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**TRADE AND SUSTAINABLE
DEVELOPMENT GOAL 15:
PROMOTING “LIFE ON LAND”
THROUGH MANDATORY AND
VOLUNTARY APPROACHES**

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Abstract

Sustainable Development Goal 15 deals with “Life on Land.” Its nine targets and three means of implementation cover a vast array of environmentally sensitive issues related to land-based renewable natural resources. This paper explores the channels through which trade can address them. Approaches are categorized as mandatory or voluntary. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) has over 40 years’ experience in mandatory regulation of trade in nature-based species. CITES has evolved considerably since 1975 to allow sustainable trade as long as it is legal and traceable. Since the international community officially embraced the concept of sustainable use with the Convention on Biological Diversity (CBD) in 1992, other initiatives have promoted international trade in biodiversity-based species. These initiatives nonetheless remain relatively limited. A widespread approach based on a model of voluntary sustainability standards (VSS), which are certified by third parties, has shown phenomenal growth over the past 20 years. But many stakeholders are dissatisfied partly due to less than expected economic benefits, and others are uncertain about the environmental *outcomes*—as opposed to changes in management *practices*—for which there is only limited solid evidence. Stakeholders are currently assessing how to improve the situation. Some advocate government involvement, and others wish to leverage large corporations to make transformational changes. The paper proposes a Trade Facilitation Agreement (TFA) for environmentally sensitive products, inspired by the World Trade Organization (WTO) TFA, that would be an “inter-governmental-plus” arrangement bringing together the range of stakeholders currently involved in sustainability standards.

JEL Classification: F13, F18, L15, Q28, Q56, Q58

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1. INTRODUCTION

This paper examines how trade can promote Sustainable Development Goal (SDG) 15—“life on land”—and what the limitations of trade are as a means of implementing the Goal. Only one of the 17 SDGs concerns the environment, i.e., SDG 15, which focuses on the terrestrial environment and land-based renewable natural resources. Nine targets (15.1–15.9) followed by three means of implementation (15.a–15.c)¹ are subsumed under the Goal. Despite the deceptively short title “Life on Land,” the nine targets plus the three means of implementation cover a vast array of environmental issues: *ecosystems* (wetlands, drylands, mountains); *natural resources* (forests, genetic resources); *environmentally sensitive issues* (land degradation, invasive species, wildlife trafficking); and solutions thereto (reforestation, biodiversity accounting, pursuit by local communities of sustainable livelihood opportunities). As the objective of this paper is to understand the potential, and limitations, of trade in contributing to SDG 15, our comments have been organized by means of implementation—15.a, 15.b, and 15.c—rather than surveying all 12 targets.

2. HOW DOES THE TRADITIONAL ANALYSIS OF TRADE AND ENVIRONMENT APPLY TO TRADE IN NATURAL RESOURCES?

Before discussing existing and proposed uses of trade to promote the terrestrial environment SDG and its targets, we begin with background on how the interaction of trade and environment have traditionally been analyzed.

The classical framework for examining linkages between trade and the environment posits that trade liberalization leads to scale, structural (sometimes called composition), and technique changes, each with environmental impacts of a different extent and nature.² The questions to be studied under such a framework are the following: (i) whether increased economic activity from trade will lead to negative effects on the environment (scale effect); (ii) what might be the new mix of dirty or clean goods traded and processes used (composition effect); or (iii) whether cleaner (or dirtier) technologies will be diffused (via a technique effect). Attempts to incorporate this conceptualization of the interaction into quantitative work have focused on the effects, via prices, of the removal of tariffs for manufactured goods.³ Trade in land-based natural resources—the subject of SDG 15—is usually subject to low tariffs but can face nontariff measures, which do not lend themselves easily to quantification in price-based economic models. Matching changes in trade flows with environmental data is even more difficult as such data are patchy in coverage. In addition, they are collected at national level whereas environmental effects are generally local, particularly those arising from the extraction and use of natural resources. Even more importantly, environmental policy boils down to laws and regulations and how they are implemented by institutions, nationally and at the subnational level. Environmental policies reflect the specificities of the biome, ecosystem, and environmental medium addressed. They also respond to the social and political priorities of a state’s polity. If the scale, composition, and technique effects are difficult to translate into environmental impacts

¹ The full text of SDG 15 and the associated targets appear in the Annex below.

² See OECD (1994), OECD (2000), and Grossman and Krueger (1993).

³ See Peters (2011), which matches GTAP (trade data base) with emissions of carbon dioxide (CO₂) but not local environmental effects.

for the manufacturing sector, they are not well designed to provide guidance of how regulatory policies and their implementation will react to liberalized trade in natural resources.

With the mushrooming of regional trade agreements (RTAs) since the mid-1990s, fears were expressed that increased trade and trade-induced growth would be detrimental for the environment. This fear was essentially an expression of the scale effect—more trade would lead to more pollution and natural resource depletion. Defenders of freer trade claimed that trade would shift the product mix and bring better techniques to relieve the increased pressure on air, water, and soil. To have a clearer understanding of what was likely to happen, or had happened, environmental assessments became mandatory, first in the United States (US) and Canada, and later in the European Union (EU) and other European countries.

These reviews adopted various methodologies. Some were *ex post*, reviewing the effects of past trade liberalization to inform the future. Others were *ex ante*, to predict how trade would affect the environment following liberalization.⁴ Because *ex ante* exercises were potentially so vast, *scoping* (to circumscribe which aspects of trade liberalization would be examined) and *screening* (looking at potential hotspots, either geographically, e.g., at border crossings, or by environmental medium) were used to bring the exercise to manageable proportions. Where weak points were identified, the reviews recommended flanking policies to accompany trade liberalization with the objective of mitigating the negative and strengthening the positive aspects associated with greater trade flows.

One result of the scoping and screening processes was a tendency for the reviews to become sectoral in nature, focusing on agriculture including forestry, fisheries, and timber, or services sectors such as tourism. In a few cases this led to separate language in the trade agreement on sectoral issues, or an annex thereto. For example, an annex in the US–Peru Free Trade Agreement is on illegal timber trade.⁵ The People’s Republic of China–Peru and the People’s Republic of China–Costa Rica Free Trade Agreements include provisions, respectively, on mining and agriculture. The environmental chapter in the EU CARIFORUM Economic Partnership Agreement concludes with a summary list of cooperation priorities, including facilitation of voluntary schemes such as labeling and accreditation schemes, and facilitation of trade in timber and wood products from legal and sustainable sources. In other trade agreements, a separate implementation mechanism or an Environment Committee has been set up to establish a work program on sectoral issues.

Some RTAs, in recognition of a general lack of data or the immensity of the interrelationships between trade and growth and environmental effects, mandated a monitoring role.⁶ The complex relationships between increased trade and impacts on

⁴ George (2014b) lists the environmental assessments of RTAs carried out by Canada, the US, and the EU. Lists for earlier years can be found at <http://www.oecd.org/trade/oecdtradeandenvironmentworkingpapers.htm>.

⁵ The US–Peru Trade Promotion Agreement. Annex 18.3.4: Annex on Forest Sector Governance. https://ustr.gov/sites/default/files/uploads/agreements/fta/peru/asset_upload_file953_9541.pdf

⁶ The Commission on Environmental Cooperation was set up in an environmental side agreement with North American Free Trade Agreement. In the case of the US-Central America Free Trade-Dominican Republic (US–CAFTA-DR) trade agreement, the Organization of American States has been used to carry out technical assistance and monitor these activities. An independent audit of the monitoring roles undertaken for US RTAs can be found in US Government Accountability Office (2014).

the environment were also checked by testing a series of hypotheses, such as the “race to the bottom” or the pollution haven hypotheses.⁷

In sum, despite the theoretical literature, the questions posed by trade and environment policy-makers when negotiating new trade agreements have rarely focused on assessing scale, composition, and technique effects. As the interaction of the various effects is in the end an empirical question, without adequate environmental data at local level, the focus of negotiators was to study regulatory effects. How adequate were existing environmental regulations? Was national regulatory capacity, particularly the institutional structure, resilient enough to adapt to the environmental challenges arising from the new trade patterns?

3. TRADE AS A MEANS OF IMPLEMENTATION IN REGULATING FOR SUSTAINABILITY OUTCOMES

The word *trade* is not used in the title of SDG 15, nor does it appear in the text of the associated nine targets. Nonetheless the following three means of implementation under SDG 15 are trade-relevant:

15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems

15.b Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation

15.c Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities

Trade can help to (i) *generate financial resources from all sources* (15.a), (ii) *provide incentives* (15.b), and (iii) *increase the capacity of communities to pursue sustainable livelihood opportunities* (15.c). The question then becomes how to operationalize the various means of implementation and increase their effectiveness and impact. Examples of innovative interventions being used to promote sustainable trade in natural resource products, including biodiversity products and wildlife species, are set out below. These are significant and growing. However, with few exceptions, they remain fairly limited. In attempts to *scale up* and extend the overall sustainability impacts of the initiatives, problems have arisen. Serious reflection among environmental nongovernment organizations (NGOs), firms, and more recently certain governments is currently underway. In the final section, it will be suggested that building on experience needs to be complemented with novel approaches to scale up sustainable outcomes and make a greater contribution to the fulfilment of the SDG 15 targets.

⁷ See chapters 2 and 3 in Frankel (2009).

3.1 Evolving Attitudes about Trade in Environmentally Sensitive Products

Promoting international trade has in the past been considered at odds—even intrinsically harmful—for natural resources and environmentally sensitive products. Trade was perceived as the driving force for the depletion and even extinction of wildlife and thus had to be strictly controlled. Trade policy instruments, such as quotas and even import bans, were used to bolster conservation by curtailing the international exchange of environmentally sensitive products. For example, on the grounds of biodiversity loss caused by poaching and exports of a few of the “charismatic” mega species, the conservation movement was behind the adoption of an international convention to restrict trade in endangered species. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) was adopted in 1976. Based on US conservation laws, it is also known as the Washington Convention. Viewed from this historical perspective, using trade and trade policy to *promote* sustainable management of natural resources and ecosystem products, as targeted under SDG 15, might appear to be difficult, or even nigh impossible.

International attitudes have evolved since the Earth Summit held in Rio de Janeiro in 1992. Agenda 21 adopted at the Rio Summit incorporated the principles of sustainable consumption and sustainable production. It also gave birth to three environmental conventions, including the Convention on Biological Diversity (CBD). In this Convention, conservation and sustainable use are balanced as two separate goals. Many of the CBD initiatives to halt loss of biodiversity—such as offsets, “no net loss,” and payments for ecosystem services⁸—are national approaches that do not involve international trade.⁹ The CBD has since developed its tool kit and today is cooperating with a series of trade-friendly initiatives to promote conservation and sustainable use. Which lessons can be drawn from trade-relevant activities in biodiversity environmental agreements about trade’s potential role in promoting SDG 15 targets?

In assessing how trade can contribute to promoting sustainable outcomes for the terrestrial environment, and its limitations, this paper examines two separate—and until recently—distinguishable paths. The first group takes a regulatory approach that relies on laws and institutions for implementation and enforcement. That is, it is governmental and has a mandatory character. The second involves standards used by private actors—NGOs, firms, farms, mills, etc. Some prefer referring to these as private sustainability standards (PSS) and others as voluntary sustainability standards (VSS). As they are nongovernmental and voluntary in nature, we will use the latter term to emphasize their nonmandatory nature.

Of the two sets of approaches that use trade as a lever to generate financial resources for the sustainable management of biodiversity and ecosystems, the first involves sales of wildlife or natural products, either directly or as inputs to a manufactured product. Since nature-based goods can be over-harvested, they are often protected and subject to legal regulations. In order to remain sustainable, trade in biodiversity products harvested from nature must, on the supply side, respect species-specific biological factors. Governance issues involving traders and institutions are also critical, as is careful attention to market drivers.

⁸ See OECD (2010), particularly a survey of environmentally effective and cost-effective systems of payments for ecosystem services (none of these involve international trade).

⁹ Under the CBD, the Nagoya Protocol on Access and Benefit-sharing, adopted in 2010, has trade-relevant aspects, as does the Cartagena Protocol on Biosafety adopted in 2000.

The second approach, based on VSS, is widely used in the case of internationally traded commodities such as coffee and other beverages, palm oil, soya, and timber. Producers, importers, or distributors work with a technical body, often in a multi-stakeholder group often called a “roundtable,” to develop standards prescribing the sustainable production (or harvesting) practices for the commodity in question. In turn, the plantations, farms, or other enterprises opting to use these standards are submitted to auditing by independent third parties with a view to having their production declared standard-compliant.

Each of these two approaches to support trade in natural resource products, and their limitations, is discussed below in sections 4 and 5.¹⁰

4. MANDATORY REGULATIONS: GOVERNMENTAL INVOLVEMENT IN REGULATING FOR SUSTAINABILITY

In this section, we examine the family of initiatives involving trade to promote sustainability that are based on laws and mandatory regulations.

As discussed above, the 1992 Earth Summit ushered in the concept of *sustainable use* in international environmental texts. Opened for signature at the Summit and entering into force the following year, the CBD is an international treaty for the conservation of biodiversity, *the sustainable use of the components of biodiversity*, and the equitable sharing of the benefits derived from the use of genetic resources. In Article 2, the Convention defines *sustainable use* as

*the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.*¹¹

It is significant of the evolving consensus in the conservation and sustainable use debate that the Agenda for 2030 adopted in September 2015, setting out the universally agreed SDGs, makes extensive references to *sustainable use*. In SDG 15, *sustainable use* appears in the overall chapeau in SDG 15 and in targets 15.1 and 15.a.

SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems

¹⁰ Certain international commodities such as timber can be farmed as well as harvested from the wild. Sustainable international trade in timber can be facilitated both by certifying voluntary standards and through laws and legal-binding regulations at national and international level. See section 6.

¹¹ CBD. Article 2. <https://www.cbd.int/convention/articles/default.shtml?a=cbd-02> The CBD Preamble is also relevant, stating, “Reaffirming also that States are responsible for conserving their biological diversity and for using their biological resources in a sustainable manner.” <https://www.cbd.int/convention/articles/default.shtml?a=cbd-00>

15.c Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities [emphasis added]

4.1 40 Years of CITES: Legal, Traceable, and Sustainable Trade

Is trade inherently *sustainable use*-friendly? Or can it be crafted to produce such results? As certain resolutions adopted by the parties to CITES recognize the benefits of trade, some members argue that this is the case. Species-based conservation approaches were insufficient to halt the decline of many populations in the wild, and trade was cast as the villain threatening the survival of many of the charismatic mega-fauna. Conservation movements successfully advanced their cause in the 1960s and early 1970s, leading to the adoption of CITES. CITES was structured to approach conservation by restricting imports and exports of endangered species of wild plants and animals. Even though it was clear that international trade was not the only threat, CITES was set up to focus on trade; it does not address other key causes of biodiversity loss such as land conversion of natural habitats. Dating from 1975, that is 17 years before the Rio Earth Summit, the Convention does not contain the term “sustainable use.” Nonetheless, since its inception, CITES has been advancing cautiously down the road toward sustainable use. It has passed several key resolutions and the CITES Secretary-General often speaks of “legal and sustainable use” or of the Convention’s role in “regulating for legal, sustainable and traceable trade in wildlife” (WTO and CITES 2015).

The three appendices to the Convention offer varying levels of protection. Species listed on Appendix I and taken from the wild are prohibited from entering international commercial trade. Exceptions exist for cases where ranching or breeding in captivity is allowed and specimens are then returned to the wild. Species listed on Appendix II that are taken from the wild may be traded if such trade is legal, sustainable, and traceable. Exporting countries must first make a “non-detriment” finding concerning such Appendix II specimens. Guidance recommends that socioeconomic factors also be taken into account, but in the end biological findings on the species take precedence. National jurisdictions may enlist the cooperation of other parties for species which they determine need protection and that they decide to place on Appendix III. International trade that is legal and traceable in such species is allowed. A major development in CITES was the issuance of its general guidance document adopted at Conference of the Parties (COP) 16 in 2013. *Strategic Vision: 2008–2020* contains references to CITES’ contribution to sustainable use.¹² This is most relevant to Appendix II specimens, which represent 96% of species covered by the Convention.

In a clear manifestation of the shift away from solely focusing on illegal trafficking, and a move toward operationalizing sustainable use and trade, CITES set up a working group on CITES and Livelihoods. Developed with support from the Organization of American States, a handbook has been developed to help stakeholders make rapid assessments of the impacts of listing species on a CITES Appendix, as well as guidelines on how to mitigate negative impacts (OAS 2015).

¹² “CITES vision statement: Conserve biodiversity and contribute to its sustainable use by ensuring that no species of wild fauna or flora becomes or remains subject to unsustainable exploitation through international trade, thereby contributing to the significant reduction of the rate of biodiversity loss and making a significant contribution towards achieving the relevant *Aichi Biodiversity Targets*.” <https://www.cites.org/eng/res/16/16-03.php>

The key operational mechanism of CITES is the system of permits and certificates to track the trade in shipments of CITES-listed specimens. Cooperation operates between management authorities of member states to match import with export permits. Over the 40 years of its existence, CITES has made progress in combating corruption and associated mafia crime involved in lucrative wildlife trade through the institutionalized cooperation not only with national customs authorities, but also with organizations such as INTERPOL. One recent concrete advance involves fighting fraudulent documentation for shipments (often paper permits were simply photocopied multiple times exceeding permissible export quotas) and accompanying corruption by instituting the use of electronic forms that were developed in conjunction with the World Customs Organization. The CITES Secretary-General, John Scanlon, has recently stated that the use of such forms “. . . offers a taste of the future for CITES implementation, where CITES trade processes are fully electronic” (CITES 2011).

A high profile and controversial case is that of the *black rhinoceros*, which are farmed in southern Africa. They breed easily in captivity and their horns can be harvested; their horns grow back at a rate of 0.9 kilogram per year following best practices. Despite relatively favorable biological attributes of the species, Save the Rhino, an NGO dedicated to saving the rhino, states that it carefully assesses governance and market aspects as well the biological attributes. Concerning the market and governance aspects on the supply and the demand side, Save the Rhino believes that

. . . more detail [is needed] on how a trade in rhino horn will be regulated and how the proponents would ensure that income generated goes back into rhino conservation efforts. Other pre-conditions include getting a better grip on the abuse and corruption that are contributing to the present high levels of illegal trade, auditing horn stockpiles and increasing the database of horn DNA samples . . . Without stringent monitoring, there are risks that a legal trade could serve as a route for the illicit tracking of rhino horns. On the demand side, the main producing country still needs to establish a credible trading partner. . . . Being a credible trading (importing) partner will entail a much higher level of law enforcement and political will to combat the illegal trade in rhino horn than has been evidenced so far. How will rising affluence in other Asian countries affect the demand for rhino horn? (Save the Rhino 2013).

Their statement underscores the need for balancing species-specific biological attributes, demand-side (actual and potential) market drivers, and governance aspects, not only in the range state but also in the importing countries. In the end, a resolution to allow greater trade in rhino horn from range states with sound management practices was debated and rejected at the CITES COP 17 held in South Africa in September 2016.

Illegal wildlife trade has taken on international proportions also with its increased link to organized crime. A recent Organisation for Economic Co-operation and Development (OECD) report finds that the networks involved in wildlife trafficking between sub-Saharan Africa and Asia are of particular concern from a security policy perspective due to their associations with listed terrorist organizations (OECD 2016, p.72). The CITES Secretariat and the United Nations Office on Drugs and Crime are partners in the International Consortium on Combatting Wildlife Crime, alongside INTERPOL (INTERPOL 2016), the World Bank, and the World Customs Organization. The Consortium is chaired by the CITES Secretariat (ICWC 2013).

4.2 CITES and the Livelihoods of Local Communities

Interestingly, SDG means of implementation 15.c has two distinct parts:

- (i) combat poaching and trafficking of protected species¹³
- (ii) including by increasing the capacity of local communities to pursue sustainable livelihood opportunities

In the section above, the CITES mechanisms that address poaching and trafficking of protected species were explained. Trade is regulated through a system of permits that track imports and exports. This can involve limiting trade via quotas or even bans of certain species, depending on how severely the species may be endangered. In large part due to discontent on the part of range states,¹⁴ CITES established the Working Group on CITES and Livelihoods in recognition of the heavy dependence of rural communities on wild species for their livelihoods.¹⁵ The Working Group was given the mandate to develop tools for sustainable implementation of CITES listings, the mitigation of negative impacts, and the enhancement of positive opportunities for rural communities. This corresponds precisely to the second part of SDG 15.c: *increasing the capacity of local communities to pursue sustainable livelihood opportunities*. CITES trade regulation mechanisms opened a bit further, a reflection of the considerable distance traveled by the Convention since 1975.

An impressive success story concerns a seriously threatened species and the livelihoods of a local community living at 4,000 meters elevation in the Andes. The vicuña, whose hair is considered the finest of natural wools, had been listed as an endangered species under Appendix I. This meant there were no possibilities of trading vicuña products legally. Rampant poaching of the animal for its hair had led to near extinction of the species. Unless CITES changed the vicuña's status, the local communities would not be allowed to trade the animal's hair. The request for the lifting of the trade ban was partially granted by CITES in 1987 for certain herds and later downlisted for all of Peru's vicuña population. Management of the herds through regular shearing of their hair made killing of the animals of no interest to poachers: "a shorn vicuña is a saved vicuña."¹⁶ A similar decision was taken later by CITES parties

¹³ The first part of target 15.c is duplicative of another target under SDG 15. Target 15.7 reads, "Take urgent action to end poaching and trafficking of protected species of flora and fauna, and address both demand and supply of illegal wildlife products." The text of 15.7 is more complete with its reference to "flora and fauna" and its injunction to address "both the demand and supply of illegal wildlife products." This is significant since CITES permits are essentially supply-side in nature. Underscoring demand-side measures shows recognition of their complementary nature to import and export permitting. Campaigns can curtail demand by promoting substitutes, not taken from the wild. Or demand promotion can also be used if the biological and governance factors contribute to putting an increased legal supply on the market that can be traded to finance conservation measures to ensure the protection of the species in question.

¹⁴ In the early 1990s, Zimbabwe was on the verge of withdrawing from CITES. Its influence by remaining a member is described in "Zimbabwe and CITES: influencing the international regime." See Hutton and Dickson (2000).

¹⁵ In southern Africa, community-based natural resource management (CBNRM) has a long tradition in practicing management of natural resources, including wildlife, through local governance structures at the villages, and was one of the inspirations for the Working Group on CITES and Livelihoods. At a 2011 symposium, the Secretary-General of CITES expressed his view that "CBNRM is not a panacea . . . but it is one viable option to explore when determining how to achieve more effective implementation of the Convention."

¹⁶ See Lichtenstein, G. 2011. Use of Vicuñas (*Vicugna vicugna*) and Guanacos (*Lama guanicoe*) in Andean countries: Linking community-based conservation initiatives with international markets. In *In CITES and CBNRM, Proceedings of an international symposium on "The relevance of CBNRM to the conservation and sustainable use of CITES-listed species in exporting countries,"* ed. M. Abensperg-

to transfer from Appendix I to Appendix II the vicuña population of Ecuador, for the exclusive purpose of allowing international trade in wool sheared from live vicuñas and in cloth and items made thereof, including luxury handicrafts and knitted articles.

Another example can be found on the side of flora. Candelilla wax, derived from an eponymous shrub in northern Mexico, had been carefully regulated by CITES. Traded for use in lipsticks, the CITES-listed product is now considered to be managed according to best practices. Retailing is allowed with some 20,000 Mexican farmers making a living from the production and trade in the wax.

As parties to CITES recognize the potential impacts on livelihoods of rural communities¹⁷ of CITES-listing decisions,¹⁸ associations of indigenous communities have become active in following CITES deliberations to assess the implications for their biodiversity-based livelihoods. Groups such as the Canadian Inuit have increased their influence in CITES discussions. This has not been without controversy. At previous COPs, for example, the proposal by the US Delegation to place the polar bear on Appendix I was not adopted.¹⁹ This issue opposes the US and Canada, reflecting differences in conservation NGOs and indigenous communities. In the case of the polar bear, the IUCN Red List states, “Loss of Arctic sea ice due to climate change is the most serious threat to polar bears throughout their circumpolar range.” CITES’ mechanisms are designed to regulate trade when trade is determined to be a significant factor threatening the species. Other biodiversity conventions²⁰ focus on other causes of biodiversity loss such as habitat destruction, overexploitation, degradation, illegal harvest and trade, pollution, and climate change.

4.3 Facilitating Sustainable Trade in Wildlife Products: Support from the International Trade Centre, BioTrade, and Union for Ethical BioTrade

The primary emphasis in CITES is to ensure that international trade does not threaten the survival of species. Permits and certificates are used to regulate international trade in the listed species. Technical assistance activities have focused on capacity building in the national management authorities to strengthen the implementation of regulatory responsibilities under the Convention. Even today, if “legal and sustainable use” or “legal, traceable and sustainable trade” have become part of the Convention’s

Traun, D. Roe, and C. O’Criodain. See also the video CITES and Vicuñas: A Conservation Journey. <https://www.youtube.com/watch?v=ROnMnfBDUQ4> (accessed 22 March 2017).

¹⁷ For CITES, “rural communities” include indigenous and local communities.

¹⁸ A recent regional trade agreement broke ground by referring to indigenous communities in its text. The parties reiterate their commitment to, *subject to national legislation, respecting, preserving and maintaining the knowledge, innovations, and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity, and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices*. Article 20.13: Trade and Biodiversity from the Trans-Pacific Partnership Agreement (2016).

¹⁹ Transfer from Appendix II to Appendix I of *Ursus maritimus* (polar bear) was voted down by the parties in 2013. The proposal had been expected to be tabled again at COP 17 in September 2016 but was withdrawn after debate in the Animals Committee. See also IUCN Red List of Threatened Species page on *Ursus maritimus* (<http://www.iucnredlist.org/details/22823/0>) for details on the use and trade and differing range state policies concerning the polar bear.

²⁰ The seven biodiversity-related conventions are (i) CBD, (ii) CITES, (iii) Wetlands (Ramsar), (iv) Migratory Species, (v) Plant Genetic Resources, (vi) World Heritage, and (vii) Plant Protection. For the full names and a short description of each convention, see CBD. Biodiversity-related Conventions. <https://www.cbd.int/brc/>

parlance, CITES still does not speak of promoting international trade. Other members of the UN family, such as the International Trade Centre (ITC) and the UN Conference on Trade and Development (UNCTAD) BioTrade, and offshoots like the Union for Ethical BioTrade (UEBT), have stepped in to complement the regulatory activities of CITES with a view to facilitating trade in nature-based biodiversity products including wildlife.

Promoting sustainable trade from the point of view of providing incentives for the conservation of the endangered species is complex. A decision to allow trade to promote sustainable use needs to be carefully evaluated along the lines of the (i) species-specific biology; (ii) governance structures in place, and incidence of corruption—game wardens, policing, and customs authorities; and (iii) actual market demand as well as potential demand when demand has been repressed.²¹ Farming of the Nile crocodile for their hides and meat has been a CITES success story. Once downlisted to Appendix II, the species may be farmed by borrowing eggs from the wild, as long as a certain share is returned after hatching. The species-level biological factors (each female lays dozens of eggs) and a strong consumer market demand were particularly favorable in overcoming doubts about potential governance issues. Crocodile farms are a thriving business in South Africa, Zimbabwe, Zambia, and Kenya which have the largest farms, bringing huge profits to the ranch owners.

The ITC has supported an important project on trade in python skins that are used in handbags, shoes, and other fashion accessories. The value of the skins is estimated to be around US\$1 billion per annum, and the extent of illegal trade in python skins is estimated to be equal in extent to that of the legal trade. In cooperation with the ITC, a BIOTRADE report, with financial backing from Gucci and other major fashion brands, has made suggestions for an effective *traceability* system involving the tagging of skins. The challenge would be for such a scheme to collect data on species, place and date of capture and of slaughter, gender, and length. Many of these proposed techniques such as *permitting, electronic tracing, tagging, and farming* are derived from experience gained in promoting sustainable trade in CITES-listed species. The trade-friendly lessons from CITES experience have spread to facilitate trade in other wildlife species.

The BioTrade Initiative was set up in 1996 under the auspices of UNCTAD to support the implementation of the Convention on Biological Diversity (CBD). In line with CBD objectives, it responds to the trade-related aspects of CBD Article 10 on sustainable use, Article 11 on incentive measures, Article 15 on access to genetic resources, and Article 8(j) on traditional knowledge. The initiative can be termed a match-maker between developing country and northern firms. It now has 20 years of experience in leveraging trade as an incentive for the incorporation of conservation and sustainable use criteria into private sector initiatives, and works with governments in 21 biodiversity-rich countries. As an intergovernmental organization, UNCTAD generally starts with government trade promotion agencies and the Ministry of Environment with a view to identifying national biodiversity-based companies. Personal care products, fashion, nature-based-tourism, medicinal plants, natural fibers, as well as wildlife products have been the focus of the BioTrade initiative. In 2011, sales of BioTrade beneficiary organizations amounted to US\$4.1 billion. In 2013, turnover was deemed to be US\$5.2 billion (Reiter 2015). The BioTrade Facilitation Programme launched its third phase in late 2015, with the aim of offering poor people a viable economic opportunity from nurturing their biological resource endowments. The overall

²¹ These factors are spelled out in detail in Cooney et al. (2015).

objective is to mainstream BioTrade in relevant multilateral, regional, and national processes and strengthen the policy and regulatory environment for BioTrade sectors.

The aim of the Union for Ethical BioTrade (UEBT), an offshoot started in 2007, is to promote ethical bio-trade practices by offering its business members independent verification, technical support, and networking opportunities for biodiversity-based innovation and sourcing. This association currently stands at 40 companies—mostly in the cosmetics, pharmaceutical, and food sector—and 20 affiliates. In 2015, these companies had a joint turn-over of just over €4 billion. UEBT helps companies negotiate the regulatory minefield of trading with local producers around the world, while ensuring that benefits reach all of those involved, particularly holders of genetic resources in the developing world. Rather than *certification*, the UEBT offers its Members *verification*—that is, audits to establish that the private firms are operating in accordance with the Ethical BioTrade Standard (based on the seven BioTrade principles, the first two of which are conservation and sustainable use of biodiversity) (UNCTAD 2007). The UEBT philosophy behind the verification is to replace a pass or fail type audit with a detailed assessment of a member's biodiversity management system and the progress being made vis-à-vis the work plan. The process also involves an impact assessment standard aligned with the code of impacts of the ISEAL Alliance,²² of which UEBT is a member. In exchange for verification, member companies may appose the UEBT logo, as well as other sustainability seals for which they have been certified.

Examples of UEBT member activities include (i) a Colombian company trading a blue colorant for food and cosmetics from the fruit of the *Genipa americana*; (ii) a large Swiss company producing hundreds of natural cosmetics and pharmaceuticals that has targeted use of 80% plant-based raw materials from organic and biodynamic cultures and a biodiversity management system that ensures traceability; (iii) a company in Burkina Faso specialized in shea butter for cosmetics working with female producers organized in cooperatives; and (iv) a Vietnamese company, the largest traditional medicine producer in Viet Nam, focusing on improving practices for the sourcing of its natural ingredients and the research and development of medicinal plants.

Measured in terms of global trade flows, initiatives like the ITC, BioTrade, and UEBT pale in significance to the many billions of dollars of trade derived from other terrestrial flora and fauna, such as timber, coffee, soy, palm oil. If these initiatives, based on legal regulation, are currently marginal in the overall picture for the conservation and sustainable use of biodiversity, what is their potential to contribute significantly more? Proponents are looking for ways to ratchet up their impact in terms of global trade in not dissimilar ways as voluntary standards movements are talking about increasing overall impact through adopting a more holistic approach to agriculture and rural development.

²² The ISEAL Alliance's "Code of Good Practice for Assessing the Impacts of Social and Environmental Standards" helps standards systems to better understand the sustainability results of their work, as well as the effectiveness of their programs. See ISEAL Alliance. Impacts Code. <http://www.isealliance.org/our-work/defining-credibility/codes-of-good-practice/impacts-code>

5. THE VOLUNTARY PATH: SUSTAINABILITY STANDARDS-CUM-CERTIFICATION

15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems

Voluntary sustainability standards (VSS) combined with certification procedures were set in motion in the 1970s²³ but took off as a concrete approach to fostering sustainability following the Rio Conference in 1992 and adoption of Agenda 21. A congruence of different factors explains the turn to voluntary, nongovernmental schemes. NGOs were disappointed with governments' refusal to agree to more international conventions, such as that on forests. Other important factors include the belief that the private sector was more closely attuned to production issues and to consumer tastes and the distaste of several large OECD governments for developing regulations. From only a handful in 1970s and 1980s, these have grown to more than 500, as catalogued in recent reports. This section focuses on the use of standards and certification to promote production, consumption, and trade in sustainably managed agricultural commodities. It provides a brief overview on how they have progressed since the Earth Summit as well as the bumpy road they are currently traveling.

The number of environmental labelling and information schemes (ELIS) was recently catalogued at 544 in a 2013 OECD study (Gruère 2013), based on a data set managed by Ecolabel Index²⁴ together with those discussed in OECD reports. Most of the phenomenal growth in ELIS occurred between the late 1990s and 2010. There are many ways to categorize the schemes. The 2013 OECD study dissected the universe of 544 ELIS in a dozen different ways. Most pertinent for this discussion concerns the environmental focus area and mode of governance and ownership, as well as the type of auditing and verification (first, second, or third party). In terms of environmental focus, the relative shares of schemes attributed to biodiversity (11%) and natural resources (20%) had dropped in 2012 from the nearly one-half of total schemes in 1990, due to the increase over this period in energy and climate-related schemes. In terms of modes of governance, nonprofit voluntary schemes clearly dominate over the 32-year period studied.

Credibility of the standards, as measured by type of auditing and verification, reveals that while third party certifiers (independent, arms-length accredited bodies) represent about two-thirds of the total universe studied, second-party audited or verified schemes (performed by a party other than the producing firm but with a user interest in the products, such as traders, retailers, or consumers) increased significantly. As discussed below, access to schemes at an affordable price and the quality of certification are currently among the hottest issues in the voluntary standards world.

Some figures often used as measures of success of the VSS are set out here for the highly traded commodities—coffee, palm oil, and soya²⁵ (those that have been the focus of extensive standards activity). According to the *State of Sustainable Markets* compiled by the ITC, FiBL, and International Institute for Sustainable Development (IISD) (ITC 2015), VSS-compliant areas that were planted or harvested for nine commodities and the focus of the 14 standards surveyed continued to show exceptional growth in 2013 and 2014. *The Roundtable on Sustainable Palm Oil*

²³ An exception is the organics movement that dates back to Rudolf Steiner's writings in 1924.

²⁴ Ecolabel Index is the largest global directory of ecolabels, "currently tracking 465 ecolabels in 199 countries, and 25 industry sectors" (as of mid-November 2016). <http://www.ecolabelindex.com/>

²⁵ As forests are the focus of SDG target 15.b, timber is discussed below in section 6.

showed a 30-fold increase of its area between 2008 and 2014, and at that point covered some 15% of the global oil palm area.

The *State of Sustainability Initiatives* (Potts 2014) estimated an impressive 41% growth overall for trade in the group of VSS-compliant commodities studied, outpacing by far the 2% growth in the conventional commodity markets. In that review, coffee, cocoa, and palm oil, held the top places in 2012 for market penetration compared with their rankings in 2008. Standard-compliant coffee, which led in terms of market penetration, reached a 40% market share of global production in 2012 (up from 15% in 2008). Other commodities with significant market shares in 2012 include cocoa (22%, up from 3% in 2008) and palm oil (15%, up from 2% in 2008).

This incredible success of VSS-compliant commodities in penetrating markets—national and international—also explains why observers are pessimistic about the degree they can continue along the same path. Now facing saturated markets, they are the victims of their own success.

There are a number of consequences of the VSS-compliant no longer being just a niche market phenomenon. For a number of the “successful” VSS-compliant commodities, supply is beginning to, or already has, exceeded the market demand for the sustainable variety of the commodity. The excess supply ends up being sold as uncertified, exerting downward pressure on prices. With the withering of the price premia, producers in a market-driven scheme begin to cut costs on the investments made to ensure their commodity is grown or harvested according to the sustainability standards. This is another consequence of what Jason Potts of the IISD termed the Sustainability Paradox (Potts et al. 2014, Box 4.1). The reliance of such initiatives on market forces leaves the distribution of supply (and benefits) to those who can provide compliant goods at the lowest cost. These tend to be the more well-off producers who have already absorbed the costs of transitioning to sustainable practices. The unintended outcome is that VSS are gaining traction in regions and markets where they are needed least. For some internationally traded commodities such as timber, for which market access is increasingly conditioned by certification to a forest management standard, the producer may have no choice but to absorb the costs, even in the absence of a price premium, or lose market. In such cases, the “voluntary” in VSS effectively becomes a mandatory standard (UN Forum on Sustainability Standards [UNFSS] 2016).

The outlook for further growth is dampened by market surveys of consumers that often reveal that sustainability is an important but not a dominant factor in decisions to buy. A recent OECD study (Vringer et al. 2015), for example, underscores a certain schizophrenia of consumers. They reply in surveys that sustainability is important to them, but apparently not when confronted with higher prices. The lack of price incentive tilts their decision in favor of the lower priced product, leaving promotion of the collective good to others. In other words, the fuzzy “warm glow” effect of consumers’ values does not necessarily carry over to their buying decisions.

Another key consideration is that stakeholders are increasingly demanding that the actual environmental *impact* be verified and measured. Sunken costs were spent in developing standards and logos; recurrent expenditures for auditing and other verification costs to assess conformity to receive certification are even greater. Those having financed the development of the VSS want to know whether the costs are having a real impact on the ground. Recent reviews conclude that while standards have contributed to a change in farming and harvesting *practices*, few evidence-based peer-reviewed studies are available to answer the questions about outcome or impact (Steering Committee of the State-of-Knowledge Assessment of Standards and

Certification 2012). Existing studies tend to be incomplete, embrace a host of methodologies, and hence are not comparable. They have generally not built in counterfactuals (what would have happened had the standards not been adopted). The ITC/FIBL/IISD experts conclude in *The State of Sustainable Markets* (ITC 2015) that

. . . the degree to which they are improving farm performance remains largely unknown. The absence of consistent data on field level impacts for many standards is one obvious bottleneck to making such determinations.

According to the ISEAL Alliance, the situation of collecting data and reports on impacts on actual outcomes (as opposed to outputs) is improving. A special website has recently been launched collecting documentation on impacts: www.sustainabilityimpactslearningplatform.org.

5.1 Accomplishments and Challenges of VSS

Generally, the VSS system has served *business interests* well. Firms have shifted the emphasis over recent years away from statements of their *corporate social responsibility* and their public image in terms of support to sustainable development. A more recent approach integrates VSS-compliant commodities into supply chains to fully embrace this risk management tool. Recourse to VSS as a key tool for managing their supply chains is no longer a matter of simply burnishing “green” credentials for the public, but has become an integral part of a business model designed to protect their reputation and trademarks—often a sizeable part of a company’s assets.

At the same time, complaints are rife that there are too many standards—they are overlapping, duplicative, and bureaucratic (UNFSS 2016). Certain business-to-business (B2B) standards require more than one certification, even if in principle they are “voluntary.” For example, GlobalGAP may require certification to UTZ, Rain Forest Alliance, and Fairtrade, and organic standards, in parallel, for the product to gain access to supermarkets.

An obvious response would be to find common denominators and simplifying to meta standards, or to keep the range of standards but seriously work toward mutual recognition of those that are similar or have the same objective.²⁶ Such attempts have run into difficulties and progress has been slow. Reasons include the pride of authorship factor from NGOs that have spent years and enormous sums to develop the standards. Certification to verify adherence to the standard is often a lucrative source of income for large NGOs. Multiplicity of standards and the related confusion and overlap also tend to fuel donor-funded capacity-building projects implemented by NGOs. While willing to promote discussions on process, including promoting consultations with representative stakeholders and the review of drafts, many stakeholders do not wish to negotiate the substance of the standards which have become “holy grail.” Any movement to harmonize has always been difficult in the standards world. On the other hand, greater hope has been put in establishing mutual recognition protocols where there has been some limited progress, for example, in the case of organics standards. Ulrich Hoffmann²⁷ concludes:

²⁶ In the case of timber, the Programme for the Endorsement of Forest Certification (PEFC) is undertaking to bring some 40 national standards together under one meta standard.

²⁷ A former UN official, Hoffmann is one of the founding fathers of the UN Forum on Sustainability Standards (UNFSS) and the FAO/IFOAM/UNCTAD International Task Force on Harmonization and Equivalence in Organic Agriculture.

If one attempts to grossly evaluate the effect of PSS in moving towards truly sustainable markets and associated production and consumption patterns, one must realistically conclude that such standards are one, not unimportant tool whose real impact should however not be overrated.

More than one observer surveying and following the standards world has set the bar at approximately 15%–20% as the limit for voluntary sustainability standards to penetrate markets.²⁸ Such a prediction is commodity- and market-dependent of course, as well as a function of the national consumer market and its growth potential. The point is not the precise figure but the ambient pessimism about VSS as a panacea. We are far from the optimistic and enthusiastic support for this market-based and consumer-driven means to bring sustainable management to commodity production that was evident when VSS were launched some 20 years ago.

All too often the impression is created that the failure to mainstream VSS-compliant production is caused by lack of efficient management of those schemes by producers or insufficient capacity-building support, when the principal reason to get past the 15%–20% bar is the lack of any progress on internalization of environmental and social costs of conventional production, starting with the removal of misplaced subsidies (see Policy Coherence section below).

Another view from one of the strongest supporters of the standards-cum-certification model is revealing:

Companies have supported sustainability standards and certification over the last fifteen years to be leading tools in driving a market-based solution to improved social, economic and environmental production, using the power of consumer choice and globalizing supply chains to incentivize farmers and enterprises to improve their practices. . . . However, standards systems and their stakeholders recognise that even with impressive growth and impact, the scale of the challenges that we are collectively seeking to address means that we are unlikely to achieve the transformation we need with a model that recognises better practices at the scale of the individual farm or production unit [rather than at the landscape scale] (ISEAL Alliance 2016).

5.2 The Certification Industry

Another aspect of a growing disappointment with the system concerns the conformity assessment segment of VSS, sometimes referred to as assurance schemes. Conceived as the linchpin of the standards model, auditing and certifying are needed to bring credibility to the whole operation. Independent third parties inspect a unit using a testing protocol and then pronounce in a pass or fail manner on whether a production unit is producing in conformity with the standard. But their image has been tarnished by a number of allegations of unfair pricing, less than thorough inspections, and, in some cases, corruption.

²⁸ See also UNFSS Discussion Paper no. 6, which elaborates on this issue: <http://unfss.org/documentation/discussion-paper-series/>

The power and influence the specialized services industry exerts has been a cause for complaint, as their activities are often no longer consistent with the founders' philosophy of the system. Some of the largest certifiers dominate conformity assessment activities simply by marketing their reputation and convince retailers to insist with producers and exporters to use their services. The reality is that often local consultants are used to perform the auditing in the producing countries. Using locally based experts is in most cases the best solution since they are closer to the ground and know local conditions best. Even though such experts are often actually undertaking the verification, retailers refuse to take the "word" on verification directly from developing country-based firms to validate the conformity assessment in question (Rundgren 2015). In sum, the certification industry, including the accreditation business, which sets the norms and decides who may audit and certify according to the norm in question, has been accused of abusing its market power and engaging in anticompetitive practices. Concentration and consolidation also increase the tendencies to cut corners and cheat. The informal trust building, which was formerly an integral characteristic of the organics sector, has often been replaced by paperwork and official licenses. This has led the governments of some countries—for example, Denmark and Finland—to take over inspection and certification. Others have intervened to set the level of fees for certification.

In the end, an assessment of VSS effectiveness depends on one's perspective and the commodity in question (Halle 2014, pp.14–16). There are, however, some clear trends. Businesses are generally pleased in having found a management tool to reduce quality risks in supply chains and reputational risk to their firm. Consumers, on the one hand, should in principle benefit from on-product logos to help guide them in buying sustainable products, however defined. And if occasionally consumers are victims of "greenwashing," i.e., false claims about the environmental qualities of a product, they have recourse to consumer protection laws, at least in developed countries. At the ground level, actual environmental outcomes have been documented to a limited extent, as discussed above. This is a disappointment for environmental NGOs and donors in OECD countries who have poured millions into the development and operationalization of the schemes.

Developing country producers are frustrated in cases of compliant supply outstripping demand and subsequent withering of price *premia*. Price differentials for sustainable commodities do not necessarily revert to the grower (Potts and Sanctuary 2010). Benefits are not evenly distributed along the supply chain, and certain actors can use their market power to bargain with suppliers and buyers to increase their share of the benefits. Certification costs are burdensome and limit access to small holders, although progress has been made in the case of organics schemes, where group or regional certification schemes have opened access to smallholders.

Developing country governments have recently been able to bring their point of view to international organizations such as the UN Forum on Sustainability Standards (UNFSS). The Forum was founded in reaction to the concern that developing producers' voices were not being heard and to document the uncertainty on market access effects of the schemes. The UNFSS is currently setting up national platforms on effective VSS use. A national platform in India was launched in April 2016, and the launching of such platforms in Brazil and the People's Republic of China is being planned.

For trade to strengthen its role in promoting VSS as a means toward sustainable outcomes in commodity production and fulfilment of SDG 15 targets, other challenges that need to be addressed by relevant players include the following:

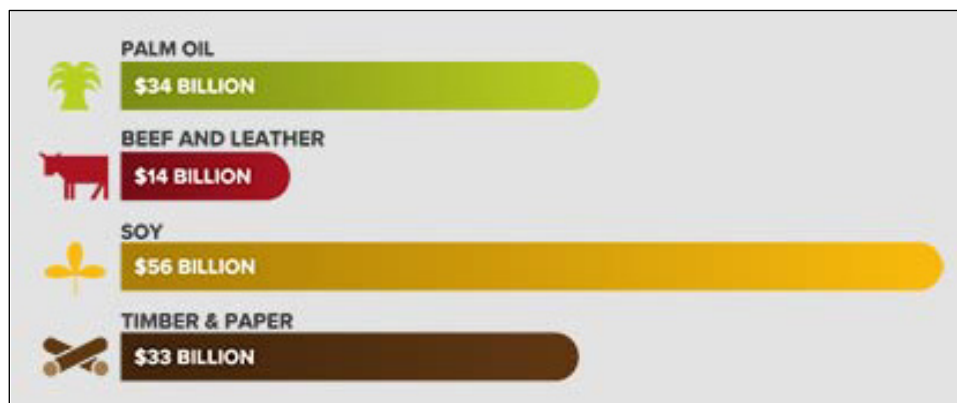
- (i) The more demanding and sophisticated the standards, the greater the tendency to limit sourcing to a relatively small number of better-off and well-managed producers benefiting from good infrastructure.
- (ii) VSS have not always been demand-driven; rather, donors and environmental and developmental NGOs have been primary advocates without sufficient developing country governmental and business support to national producers. The flip side is that such standards are not financially sustainable, and when donor support is discontinued they are likely to disappear.

5.3 Other Voluntary Approaches Involving Trade in Natural Resources

5.3.1 Zero Deforestation Pledges

Another private sector approach to linking exports of internationally traded commodities to the improvement of sustainable management practices has been the growth in zero or no deforestation pledges. Palm oil and soy have been the focus of international attention because the clearing of land in tropical areas in response to demand for these commodities is an important driver of deforestation. Along with soy and palm oil, beef and wood fiber for paper and pulp for export are considered the top four drivers of deforestation.

Global Export Values for Important Forest Risk Commodities



Source: Forest500. www.forest500.org

The type and coverage of the zero deforestation pledges vary. Some are across-the-board no deforestation, some may be net pledges (clearings offset by plantings), while many are commodity-specific pledges (Bregman, et. al. 2015). In the Amazon region, the Working Group on Soy (GTS) of producers, traders, environmental NGOs (including WWF and Greenpeace), and financiers worked out *the Soy Moratorium*. It has been continuously renewed since its inception in 2006. This initiative prevents major traders who are signatories from selling soya that may be linked to deforestation. Monitoring by the GTS in 73 municipalities that cover the quasi totality of the area of soy produced in the Amazon is widely credited as a major factor in the reduction of

deforestation in the Brazilian Amazon. In fact, this voluntary private-led initiative has been analyzed as outperforming the legally mandated Brazilian Forest Code.²⁹

Nestlé had already announced a zero deforestation pledge in May 2010 and has followed through by ensuring its *palm oil* plantations in Indonesia are uniquely located on lands cleared before that date. The *palm oil* trading giant, Wilmar, made an anti-deforestation promise in 2013. Unilever and Marks & Spencer have made general deforestation commitments. The Amsterdam Declaration in Support of a Fully Sustainable Palm Oil Supply Chain by 2020 was signed by the governments of Germany, Netherlands, the UK, and Denmark to back a joint European company commitment to support 100% sustainable palm oil in Europe by 2020.

ISEAL Alliance reports that the number of various kinds of such pledges has grown to some 300 (ISEAL Alliance 2016).

5.2.2 Policy Coherence

The expression *policy coherence* does not appear under SDG 15. It can however be found under SDG 17, which is considered to be the overarching goal insofar as it sets out various means of implementation applying to all the SDGs. Target 17.14 reads: “enhance policy coherence for sustainable development.” This is usually understood to be a synonym for removing perverse incentives, *inter alia*, for reducing funding to economic activities that go against recognized public policy goals. Targets under two other SDGs address subsidy reform directly, e.g., 14.6 *prohibiting certain forms of fish subsidies and 12.c rationalizing inefficient fossil fuel subsidies*.³⁰

In a recent study (McFarland, Whitley, and Kissinger 2015), the UK Overseas Development Institute identified 48 subsidies, and was able to estimate the value of half of them, revealing that REDD+ funding is eclipsed, specifically by domestic agriculture and biofuels subsidies. It is clear, they conclude, that REDD+ money to keep forests standing will not have much impact unless the real drivers of deforestation, including subsidies that lead to forest loss, are addressed. The authors call on donors and private investors to identify opportunities to phase out or reform current subsidies that encourage forest loss. The UN Environment Programme Financial Initiative has been working with three countries—Peru, Ecuador, and Indonesia—to understand how subsidies to agriculture are contributing to deforestation (UNEP 2015).

²⁹ Butler, R. 2015. Brazil's soy moratorium dramatically reduced Amazon deforestation. *Mongabay*. 23 January. <https://news.mongabay.com/2015/01/brazils-soy-moratorium-dramatically-reduced-amazon-deforestation/>. On the other hand, a high rate of conversion of the cerrado (savanna grasslands) to soy proceeded over this period. See Poynton, S. 2014. Wilmar's 'no deforestation' goal could revolutionise food production. *The Guardian*. 29 January. <http://www.theguardian.com/sustainable-business/wilmar-no-deforestation-commitment-food-production>

³⁰ SDG 12.c: Rationalize inefficient **fossil-fuel subsidies** that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities.

SDG 14.6: By 2020, prohibit certain forms of **fisheries subsidies** which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation.

6. FORESTS: STRADDLING THE CERTIFIABLE AND THE (IL)LEGAL

15.b Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation.

Under SDG 15, forests are mentioned no fewer than four times, once in the text of overriding Goal 15 itself, then under two separate targets, 15.1 and 15.2, and finally in means of implementation 15.b. Why do forests occupy such a prominent place?

Classified into three groups—boreal, temperate, and tropical—forests englobe complex ecosystems with varied environmental, social, and economic attributes. Over one billion people depend on forest and non-timber forest products for their livelihoods (Chao 2012). Issues of national pride and sovereignty associated with forests mean that international discussions run up against strong sensitivities. These technical and political issues explain why it has never been possible to adopt an international convention on forests. They have, however, been the focus of numerous nonbinding international initiatives and texts. Although environmentalists pushed for an international convention, the document adopted at the Earth Summit at Rio in 1992 was a Statement of Forest Principles.³¹ This was the first global consensus reached on the sustainable management of forests.

More recently, in the New York Declaration on Forests agreed at the UN Climate Summit in September 2014, companies, governments, NGOs, and indigenous groups endorsed ambitious targets of cutting forest loss and restoring degraded forests (Gulbrandsen and Fauchald 2015). Among the trade-related measures were commitments to take steps to eliminate commodity-driven deforestation from their supply chains. Some of the commodity-specific zero deforestation pledges were discussed above in section 5.

With the adoption of the Paris Agreement at COP 21 in December 2015, forests have taken on even greater importance. Deforestation and forest degradation is the second leading contributor to global warming, responsible for some 15% of global greenhouse gas emissions. This makes the loss and depletion of forests a major issue for climate change. Despite their importance in terms of greenhouse gas emissions, the role of forests had not been included in earlier UN Framework Convention on Climate Change texts. Their prominent place in the COP 21 Agreement has been heralded as a major step forward, as it recognizes not just the need to reduce emissions from deforestation and degradation but also forests major role in sequestering carbon and thus in contributing to the overall two-degree target.

Even if trade in timber is not explicitly mentioned in the COP 21 text, the links to trade are important. Forest-related emissions come largely from logging or clearing trees for agriculture, such as soy and palm oil, and cattle ranching, two-thirds of which are export-oriented. In the words of the Forest Carbon Partnership Facility, “With all the services that forests provide both to humanity and the natural world, there is now widespread understanding of a simple yet profound fact—that forests are more important left standing than cut.”³² The Paris Agreement calls for endorsement of

³¹ The full name is the Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests.

³² Forest Carbon Partnership Facility (2010), p. 2. The FCPF is housed in the Carbon Finance Unit of the World Bank.

policies that conserve standing forests and also sustainably manage forests and enhance carbon stocks.³³

6.1 REDD+: Results-based Payments

Although the acronym REDD+ itself doesn't appear in the Paris Agreement, the COP 21 text uses the exact definition of REDD+ both in Finance paragraph 55 and Article 5 on forests.³⁴ REDD+, standing for countries' efforts to "reduce emissions from deforestation and forest degradation, and foster conservation, sustainable management of forests, and enhancement of forest carbon stocks," was designed as a scheme based on rewards for results, also termed results-based payments. Beneficiaries are required to show that their forest conservation programs have reduced emissions before they receive funds. Originally, REDD+ was to rely mainly on voluntary carbon markets, but with their slow development of these markets and low carbon prices, incentives were not strong to attract participants. Other sources of finance were necessary.³⁵ These have been forthcoming in the form of significant aid money from, e.g., Norway, other bilateral donors, and the World Bank's Forest Carbon Partnership Facility (FCPF).

6.2 Certification of Voluntary Standards for Sustainable Timber: FSC and PEFC

The Forestry Stewardship Council (FSC) was set up in 1993. The forest certification initiative had strong input from environmental NGOs. Originally a global standard setter, it now manages a series of national standards that adapt FSC international standards. It can be viewed as a "top down" approach. It works with national forestry agencies and accredits national certifying bodies. The FSC standard has a focus on the environmental pillar of sustainable development, i.e., sustainable forest management and biodiversity, genetically modified organism (GMO) prohibition, and soil attributes. Set up in 1999, the Programme for the Endorsement of Forest Certification (PEFC), the other major certification scheme, is "bottom up" on the other hand. It works with national certification systems in 40 member countries and acts as a

³³ Note that this mirrors the elements in SDG 15.2, the text of which is in the Annex below.

³⁴ **Finance 55.** Recognizes the importance of adequate and predictable financial resources, including for results-based payments, as appropriate, for the implementation of policy approaches and positive incentives for **reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks**; as well as alternative policy approaches, such as joint mitigation and adaptation approaches for the integral and sustainable management of forests; while reaffirming the importance of non-carbon benefits associated with such approaches; encouraging the coordination of support from, inter alia, public and private, bilateral and multilateral sources, such as the Green Climate Fund, and alternative sources in accordance with relevant decisions by the Conference of the Parties; [emphasis added]

Article 5 1. Parties should take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases as referred to in Article 4, paragraph 1(d), of the Convention, including forests.

2. Parties are encouraged to take action to implement and support, including through results-based payments, the existing framework as set out in related guidance and decisions already agreed under the Convention for: policy approaches and positive incentives for activities relating to **reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks** in developing countries; and alternative policy approaches, such as joint mitigation and adaptation approaches for the integral and sustainable management of forests, while reaffirming the importance of incentivizing, as appropriate, non-carbon benefits associated with such approaches. [emphasis added]

³⁵ See Angelsen et al. (2012) for a detailed discussion of the technical, social, and political aspects of REDD+, including ramifications of its financing moving from carbon markets to donor money.

mutual recognition scheme. It also provides group certification to smallholders, which makes it attractive to small forest owners.

Both FSC and PEFC now have “due diligence” provisions including Chain of Custody certification that offer assurances that timber sold with the respective approval can be traced from the forest through successive stages of processing to the consumer. This is to minimize the risk that shipments include wood from unknown, illegal, and controversial sources. Due diligence and chain of custody certification have become important in view of the European Union Timber Regulation (EUTR) (see below) that now requires European timber importers to have in place a due diligence system. For actors all along the supply chain, this is a crucial risk management strategy. FSC is a full member of the ISEAL Alliance.³⁶ PEFC is an association member of the International Accreditation Forum.³⁷

Between 9% and 10% of the total forest area of 4 billion hectares worldwide is certified by FSC and PEFC (combined). That certified area in fact represents closer to 30% of the productive forests, that is, excluding national parks and other protected areas. Some 90% of total certified hectares are of temperate and boreal forests—those located in North America or Europe. In terms of area certified by FSC, Brazil and the Republic of Congo were among the top 10 countries in 2015. Under the PEFC scheme, the top 10 countries were all in North America and Europe; the People’s Republic of China was number 11, and Malaysia number 12. Overall, tropical forests represent 10% of the area certified by the two bodies.³⁸

6.3 Beyond Certification

Sustainability standards backed by certification have their share of critics. Various challenges are discussed above in section 5. As certification has become big business, it has, in the eyes of some critics, promoted a mentality of “ticking the box” rather than promoting deep transformations based on a holistic approach to ensure sustainable management of the natural resource. In part this is a manifestation of the natural progression of the “standards paradox” discussed earlier. As more and more of the commodity becomes standard(s)-compliant, supply outstrips demand for the “green” variety of the commodity, causing downward pressure on prices and reduction of the price premia. In turn sustainability investments are reduced and corners are cut, strengthening the tendency toward a “ticking of the boxes.” Or, even worse, cheating and corruption may occur. Certifiers who are known to be less stringent or can be bought off are called in. In such cases, trade loses its incentivizing role based on market-based instruments, as had been envisaged. No longer a driver for improved management practices, the standards-cum-certification model according to these critics is reduced to a race for the piece of paper.³⁹ Examples tend to be cited for organic agriculture and the VSS for heavily traded agricultural (non-timber) products.

³⁶ See ISEAL Alliance. Forest Stewardship Council Organisations. <http://www.isealalliance.org/online-community/organisations/forest-stewardship-council?page=2>

³⁷ See International Accreditation Forum. Association Members. http://www.iaf.nu/articles/Assoc_Mem_by_Name/128

³⁸ These statements are based on statistics provided by PEFC; areas certified by both bodies continue to grow.

³⁹ Poynton (2015) describes in passionate terms how many standards plus certification schemes have in his view gone wrong. He advocates an alternative model based on values, transparency, transformation, and verification. LeBaron and Lister (2016) have similar criticisms. They find that audits come down to fostering a “checklist” audit compliance mentality and are ineffective tools for detecting, reporting, or correcting environmental and labor problems in supply chains.

Frustration with the process has had various consequences: some NGOs who were instrumental in originally developing standards have moved on, in some cases forming consultancies to work directly with the larger firms such as Unilever or Nestlé, with the objective of negotiating transformational change in the firm's behavior (Greenpeace 2016). This may have been successful in the case of large firms who have made commitments at the highest level to these transformational changes to sustainable supply chains. Others have lobbied governments to step back into the business of regulating and setting stiffer standards. And some governments have taken over the certification business (Denmark and Finland in the case of organics).

6.4 Legislating against Illegal Logging and Illicit Trade

Global exports of timber and forest products in 2013 were valued by the Food and Agriculture Organization of the UN and UN Economic Commission for Europe at US\$246 billion. The UN Environment Programme has put a price tag on illegal logging and forest crime at between US\$30 billion and US\$100 billion a year, and estimates that in certain countries, 50%–90% of the wood is harvested or traded illegally.

In the absence of international regulation of the timber trade,⁴⁰ key timber consuming countries have in recent years passed legislation to prohibit the import of illegally harvested or trans-shipped timber.⁴¹ The EUTR, the US Lacey Act, and the Australian Illegal Logging Prohibition Regulation (Schloenhardt 2008) all take roughly similar approaches to combatting imports of illegal timber.

The *EUTR* went into effect on 3 March 2013. Its three main obligations are to (i) require EU traders who place timber products on the EU market for the first time to exercise due diligence to ensure that timber products marketed are legitimate; (ii) prohibit European importers from placing illegally harvested timber or their products on the EU market; and (iii) ensure that economic operators have a traceability obligation, that is, they maintain records of their suppliers and customers (European Commission 2016b).

Under the *US Lacey Act*, trade is prohibited in wood products manufactured from illegally harvested and traded timber. Infractions are punishable with heavy fines. The US has also worked to include provisions on illegal logging in *bilateral and regional trade agreements*. Currently, the US government is cooperating with Peru to implement obligations in the forest sector annex to the US–Peru Trade Promotion Agreement.⁴²

The US has also advocated strong disciplines against illegal logging and associated trade in the Trans-Pacific Partnership, currently under domestic approval procedures in the 12 partner nations. These disciplines include (i) implementing CITES concerning the timber species listed; (ii) combating trade in illegally harvested timber, whether included or not under CITES and regardless of its source country; (iii) stepping up effective enforcement of national environmental and conservation laws to address illegal logging; and (iv) implementing strong anticorruption protections that are often the causes for the failure of countries' forest governance schemes.

⁴⁰ The number of listed species of timber has increased from 18 at CITES' beginnings in 1975 to a few hundred after COP 16 held in 2013. Decisions taken at COP 17 in September 2017 added stricter provisions for certain species of timber, particularly rosewoods. See International Centre for Trade and Sustainable Development, 2016.

⁴¹ See WTO Committee on Trade and Environment Records in 2014 and 2015: WT/CTE/M/57, 58 and 59.

⁴² US–Peru Trade Promotion Agreement. Annex 18.3.4: Annex on Forest Sector Governance. https://ustr.gov/sites/default/files/uploads/agreements/fta/peru/asset_upload_file953_9541.pdf

6.5 Legal Reform in Producing and Exporting Countries

The EU Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan, adopted in 2003, focuses on negotiating Voluntary Partnership Agreements (VPAs) with the two-fold aim of addressing legality and sustainability in the timber sector. A VPA is a legally binding trade agreement between the European Union (EU) and a non-EU timber-producing country. To date, six VPAs have been signed and another nine are being negotiated, mostly with African and Southeast Asian countries. Since 2003, and despite the six VPAs currently in place, no shipment of “green lane” timber to the EU had been made as of mid-2016.

Criticism of FLEGT has been strong due to slow progress and its heavy procedural aspects. The EU and FAO, offering technical assistance to the VPA talks, explain that negotiations are necessarily long due to the revamping of the producing country’s legal system and the concomitant need for strengthening government agencies’ capacity—issues that go to the heart of national governance, including issues of fighting corruption. Indonesia and Viet Nam have to address the further problem of closing the loophole of timber transiting from illegally logged sources elsewhere in the region to EU destinations to meet compliance with the EUTR. The political and technical dialogues are bringing reform, but slowly.

An in-depth independent evaluation of FLEGT and the VPAs was released in early May 2016. It finds that FLEGT has contributed to improved forest governance and reduced demand for illegal timber in the EU. The three pillars of FLEGT are to work along with (i) the supply-side in producer countries (governance reforms and licensing); (ii) the demand-side in consumer countries (public procurement policies, private sector initiatives, and finance and investment safeguards); and (iii) trade agreements—to link and incentivize (i) and (ii). The VPAs have helped countries address governance issues, increase participation and transparency, and start legislative reforms. FLEGT licenses are required to export legal timber into the EU. As none have been issued so far, the incentivization from trade has been lacking according to the independent evaluation (European Commission 2016a).

Additional challenges to be addressed include the importance of other drivers of deforestation, such as conversion of forest to agriculture land that are not always tied to exports of timber. The in-depth evaluation makes a number of recommendations, such as: getting the private sector more involved; focusing on non-VPA countries in order to effectively address illegal logging and trade at the global level; and adding obligations arising from international initiatives, such as climate change. In the latter context the need to develop relations with REDD+ was underscored.

6.6 Synergies between Certification and Illegal Logging Laws

Increasingly it is being recognized that the two approaches—regulatory and voluntary—have the potential to create synergies. “Due diligence” is now required by both certification systems—FSC and PEFC—within their chain of custody requirements. This is an ongoing process, not a one-off prerequisite, and can help reassure traders that they may be in compliance with the EUTR when operating within the EU market. Investigation into the legal regime and origin of the timber therefore becomes part of a risk management strategy for the importer who would otherwise face potential sanctions under EU legislation. Synergies are also created by using the practical experience of certification standards such as FSC in implementing traceability schemes that are useful in legal reform in VPA countries.

Synergies can also be imagined from the practical experience of undertaking in-depth audits to meet the standards in implementing traceability schemes. These are essential in reforming timber legislation in VPA or other producing countries. The voluntary certification schemes that have been operational for many years now are contributing to the fulfilment of the requirements of consumer countries' legislation to promote trade in legally harvested and shipped timber.

7. MOVING FORWARD TO STRENGTHEN TRADE-RELATED INITIATIVES FOR SUSTAINABLE USE

As discussed above, voluntary initiatives have been successful when measured by market penetration. This dynamism using a market-based instrument has not carried through to the satisfaction of all stakeholders. Frustration exists at certain levels—producers, NGOs, developing country governments, and consumers, but not everyone. Business has learned to adapt the VSS-cum-certification model by moving away from a simple expression of Corporate Social Responsibility to make it one component in a multifaceted business model. Businesses have successfully integrated it in their risk management strategies throughout the supply chain to protect reputational and other assets.

Currently there are discussions about how to revitalize the VSS-cum-certification model. Research and reflection that are underway by leaders in the standards world are calling for innovation to address weak points and expand sustainability standards to support landscape approaches (Molenaar 2015). The change in direction is anchored by solid experience with the past.⁴³ Instead of working plot by plot or at farm or mill level, an entire area would be monitored. The task would be facilitated with mapping and satellite technology to determine sustainability at a meta level. Instead of a detailed pass or fail type audit on the ground, verification would examine progress made in accordance with a more far-reaching management system. Governments would make a reappearance, usually at the local or regional level (ISEAL Alliance 2016).

The big question remains about financial incentives, that is, how to incentivize producers to adopt and maintain use of more sustainable practices (OECD 2013). From an agricultural point of view, this traditionally means productivity gains and diversification. Will the consumer accept buying the “green” good simply based on claims that landscape management systems have been “verified”? Will they accept a system based on “things are getting better,” rather than commodity production units that are audited according to strict testing protocols as done previously? And what happens to the smallholder? How could a new system involve more competitive market safeguards or government intervention to limit anticompetitive practices by certain certification firms?

The voluntary zero deforestation pledges would on the surface appear to fit well with the objective of maintaining and restoring forests through REDD+. Further commitments from timber-producing countries under the Nationally Designated Commitments, adopted in the context of commitments under the COP 21 agreement on climate change to protect and restore forests, will need to be matched with financial incentives. Learning from the past slow uptake, the results-based-payments approach needs to be strengthened. Policy coherence (eliminating perverse subsidies) could be a helpful complement, but it is easier to espouse than realize. Years of hard work on

⁴³ Forest management certification systems based on ISO 17021 use ongoing monitoring to expand certification and include smallholders.

fossil fuel subsidy reform has now led to peer reviews for a few G20 and Asia-Pacific Economic Cooperation countries.

Any revisions in voluntary approaches will still necessarily need a conformity assessment or assurance component. Consumers, donors, environmental watchdogs, and others must be reassured, and validation of the risk management strategies of business must be allowed. But processes that encourage a one-dimensional compliance or a checklist mentality need to be avoided. Lessons need to be drawn also to ensure that the certification industry no longer engages in anticompetitive practices. Allegations should be investigated by governments who have the competition policy tools to intervene and correct imbalances.

Tools to provide concrete support to a sustainable use and sustainable trade approach have been developed including under CITES since the CBD was born at the Earth Summit in 1992. A number of success stories have been inspired by CITES-type mechanisms. At the same time, these programs remain comparatively small relative to trade in the big international commodities such as palm oil, soy, beef, and forest products. UNCTAD's launching of an initiative to mainstream support into BioTrade in bilateral and multilateral donor programs is welcome. But can this be expected to remain more than marginal?

A further complication is in relation to environmental crime. Due to links to organized crime and terrorist organizations in certain regions and for certain products, trade in nature-based goods has once again become suspect. Therefore, increased support for sustainable use and sustainable trade will need to prove itself, not only to environmental groups but also to criminal enforcement authorities. Organized crime is using helicopters and Kalashnikovs, and is ahead of the curve in using IT and globalized transport routes. Meanwhile, enforcement agencies are struggling to increase their resources. Legal nature-based trade will have to prove itself to be "whiter than white," and emerging techniques such as e-permitting, tagging, and other traceability systems need to be generalized.

Perhaps the truly herculean effort will be on the forests front. On the one hand, there is the continued need to accommodate facilitation of the hundreds of billion dollar legal trade through certification, including chain of custody processes together with the reform of logging laws. On the other hand, REDD+ has to be incentivized to let trees stand and play their role as carbon sinks.⁴⁴ REDD+ was given a new lease on life at COP 21. It has a long way to go to catch up as the various certification schemes are forging ahead and sustainable timber areas being certified by double digit growth figures. The debate will continue to rage between keeping a tree standing to play its role in sequestering carbon and selling it as timber. Actors will need to be convinced that the timber traded originates from legal sources and sustainably managed stands.

In view of the challenges voluntary and mandatory schemes have been facing, it is an opportune time to be innovative. Indeed, as discussed above, voluntary standards leaders are already thinking in terms of expanding their horizons beyond the farmer's plot to promote sustainability schemes for entire landscapes.

⁴⁴ See Sukhdev (2015) for ideas on promoting synergies.

7.1 Trade Facilitation Agreement for Environmentally Sensitive Goods and Relevant Services

What could be a possible role for a Trade Facilitation Agreement (TFA) for environmentally sensitive goods and relevant services? The idea has a firm precedent in the TFA agreed at the WTO Ministerial Conference in Bali in 2012.⁴⁵ Such an agreement would be “intergovernmental plus,” that is, with significant participation from local communities, NGOs, and business. It is important to distinguish the notions of *promoting* trade and *facilitating* it. The aim of the WTO TFA is to “expedite the movement, release and clearance of goods, including goods in transit”—i.e., that part of trade after exporter and importer have concluded the business deal (Rosenow 2015; OECD 2015). For example, as CITES-permitting and related wildlife laws are relatively complex, using TFA-type techniques could help *facilitate* the process. Components for consideration inspired by the current TFA would address the following:

- *Border procedures to accelerate movement through customs.* The techniques of the Single-Window system, electronic permits, data authentication, tracking and traceability systems, etc. would simplify procedures and cut down room for corruption.
- *Cooperation among government agencies involved.* Today they too often are operating as separate units. Thus, trade, customs (including inspection and criminal units), and wildlife officials (such as CITES management authorities) would be required to work together.
- *Regulatory cooperation on trade in relevant services.* These services, which facilitate the movement of goods, including transport (international and domestic), logistics, and customs brokers, would also figure prominently.
- *Strong role for technical assistance agencies and other bilateral and multilateral donors.* As with the WTO TFA, developing countries would only be subject to the disciplines when they declared themselves ready to accept them.

Under a separate window of the proposed agreement, VSS could be kept under review by a loose, arms-length coalition of select stakeholders—governments of producing and consuming countries, the private sector, NGOs, traders, and certifiers. The GTS (Working Group on Soy) is an example of a multi-stakeholder process that has succeeded in stopping deforestation through a voluntary and negotiated process. In this case, the “return of governments” to the game would be officialized to validate the process.

The lessons of 20 years of voluntary standards show that it is not a question of either/or but benefitting from both an active private and governmental presence. As stated in a recent discussion piece of private standards and the WTO: “Reification of the old-fashioned distinction between public and private ordering fails to address the realities of 21st century governance” (Mayroidis and Wolfe 2016).

Reuniting suspicious actors will not be easy. Witness the difficulties the EU is having with FLEGT to promote timber sector reform through VPAs, despite the tremendously attractive carrot for producers of opening a “green lane” procedure into the EU market. “Pride of authorship” by certain large NGOs who wrote and are operating many of the sustainability standards for internationally traded commodities will not necessarily be

⁴⁵ The TFA entered into force on 22 February 2017 after the WTO obtained the needed acceptance from 110 members.

in favor of increasing government involvement. Will the large corporations that are already out in front want to lose a first-mover advantage?

For the idea to move forward, a testing ground could prove useful between sympathetic trading partners. Such an opportunity might take the form of a regional trade agreement⁴⁶ between two natural resource-dependent economies that understand the crucial importance of maintaining the future sustainability of their resource base while providing nature-generated revenues for current generations. This should be an idea worth pursuing to strengthen the positive accomplishments of both voluntary standards and more than 40 years of international experience in regulating wildlife trade.

⁴⁶ Provisions about VSS in RTAs are relatively recent: Article 3.2(g) of the sustainable development chapter in the Canada–EU Comprehensive Economic and Trade Agreement provides, “*Encouraging the development and use of voluntary schemes relating to the sustainable production of goods and services, such as eco-labelling and fair trade schemes.*” TPP language is considerably more detailed. It calls on each party to *encourage, in accordance with its laws, regulations or policies and to the extent it considers appropriate, the use of flexible and voluntary mechanisms to protect natural resources and the environment in its territory* (TPP Article 20.11: Voluntary Mechanisms to Enhance Environmental Performance).

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ANNEX

Sustainable Development Goal 15 and the 12 Targets

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally

15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world

15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development

15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species

15.6 Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed

15.7 Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products

15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species

15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts

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15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems

15.b Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation

15.c Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities