a serious impact on livestock health and public health and adversely affect wildlife conservation. The OIE has also highlighted the need for national wildlife disease surveillance programmes to better understand the local risks associated to a disease.³²

Given the interlinkages and interdependence between animal, human and environmental health, the OIE, the World Health Organization (WHO) and the FAO have created an alliance to fight diseases, in particular zoonoses, which pose significant health risks. At the national level, these organizations have jointly developed a tripartite guide to addressing zoonotic diseases³³ to assist countries in adopting a One Health approach to fight these diseases while involving a number of national stakeholders. Such international guidance helps WTO members ensure safe trade of animals and animal products.

Wildlife trade is reported to be one of the most lucrative trades in the world, even more so if endangered species are involved. Future trends look worrying also in light of overexploitation, a growing human population, and ever-increasing trade activity.34 For one thing, illegal wildlife trade is an issue of poverty in the source countries as the root causes and socioeconomic context associated with it are linked to limited livelihood opportunities. Thus, illegal wildlife trade often occurs in countries with weaker institutions and regulations and vulnerable communities who get involved because of penurious economic situation. At the same time, illegal wildlife trade results in environmental degradation and adversely affects the ecosystem on which local communities rely to meet their needs. Illegal logging, fishing and wildlife trade also result in economic losses of US\$ 1-2 trillion per year.³⁵ This in turn impacts the most vulnerable populations and hinders their development opportunities. Adopting incentives to boost legal and sustainable trade in wildlife is therefore crucial and has the potential to lift communities out of poverty. For instance,

legal international trade in skins has been central to reducing illegal, unmanaged, and unsustainable crocodilian harvests.³⁶ Trade facilitation is also a powerful tool in this area contributing to more efficient and transparent legal trade in wildlife.

CITES is among the earliest MEAs that make extensive use of trade-related measures to achieve their goals. These requirements - including prohibitions on international commercial trade with endangered species, use of import and/or export permits, and requirements that trade with covered species be legal, sustainable, and traceable - relate to core WTO disciplines.³⁷ When trade is well-regulated, it can contribute to conservation efforts while improving livelihoods. An emblematic example of this are the vicuñas, whose legal and regulated trade has helped the species to recover from near extinction.³⁸ CITES reported on this at the CTE, highlighting how trade rules can improve sustainability, traceability and legal trade in vicuña fibre by requiring a mark of origin throughout the value chain.39

At the WTO, more than 340 measures have been notified to date relating to the protection of endangered species, including wildlife habitat incentive programmes, import and export bans, licences and quotas on protected species, and quarantine and risk assessment requirements.⁴⁰ A total of 160 parties to CITES are also WTO members, and CITES is one of the international conventions most frequently mentioned as indication of the grounds for the import and export quantitative restrictions maintained.⁴¹ But while by definition CITES-related trade measures are trade restrictive, to date there has been no WTO dispute directly challenging a CITES trade measure.

The importance of CITES was considered in the landmark WTO dispute US - Shrimp. The dispute involved measures adopted by the United States to protect endangered marine turtles from being harmed and killed during shrimp fishing operations. Notably, the Appellate Body interpreted the phrase "exhaustible natural resources" under Article XX(g) of the GATT 1994 broadly to include not only "mineral" or "non-living" resources, but also living species which may be susceptible to depletion, such as sea turtles. In order to demonstrate the exhaustible character of sea turtles, the Appellate Body noted that sea turtles were included in Appendix I of CITES which comprises species threatened with extinction.

5.2.4 Trade and invasive alien species (IAS)

Trade can be a pathway for the introduction of IAS. Whether plants and animals are traded as pets, for display in zoos or in botanical gardens, for food, or as seeds for planting, introductions of new species can lead to invasiveness and thereby contribute to biodiversity loss. In addition, many quarantine pests, weeds and animal diseases that are unintentionally introduced through trade in agricultural and forestry products, for example, are IAS. Measures adopted by WTO members to prevent the introduction of IAS fall under the SPS Agreement, which also covers measures that aim to ensure the life and health of animals (including wild fauna) and plants (including wild flora), and to prevent other damage from the introduction of pests.

Some trade-related IAS can be managed effectively by operational national SPS systems. The OIE and the IPPC, two of the standard-setting bodies explicitly recognized by the SPS Agreement, have developed international guidance that assist members in this regard. In addition to diseasespecific standards, the OIE has developed guidelines for assessing the risk of non-native animals becoming invasive. IPPC guidance, for example on how to perform a risk assessment, can also be useful in the context of IAS. The CBD recommends that states implement border controls and guarantine measures to minimize the risks of introducing alien species that could become invasive. The Convention has also developed detailed guidance for assessing pest risks to the environment and in relation to IAS.

Strengthening existing SPS authorities offers an effective approach to enhance capacity to respond to and manage IAS-related risks. In this respect, the STDF has undertaken relevant work on the topic of IAS. A 2013 study⁴² on international trade and IAS highlights the importance of having in place strategies and plans to address the risks faced, including through improved surveillance and control initiatives, as well as an enhanced collaboration with the private sector to better understand, assess and monitor the role of trade in the spread of IAS.

5.3 The COVID-19 recovery

Trade in animals and animal products, and especially trade in wildlife, can result in the emergence of new zoonotic diseases such as COVID-19. Moreover, illegal trafficking and illicit trade in wildlife are drivers of biodiversity loss, and they are also more likely to carry risks of zoonotic pathogen spillover and create future pandemics. Deforestation, changes in forest habitats and poorly regulated agriculture have also altered the composition of wildlife communities, greatly increased contact between humans and wildlife, and created niches that harbour pathogens, increasing their chances of contact with humans.⁴³ As a first step in exploring how WTO disciplines relate to illicit trade, the WTO Secretariat is currently doing an internal assessment of illicit trade related to COVID-19 medical products during the pandemic, and in a forthcoming series of studies, it will also focus on other environmental topics such as plastics, wildlife and food.

COVID-19 has evidenced the crucial role that international trade can have in a pandemic. Leaving aside other critical aspects, such as sourcing of medical equipment and food supply chains, safe trade in animals and plants as potential disease-carrying organisms has been a topic of concern for WTO members.⁴⁴ In the wake of the pandemic, members initially imposed a few SPS restrictions on trade in animals in an attempt to control the spread of the disease through animals. As more scientific evidence became available, restrictions were subsequently lifted and members increasingly adopted and notified trade-facilitating measures. This serves as an example of how the COVID-19 pandemic has underlined the vital role of science in decision-making and of the importance of transparency, both of which will be crucial in subsequent efforts to support the recovery from the pandemic.

Science- and risk-based measures are a less restrictive and more effective way than trade bans to deal with these risks, together with investment in surveillance and strong human, animal, plant, and environmental health policies, ideally taking a one health (or planetary health) approach. For example, increased consideration of risk factors, such as the disease status of animals or sanitary controls in the supply chain and in markets, as well as the use of international standards, based on the latest scientific evidence, can contribute to a better preparedness to prevent future pandemics.⁴⁵ In sharing relevant information on good practices and scientific evidence through the various mechanisms made available at the WTO, members can help to improve the quality of regulation in this area, ensuring that trade measures contribute to enhancing future resilience to diseases of animal origin. Thus, putting in place policies for better regulation, establishing strong national and international systems preserving human, animal, plant and environmental health, and monitoring and controlling such trade is critical for limiting the risks of pathogen spillovers and for preventing future pandemics.

Endnotes

- 1 "World Trade Report 2013: Factors shaping the future of world trade", WTO, 2013, p. 242.
- 2 "Merging the Poverty and Environment Agendas", IISD Brief, 2021.
- 3 "Mainstreaming trade to attain the Sustainable Development Goals", WTO Report 2018.
- 4 On the linkages between trade and biodiversity, see: "Biodiversity and International Trade Policy Primer: How Does Nature Fit in the Sustainable Trade Agenda?", UNEP, UKRI GCRF Trade, GCRF TRADE Hub and TESS 2021; "Linking Trade and Biodiversity, UNCTAD 2021; "The Economics of Biodiversity: The Dasgupta Review", Dasgupta 2021; "Online Workshop on Trade and Biodiversity for the Post-2020 Global Biodiversity Framework: Workshop Report", UNCTAD 2021; "The Future is Now: Science for Achieving Sustainable Development, Global Sustainable Development Report 2019"; "The Convention on Biological Diversity: Social, Economic and Legal Challenges", CBD Secretariat.

- 5 Source: WTO Environmental Database (EDB).
- 6 Source: WTO Environmental Database (EDB).
- 7 Appellate Body Report, US Gasoline, p. 30.
- 8 While these disputes concern marine animals, rather than life on land, they illustrate the application of WTO rules to national policies with the objective of protecting biodiversity more generally.
- 9 The STDF is a global partnership that supports developing countries in building their capacity to implement international SPS standards, guidelines and recommendations as a means to improve their human, animal and plant health status, and their ability to gain or maintain access to markets.
- 10 "Mainstreaming trade to attain the Sustainable Development Goals", WTO Report 2018.
- See the latest revision of WTO document G/SPS/GEN/1758.

- 12 Presentations in the CTE by Indonesia and Malaysia in 2018 - WT/CTE/M/65 – and by Colombia in 2019 WT/CTE/M/67.
- 13 WTO document INF/TE/SSD/R/5.
- 14 For instance, as part of its 2021 TPR, Myanmar's was asked to elaborate on how environmental sustainability applies to its FTA negotiations. Myanmar responded inter alia that, as part of ASEAN community, it was committed to a number of strategic measures including strengthening regional cooperation to protect, restore and promote sustainable use of coastal and marine environment and terrestrial ecosystems resources, combat desertification, halt biodiversity loss, and halt and reserve land degradation (WTO document WT/TPR/M/405/Add.1).
- 15 ePing SPS&TBT Platform is an online tool that sends email alerts and allows users to search and retrieve notifications on SPS and TBT measures notified by WTO members.
- 16 EDB is an online database with over 13,000 environmentrelated measures drawn from WTO notifications and over 800 environmental-related entries from the Trade Policy Reviews of WTO members.
- 17 WTO MEA Matrix provides background information on trade-related measures pursuant to selected MEAs. The Matrix currently includes information on 15 MEAs, including CITES, CBD and ITTA.
- 18 QR database is an online tool to search and retrieve notifications on trade restrictions and prohibitions notified by WTO members. Apart from basing it on WTO provisions, members can also base the justification for these measures on international conventions such as CITES, among others.
- 19 See discussions on biodiversity in the Trade Concerns Database.
- 20 "Progress towards the Sustainable Development Goals", Reports of the UN Secretary General, 2018.
- 21 According to the CBD, invasive alien species are plants, animals, pathogens and other organisms that are nonnative to an ecosystem, and which may cause economic or environmental harm or adversely affect human health.
- 22 UNSTATS.
- 23 "Global Assessment Report on Biodiversity and Ecosystem Services", Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).
- 24 "Progress towards the Sustainable Development Goals", Reports of the UN Secretary General, 2018.
- 25 Source: WTO Environmental Database (EDB).
- 26 By way of example, the programme EU Multi-stakeholder Dialogue for Sustainable Cocoa funds parallel multistakeholder dialogue events in Côte d'Ivoire, Ghana and Cameroon, involving government, private sector companies and civil society, with the aim of training farmers on inter alia sustainability, tree replacement, and reforestation, while ensuring they earn a living income.

- 27 WTO documents WT/CTE/M/57, WT/CTE/M/58, WT/CTE/M/59.
- 28 The EU Timber Regulation (EUTR) is key element of the FLEGT Action Plan, which prohibits the placing of illegally harvested timber and timber products on the EU market and lays down obligations for operators placing timber on the market for the first time. (See Commission Impact Assessment on minimising the risk of deforestation and forest degradation associated with products placed on the EU market, p. 38).
- 29 WTO document INF/TE/SSD/R/5, para. 3.3.
- 30 Countries pledge to strengthen their shared efforts to "[f] acilitate trade and development policies, internationally and domestically, that promote sustainable development, and sustainable commodity production and consumption, that work to countries' mutual benefit, and that do not drive deforestation and land degradation" and "[i]mplement and, if necessary, redesign agricultural policies and programmes to incentivise sustainable agriculture, promote food security, and benefit the environment".
- 31 Statement of the OIE Wildlife Working Group, April 2020.
- 32 OIE Guidelines for Wildlife Disease Surveillance.
- 33 "Taking a Multisectoral, One Health Approach: A Tripartite Guide to Addressing Zoonotic Diseases in Countries". FAO, OIE, WHO, 2019.
- 34 WTO-CITES co-publication "CITES and the WTO: Enhancing Cooperation for Sustainable Development".
- 35 "Illegal logging, fishing, and wildlife trade : the cost and how to combat it". World Bank, 2019.
- 36 "The elephant in the room: sustainable use in the illegal wildlife trade debate", IIED Briefing 2014.
- 37 WTO-CITES co-publication "CITES and the WTO: Enhancing Cooperation for Sustainable Development".
- 38 "Trade in vicuña fibre. Implications for conservation and rural livelihoods". International Trade Centre, 2018.
- 39 WTO document WT/CTE/M/62, para. 2.3.
- 40 Source: WTO Environmental Database (EDB).
- 41 WTO document G/MA/W/114/Rev.3.
- 42 See the STDF work on Invasive Alien Species.
- 43 Merging the Poverty and Environment Agendas, IISD Brief, 2021.
- 44 Information on measures notified by WTO members is available in the dedicated webpage COVID-19 and world trade.
- 45 "Future resilience to diseases of animal origin: The role of trade".