



Deforestation and forest degradation – reducing the impact of products placed on the EU market: developing EU measures modelled after the IUU Regulation

Nathalie Walker, Emma Grier and Barbara Bramble, National Wildlife Federation

Contact: Nathalie Walker, walkern@nwf.org

25th November 2020

Summary	2
1. EU Consultation on “deforestation and forest degradation – reducing the impact of products placed on the EU market”	2
2. What is the IUU Regulation?	3
3. Adapting the IUU system for forest-risk commodities	4
3.1 Adaptation from legality to zero deforestation	4
3.2 Utilisation of a monitoring and verification system to allow only zero deforestation forest-risk commodities to enter the EU	6
3.2.1 Tracing supplies from origin	7
3.2.2 Verifying EU Imports	8
3.3 Utilisation of a traffic-light system to improve governance and reduce deforestation in exporting countries	8
3.3.1 Overview of the traffic light system	8
3.3.2 Introduction of sub-national approaches	9
3.3.3 Dialogue and issuance of a yellow card/warning	9
3.3.4 Sanctions for non-compliance	10
3.4 Complementarity with other regulatory approaches	10
3.5 Challenges in adapting the IUU system to forest-risk commodities	11
3.5.1 Lack of data availability necessary for verifying products as free from deforestation	11
3.5.2 Lack of shared set of principles, norms and goals for compliance between exporting countries and EU	11
4. Key elements to be determined for an adapted IUU model	12
4.1 Determination of which forest-risk commodities are included under the framework	12
4.2 Thresholds for entering the dialogue process	13
4.3 Clear criteria for allocation of cards, and for the transfer from one category to another	13
4.4 Determination of applicability to raw imports only or also to processed products	13
4.5 Definition of deforestation and deforestation-free criteria	13
4.6 Trade rules implications of a regulatory and sanction-based approach	14
Conclusion	14

Summary

The European Commission has committed to assessing additional (regulatory and non-regulatory) demand-side measures to help tackle deforestation and forest degradation. This briefing analyses the benefits and challenges of adapting one of the proposed measures to address imports of products driving deforestation – the EU Regulation to prevent, deter and eliminate illegal, unreported and unregulated fishing (IUU). If core components of the IUU Regulation can be adapted and adjusted to account for differences between fisheries and deforestation-driven commodity expansion, which are described below, the result could be an effective mechanism for implementing a deforestation free market requirement, one that comes with benefits not available with labelling, certification or due diligence approaches. These benefits include:

- Comprehensive application at scale – covering all relevant forest-risk commodities volumes entering the EU and thereby accelerating shifts driven by governments as well as upstream and downstream global supply chain actors
- Combines a carrot and stick approach, focused on dialogue and action that can be accelerated by the threat of potential sanctions, with a focus on additional measures in areas at highest deforestation risk
- Avoidance of problems with self-reporting, as performance can be verified by either an independent body or the European Commission
- Can build upon existing credible schemes developed to address forest-risk commodities
- Complementary with other regulatory approaches such as due diligence requirements
- Allows for a government to government approach, which can be aligned with development aid

This policy brief analyses approaches from the regulation of fisheries to distil valuable lessons relevant to possible new EU measures to regulate imports of forest-risk commodities. It also aims to provide some explanations, as many stakeholders involved in EU commodity supply chains or experts in drivers of deforestation may not be aware of how the IUU Regulation operates, and as a result may not have considered the pros and cons of adapting this approach for forest-risk commodities.

1. EU Consultation on “deforestation and forest degradation – reducing the impact of products placed on the EU market”

The EU public consultation “Deforestation and forest degradation – reducing the impact of products placed on the EU market” will contribute to an impact assessment for and the design of potential (regulatory and non-regulatory) demand-side measures to help tackle deforestation and forest degradation. The consultation considers the suitability of a range of different demand-side measures to address deforestation and forest degradation associated with commodity imports in the EU.

The rationale for focusing this paper on how measures could be adapted from the IUU Regulation is that we believe this information provides added value to the discussion: the other options under consideration are either based on existing systems for forest-risk commodities, or are broad enough for it to be difficult to provide specific advice without further details. In contrast, adapting the IUU Regulation for use with forest-risk commodities requires consideration of the differences in nature between fisheries and how most forest-risk commodities are produced, as well as the potential impacts of an IUU approach, both positive and negative, on production, forests and livelihoods. We

set these out below and suggest how challenges may be overcome through adapting the IUU Regulation. We also consider options for adjustment, including those that incorporate additional features, such as subnational approaches, along with hybrid measures, incorporating some of the other options under consideration. A key opportunity of the IUU approach over other options considered is that it offers the potential for cost-effectively ensuring that key commodities sourced into the EU are not only not driving deforestation but are also resulting in a net benefit to forests. Moreover, unlike most of the other options under consideration, which rely upon self-reporting (which is unreliable and would make it difficult to detect the imports which are out of compliance), the IUU regulation offers a mechanism for independent verification of imports.

2. What is the IUU Regulation?

The EU adopted the IUU Regulation to prevent illegal, unreported and unregulated (IUU) fisheries products from reaching EU markets in 2008.¹ The regulation requires nations which register fishing vessels (flag states) to certify and report fish origin and legality (following both national and international law), using a catch certificate. The catch certificate may be verified by national authorities once fisheries products arrive at an EU member state (on the basis of risk criteria). Flag states must also inform the EU Commission of the presence of legal instruments, procedures, and administrative structures that can ensure legal catch and certification as well as sanctions for those found to be acting illegally.^{1, 2}

If the EU suspects that fish imports are illegal, unreported, or unregulated, they start a dialogue (lasting several months to years) with the flag state to determine if they are in fact complying, or are willing and capable to comply with EU rules. If they are non-cooperative or non-compliant and fail to demonstrate progress against EU rules, a warning/yellow card is issued, which begins a 6 month or more watch period, giving the flag state a chance to resolve the issue. If the flag state does not resolve the issue, the Commission will advocate to the Council of the EU for the issuance of a red card, which identifies the flag state as non-cooperating with international laws, and any fishing vessels from that country will be banned from importing to the EU. In addition, the regulation includes a list of prohibited vessels that are known to participate in IUU fishing and penalties for EU actors involved in IUU fishing, to further deter illegal fishing.¹

The program has twofold impacts: the catch certification scheme aims to only allow legal fisheries products to enter the EU, while the traffic-light carding system aims to improve governance in fisheries to effectively combat IUU fishing. For example, In June of 2014, the Philippines was issued a yellow card from the EU for failure to meet their obligation to implement the conservation and management measures of their Regional Fisheries Management Organisations (RFMOs). Working with the EU, the Philippines amended their domestic legislation to better implement their RFMOs conservation and management measures.³ This involved raising sanctions on vessels which were found to be involved

¹ EC Regulation 1005/2008 to prevent, deter and eliminate illegal, unreported and unregulated (IUU) fishing. Information note. https://ec.europa.eu/fisheries/sites/fisheries/files/docs/body/information_note01_en.pdf

² EC Regulation 1005/2008 to prevent, deter and eliminate illegal, unreported and unregulated (IUU) fishing. Technical note. https://ec.europa.eu/fisheries/sites/fisheries/files/docs/body/technical_note_en.pdf

³ Environmental Justice Foundation, Oceana, Pew Charitable Trusts, and WWF. (2015). "EU Regulation to Combat Illegal Fishing Third Country Carding Process: Success for South Korea and the Philippines." Case Study 2. http://www.iuuwatch.eu/wp-content/uploads/2015/06/Case-Study2.FINAL_EN.pdf

in IUU fishing, and required all flagged Philippine fishing vessels to install Monitoring, Control and Surveillance systems.⁴

The EU IUU approach is focused on dialogue and action, accelerated by the threat of sanctions, and has been used by the EU as a mandate to dialogue with almost 50 nations on needed improvements to tackle IUU fishing. Less than half of those have received yellow cards, as many countries have demonstrated progress through dialogue alone.⁵

3. Adapting the IUU system for forest-risk commodities

Adaptation of the IUU approach for use with forest-risk commodities is required to account for the difference in nature between fisheries and forest-risk commodities. Fishing that results in reduced stock can threaten the sustainability or even existence of a fishery, and so legislation is necessary to protect the stock. When considering forest-risk commodities, this is similar to selective logging, whereby specific species are harvested, commonly from a very diverse mix of species in tropical forests, and therefore measures are focused on reducing the impact of the harvest on forests. Other ‘transferable’ examples are non-timber forest products (NTFPs) or understory production, such as shade-grown coffee and cocoa, whereby forests may be disturbed but are left largely intact. In these cases, the determination of a sustainable harvest depends upon both the nature of the forest and the level of harvesting, and laws often guide permission based on what is harvested (such as with requirements for logging permits and stumpage fees).

However, the majority of forest-risk commodity production, in terms of area, volume and value of product, involves the conversion of forests and other ecosystems into agricultural production areas (or other land use, such as for mining). Land-use change is not easily reversible, and the forest, its biodiversity, and its ecosystem services are lost when it is destroyed. In addition, the forest destruction is not ameliorated by what the land is subsequently used for – it is the conversion of the forest itself that is harmful, not how much of what type of agriculture is produced on a piece of land, for example. This has a number of implications for the impact of conversion, monitoring, traceability and imports, which are considered below.

3.1 Adaptation from legality to zero deforestation

Fishing is usually considered unsustainable based on exceeding the quantity of fish that is acceptable to catch, or using the wrong equipment, and these determinants are set by a governing body, depending on the type of fish and stock dynamics. It then becomes illegal when it exceeds the quantity or violates the methods agreed on by that governing body. However, *some* fishing is always permitted and can occur without significantly damaging a fishery. If a fishery is unsustainable, any carding or ruling would apply to all fish harvested from that fishery.

⁴ Republic Act No. 10654 amending Philippine Fisheries Code of 1998. <http://extwprlegs1.fao.org/docs/pdf/phi153082.pdf>

⁵ IUU Watch. *Background to the Regulation*. <http://www.iuuwatch.eu/new-background-to-the-iuu-regulation/#:~:text=What%20is%20the%20EU%20IUU,The%20Regulation%20aims%20to%20ensure%3A&text=An%20IUU%20vessel%20list%20is,by%20Regional%20Fisheries%20Management%20Organisations>.

Unlike fish stocks, all deforestation for agricultural production is by definition unsustainable, because the forest is destroyed; since any level is unsustainable it does not need to be agreed on by a governing body. In the case of the largest commercial drivers of agriculture, there is generally sufficient already-cleared land available to meet production targets; it is poor management of this existing cropland or degraded land that leads to clearing of new land for expansion.^{6, 7} Therefore, any regulatory measures from the EU would be best used in parallel with support for improving yields on existing cropland. The reason why regulatory measures are needed, even when there is support for improved productivity, is that improving yields increases the value of cleared land and so can result in increased deforestation, unless there are safeguards in place to protect forests.^{8, 9}

Because there is, by definition, no 'sustainable' way to clear forests, nor is it required in order to produce forest-risk commodities, unlike with the IUU Regulation, measures for forest-risk commodities should be geared towards zero deforestation rather than zero illegal deforestation. There are a number of reasons for this:

1) **Ease of monitoring:** legality does not imply sustainability, and can be difficult and costly to assess. Conversely, deforestation for forest-risk commodities can be monitored by remote sensing and if a current cut-off date is used, all producers are in compliance at the time of regulatory enactment; thus, the focus of regulations can be on preventing deforestation. Conversely, many forest laws have cut-off dates far in the past, as a result many producers are already out of compliance.¹⁰ In addition, determining whether producers have taken legally required remedial actions can be costly and results in a focus on deforestation that may have occurred several years earlier.

2) **Perverse incentives:** a focus on legality could perversely encourage the weakening of forest laws and therefore create an unequal playing field. For example, soy producers in neighbouring areas of Brazil, Paraguay and Argentina are subject to very different regulations, and some may inherently favour access to EU markets.¹¹

3) **Differences in oversight:** there is no body of international law for forest management unlike for fisheries, where the UN Fish Stocks Agreement (UNFSA) establishes obligations to implement

⁶ Strassburg, B. B., Latawiec, A. E., Barioni, L. G., Nobre, C. A., Da Silva, V. P., Valentim, J. F., ... & Assad, E. D. (2014). When enough should be enough: Improving the use of current agricultural lands could meet production demands and spare natural habitats in Brazil. *Global Environmental Change*, 28, 84-97.

<https://www.sciencedirect.com/science/article/pii/S0959378014001046#bib0190>

⁷ Licker, R., Johnston, M., Foley, J. A., Barford, C., Kucharik, C. J., Monfreda, C., & Ramankutty, N. (2010). Mind the gap: how do climate and agricultural management explain the 'yield gap' of croplands around the world?. *Global ecology and biogeography*, 19(6), 769-782. https://onlinelibrary.wiley.com/doi/full/10.1111/j.1466-8238.2010.00563.x?casa_token=C6_aYAtiENEAAAAA%3AltRpQEIGVPfJyG830KTX_U8sF4mQRAi3323XuYclewkDMXmewdjX8Ro3AQNK_D-3j8HZQhp1jLnG4qc

⁸ Paul, C., Techen, A. K., Robinson, J. S., & Helming, K. (2019). Rebound effects in agricultural land and soil management: Review and analytical framework. *Journal of cleaner production*, 227, 1054-1067. <https://doi.org/10.1016/j.jclepro.2019.04.115>

⁹ García, V. R., Gaspart, F., Kastner, T., & Meyfroidt, P. (2020). Agricultural intensification and land use change: assessing country-level induced intensification, land sparing and rebound effect. *Environmental Research Letters*, 15(8), 085007. <https://iopscience.iop.org/article/10.1088/1748-9326/ab8b14/meta>

¹⁰ LEI Nº 12.651, DE 25 DE MAIO DE 2012. http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2012/lei/l12651.htm

¹¹ Van Dam, J., Van Den Hombergh, H., & Hilders, M. (2019). An Analysis of Existing Laws on Forest Protection in the Main Soy Producing Countries in Latin America. https://www.iucn.nl/files/publicaties/an_analysis_of_existing_laws_on_forest_protection_la_final.pdf

conservation and management measures.¹² Whereas fisheries all share some basic features and supply chain dynamics, forest-risk commodities vary in terms of supply chains, industries, range of products, and actors. Whereas fisheries are harvested by fishing companies, forest-risk commodities involve a wide range of industries with different levels of oversight, expertise in traceability, levels of vertical integration and range of products that reach the EU market.

4) **Utilising existing approaches:** many private sector actors in Europe involved in forest-risk commodities supply chains have already adopted ‘zero deforestation’ commitments. In contrast to assessing legal compliance, which can be complex, because conversion of forests to agriculture can usually be assessed by satellite monitoring, a “zero deforestation” policy is simple, cheap and effective to monitor.¹³

3.2 Utilisation of a monitoring and verification system to allow only zero deforestation forest-risk commodities to enter the EU

Whatever the ‘rules’ for what is or is not permissible for import into Europe, in order to be effective, it is important to ensure robust and efficient monitoring and verification. There are a number of elements of the IUU system aimed at limiting non-compliant fish imports into the EU which could easily be adapted for forest-risk commodities, including reliance upon a robust verification system. This type of verification system could cover all volumes of forest-risk commodities entering the EU, allowing for opportunities to make an impact at scale; there could be efficiencies by applying similar requirements for most commodities, while allowing for relevant adaptation to take account of the specifics of supply chains and sourcing regions. Guidance for effective verification is available from the [Accountability Framework](#).

The IUU system requires certification (linked to vessels) and verification of validity of certificates to demonstrate that volumes entering the EU meet EU requirements. The IUU relies on the exporting countries to verify certificates, and in the absence of evidence that the producing country government’s compliance checks are fraudulent, the certificate will be accepted by EU officials as proof of legal compliance.¹⁴ This approach functions well for the case of different legal issues related to fisheries, as countries have a variety of existing systems to verify legal catches and legal operations of vessels.

This approach is amenable for adaptation for forest-risk commodities, since deforestation performance of each commodity at each country of origin can be measured through remote monitoring systems and then verified (such as via the issuing of certificates or requiring audits in compliance with guidance to be made public). Existing national forest monitoring systems (where available) would be operated by exporting countries, using credible and approved satellite monitoring data, systems and methodologies that allow determination of deforestation according to the agreed

¹² UN Fish Stocks Agreement. (1995).

https://www.un.org/depts/los/convention_agreements/convention_overview_fish_stocks.htm

¹³ Gibbs, H. K., Munger, J., L’Roe, J., Barreto, P., Pereira, R., Christie, M., ... & Walker, N. F. (2016). Did ranchers and slaughterhouses respond to zero-deforestation agreements in the Brazilian Amazon?. *Conservation Letters*, 9(1), 32-42. <https://doi.org/10.1111/conl.12175>

¹⁴ EC Regulation 1005/2008 to prevent, deter and eliminate illegal, unreported and unregulated (IUU) fishing. Technical note. https://ec.europa.eu/fisheries/sites/fisheries/files/docs/body/technical_note_en.pdf

definition; and where national systems are not available, European, international or regional systems would be used.

In order to determine deforestation for each forest-risk commodity, annual land use maps for the extent and expansion of each commodity will be needed, but these exist for the major commodities' largest producing regions (either produced by [governments](#),¹⁵ or via [multi-stakeholder initiatives](#)¹⁶), and can be developed using defined methodologies where existing resources do not exist. Most countries with significant volumes of exported forest-risk commodities have [property-level datasets](#)¹⁷ which can be used so that processors and traders can identify the origin of their products.

3.2.1 Tracing supplies from origin

There are two major ways in which deforestation can be avoided in supply chains entering the EU. The first, and most effective is for companies purchasing from farms to monitor the property-level source of their products and avoid all purchases from areas cleared post the agreed cut-off date. This is how Brazil's Soy Moratorium is implemented and provides a model for how this can be done. The Moratorium is cost-effective to administer, because it uses a centralised system for monitoring and identifying non-compliant production. Because the vast majority of soy buyers are involved, the Moratorium has shaped the pattern of soy expansion in the region, such that the volume of soy more than doubled after the Moratorium, but farmers focused on yield enhancement and expansion onto already-cleared land. The first ten years of the Moratorium resulted in over 18,000km² of avoided deforestation,¹⁸ so demonstrates that supply chain governance can have durable impacts on reducing deforestation at scale.

EU regulation of forest-risk commodities should aim to result in a similar shift, whereby production continues to grow, but is focused away from expanding onto forests and other valuable ecosystems.

If EU markets are not large enough to influence producers, or other conditions are not in place to bring about change in overall purchasing policies of companies processing and trading in forest-risk commodities, then an alternative approach may be taken, of which there are several options, such as through individual processors developing verifiable deforestation-free supply chains, or sourcing certified products for the EU market.

For any of these to work, there would be a need to incorporate traceability systems that track traded commodity volumes either to point of origin or to a sourcing region that is free from deforestation. Exporting country traceability programs could operate at a sub-national level or national level, to prove the commodities do not originate from an area of forest risk. This is how the Soy Moratorium works: it assures all soy from Brazil's Amazon is 'deforestation free', therefore traceability is only needed to this biome. (see options for adjusting requirements at subnational levels below, [Section 2.3.2](#)).

¹⁵ PRODES - Amazônia. <http://www.obt.inpe.br/OBT/assuntos/programas/amazonia/prodes>

¹⁶ MapBiomas Chaco. <https://chaco.mapbiomas.org/>

¹⁷ Cadastro Ambiental Rural. <https://www.car.gov.br/>

¹⁸ <http://www.gibbs-lab.com/recent-publications/>

3.2.2 Verifying EU Imports

Performance of any of the monitoring and traceability systems would be verified by either the European Commission (such as by the proposed EU Observatory on forests), by an independent body overseen by the Commission. In either case, it would be most efficient to utilise existing approaches that can satisfy EU requirements, or to allow for adaptation of existing verification systems, such as was done by certain ‘commodity roundtables’ which added provisions to their systems for [demonstrating compliance](#) with the EU Renewable Energy Directive.¹⁹ These options can remove the burden on the exporting countries to verify performance, such as is required under the IUU certification scheme, and can avoid the pitfalls that come with self-reporting, such as would be found under a due diligence framework.

3.3 Utilisation of a traffic-light system to improve governance and reduce deforestation in exporting countries

There are a number of elements of the IUU traffic-light system that could easily be adapted for forest-risk commodities, including thresholds for risk leading to initial dialogue, a focus on exporting-country national compliance overall for each commodity (not just compliance for products destined for EU markets) and possible sanctions for red card countries or subnational jurisdictions (see the section on subnational approaches below).

It would be important to consider the deforestation driven by each commodity, rather than deforestation as a whole (which is why it is important to ensure this data be available as noted above.) For example, in the Brazilian Amazon, thanks to the Soy Moratorium, soy is not a significant driver of deforestation,²⁰ yet cattle continues to occupy the majority of cleared land,²¹ so the IUU dialogue and card approach could focus on cattle. The card approach offers an opportunity to reduce leakage. It also confronts one of the toughest challenges of supply chain traceability applicable to most forest-risk commodities, which is how to address indirect suppliers. Commodity buyers often use spot markets, and products can also move from property of origin to other properties before sale, especially in the case of cattle. This makes full traceability from farm or farms of origin difficult. A carding system can therefore help to encourage the specific national or subnational efforts needed to address deforestation driven by commodities, and can support existing jurisdictional approaches.²²

3.3.1 Overview of the traffic light system

The traffic light system is a key element of the IUU Regulation, and the component responsible for the regulation’s success at promoting sustainable fishing.²³ As described earlier, if exporting nations are

¹⁹ RTRS EU RED Compliance Procedure for the Supply Chain V3.4. <https://responsiblesoy.org/documentos/rtrs-eu-red-compliance-procedure-for-the-supply-chain-v34?lang=en>

²⁰ <http://www.gibbs-lab.com/recent-publications/>

²¹ INPE. TerraClass. http://www.inpe.br/cra/projetos_pesquisas/dados_terraclass.php

²² Produzir Conservar Incluir. <http://pci.mt.gov.br/>

non-cooperative or non-compliant with EU rules after an initial period of dialogue, a warning/yellow card is issued, which begins a watch period, giving the country a chance to resolve the issue. If the country resolves the issue, a green card is issued, and the country faces no consequences. If the country does not resolve the issue, however, they may receive a red card, which identifies the flag state as non-cooperating with international laws. The red card is seen as a last resort, and once issued, any fishing vessels from that country will be banned from importing to the EU. This threat of trade sanctions is what makes the regulation effective, and is what could similarly make a forest-risk commodities regulation effective at preventing deforestation-linked commodities from being placed on the EU market.

3.3.2 Introduction of sub-national approaches

One significant adaption to the IUU traffic-light approach to fit forest-risk commodities would be the introduction of sub-national level colour-coding, recommended actions and sanctions. Global fisheries are not quite as concentrated, in terms of a limited number of exporting countries, as some of the forest-risk commodities. For example, both palm oil and cacao are produced predominantly in just two countries. A ban on imports of palm oil from either Malaysia or Indonesia, or cacao from either Cote d'Ivoire or Ghana, would remove a significant portion of the global market from EU access.

Importantly, zero deforestation initiatives have demonstrated that it is possible to separate out 'deforestation-free' products from those arising from deforestation, even when they originate from the same country, subnational jurisdiction or municipality.²⁴¹³ This offers options for making determinations at the subnational or even supply chain level, which provides flexibility for carding.

Instead of allocating colour cards to nations as a whole (unless an entire country is classified as low risk), this proposed approach for forest-risk commodities could allocate colour-coding to sub-national regions or biomes. Alternatively, the colour coding could remain on a national level, while the required improvement actions could be implemented on a sub-national level, on the basis of deforestation performance. Negotiations and penalties might be calibrated and adjusted from national to sub-national level, rather than a prohibition on all imports at a national level. A specific refinement might be used, where even when sanctions are imposed, third-party certified products might be excluded from import sanctions.

3.3.3 Dialogue and issuance of a yellow card/warning

If a nation or region is suspected of exporting commodities that violate a deforestation threshold, the EU and the exporting country could develop together a roadmap of actions that the country would need to progress against in order to avoid receiving a yellow card. The IUU model uses the dialogue as a way to evaluate the gaps in capacity and technical expertise of the exporting country in being able to meet EU standards. In the case of application to forest-risk commodities, the dialogue would also

²³ Environmental Justice Foundation, Oceana, Pew Charitable Trusts, and WWF. (2015). "EU Regulation to Combat Illegal Fishing Third Country Carding Process: Yellow and red-carding process is encouraging fisheries reforms and must be maintained." Case Study 1. http://www.iuuwatch.eu/wp-content/uploads/2015/06/Case-Study1.2pp.FIN_1.pdf

²⁴ Gibbs, H. K., Munger, J., L'Roe, J., Barreto, P., Pereira, R., Christie, M., ... & Walker, N. F. (2016). Did ranchers and slaughterhouses respond to zero-deforestation agreements in the Brazilian Amazon?. *Conservation Letters*, 9(1), 32-42. <https://doi.org/10.1111/conl.12175>

provide an opportunity for the EU to explore ways to invest in exporting countries' forest governance, and technical agencies aimed at supporting agricultural productivity on existing farmland. This in turn could link to goals and benefits such as REDD+ and achieving targets of nationally-determined contributions (NDCs), central to countries' implementation of the Paris Climate Agreement.

If the exporting country showed a lack of progress or a lack of willingness to make progress, a yellow card would be issued. This would trigger a watch period where the country would be required to demonstrate progress, or face sanctions linked to escalation to a red-card.

Either the European Commission, or an independent body overseen by the Commission, should be responsible for delivering country cards. Member states should *not* be responsible for delivering country cards, to avoid uneven standards among different member states. This would avoid encouraging weaker standards for issuing country cards from some member states, and makes it easier for importers to comply with a unified standard for the entire EU.

3.3.4 Sanctions for non-compliance

If after a yellow card is issued, the exporting country still shows no signs of improvement, there could be a threat of a red card being issued. Adapting for forest-risk commodities, severe import sanctions of a red card for countries/or subnational jurisdictions – a full ban on imports of the risky commodity – would be a very last resort. Preferably, there would be a series of escalating sanctions for countries with red cards, ranging from restrictions to a full ban. Restrictions might take the form of requiring that products originating from countries with a red card (or originating from higher-risk municipalities within a red card country) demonstrate traceability of volumes to known origins, with proof of monitoring for, and verification of, zero deforestation. Another level of sanctions might allow imports only from operators with a demonstrated zero deforestation due diligence system in place, and without that, imports would not be allowed entry to the EU.

Including some form of trade sanctions as a consequence of a red card may be an important lever to prompt the exporting country to make changes. Capacity building and other needs of the exporting country to achieve control of deforestation should be identified and efforts made to support improvements. Crucially, the red card would be seen as a last resort, and would only apply to the commodity that triggered the traffic light process, not to all forest-risk commodities from the offending country or region. For example, countries or regions facing trade restrictions on soy imports due to a red card would not automatically as a result face restrictions on imports of beef or palm oil; each commodity would be treated distinctly.

3.4 Complementarity with other regulatory approaches

The IUU approach can easily be combined with other regulatory approaches, such as a due diligence approach. Operator due-diligence requirements can place the burden on the exporter to manage volumes in alignment with criteria specified by EU regulations, providing evidence of traceability to origin, monitoring of origin for deforestation, systems for addressing non-compliance, and verification of the system by a third-party. This would align with existing marketplace pressure being placed on many global commodities traders to go deforestation-free. Due diligence could also be included in EU import requirements for commodities coming from a country or jurisdiction which is subject to a yellow card for that commodity.

3.5 Challenges in adapting the IUU system to forest-risk commodities

While there are a number of IUU elements that can be easily adapted to a system for forest-risk commodities, there are also several complicating factors in adapting the IUU system to forest-risk commodities, including lack of traceability in many supply chains, and the lack of alignment on deforestation-free targets and goals across producer and importer regions.

3.5.1 Lack of data availability necessary for verifying products as free from deforestation

A remote sensing monitoring approach, aimed at restricting commodity volumes linked to deforestation from entering the EU, only works when paired with traceability data. To be allowed in, imports would need to be traceable, either to origin or to a processor who can be verifiably determined to source exclusively deforestation-free commodities. The credibility of any verification programme hinges on the accuracy of the traceability data. However, supply chains for many forest-risk commodities lack systems for detailed traceability to origin – whether aided by government data or reported directly by private sector actors. This challenge is further exacerbated by the fact that materials from multiple sources are often aggregated at different points along the supply chain – such as at soy crushers or meatpackers, who may source from more than one biome. Encouraging processors such as soy crushers to adopt fully deforestation-free sourcing commitments would be the simplest way to avoid these traceability challenges.

In the case of IUU, the EU requires exporters to certify the origin of fish. For forest-risk commodities, this would be easiest if there were appropriate legal frameworks, as well as transparent land use and ownership registries, driven by government policy. Absent those enabling conditions for traceability to origin, as a preliminary step the EU could require exporters to provide evidence of their efforts to achieve traceability to origin, or, at a minimum, traceability to aggregation “choke points” (processing facilities, refineries, silos, etc.), aligned with criteria specified by EU regulations and modelled after OECD Guidance. The EU could also require that exporters impose traceability and due diligence requirements on upstream actors from the choke points from which they purchase.

Over time, as part of the dialogues and roadmaps for action, the EU would need to work with countries and regions to create the enabling government policies, data and tools for private sector actors – particularly those upstream of the “choke points” – to track and report on traceability to origin for products destined for EU markets. Governments in many key exporting nations for forest-risk commodities hold data that can greatly facilitate traceability (such as property maps) or traceability for cattle (such as the GTA in Brazil). The dialogue between the EU and these countries should encourage data access in order to most efficiently and cost-effectively determine compliance with the EU regulation.

3.5.2 Lack of shared set of principles, norms and goals for compliance between exporting countries and EU

The IUU model is predicated on a general agreement on intended outcomes (i.e. legal compliance) between producers and buyers; whereas this may not be the case for forest-risk commodities. The IUU framework was developed as a tool to incentivise national action on monitoring and enforcement to meet domestic and international legal agreements. This works in large part because both producer

country and buyer country ostensibly are aligned on the desire for producing countries to comply with domestic and international law.

In the forest-risk commodities model, it is very possible that the producer country (or sub-national jurisdiction) and EU are not aligned on a desire for eliminating deforestation for commodity production. In fact, deforestation for commodity production may not be illegal in many producing countries, and in some cases, it may be legally protected. This can create challenges for aligning on a roadmap for improvement actions, and ensuring progress on them. Encouraging compliance through incentives and support for improved productivity, and other ways to reduce negative impacts on livelihoods, would be important parts of the package of measures with this approach.

An IUU framework for forest-risk commodities, absent a basis in international law could build upon elements of global voluntary agreements specific and applicable to forests. These include the [Accountability Framework Initiative](#), the [New York Declaration on Forests](#) and the [CBD Action Plan on Customary Sustainable Use](#), as well as global frameworks and agreements with a climate and biodiversity lens that intersect with forest management, such as the [UN Framework Convention on Climate Change](#), (including the Paris Agreement) and related national commitments, and the [UN Sustainable Development Goals](#).

Even absent the ability and leverage by the EU to motivate policy and monitoring progress by forest-risk commodity exporting countries, the approach of adapting IUU for forest-risk commodities is still a very capable tool for creating safeguards against the importation of volumes of deforestation-linked or high-deforestation-risk products into the EU. This is because it can serve as a market-based incentive for national and sub-national districts to deforestation-free production practices in order to access EU markets.

4. Key elements to be determined for an adapted IUU model

The following are key elements that require clarification and definition in order to develop a functional model for forest-risk commodities.

4.1 Determination of which forest-risk commodities are included under the framework

Because of the requirements for data access, for a dialogue with producer countries and agreed-upon determinants of compliance as well as a coloured carding framework, and given the associated time and costs of setting up this approach, it may be most effective to focus this adapted IUU model on the major producing countries and the top commodity drivers of deforestation, at least to begin with. The list should be determined by an objective assessment of the level of risk of deforestation by commodity and country combination, together with the volume entering the EU market. A threshold could be set for entry into the system, with a focus on producer countries which have the data and existing public and private sector mechanisms in place, or which have the potential to be put in place. Any country/commodity combinations that would not reach the threshold could be managed on a mandatory due diligence basis to begin with, as a stepping stone for entry into the adapted IUU model.

4.2 Thresholds for entering the dialogue process

The IUU regulation on fish requires that the EU engages in dialogue with countries flagged for non-compliance, in an effort to align on needed actions for compliance. The forest-risk commodities approach would similarly require the EU to identify thresholds for non-compliance after which countries would be engaged in dialogue. This threshold could be triggered by attempts to import non-certificate/non-verified products (see above), or by the EU's analysis of deforestation rates for commodity production in-country. Once countries cross a particular risk threshold, the EU would initiate dialogue with the countries about needed reforms in policy, monitoring, data transparency and more, to address deforestation rates for commodities, with the goal of avoiding a yellow card.

As multiple commodities are addressed under the forest-risk commodities framework, it is suggested that the approach, thresholds, and criteria for the system are tailored specifically to each individual commodity. For example, if a country is flagged due to risk of deforestation for soy production, the dialogue, action plan, and sanctions would all focus solely on soy; dialogue and sanctions would not automatically apply to other forest-risk commodities. But the dialogue could be triggered with a country for other commodities if similar risks are found.

4.3 Clear criteria for allocation of cards, and for the transfer from one category to another

Criteria must also be set for when to trigger, and then to exit, the yellow and red card process. Thresholds for a yellow card should be low, but thresholds for a red card should be high. The actions that are required as conditions to exit yellow card status could include a mix of actions related to traceability, property registration systems, transparency of government-held land-ownership and lease information in the public domain, monitoring, and performance indicators for progress on reducing levels of deforestation associated with commodity production.

4.4 Determination of applicability to raw imports only or also to processed products

The approach should apply to all raw forest-risk commodity products (including palm oil and soymeal) and minimally processed materials (tanned leather). This approach should likely exclude forest-risk commodity ingredients embedded in other imported products, given the challenges in traceability and complications of tracking embedded products. But in order to avoid this leading to a shift in processing location, so that products are simply further refined before being exported to the EU, the production and volume of such materials should be monitored; in addition, processed materials should be subject to at least self-reporting such as via due diligence.

4.5 Definition of deforestation and deforestation-free criteria

The definition of deforestation-free, applicable to multiple commodities, will need to be established – just as it would for any EU approach to reducing deforestation for commodities. At the very least, the definition will need to be compatible with the selected satellite monitoring system. Although it may not be legally necessary to agree on the definition with producer countries, that would be

preferred. The [Accountability Framework Initiative](#) offers support and guidance on definitions of deforestation applicable across forest-risk commodities.

4.6 Trade rules implications of a regulatory and sanction-based approach

The World Trade Organisation agreement includes broad principles to ensure the liberalisation of international trade. These principles include that WTO members are not permitted to discriminate between traded ‘like products’ produced by other WTO members, or between domestic and international ‘like products’.²⁵

This discrimination includes prohibition of measures other than duties and taxes, and commodities from high and low risk areas could be considered like products. However, there are exemptions, which include ‘measures necessary to protect human, animal or plant life or health’; and ‘measures relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption’ (GATT Article XX (b) and XX (g)).²⁶ These two exceptions have been cited in several WTO dispute cases which suggest that discriminating between “like” products on the basis of their production processes and production methods (PPMs) can be acceptable.²⁷ For example, in the US – Shrimp case, the Appellate Body decided that under Article XX(g), the US was allowed to require importers to demonstrate that shrimp had been harvested using turtle excluder devices to minimize the incidental killing of sea turtles.²⁸

In order to demonstrate that the exemptions could apply, it would be important to ensure that there was a scientific methodology applied to the definitions of forest-risk commodities and deforestation, and the risk assessment should be completed scientifically. As suggested above, a focus on the major commodity drivers (cattle, soy, palm oil and wood products) would be “unlikely to generate arbitrary or unjustifiable discrimination”.²⁹ Partiti³⁰ also states that imported products can be shown to have a negative impact on the EU because of the impact of forest-risk commodities on global natural resources, as well as the existence of multilateral bodies and agreements calling for action to halt deforestation and its associated greenhouse gas emissions. While there should be a comprehensive legal assessment, the IUU approach could be adapted towards zero deforestation for forest-risk commodities while keeping in line with WTO principles.

Conclusion

The IUU model, adapted for forest-risk commodities, holds the potential to drive meaningful policy shifts by governments in exporting countries while also effectively restricting the imports of volumes of deforestation-linked products into the EU.

²⁵ GATT 1994. The General Agreement on Tariffs and Trade. https://www.wto.org/english/docs_e/legal_e/gatt47.pdf

²⁶ *ibid.*

²⁷ Leggett, M. (2013). Drivers of deforestation and WTO rules: Conflicts and Solutions. <https://forest500.org/publications/drivers-deforestation-and-wto-rules-conflicts-and-solutions>

²⁸ Appellate Body Report, United States – Import Prohibition of Certain Shrimp and Shrimp Products, WT/DS58/AB/R, adopted 6 November 1998, DSR 1998:VII, p. 2755. https://www.wto.org/english/tratop_e/envir_e/edis08_e.htm

²⁹ Partiti, E. (2020). Regulating trade in forest-risk commodities. *Journal of World Trade*, 54. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3406718

³⁰ *ibid.*

While the threat of sanctions has been proven, in the case of the IUU for fisheries, to prompt countries with yellow cards to change their national policies and align with EU expectations,³¹ the political and socio-economic impacts of sanctions must be considered and only used as a last resort. When applied effectively, restricted market access can be a powerful incentive to conserve forests, and can encourage improved land use practices and productivity, as demonstrated by Gibbs et al. (2015).³²

An IUU approach, adapted to forest-risk commodities, comes with many additional benefits as well. The ability to use remote sensing to monitor and verify whether a commodity is linked with deforestation works at scale for virtually all forest-risk commodities, unlike certification schemes, which have not been found to scale up effectively. The ability for the EU or an independent body overseen by the EU to monitor compliance also avoids the process of self-reporting, which could lead to unreliable information and inconsistent standards. An IUU approach also presents an opportunity for government to government dialogue and cooperation, and could be linked to development aid.

Given the importance of the EU as a market for many forest-risk commodities, and because of the announced interest by other import markets of taking a similar approach, the benefits of such a system would clearly outweigh the administrative burden for Member States and for economic operators. Simple, clear and uniform requirements issued from the European Commission can reduce the administrative burden on Member States. The supply chains of the largest forest-risk commodities in major exporting countries all have existing initiatives that address deforestation, and monitoring and verification systems are underway in many.^{33, 34, 35, 36, 37} Aligning EU definitions and policies with existing zero deforestation initiatives can result in efficiency gains. The ability to remotely sense performance for commodities simplifies assessments, and there are many research and civil society groups who could help with implementation.

The vast majority of forest-risk commodities do not need to be drivers of deforestation; there is sufficient land already cleared to meet future needs.^{38, 39} The development of an IUU-based regulatory approach that would avoid the EU importing agricultural commodities that are driving deforestation

³¹ Environmental Justice Foundation, Oceana, Pew Charitable Trusts, and WWF. (2015). "EU Regulation to Combat Illegal Fishing Third Country Carding Process: Yellow and red-carding process is encouraging fisheries reforms and must be maintained." Case Study 1. http://www.iuuwatch.eu/wp-content/uploads/2015/06/Case-Study1.2pp.FIN_1.pdf

³² Gibbs, H. K., Munger, J., L'Roe, J., Barreto, P., Pereira, R., Christie, M., ... & Walker, N. F. (2016). Did ranchers and slaughterhouses respond to zero-deforestation agreements in the Brazilian Amazon?. *Conservation Letters*, 9(1), 32-42. <https://doi.org/10.1111/conl.12175>

³³ ABIOVE. Sustainability. <https://abiove.org.br/en/sustainability/#:~:text=The%20Soy%20Moratorium%20is%20a,the%20government%20and%20civil%20society.&text=It%20has%20contributed%20to%20the,Amazon%20Biome%20associated%20with%20soy>

³⁴ Beef on Track. <https://www.beefontrack.org/>

³⁵ Roundtable on Sustainable Palm Oil. <https://www.rspo.org/>

³⁶ Forest Stewardship Council. <https://fsc.org/en>

³⁷ Roundtable on Responsible Soy Association. <https://responsiblesoy.org/?lang=en>

³⁸ Strassburg, B. B., Latawiec, A. E., Barioni, L. G., Nobre, C. A., Da Silva, V. P., Valentim, J. F., ... & Assad, E. D. (2014). When enough should be enough: Improving the use of current agricultural lands could meet production demands and spare natural habitats in Brazil. *Global Environmental Change*, 28, 84-97. <https://www.sciencedirect.com/science/article/pii/S0959378014001046#bib0190>

³⁹ Licker, R., Johnston, M., Foley, J. A., Barford, C., Kucharik, C. J., Monfreda, C., & Ramankutty, N. (2010). Mind the gap: how do climate and agricultural management explain the 'yield gap' of croplands around the world?. *Global ecology and biogeography*, 19(6), 769-782. https://onlinelibrary.wiley.com/doi/full/10.1111/j.1466-8238.2010.00563.x?casa_token=C6_aYAtiENEAAAA%3AltRpQEIGVPfJyG830KTX_U8sF4mQRAi3323XuYclewkDMXmewdjX8Ro3AQnk_D-3j8HZQhp1jilLnG4qc

could foster better, more sustainable production in exporting countries, while allowing the EU to meet its ambitions laid out in the European Green Deal and to meet international targets for reduced climate emissions.