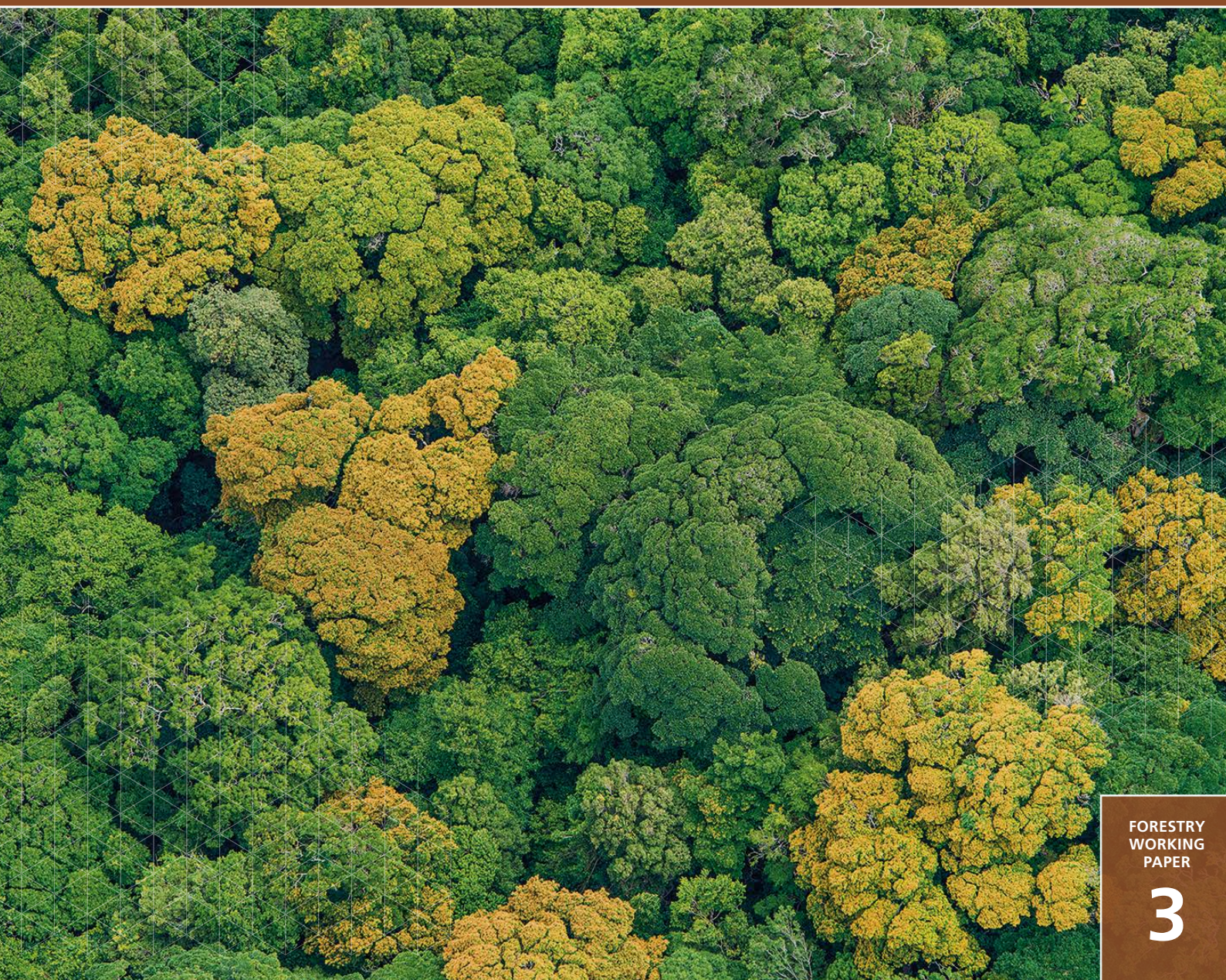
Food and Agriculture Organization of the United Nations

Zero-deforestation commitments

A new avenue towards enhanced forest governance?



FORESTRY WORKING PAPER 3

Zero-deforestation commitments

A new avenue towards enhanced forest governance?

Food and Agriculture Organization of the United Nations
Rome, 2018

ISBN 978-92-5-130630-7

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Front and back cover photo: Tropical forest on the mountains of Cordillera de Tilarán, Costa Rica
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Acknowledgements

Zero-Deforestation commitments: a new avenue towards enhanced forest governance? was authored by Till Neeff and Thaís Linhares-Juvenal. It benefited from inputs and support of a number of experts.

The publication was prepared under the overall guidance of Eva Müller, Director, and Andrey Kushlin, Deputy Director, of the FAO Forestry Policy and Resources Division.

Work developed under request of the FAO Advisory Committee on Sustainable Forest-based Industries (ACSFI) and within the FAO Forest Governance and Economics Team provides the basis for this working paper.

Discussions and comments with selected experts provided valuable contribution. In particular, we thank our colleagues at FAO Marco Boscolo, Susan Braatz, Irina Buttoud, Kristin DeValue, Mats Nordberg, Jukka Tissari and Francesco Tubiello. We also thank the following persons from other institutions for their availability and insightful perspectives: Gary Dunning (The Forests Dialogue), Chris Elliott (The Forests Dialogue), Uta Jungermann (World Business Council for Sustainable Development), Richard McNally (SNV Netherlands Development Organisation), Matthew Reddy (World Business Council for Sustainable Development), Hans Smit (SNV Netherlands Development Organisation), Eric Swanson (Forest Trends), Rodney Taylor (World Wildlife Fund), Heiner von Lüpke (Gesellschaft für Internationale Zusammenarbeit), and Daniel Zarin (Climate and Land Use Alliance).

Thanks also to Patricia Tendi, for editorial guidance, Ivan Grifi, for graphic design, and Caroline Lawrence for copyediting.

Acronyms and abbreviations

ACSFI	FAO Advisory Committee on Sustainable Forest-based Industries
BEI	Banking Environment Initiative
CBD	Convention on Biological Diversity
CERFLOR	Brazilian Forest Certification Programme
CGF	Consumer Goods Forum
CLUA	Climate and Land Use Alliance
CoC	chain of custody
EII	Earth Innovation Institute
FAO	Food and Agriculture Organization of the United Nations
FCPF	Forest Carbon Partnership Facility
FLEGT	Forest Law Enforcement, Governance and Trade
FRA	Global Forest Resources Assessment
FSC	Forest Stewardship Council
GCP	Global Canopy Programme
GEF	Global Environment Facility
GRSB	Global Roundtable for Sustainable Beef
HCS	high carbon stock
HCVA	high conservation value area
IBGE	Instituto Brasileiro de Geografia e Estatística
IFCC	Indonesian Forestry Certification Cooperation
(I)NDC	(intended) nationally determined contribution

IPOP	Indonesia Palm Oil Pledge
NGO	non-governmental organization
PEFC	Programme for the Endorsement of Forest Certification
REDD+	Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
RSPO	Round Table on Sustainable Palm Oil
RTRS	Round Table on Responsible Soy Association
SDG	Sustainable Development Goals
SPOM	Sustainable Palm Oil Manifesto
TFA	Tropical Forest Alliance
TFD	The Forests Dialogue
TFT	The Forest Trust
UNFCCC	United Nations Framework Convention on Climate Change
UoCS	Union of Concerned Scientists
VCS	verified carbon standard
WWF	World Wide Fund for Nature

1.

Introduction

The climate agenda has increased awareness of deforestation and triggered private and public action. In general, private-sector pledges gained momentum along with negotiations for Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD+), the mechanism developed by Parties to the United Nations Framework Convention on Climate Change (UNFCCC). Notably, several global private-sector pledges have been announced since 2007, following REDD+ inclusion in the UNFCCC's roadmap for a new global climate agreement. Some of these pledges were co-signed by governments of developed and developing countries, and have contributed to the formulation of climate change mitigation plans. When 195 countries adopted the Paris Agreement for a new global climate deal in 2015 (UNFCCC, 2015a), 152 countries had already submitted their intended nationally determined contributions (INDCs), many including forest-related targets.[1] But important pledges have also been made in other contexts, often led by international civil

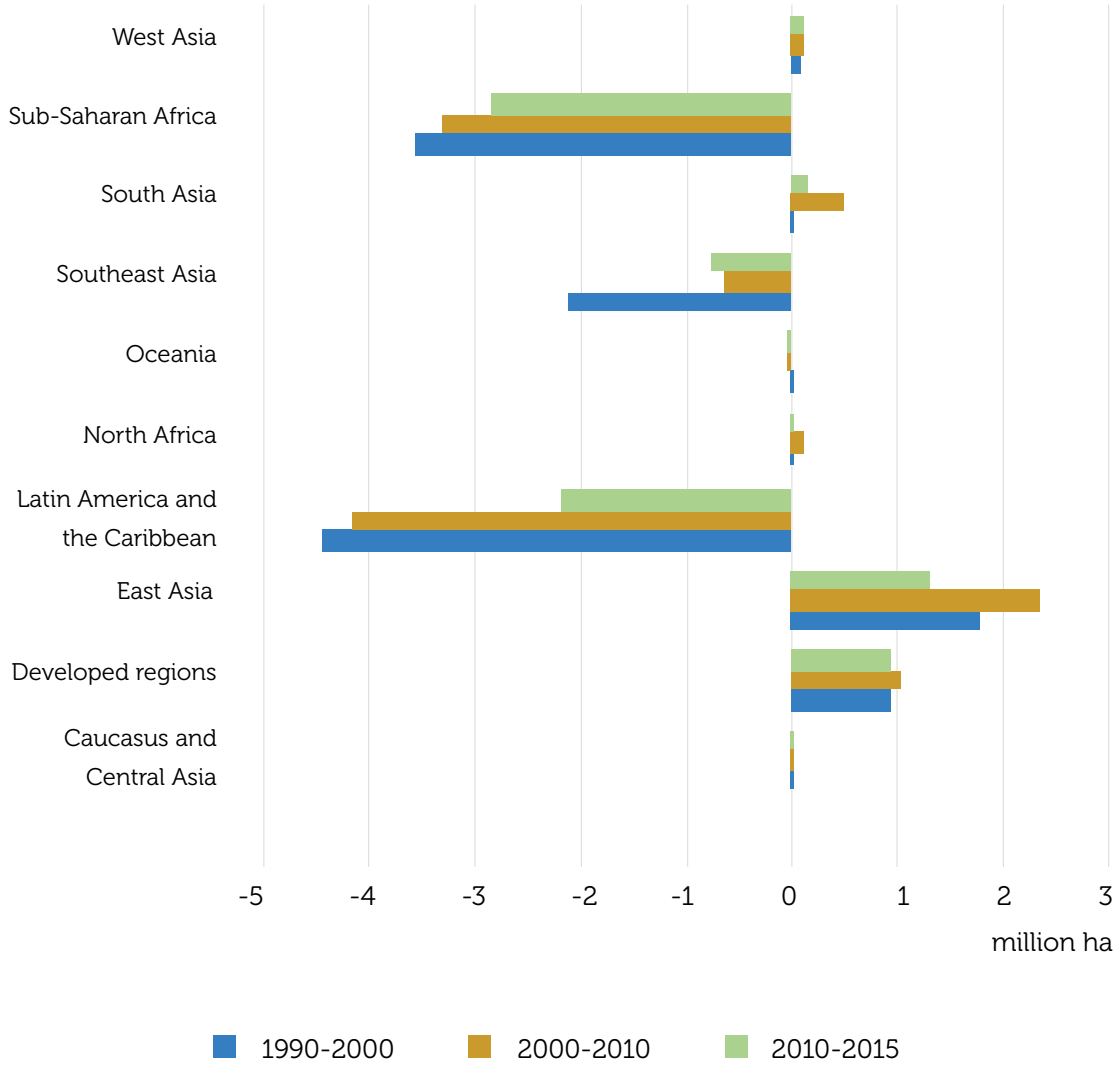
1 According to a recent review of INDCs at FAO (2016b), 148 countries included agriculture (crops, livestock) in their mitigation contributions and 157 countries included land use, land-use change and forestry in their mitigation contributions. There were 131 countries that included priority areas for adaptation and/or adaptation actions relating to agriculture and/or land use, land-use change and forestry.

Box 1: Forest-cover trends

During the 25 years from 1990 to 2015, the world's forest area has decreased from 31.7 percent of the total land area to 30.7 percent. However, the annual global net loss of forest area has been more than halved during the last 25 years. It fell from 7.3 million hectares per year in the 1990s to 3.3 million hectares per year for the period 2010–2015 (Figure 1). Forests are lost either by conversion to other land uses, such as agriculture and infrastructure, or by natural disasters. At the same time, other land uses are transformed to forest through planting, landscape restoration and natural expansion of forests.

Forest loss was particularly evident in developing regions, although the trend varies across subregions. While Latin America and the Caribbean, sub-Saharan Africa and Southeast Asia had the largest losses in forest area, the annual net forest loss decreased from 4.5 million hectares per year to 2.2 million hectares per year in Latin America and the Caribbean, and from 2.1 million hectares per year to 0.8 million hectares per year in Southeast Asia.

Figure 1: FAO forest loss statistics 1990–201.



Source: Based on FAO (2017), Sustainable Development Goal (SDG) Indicator 15.2.1 – Progress towards sustainable forest management.

society organizations or business associations, and not always co-signed or endorsed by governments of forested countries. Many of these pledges have focused on commodity-driven deforestation.

Between 2010 and 2015, global forest area decreased by an average of 3.3 million hectares every year (FAO, 2015) (Box 1 and Figure 1). The key drivers of this loss have been identified as the expansion of the agricultural frontier and growth of the forest-risk commodities palm oil, soya, timber, pulp and paper, and beef (FAO, 2014; Rautner, Leggett and Davis, 2013). Commercial agriculture was responsible for between half and three-quarters of tropical deforestation (Hosonuma *et al.*, 2012; Rautner, Leggett and Davis, 2013; Lawson, 2014). Despite recent progress, forest and land-use governance remains weak, which makes for unsustainable changes in land use (FAO, 2014; 2015). Much forest conversion is carried out illegally (Lawson, 2014). Although agriculture remains the major driver of deforestation globally, increasing agricultural productivity and food security, and halting or even reversing deforestation, are not mutually exclusive. It has been highlighted that integrated land-use planning is the key to balancing land uses, underpinned by the appropriate policy instruments to promote both sustainable forests and agriculture (FAO, 2016a).

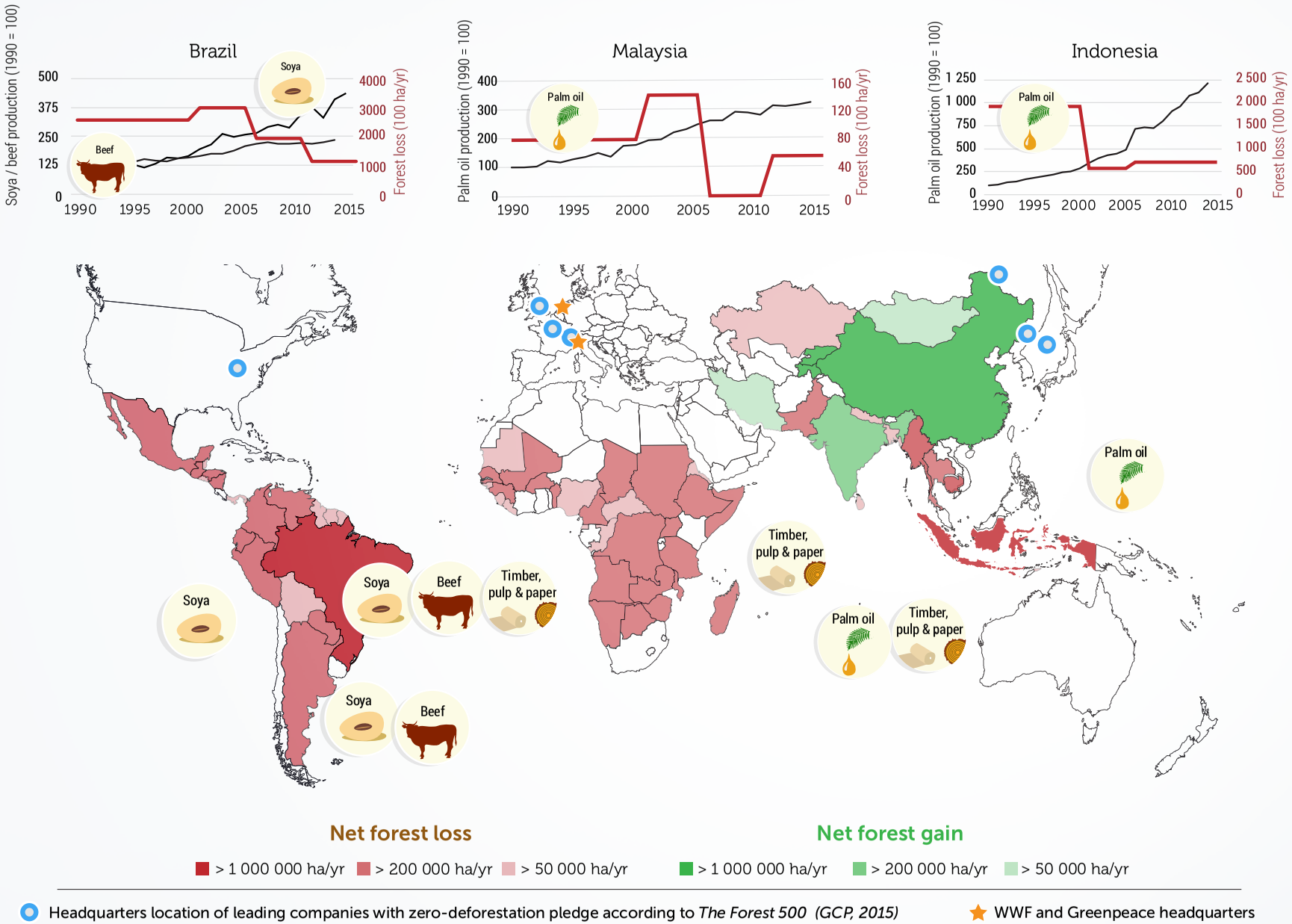
Commitments to reduce deforestation all aim to reduce loss of forest cover but draw on different measures of deforestation and concepts of forests, reflecting to a certain extent the different objectives of their leading organizations. Cover comprises both natural and planted forests and is affected by suppression of forests but also by regrowth and planting of new forests. Qualifiers such as gross or net deforestation, natural or planted forests, have different implications for local forest governance. Moreover, countries have a legal framework ruling their rural landscapes and deforestation might be legal, i.e. in compliance with local laws, or illegal, bringing up additional challenges to definitions and reconciliation between local and global governance.

The New York Declaration on Forests (United Nations, 2015) called for deforestation to be halved without further qualifying the term (whether gross or net deforestation, natural or planted forests, legal or illegal activities were to be addressed). Other pledges have been more specific. However, although the understanding of what is meant by deforestation varies with a pledging organization, it is clear that loss of forest cover has now become a key environmental concern that global finance and trade have started to factor into their plans for the future. Notable private-sector initiatives, such as the Consumer Goods Forum and the "Soft Commodities" Compact,[2] have taken the lead (Figure 2).

Recognizing that zero-deforestation commitments are business strategies rather than public policy, this working paper explores the fundamentals of the zero-deforestation movement, focusing on zero deforestation in supply chains, and draws conclusions about the potential of public- and private-sector partnerships for reshaping forest governance and reducing deforestation, while upholding the principles of sustainable development.

2 The Consumer Goods Forum represents 400 companies across 70 countries employing nearly 10 million people with combined sales of more than US$3 trillion. The "Soft Commodities" Compact, an alliance of the Banking Environment Initiative, WWF and the Consumer Goods Forum, accounts for approximately 50 percent of global trade finance.

Figure 2: Global overview of forest-area changes and forest-risk commodities



Source: www.fao.org/faostat

2.

Zero-deforestation pledges in the public and private sectors

The zero-deforestation movement developed global momentum after success in Brazil proved deforestation reduction to be feasible. In the Brazilian Soy Moratorium and its various replications for other commodities, the private sector emerged as a powerful ally in pursuing sustainability goals. The key catalysts of this paradigm shift were pressure from civil society organizations on both the public and private sectors, more effective enforcement thanks to advances in monitoring technology, progress on the legal designation of indigenous territories and protected lands, and multi-stakeholder processes that resulted in successful sectoral moratoria (CLUA, 2014). Since then, the zero-deforestation movement has spread globally, now covering the Amazon forest, the Congo basin and Southeast Asia's forest expanse, and targeting all the forest-risk commodities: palm oil, soya, timber, pulp and paper, and beef (CLUA, 2014). Some of the most prominent zero-deforestation pledges include the following.

- **World Wide Fund for Nature (2008)**: "WWF invites all stakeholders to support the call for a zero net deforestation by 2020, and stands ready to work with all stakeholders in making this target a reality" (WWF, 2008).

- **Consumer Goods Forum (2010)**: "As the Board of the Consumer Goods Forum, we pledge to mobilise resources within our respective businesses to help achieve zero net deforestation by 2020" (CGF, 2010).

- **Tropical Forest Alliance (2013)**: "Tropical Forest Alliance 2020 will contribute to mobilizing and coordinating actions by governments, the private sector and civil society to reduce tropical deforestation related to key agricultural commodities by 2020" (*TFA 2020*, undated).

- **Banking Environment Initiative (2013)**: "By adopting the Banking Environment Initiative's 'Soft Commodities' Compact, developed in partnership with the Consumer Goods Forum, Compact Banks pledge to help achieve zero net deforestation by 2020" (BEI, 2015).

- **New York Declaration on Forests (2014)**: "At least halve the rate of loss of natural forests globally by 2020 and strive to end natural forest loss by 2030" (United Nations, 2015).

Most of the pledges focus on net deforestation, revealing a concern with all types of forest cover, i.e. natural and planted forests. This vision of zero deforestation provides more flexibility to respond to different national and corporate needs within sustainable development strategies. Adopting a conservationist approach, the New York Declaration's focus on natural forests is closer to the climate change agenda and the REDD+ concept. The **New York Declaration on Forests** was announced at the UN Climate Summit in 2014 when negotiations in the run-up to the 2015 Paris Agreement were under way and it helped to push developed and developing countries towards pledges and agreements to reduce emissions from deforestation and agree to halt deforestation by 2020 as part of the United Nations' Sustainable Development Goals (SDGs).

The **Consumer Goods Forum**'s 2010 deforestation resolution represents the corporate response to the increased focus on forest-risk commodities in global supply chains. CGF members managed to coordinate the actions of around 400 companies, pledging to mobilize their resources towards achieving zeronet deforestation by 2020, most notably by promising changes to supply chains rather than the achievement of global targets. Although the resolution can be placed in the realm of private-sector risk-mitigation strategies and corporate social responsibility, it is likely to produce important impacts on global and local governance for reducing deforestation. The actions following the 2010 deforestation resolution helped to establish coherent thinking around reducing deforestation within the private sector, for example through procurement guidelines for forest-risk commodities or through coordination with the financial sector, such as the **Banking Environment Initiative** and its 2013 "Soft Commodities" Compact. The most impactful follow-up is probably the **Tropical Forest Alliance 2020** launched in partnership with the United States Government in 2013, which has expanded CGF's actions towards stronger influence in local forest governance by promoting public-private partnerships towards zero deforestation.

> *Although support for zero deforestation has grown, it is difficult to perceive any concrete results of zero-deforestation pledges*

The timeline of pledges and declarations around deforestation reduction since 2000 (Figure 3) shows a gradual progress from initiatives led by non-governmental organizations (NGOs) to pledges involving private sector and governments, jointly or individually, in addition to civil society. The **New**

Figure 3: Timeline of the zero-deforestation movement 2003–2016

Source: Neeff and Linhares-Juvenal (2017).

York Declaration on Forests in 2014 culminates with a broader consensus between governments, companies and civil society organizations on the importance of reducing deforestation, aligning with the two main processes in the international developmental agenda, the climate change negotiations and the SDGs. Signed by developing and developed countries and including major NGOs and many companies involved in the Consumer Goods Forum, the non-binding declaration calls for the involvement of broad stakeholder groups.

Although support for zero deforestation has grown, it is difficult to perceive any concrete results of zero-deforestation pledges. There is too little information for companies to judge their progress. Many pledges promised results by 2020 or 2030, and so many companies have not yet publicly reported on their progress (Forest Trends, 2015a; 2015b; GCP, 2015) Similarly, few governments have managed to demonstrate any results of their efforts to reduce deforestation. The vast majority of REDD+ strategies still emphasize capacity-development issues and only a few have identified private-sector initiatives as important entry points for mitigation (Salvini *et al.*, 2014). More tangible governmental pledges frequently depend on financial and technical support.[3] The ambitious New York Declaration on Forests does not have any specific monitoring system in place, but proxy measurements based on global data sources are not reassuring about progress towards halving gross annual forest loss by 2020 (Climate Focus, 2015). The downside to the tremendous current support for zero-deforestation initiatives is the risk of severe disappointment if they fail to deliver on their promises.

There is increasing pressure on governments and the private sector to work together to achieve zero deforestation because, although governments can work towards achieving this goal through improving forest governance, change on the ground requires the cooperation of the private sector. On the other hand, whereas the private sector can work towards zero deforestation primarily through its supply chains, it needs to coordinate with governments and other stakeholder groups to ensure that its efforts produce a positive outcome on a large enough scale. In the early 2000s, WWF focused on individual forest-risk commodities and the private sector, but expanded its focus to encompass governments in its 2008 zero net deforestation target. The CGF's deforestation resolution from 2010 chiefly applied to supply chains, but in 2013 it helped to set up the Tropical Forest Alliance 2020 to promote public-private partnership. In principle, the 2014 New York Declaration on Forests also integrates the public and private sectors.

3 The New York Declaration on Forests, for example, was accompanied by a joint statement on REDD+ by Germany, Norway and the United Kingdom.

3.

Concepts and definitions underlying zero-deforestation commitments

The related but distinct concepts "deforestation free", "zero deforestation", "zero gross deforestation", "zero net deforestation" and "zero illegal deforestation" are often used interchangeably, creating confusion (Brown and Zarin, 2013; Linhares-Juvenal and Neeff, 2017). "Zero deforestation" is an inherently ambiguous term. It includes a modifier to the word "deforestation", and needs context to clarify whether it refers to gross or net deforestation, both, or something else entirely (Fishman, 2014). Imprecise definitions create confusion among those who commit to zero-deforestation pledges, as well as those who aim to assess or implement them. Correct use of these terms has substantial implications for the stringency and feasibility of deforestation targets (Brown and Zarin, 2013). Ultimately, this lack of clear and agreed definitions undermines the zero-deforestation movement (Brown and Zarin, 2013; Rainforest Alliance, 2015; TFD, 2014).

"Zero gross deforestation" means putting an end to the conversion of all existing forested land, without offsetting gains in forest cover (Fishman, 2014). To fully comprehend this concept, we need to know what is meant by "forest" with respect to time frame, area, origin, legal status, morphology, structure, ecosystem value and/or other characteristics. Nevertheless, The Forests

Zero net deforestation enjoys most support among recent pledges

Dialogue (TFD) has called it "the least ambiguous term" and interprets several company commitments as referring to gross deforestation (Fishman, 2014). Benchmark data on Amazon deforestation, mostly based on information from Brazil's National Institute for Space Research, are given as estimates of gross deforestation (Brown and Zarin, 2013).

"Zero net deforestation" means allowing no change to the total forest area, with new forests compensating for converted forests. Using this definition, some forest loss could be offset by forest restoration (WWF, 2008). However, what is meant by "forest" needs to be carefully specified before we can understand the full implications of this idea of zero deforestation. Underlying this concept is the problem of what kinds of new forest are good enough to compensate for lost forest area and what can, therefore, be considered "acceptable deforestation". For example, plantations replacing natural forests may or may not be acceptable because they are less biodiverse or store less carbon. Also, deforestation that occurred a long time ago may or may not count. These finer points are important for securing the environmental benefits of zero net deforestation. WWF, BEI and CGF all use this zero-deforestation concept (BEI, 2015). Global benchmark data on forest trends are mostly based on FAO's *Global Forest Resources Assessment* which uses net forest area change as a key variable (FAO, 2012).

Both concepts have been widely criticized. Zero gross deforestation is criticized for not allowing flexibility for land-use planning, which constrains development options by requiring that all forests remain untouched, irrespective of the development needs that are often greatest among small producers (Fishman, 2014). In practice, economic imperatives can sometimes trump inflexible zero gross deforestation commitments (TFD, 2014). Zero net deforestation is criticized because replacement forests are often not equivalent to cleared vegetation in terms of conservation value, carbon stock or other ecosystem services (Fishman, 2014; TFD, 2014).

Zero net deforestation enjoys most support among recent pledges. It is used by the Consumer Goods Forum for formulating targets, as well as by its Tropical Forest Alliance 2020, and the "Soft Commodities" Compact between the CGF, WWF and BEI. The Forests Dialogue concludes that "the economic heft of the Consumer Goods Forum (whose member companies have combined sales of over US$3.3 trillion), WWF's size and reputation, and the support of 67 countries plus the European Commission, make a strong case that zero net deforestation is the variation with the most backing" (Fishman, 2014).

"Zero illegal deforestation" makes reducing forest loss the responsibility of local governments, aiming to achieve zero deforestation through improving compliance with national regulations. Work towards zero illegal deforestation focuses on the enforcement of national legal frameworks and the improvement of local forest governance, taking into account competing demands for food and forest products, and recognizing how voluntary market instruments such as certification might usefully complement government action (FAO, 2014).

Beyond **"net deforestation" or "gross deforestation"**, pledges apply either to **supply chains or to the jurisdictional level**, and point towards some level of **"acceptable deforestation"**. Although the distinction between net and gross deforestation has received a lot of attention, other variations in what is meant by zero deforestation may be equally important (Figure 4). Corporate zero-deforestation commitments focus on supply chains, but government action is also expected to take place

at jurisdictional level (see Section 7). In practice, verification schemes provide details on what is considered "acceptable deforestation".

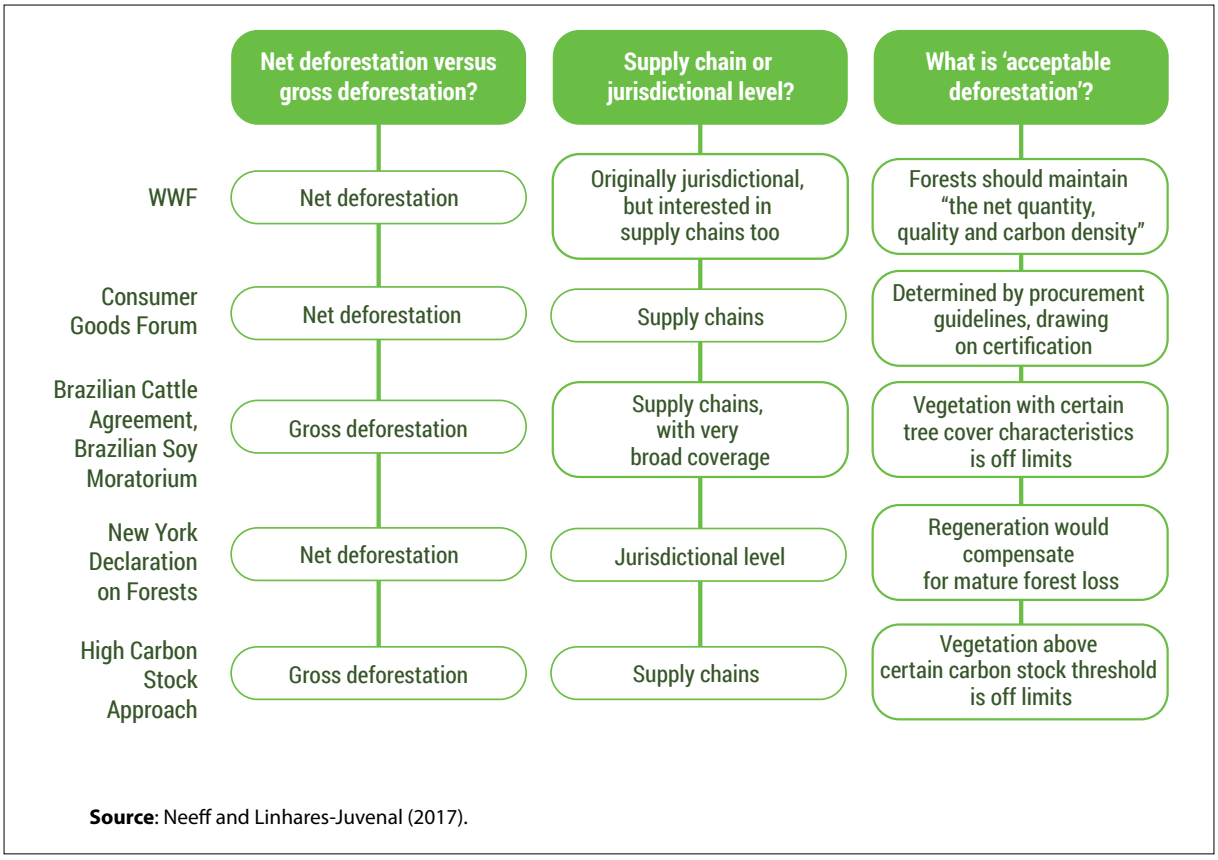
Rather than aiming at eliminating deforestation altogether, most zero-deforestation pledges include a certain degree of "acceptable deforestation" (Taylor, 2015; TFD, 2014). This means that clear criteria are needed for determining what kinds of vegetation companies can convert while still upholding their zero-deforestation claim. Typical criteria include a reference timeframe, legal status, structure, conservation value and origin of the vegetation. These and other highly technical issues all have a bearing on what zero deforestation means (Linhares-Juvenal and Neeff, 2017).

- Cut-off dates determine the date after which lands cannot have been forested to qualify for conversion. The time point of forest conversion is a key parameter in most certification standards. It may determine whether a company's production base can comply with the standards or not (Gibbon, Baroody and McNally, 2014) (Box 2).

- Compliance with laws and regulations can prevent parts of a company's supply chain from being eligible for zero-deforestation pledges. Legality of timber is a key issue in United States of America and European Union timber import regulations, and there are dedicated legality certifications (*TFA 2020*, undated).

- Forest structure has been suggested as a useful indirect measure of zero deforestation. Notably, a new high carbon stock (HCS) standard has been specifically developed for zero deforestation that rules out conversion of forests with carbon stocks above certain thresholds (Golden Agri Resources, 2012; Greenpeace, 2013; SPOM, 2014; TFD, 2014).

Figure 4: Overview of variations in the concept of zero deforestation



Source: Neeff and Linhares-Juvenal (2017).

Similarly, certification standards have also referred to height thresholds for determining whether vegetation counts as forest (Box 2).

- There is broad agreement that forests with high conservation value are off-limits for conversion under zero-deforestation initiatives. Forests with high conservation value need to be protected by the leading certification standards for forest-risk commodities (FSC, 2015; RSPO, 2013; RTRS, 2013) (Box 2).

- Whether or not planted forests should count will determine whether converting primary or other natural forests to plantations is permissible (*TFA 2020*, undated). According to WWF, new forests should only count if they maintain "the net quantity, quality and carbon density" of the converted forest (WWF, 2008).

Company zero-deforestation targets largely apply to individual commodities within their supply chains, whereas governments focus on addressing developmental issues at jurisdictional level. WWF's original proposal for zero net deforestation did not refer to specific supply chains (WWF, 2015a). Through the Consumer Goods Forum, companies have aligned themselves with WWF but it is notable that their pledges work within supply chains, on a different scale to WWF aims (CGF, undated; 2010; 2013; 2015a). The Brazilian Cattle Agreement, the Brazilian Soy Moratorium and the Indonesia Palm Oil Pledge stand out because broad participation in these schemes almost equates to full coverage of these sectors (Meijer, 2014). Mostly, however, companies choose to tackle individual forest-risk commodities within their supply chains (Bregman *et al.*, 2015; GCP, 2015; Lawson, 2014). Governments, on the other hand, focus on development issues that are best addressed at jurisdictional level. A stronger engagement with governments has frequently been called for.

Morocco

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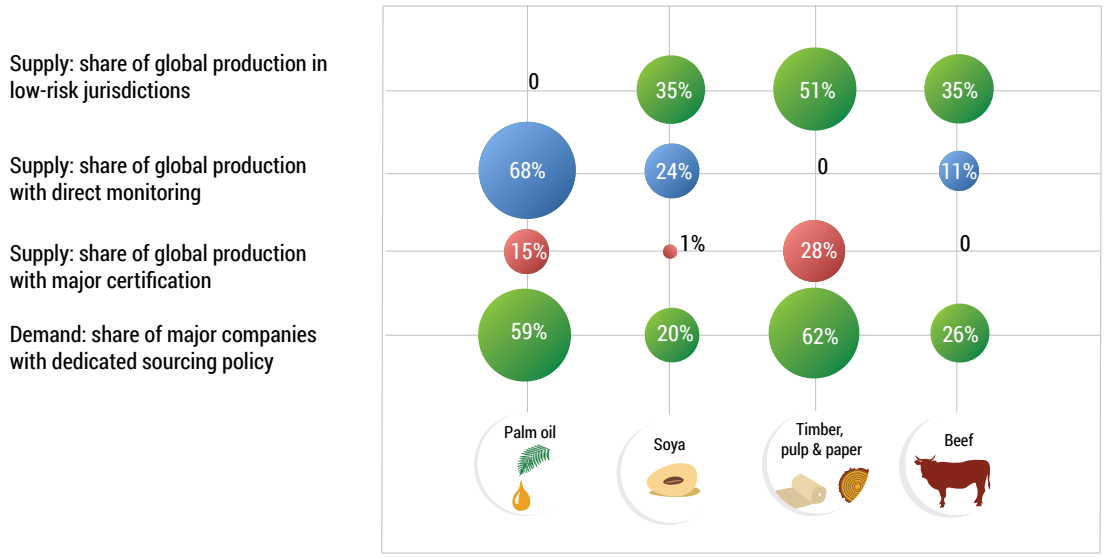
4.

Performance indicators used for assessing compliance with zero-deforestation goals

Certification is the most used proxy of adherence to zero-deforestation pledges. Forest Trends has found that four out of five zero-deforestation pledges rely on certification in this way (Forest Trends, 2015a). The Consumer Goods Forum has published procurement guidelines for soya, pulp, paper and packing, and palm oil which indicate the certification schemes considered sufficiently good to act as proxies for low deforestation risk. These are therefore held to be useful in efforts "to achieve zero net deforestation" (CGF, undated; 2013; 2015a).

As well as through the procurement of certified produce, companies can confirm that their zero-deforestation pledges are being adhered to by directly monitoring land areas or by procuring from low-risk jurisdictions (Figure 5). The first of these approaches, **certified procurement**, is conceptually simple and most companies consider it to be good evidence of zero deforestation. The second approach, **procurement from low-risk jurisdictions**, has recently gained support in the tropics as a means of verifying compliance with zero-deforestation commitments. The third approach, **direct-area monitoring**, offers the most control over the impact of production on forest cover.

Figure 5: Supply of certified forest-risk commodities versus proxy of demand from major companies with zero-deforestation commitments



Source: See Neeff and Linhares-Juvenal (2017) for details of calculations and sources.

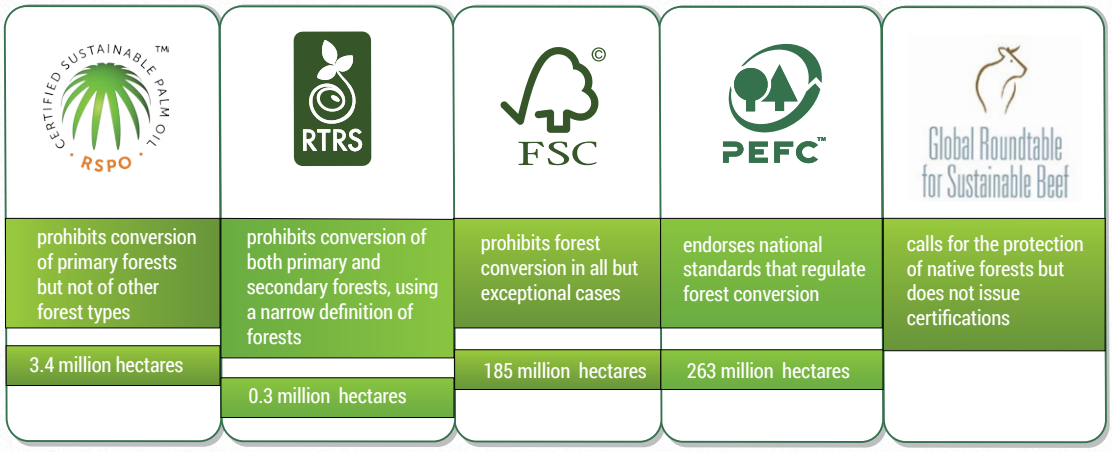
Certification is the most used proxy of adherence of adherence to zero-deforestation pledges

Companies have long used a range of voluntary certification schemes for forest-risk commodities[4] (Figure 6). The Rainforest Alliance reviewed eight of these major agriculture certification schemes and found that they all included criteria prohibiting forest clearance (Gibbon, Baroody and McNally, 2014; Smit, McNally and Gijsenbergh, 2015). The key differences between them related to the type of forests affected, the cut-off date for non-conversion and the requirements around remedial measures. The Forests Dialogue also assessed three forest-certification schemes for evidence of zero deforestation and concluded that all the major forest-certification standards address the issue of timber from forest land converted to other vegetation (Fishman, 2014). Such assessments focus on forest management certification, although many corporate sourcing policies refer more prominently to controlled wood certification, which arguably provides less assurance (Neeff and Nordberg, 2017).

The **Forest Stewardship Council's (FSC)** Forest Management Certification scheme prohibits forest conversion in all but exceptional cases. It prohibits the conversion of natural forests to plantations, and natural forests or plantations to other land uses. Exceptional cases include where the activity affects a very limited portion of the area, and where it will produce clear long-term conservation benefits without directly or indirectly compromising high conservation values (Box 2) (FSC, 2015). Other than forest management, there is also an FSC-controlled

4 Traceability of the chain of custody is required for trading certified products. This entails both management certification and chain-of-custody certification. The FSC, PEFC, RSPO and RTRS standards all come with separate chain-of-custody certification standards. These draw on typical approaches for tracing products through complex supply chains: book-and-claim, mass balance, segregated, identity preserved.

Figure 6: Voluntary certification schemes for forest-risk commodities and deforestation



Source: See Neeff and Linhares-Juvenal (2017) for details of calculations and sources.

wood certification that makes fewer restrictions on forest clearing (Neeff and Nordberg, 2017).

The **Programme for the Endorsement of Forest Certification (PEFC)** endorses national standards that regulate forest conversion. It is a meta-standard that lays out the minimum standards for national certification schemes, although these may go beyond the minimum requirements. The PEFC does not prohibit the conversion of natural forest to plantation, but stipulates that conversion should take place only under "justified circumstances" requiring legal compliance, no negative impact on the environment, a small scale, and positive socioeconomic effects. Forest plantations from before 2011 are eligible for the scheme, whether or not they meet these requirements. The PEFC is one of several national certification schemes in North America and Europe. It also endorses the Brazilian Forest Certification Programme (CERFLOR), the Indonesian Forestry Certification Cooperation (IFCC) and other schemes in developing countries (Box 2) (PEFC, 2010).

Certification by the **Round Table on Sustainable Palm Oil (RSPO)** prohibits conversion of primary forests but not of other forest types. Plantations cannot be established on lands with primary forests, but secondary or degraded forests can be converted to plantations as long as they avoid areas of high conservation value and peatlands (Box 2) (RSPO, 2013).

Certification from the **Round Table on Responsible Soy (RTRS)** prohibits conversion of both primary and secondary forests, using a narrow definition of forest. The scheme rules out conversion of any "native" forest, including disturbed and secondary vegetation as well as primary forest growth. However, any vegetation under 10 m high can be converted so long as areas with high conservation value are avoided (Box 2) (RTRS, 2013). Most countries have a considerably lower threshold for forest height, and this high threshold means that soya can be grown with little restriction in the Brazilian *cerrado* woodlands, and other key areas.

The **Global Roundtable for Sustainable Beef (GRSB)** sets out principles and criteria that call for the protection of native forests. This scheme does not include indicators or any means of verification

Box 2: Major certification schemes and their principles with relevance to deforestation

FSC Principle 6.9 with relevance to deforestation (FSC, 2015)

The organization shall not convert natural forest to plantations, nor natural forests or plantations on sites directly converted from natural forest to non-forest land use, except when the conversion:

- affects a very limited portion of the area of the management unit, and
- will produce clear, substantial, additional, secure long-term conservation benefits in the management unit, and
- does not damage or threaten high conservation values, nor any sites or resources necessary to maintain or enhance those high conservation values

PEFC Criterion 1, item 5.1.11 with relevance to deforestation (PEFC, 2010)

Conversion of forests to other types of land use, including conversion of primary forests to forest plantations, shall not occur unless in justified circumstances where the conversion:

- is in compliance with national and regional policy and legislation relevant for land use and forest management and is a result of national or regional land-use planning governed by a governmental or other official authority including consultation with materially and directly interested persons and organizations; and
- entails a small proportion of forest type; and
- does not have negative impacts on threatened (including vulnerable, rare or endangered) forest ecosystems, culturally and socially significant areas, important habitats of threatened species or other protected areas; and
- makes a contribution to long-term conservation, economic and social benefits.

RSPO Principle 7.3 with relevance to deforestation (RSPO, 2013)

New plantings since November 2005 have not replaced primary forest or any area required to maintain or enhance one or more high conservation values.

RTRS Principle 4, Criterion 4.4, Indicator 4.4.1 with relevance to deforestation (RTRS, 2013)

After May 2009 expansion for soy cultivation has not taken place on land cleared of native habitat except under the following conditions:

- It is in line with an RTRS-approved map and system, or
- Where no RTRS-approved map and system is available:
  - ◊ Any area already cleared for agriculture or pasture before May 2009 and used for agriculture or pasture within the past 12 years can be used for soy expansion, unless regenerated vegetation has reached the definition of native forest.
  - ◊ There is no expansion in native forests.
  - ◊ In areas that are not native forest, expansion into native habitat only occurs according to one of the following two options:
    - » Option 1. Official land-use maps such as ecological-economic zoning are used and expansion only occurs in areas designated for expansion by the zoning. If there are no official land-use maps then maps produced by the government under the Convention on Biological Diversity (CBD) are used, and expansion only occurs outside priority areas for conservation shown on these maps.
    - » Option 2. A high conservation value area (HCVA) assessment is undertaken prior to clearing and there is no conversion of high conservation value areas.

There is no conversion of land where there is an unresolved land-use claim by traditional land users under litigation, without the agreement of both parties.

that could be used as a basis for certification. These are supposed to be developed through regionally-based processes.

Existing certification schemes are not equally applicable as sufficient proof of zero deforestation. The major certification standards (FSC, PEFC, RSPO, etc.) are relevant (Figure 6), but it can hardly be concluded that they exclude any sort of forest loss. For example, while the FSC forest management certification includes strong provisions, the FSC-controlled wood certification that most corporate sourcing policies refer to is much less restrictive regarding forest loss (Neeff and Nordberg, 2017). For example, the well-known PEFC attracted substantial NGO criticism when it endorsed the Indonesian Forestry Certification Cooperation (IFCC). This is exacerbated by the fact that many company sourcing policies and the Consumer Goods Forum guidelines also recommend lesser-known standards in addition to the major certification standards, as if all guidelines made equivalent requirements. Failing to discriminate between different certification standards for forest-risk commodities ultimately undermines the credibility of the zero-deforestation movement as a whole.

Some zero-deforestation initiatives monitor production areas directly. Through the Indonesia Palm Oil Pledge, a group of companies has committed to avoid high carbon stock (HCS) areas for new plantations (IPOP, 2014). Although details of its verification scheme are still being worked out, it is likely to rely on area monitoring. The Brazilian Soy Moratorium and the Brazilian Cattle Agreement are similar schemes set up by groups of manufacturers and their business associations (National Wildlife Federation, 2015; Soy Moratorium, 2014). Participants in these schemes have agreed to purchase only from producers who do not deforest lands in the Amazon. They use a purpose-designed verification system based on remote data collection. Verification of these schemes is simpler and less ambiguous than that offered by certification schemes because they use just one performance indicator: eligibility of lands as determined by defined cut-off dates. These schemes can, however, be criticized for not directly considering producers' business practices on complex issues such as legality, forest-based livelihoods or tenure.

A pilot initiative by Golden Agri Resources, Greenpeace and The Forest Trust has proposed using the concept of HCS forests to determine which forests must be preserved and which can give way to plantations (Golden Agri Resources, 2012; Greenpeace, 2013; 2014). Vegetation with carbon storage above a certain threshold is designated HCS, and using a threshold of 35 tonnes per hectare results in most forests qualifying for conservation (Golden Agri Resources, 2012). Although the focus on carbon suggests that reducing emissions is the main priority of this approach, the concept is supposed to also take into account biodiversity and social considerations. Signatories to the Sustainable Palm Oil Manifesto and the Indonesia Palm Oil Pledge, which have taken up the concept, have now also committed to protecting HCS forests (SPOM, undated; 2014). Arguably, monitoring HCS forests is a good way to track the outcomes of company activities more closely than reliance on certification schemes or other measurements of zero-deforestation pledges (Figure 7).

5.

Factors influencing impact of zero-deforestation pledges

The extent to which companies can actually monitor actions conducive to zero-deforestation pledges depends on their position in the supply chain. Companies at the production end of the supply chain are able to make pledges with tailor-made performance indicators, and to verify compliance with these pledges themselves. This shows how the kinds of zero-deforestation pledges companies can make depend on where they are situated in the supply chain. Producers, processors and vertically integrated companies control production, or at least have a direct relationship with producers. They can therefore verify compliance with zero-deforestation pledges themselves, instead of having to rely on certification. The HCS approach, the Indonesia Palm Oil Pledge, the Sustainable Palm Oil Manifesto, the Brazilian Cattle Agreement and the Brazilian Soy Moratorium are pledges of this sort that were all (co-)proposed by producers, processors or vertically integrated companies (Golden Agri Resources, 2012; National Wildlife Federation, 2015; Soy Moratorium, 2014; SPOM, undated).

On the other hand, companies at the consumer end of the supply chain have to rely on certification to promote zero deforestation in their supply chains. The procurement guidelines of the Consumer Goods Forum, made up mostly of manufacturers and retailers, suggest that certification standards are sufficient evidence of compliance with its zero-deforestation principles (CGF, undated; 2013), and individual company procurement guidelines are often similarly structured to these (Neeff and Nordberg, 2017). These companies, situated downstream in the supply chain, are not in a position to devise new performance indicators for zero deforestation because they are too far removed from production systems, and seldom have much information on their upstream suppliers. They have to rely on responsible procurement and on certification.

The zero-deforestation movement cannot reasonably aim to reduce forest conversion to zero by working at the level of jurisdictions, but it can contribute to improvement of global and local forest governance. In some places, governments and companies have started working together to promote zero deforestation through the creation of jurisdictions where the risk of deforestation is kept low, and where forest-risk commodities can be preferentially sourced. Local governments working at the level of counties and states have collected positive experiences of this new kind of public-private partnership, which is formed by collective action and social pressure rather than by individual agreements (CLUA, 2014; Nepstad *et al.*, 2013; 2014). The Consumer Goods Forum's sourcing guidelines make explicit reference to jurisdictions for timber, pulp and paper. For palm oil the guidelines use a risk-based verification mechanism that could also be met by jurisdictions (CGF, 2013; 2015a). Some large companies, as well as carrying out appropriate monitoring, have recently committed to preferential sourcing of forest-risk commodities from jurisdictions with ambitious environmental and sustainable development targets, known as "Produce-Protect" (CGF, 2015b) (see Section 7 for jurisdictional zero-deforestation initiatives).

Procurement from low-risk jurisdictions allows companies to brand products as zero-deforestation compliant based on origin. Such preferential sourcing from low-risk jurisdictions links in closely with zero-deforestation action by governments and is conceptually similar to North American and European government actions to regulate tropical timber imports under the EU Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan, the EU Timber Regulation and the US Lacey Act, which bans trafficking in wildlife, plants and plant products such as timber and paper (EC, 2010; USDA, 2008). The degree of zero-deforestation assurance provided by preferential sourcing from low-risk jurisdictions is lower than that from individual company-level certification, but some NGOs now offer schemes, akin to certificates, to verify performance (EII, 2015; Forest Trends, undated; VCS, undated). Recent advances in monitoring systems using remote-sensing technology have made this type of certification feasible and it is associated with lower transaction costs than individual management certifications.

It is doubtful that preferential sourcing from low-risk jurisdictions can be used as a means to achieve "zero" deforestation (Nepstad *et al.*, 2014). However, it is a good way for governments and companies to collaborate in mainstreaming better business practices across entire landscapes. In this way, "zero deforestation" may be maturing from a buzzword to a concept guiding corporate and government decision-making.

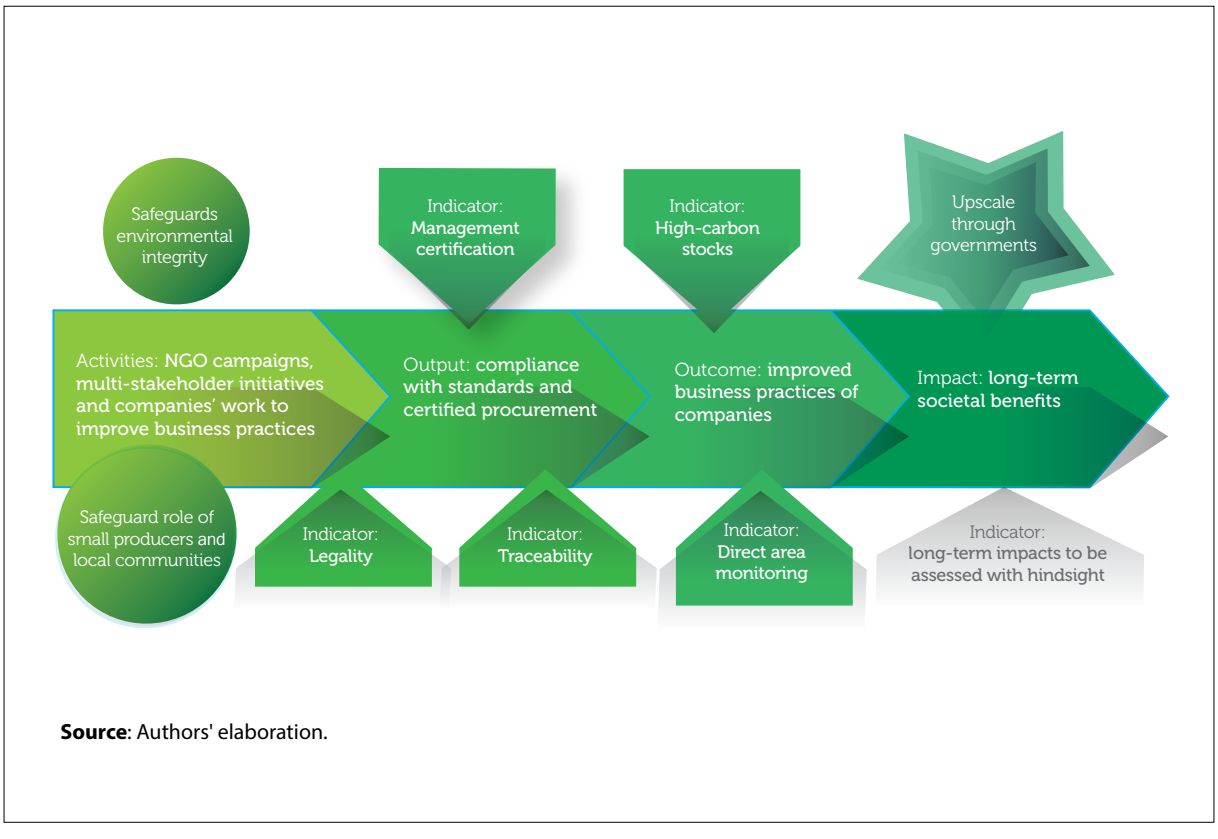
The zero-deforestation pledges have also represented an opportunity to strengthen the position of NGOs in forest governance. In all zero-deforestation initiatives, NGOs offer support through certification and performance indicators, as well as by participating in the round tables that design standards. They also propose tools and methods for companies that wish to improve their business practices by, for example, improving traceability (Smit, McNally and Gijsenbergh, 2015), direct monitoring (Greenpeace, 2013) and legality (TFT, undated; 2003). Aiming at stronger impact on local governance for deforestation reduction, leading NGOs highlight the importance of engaging with small producers (Rainforest Alliance, 2015; Seymour, 2015; Smit, McNally and Gijsenbergh, 2015) and governments (Rainforest Alliance, 2015; Seymour, 2015), and of working at jurisdictional level (Meyer and Miller, 2015) to ensure that zero-deforestation activities can be a win-win strategy for all stakeholders.

Zero-deforestation initiatives generate results at multiple levels (Meijer, 2014) (Figure 7). Efforts to achieve zero-deforestation are undertaken by NGOs, companies, governments and other stakeholder groups. NGOs engage through

Achieving long-term positive societal impacts requires upscaling from supply chains towards landscapes, with engagement of all stakeholders, and in particular small producers

their campaigning, but also propose tools and approaches for companies wishing to improve their business practices, not least by participating in the round tables behind certification standards. The companies themselves work to improve corporate policies and achieve compliance with certification standards. However, albeit a useful output that contributes to deforestation reduction, certification is not universally seen as an end in itself: zero deforestation requires substantial improvements to underlying business practices as an outcome. Beyond the business practices of participating companies, achieving long-term positive societal impacts requires upscaling from supply chains towards landscapes, with engagement of all stakeholders, and in particular small producers. The various success indicators for zero deforestation mirror the multiple levels at which such initiatives develop: progress towards certification, improved traceability and legality are apparent output measures, whereas direct-area monitoring and site-selection approaches target the business practices themselves. Long-term positive impacts, however, will need to be assessed with hindsight and focus on national and global statistics.

Figure 7: Multiple-level results of zero-deforestation initiatives, including indicators at the level of output and outcome



Source: Authors' elaboration.

6.

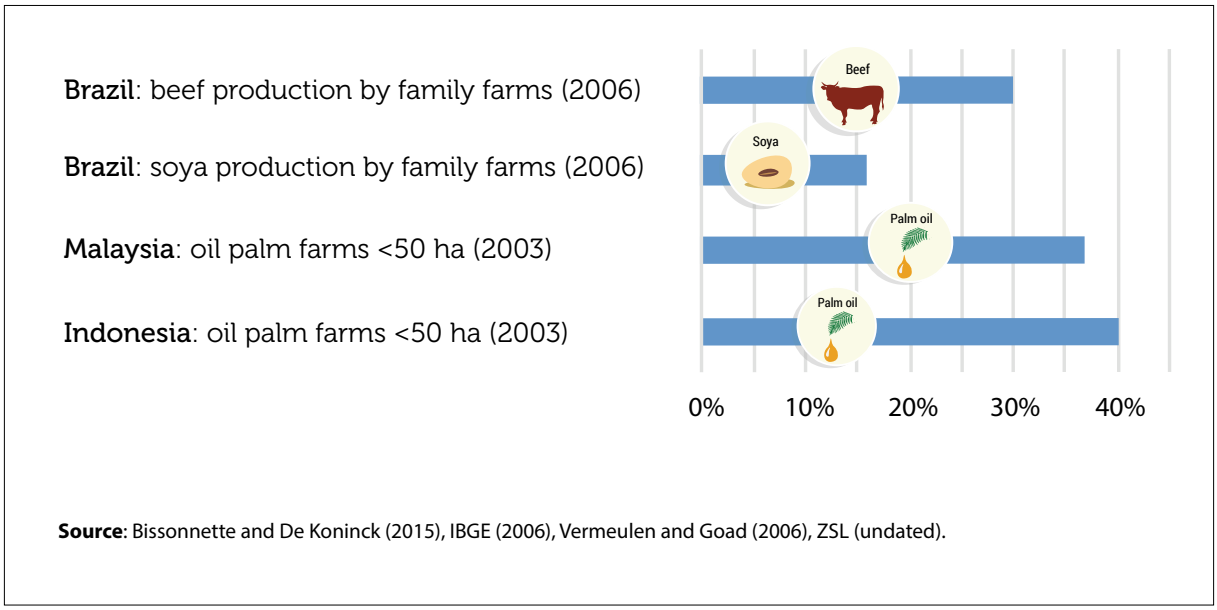
Ensuring long-term benefits to local communities and small producers

Local communities and small producers are involved in the supply chains for forest-risk commodities but large producers dominate zero-deforestation initiatives. Local communities are often involved in supply chains, either directly as small dependent or independent producers, or indirectly as the neighbours of large producers and by providing most of their labour. In some places, and for certain commodities, small producers make a significant contribution to the supply of forest-risk commodities (Figure 8). Despite this, most success in addressing deforestation has been achieved by larger producers. Small producers in Brazil, for example, tend not to take part in the push for lower deforestation that has had such promising results (Godar *et al.*, 2015).

Zero-deforestation initiatives can succeed only if they engage producers as allies (Rainforest Alliance, 2015; TFD, 2014; UoCS, 2013). There are positive examples of careful collaboration between companies with zero-deforestation pledges at the consumer end of the supply chain and their upstream suppliers. These collaborations are effective and have been found to reduce costs and business risks (*TFA 2020*, 2013). Despite this, four of the major zero-deforestation initiatives lack any detailed discussion of the complexity, costs and benefits of zero deforestation for farmers (Meijer, 2014). Failing to secure the participation of producers in zero-deforestation pledges could compromise their environmental integrity, because those producers may then turn elsewhere, sidestepping attempts to promote sustainable production (Bregman *et al.*, 2015; TFD, 2014).

Producers carry most of the burden for complying with zero-deforestation pledges (TFD, 2014). These are often based on negative commitments: companies at the consumer end of the supply chain vow to cut those parts of their supply chain that are incompatible with zero-deforestation goals. Producers are then forced to comply with shifting procurement standards, or look for alternative buyers. These shifting procurement standards are designed to have knock-on effects on systems of production, but they also place a disproportionate burden on producers, who have sole responsibility for carrying out the investment necessary to improve their business practices and obtain certification. The fact that zero-deforestation pledges do not typically involve support for producers puts the success of those pledges at risk. A positive-value proposition for producers would go a long way towards providing a more widely acceptable solution to problems of sustainability, particularly if it were applicable to

Figure 8: Estimated contributions of small producers to the supply of forest-risk commodities



Source: Bissonnette and De Koninck (2015), IBGE (2006), Vermeulen and Goad (2006), ZSL (undated).

Zero-deforestation initiatives can succeed only if they engage producers as allies

both large and small producers (Nepstad *et al.*, 2014; Rainforest Alliance, 2015; Taylor, 2015). A trend towards collaboration between public and private sectors may offer such a proposition if it proves successful beyond the individual jurisdictions where this is currently being piloted.

Small producers are particularly vulnerable to shifts in the supply chain. Small producers often depend to varying degrees on larger producers for selling their produce, for processing it, for financing or technical support, and for sourcing materials such as seeds and fertilizers. They may be unable to adapt to new circumstances such as compliance with larger producers' zero-deforestation pledges. For example, small producers may find it difficult to access markets with less stringent environmental standards (e.g. in developing countries) if larger producers cease to offer them cooperation. Small producers are therefore vulnerable to being cut out of shifting production systems when supply chains are reconfigured to comply with the procurement guidelines of international traders. Small producers also have difficulty in obtaining the certification they need because of the high costs of improving their business practices, and because the certification process is itself costly (Bregman *et al.*, 2015; Seymour, 2015; Smit, McNally and Gijsenbergh, 2015).

Zero-deforestation pledges do not always emphasize the importance of coordination with stakeholders and inclusion of small producers, and this omission needs to be addressed to safeguard their interests (Bregman *et al.*, 2015; CLUA, 2014; Rainforest Alliance, 2015; Taylor, 2015). The Climate and Land Use Alliance (CLUA) says that "Unlikely partnerships are emerging between environmental organizations, indigenous peoples' groups, forest communities, businesses, and governments." (CLUA, 2014) But this process is not universal. For example, the Consumer Goods Forum's deforestation resolution excludes small producers from the most important stakeholder groups, and limits its scope to

A positive-value proposition for producers would go a long way towards providing a more widely acceptable solution to problems of sustainability, particularly if it were applicable to both large and small producers

economic development.[5] More generally, companies involved in the supply of forest-risk commodities do not always have smooth working relationships with broad stakeholder groups. Indonesia's Ministry of Agriculture estimated that in 2012, 59 percent of palm oil companies were involved in land conflicts with local communities (Hadinaryanto, 2014). Small producers did not participate in the changes to production methods that were responsible for the drop in Amazonian deforestation that took place in the 2000s, because they were excluded by the monitoring approaches and conservation policies that were available (Godar *et al.*, 2015). Clearly, more efforts are needed to build coordination round tables that include not only governments, producers, financiers and commodity buyers, but also civil society organizations and small producers. This sort of coordination is proposed by jurisdictional zero-deforestation initiatives (Meyer and Miller, 2015). As the Rainforest Alliance says, "the goal is sustainability, not just halting deforestation" (Rainforest Alliance, 2015).

The proliferation of zero-deforestation pledges creates uncertainty for small and large producers. Producers run the risk of losing customers when companies further down the supply chain take on zero-deforestation commitments (Bregman *et al.*, 2015; TFD, 2014). Changing standards can also cause the production base to shrink because land that was previously authorized for production becomes ineligible (CDP, 2014). Producers may also have difficulty in attracting funding if they cannot meet the financial sector's environmental standards. Ineffective supply-chain coordination and wide variation in the definitions and standards used by deforestation initiatives can exacerbate the situation (Meijer, 2014; TFD, 2014). Small producers may be least capable of managing such risks (Bregman *et al.*, 2015).

Governments can contribute by unifying standards and coordinating jurisdictional work. They can also ensure that production changes result in positive social and environmental impacts by improving the enforcement of forest law, among other means. Several of the concerns about the environmental integrity of zero-deforestation schemes could be addressed by government intervention at jurisdictional level. For example, government regulation of land-use planning would mean that production could no longer be easily shifted elsewhere in response to zero-deforestation requirements (Meijer, 2014; TFD, 2014). The socioeconomic impact of zero-deforestation schemes can vary significantly, depending on the business practices that emerge as a consequence, and governments can help to ensure that this impact is positive through regulation (World Bank, 2015). They can also protect small producers and local communities through regulation of social and environmental standards, and through land tenure (Bregman *et al.*, 2015; Rainforest Alliance, 2015; Smit, McNally and Gijsenbergh, 2015). Successful initiatives targeting zero deforestation at jurisdictional level would also need to improve the enforcement of forest laws and regulations (EII, 2015; Meyer and Miller, 2015).

5 It commits its members to work "with other stakeholders – NGOs, development banks, governments etc. ... to assist forested countries to achieve the goal of zero net deforestation, whilst at the same time meeting their goals for economic development" (CGF, 2010).

7.

Building on zero-deforestation pledges to enhance forest governance

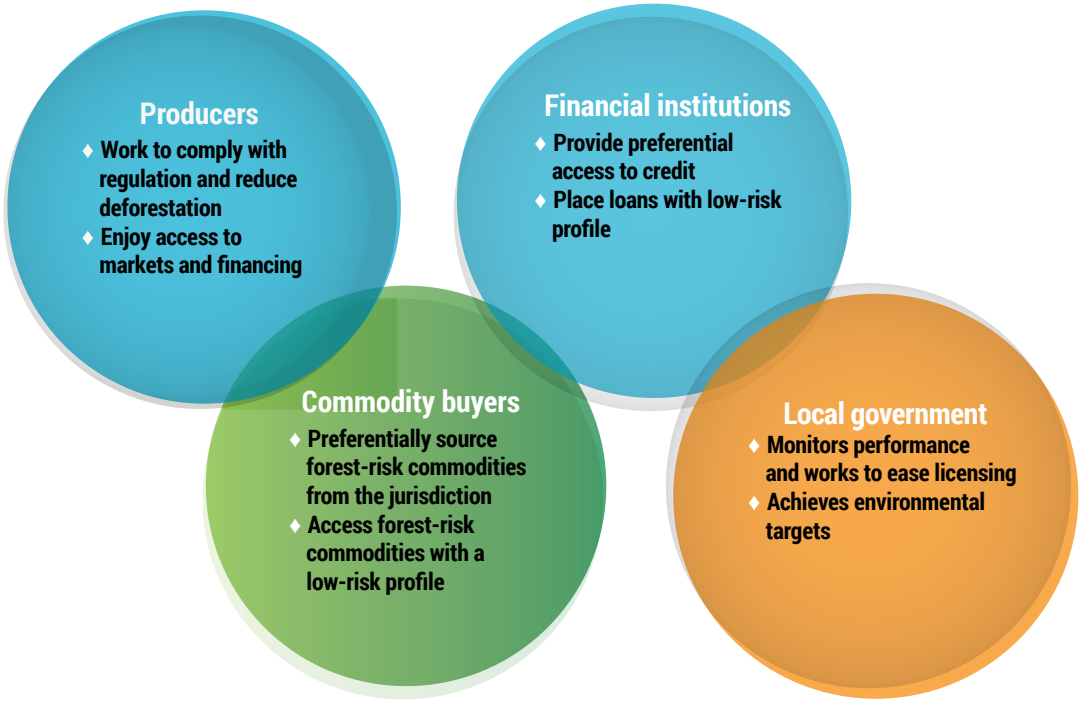
There are many ways that governments can enhance private-sector efforts towards zero deforestation. They can protect the rights of small producers that may otherwise be excluded from the supply chain when these rights are reconfigured in line with zero-deforestation initiatives (TFD, 2014). They can clear up land-tenure issues, enabling more responsible management of resources (Bregman *et al.*, 2015; TFD, 2014) and negotiate agreements with consumer markets to ensure preferential access to zero-deforestation products (Bregman *et al.*, 2015). They can also monitor jurisdictional progress towards zero deforestation (EII, 2015; Forest Trends, undated).

The international community has made significant funding available to governments that support zero deforestation (GEF, undated). Most governmental action is focused on governance reform, which to a certain extent contributes to an enabling environment for zero-deforestation pledges. However, few governments have yet directed efforts towards concerted action with the private sector. Forested countries have largely assessed the drivers of forest change and worked on REDD+ strategies, but only a few consider private-sector initiatives to be a good starting point for mitigation (Salvini *et al.*, 2014). Part of the reason for this is that governments use national greenhouse gas inventories as a starting point for their planning, and emission categories do not map easily onto forest-risk commodities, or supply chains more generally (UNFCCC, 2015b). The NDCs of Indonesia and Malaysia do not mention plans to curb

emissions from palm oil (Government of Malaysia, 2015; Republic of Indonesia, 2015), nor does Brazil's INDC directly address soy or beef (Federative Republic of Brazil, 2015). It does however mention forest law enforcement, underlining Brazil's target of zero illegal deforestation (Federative Republic of Brazil, 2015). More generally, the vast majority of REDD+ strategies demand more work on stakeholder involvement, clarification of tenure and land rights, and reform of policy and governance (Salvini *et al.*, 2014).

There has been a general lack of alignment between governmental and company pledges, even where these overlap (TFD, 2014). In some places, company initiatives may even counteract governmental targets. For example, the Government of Indonesia has strongly criticized the Indonesia Palm Oil Pledge, citing concerns about economic growth and possible adverse effects on small producers who could lose market access (Jong, 2015). In fact, governments and companies do not always collaborate effectively and zero-deforestation initiatives have been perceived as impinging on countries' authority in setting priorities for development. On the other hand, private-sector engagement has been used as an important instrument in the Brazilian deforestation reduction efforts through initiatives such as the Brazilian Soy Moratorium (Boucher, 2011; Phillips, 2010).

Figure 9: Typical role allocation and benefits of producers, commodity buyers, financial institutions and local government from zero-deforestation initiatives on a jurisdictional scale



Source: Ell (2015), Meyer and Miller (2015), Nepstad *et al.* (2014).

Recently, attention has focused on efforts on a jurisdictional scale, where zero-deforestation ambitions could integrate governmental and corporate targets. The Environmental Defense Fund has advocated setting up "zero-deforestation zones" and the Earth Innovation Institute proposes "territorial performance systems" (EII, 2015; Meyer and Miller, 2015; Nepstad *et al.*, 2014). Such closely aligned concepts foresee the public and private sectors entering into a broad agreement to work towards reducing deforestation within the low-risk jurisdiction, including a definition of performance metrics and financing, a commitment towards responsible resource use, regulatory easing and preferential access to markets and finance (Figure 9) Such an inclusive multi-stakeholder agreement underpins efforts to upgrade commodity value chains and is meant to ultimately allow both public and private sectors to achieve shared deforestation-reduction objectives.

Inclusive platforms for coordinating action are key to successful collaboration between private and public sectors

Shared zero-deforestation objectives between private and public sectors are an opportunity for improving forest governance, but examples of effective collaboration are rare. In many countries, the national legal and institutional framework for forest governance remains weak, including that covering tenure and land use. The policies of different sectors often lack coherence, and may even contradict each other (FAO, 2014). Expansion in the production of agricultural commodities is not always carefully managed to ensure that environmental concerns are respected alongside economic objectives. Current support for reducing deforestation, whether at the level of supply chains or through government action, is an important opportunity for improving overall forest governance. It is therefore surprising that there are few positive examples of effective collaboration between companies and governments, and that these have occurred almost exclusively in Brazil (*TFA 2020*, 2013; TFD, 2014). In most places, the private and public sectors continue to work independently of each other, wasting this opportunity for making zero deforestation a reality (Rainforest Alliance, 2015; Seymour, 2015; *TFA 2020*, 2013; TFD, 2014).

Inclusive platforms for coordinating action are key to successful collaboration between private and public sectors. Inclusive participatory platforms, such as round tables, bring governments and companies together with other stakeholders to formulate an agreement whereby all parties will work towards reducing deforestation within a specified low-deforestation-risk territory. These agreements should include details on responsibilities, performance indicators and financial means for implementation. Eventually, successful participatory platforms for zero-deforestation goals are able to localize a global goal and internalize the drivers for more sustainable landscapes.

8.

Conclusions

Zero-deforestation pledges have the potential to make a meaningful contribution to the global goal of halting deforestation. However, long-term results will depend on their capacity to extend sustainable standards and practices outside the supply chains. Although some progress has been achieved, deforestation and forest degradation continue at a high rate. Reducing deforestation would contribute to several other global initiatives for development, but although many national development plans include careful strategies for expanding the production of food and forest products, unplanned and illegal deforestation puts sustainable development at risk.

Lack of clarity and transparency in zero-deforestation concepts and definitions creates confusion about the impacts to be expected from commitments that diverse actors engage in. Zero-deforestation pledges all aim at reducing loss of forest cover but draw on different concepts of deforestation. Terms such as "deforestation free", "zero deforestation", "zero gross deforestation", "zero net deforestation" and "zero illegal deforestation" are often used interchangeably. Correct use of these terms has substantial implications for the stringency and feasibility of deforestation reduction targets. To a certain extent, the different zero-deforestation concepts reflect the objectives of the pledging organizations, and definitions need to adjust to the contexts and objectives of the zero-deforestation movement. Nonetheless, lack of precision creates confusion among those who commit to zero-deforestation pledges as well as those who aim to assess or implement them, compromising the movement.

Large-scale agribusiness, banks and consumer goods companies dominate supply-chain focused zero-deforestation initiatives, but only the producers, including local communities and smallholders, can change the production circumstances. Private-sector

commitments are mostly assumed by large-scale agribusiness, banks and consumer goods companies but their pledges are relevant for their entire supply chains. Producers shoulder much of the burden for meeting environmental requirements of pledges. And local communities and small producers are vulnerable to being cut out when supply chains reorient. The zero-deforestation pledges do not always devise programmes for introducing new sourcing strategies, and this omission needs to be addressed. Governments may have an important contribution to make here, particularly in safeguarding the interests of small producers.

Other than in Brazil, beyond individual supply chains, there is still little evidence on positive results of zero-deforestation commitments, and implementation efforts need to be stepped up. There is too little information available for companies to judge their progress. Moreover, many zero-deforestation pledges set targets to be achieved by 2020 or 2030, and, consequently, many companies have not yet reported publicly on their progress. Similarly, only a few governments have yet shown progress in reducing deforestation, but the New York Declaration on Forests, the SDGs and the Paris Agreement were adopted relatively recently. It seems plausible to conclude that the effectiveness of private-sector zero-deforestation pledges depends on the extent to which they can be supported by governmental action and foster a cooperative environment with the engagement of all stakeholders. Where the pledges are coordinated with regulation, multi-stakeholder dialogues and technical and financial support, a true paradigm shift becomes possible. Many governments are still building the capacity to improve overall forest governance, but implementing ambitious international targets is likely to depend on technical and financial support that has not yet been mobilized.

The zero-deforestation initiatives have created a valuable opportunity to strengthen forest governance through closer collaboration between governments, the private sector and civil society. Sustainable and timely results rely on the capacity of such initiatives to establish collaborative action with multiple stakeholders, recognizing their different needs, providing support and feeding back the lessons learned. Whereas the private sector can be a catalyst and should be open to dialogue and collaboration with stakeholders outside a specific supply chain, governments play a fundamental role in providing leadership. They can harness the conditions for halting deforestation, along with the inclusion and upgrading of sustainability standards across commodity value chains. Governments, the private sector and civil society need to work together in multi-stakeholder partnerships to shape good land-use governance and advance sustainable development.

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The zero-deforestation initiatives have created a valuable opportunity to strengthen forest governance through closer collaboration between governments, the private sector and civil society. Sustainable and timely results rely on the capacity of such initiatives to establish collaborative action with multiple stakeholders, recognizing their different needs, providing support and feeding back the lessons learned. Whereas the private sector can be a catalyst and should be open to dialogue and collaboration with stakeholders outside a specific supply chain, governments play a fundamental role in providing leadership. They can harness the conditions for halting deforestation, along with the inclusion and upgrading of sustainability standards across commodity value chains. Governments, the private sector and civil society need to work together in multi-stakeholder partnerships to shape good land-use governance and advance sustainable development.

ISBN 978-92-5-130630-7

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I9927EN/1/06.18

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