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## The Role of the Private Sector in REDD+: the Case for Engagement and Options for Intervention

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### Key messages

- The private sector is a source of implementation, innovation and investment and is a key REDD+ stakeholder. Private sector engagement must be broadened to slow, halt and reverse forest loss.
- Two main private sector groups are relevant in the context of REDD+: a) those focused on producing verified emission reductions (VERs) and b) those involved in the supply chains of forest-risk commodities.
- There is no single demand or supply-side strategy that is a 'silver bullet' – interventions must be used in combination and must be mutually reinforcing in order to achieve the desired outcomes.
- Approaches for engagement fall into four categories: incentives, risk mitigation instruments, setting of minimum standards and enabling conditions.
- The UN-REDD Programme can assist partner countries in engaging the private sector through convening, catalyzing and the sharing of experience and lessons learned.

### Introduction

This brief aims to encourage public sector REDD+ planners and practitioners to engage with and mobilize the private sector through a range of possible interventions. It identifies relevant private sector actors, and outlines their potential role, in the context of REDD+. The brief makes the case for stronger engagement and considers various interventions that can alter the private sector's

impact on land use. It also outlines the forms of support that the UN-REDD Programme can provide to countries. The brief concludes with a series of case studies examining the potential of engaging with financial intermediaries to slow, halt and reverse forest loss<sup>2</sup> and forest degradation.

Reducing deforestation and forest degradation and restoring forests could bring significant benefits for livelihoods, climate

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and biodiversity. Economic progress and human well-being are dependent on healthy forest ecosystems, which provide shelter, food, jobs, medicine, water, climate regulation and energy to more than one billion people<sup>3</sup>.

Despite the tremendous value of standing forests<sup>4</sup>, and although there is some evidence of a decline in deforestation rates, the world's forested areas continue to decrease<sup>5</sup>. Forest-related activities are predominantly extractive and often involve conversion to other types of land use. Current levels of investment in sustainable management of global forests are low. This pattern of behaviour is intrinsically unsustainable, as it threatens four of the nine 'planetary boundaries', which are the non-negotiable conditions that humanity needs to respect and maintain in order to ensure favourable conditions for human civilization<sup>6</sup>: climate change, global freshwater use, land-system change, and biodiversity. The current development pathway also defies economic logic over longer time frames and at scale: it is estimated that the average benefits of halving deforestation exceed average costs by a factor of three<sup>7</sup>. REDD+ is a mechanism that can help society move off the unsustainable current development pathway<sup>8</sup>, while also reducing pressure on planetary boundaries. It represents an opportunity to contribute to a transition to a green economy and to align national development choices with vital global climate and biodiversity goals<sup>9</sup>.

In order for the opportunities presented by REDD+ to be realized, the private sector must be involved. Private sector actors have a fundamental role to play as designers, developers, operators and enablers of 'forest-friendly' initiatives at a variety of scales. Although private sector actors are significant agents of change, engagement with the private sector on REDD+ has been limited to date. This lack of engagement is due to a number of factors, including the slow pace of and uncertainty surrounding REDD+ negotiations under the United Nations Framework Convention on Climate Change (UNFCCC); political, economic and financial risks associated with this uncertainty; and a lack of common understanding over what REDD+ is and how best to slow, halt and reverse forest loss<sup>10</sup>.

## 1. What is the private sector?

There is huge diversity amongst private sector actors, and it is consequently challenging both to make meaningful generalizations about them and to conceptualize the private sector as a whole. The United Nations defines the private sector as including individual, for-profit, and commercial enterprises or businesses; business associations and coalitions as well as corporate philanthropic foundations<sup>11</sup>. Viewed through the lens of size, the private sector can range from the individual up to the largest multinational corporation employing millions of people. From the perspective of motivation, the private sector covers a wide spectrum, from those living a subsistence lifestyle to





highly profit-focused enterprises. It includes formal and informal sectors<sup>12</sup>, both foreign and domestic enterprises, and covers actors along the length of supply and value chains.

Given this level of diversity, it is necessary to specify the groups within the private sector that are relevant to REDD+. Two important private sector groups are those involved in the production and sale of VERs and those linked to the drivers of deforestation and degradation<sup>13</sup>.

- The first group consists of actors who are involved in the production and sale of VERs, which can be sold to interested parties who purchase them either voluntarily or due to regulatory obligations. This group can include project developers, technical service providers, financiers and VER buyers. Reported VER transactions in 2011 totalled US\$237 million linked to the reduction of 26 MtCO<sub>2</sub>e<sup>14</sup>. These VERs came from a variety of afforestation/ reforestation (Clean Development Mechanism A/R), REDD+, improved forestry management and agro-forestry projects and programmes.
- The second category comprises private sector actors associated with drivers of deforestation and forest degradation<sup>15</sup>, the single largest of which is the production and supply chains of agricultural commodities<sup>16</sup>. Actors in this category can include producers of raw materials, suppliers, manufacturers, traders, retailers, consumers, financiers and technical service providers.

There is considerable variation within this category. In parts of Latin America, the large-scale actors in commercial

agriculture who produce goods for export, often using funds raised in international capital markets, are significant drivers of deforestation and degradation. This contrasts with the situation in parts of the Congo Basin, where forest loss is largely driven by small-scale and subsistence producers selling goods such as charcoal in the local market, generally with little requirement for finance<sup>17</sup>. This private sector category is also orders of magnitude larger than the category of those involved in the production and sale of VERs. The estimated annual producer values for palm oil, beef and soy were US\$31 billion, 14 billion and 47 billion, respectively in 2011<sup>18</sup>. The few efforts to engage the private sector in the context of REDD+ have generally been directed at the first group of actors, while the potential of engaging the second group to achieve REDD+ remains underexplored.

These two groups are very important to the success of REDD+, but it should be noted that this grouping is simplistic and does not cover every relevant private sector actor. For example, private sector actors involved in harvesting non-timber forest goods can be important forest stewards who do not drive forest loss and do not fall neatly into either of the above categories.

From a macro perspective, economic development needs to decouple from forest resource consumption in order for REDD+ to succeed. A new paradigm is needed, which will involve economic and development choices different to those made by other countries in the past. It will involve the expansion of a new, non-extractive, low-carbon economy outside the forest that will not only have environmental sustainability at its core, but will



also be economically, socially and politically viable. A vast array of private sector actors will play an important role in creating this new paradigm.

## 2. Why is the private sector important in REDD+ planning and implementation?

Historically, deforestation and forest degradation have been intrinsically linked to economic development. Over the course of the last century, the highest rates of deforestation and degradation have shifted from temperate climates to the tropics<sup>19</sup>. This shift has affected many highly biodiverse, carbon-rich forests in developing countries, on which many of the world's poorest people rely for their livelihoods.

The geographic shift in forest loss has been accompanied by the rise of the global market economy. This transition has afforded the private sector greater freedom in making decisions about the use of land and has increased the significance of their decisions on forests. Increases in global population and wealth, combined with shifting food and fuel consumption patterns indicate that pressures on land will intensify over the coming decades<sup>20</sup>. These pressures could be compounded by factors such as structural changes to the hydrological cycle<sup>21</sup> and continued land degradation<sup>22</sup>.

Although some sections of the private sector are currently driving deforestation and degradation in many parts of the world, both they and other private sector actors are also an important part of the solution<sup>23</sup>. Specifically, the private sector can contribute to REDD+ in three key areas: innovation, investment and implementation.

- **Innovation:** One of the key attributes of the private sector is the development and deployment of new technologies and innovations. Commercial enterprises must respond to market pressures and need to stay competitive in an evolving environmental, legal, regulatory and fiscal landscape. They do this by incorporating new systems, knowledge, technologies and practices into their operations to boost efficiency, productivity and profits. These skills and capabilities will be needed to decouple growth from resource consumption and environmental degradation.
- **Investment:** The transition to a green economy will require structural changes to current and future investment patterns. The UNEP Green Economy report suggests that an average annual *additional* investment of US\$40 billion will be required to halve global deforestation by 2030 and to increase reforestation and afforestation by 140 per cent by 2050, relative to business as usual<sup>24</sup>. Given the current





strained state of public finances globally, in the wake of several financial crises, private sector capital will be essential to meeting this requirement.

- **Implementation:** Innovation and investment require various forms of implementation to bring about results on the ground. Ultimately, as the largest terrestrial land users, the private sector will be heavily involved in activities on the ground required to transition to a green economy.

In order for the private sector's potential to be unlocked, the current paradigm needs to change, and major structural issues need to be addressed. Market signals that can be influenced by subsidies, taxation, pricing, regulation and land tenure issues often contribute to making deforestation a profitable activity<sup>25</sup>. Ensuring that this new paradigm is efficient, effective and equitable will require thorough coordination and collaboration between the public sector, private sector and civil society.

### 3. Engaging the private sector in REDD+

The private sector can be engaged and further involved in REDD+ through a variety of interventions and activities. These will vary depending on national circumstances, as well as on the nature of the private sector in a particular country. The process of engagement can have various phases, which can include stakeholder identification, information sharing, consultation and partnership building<sup>26</sup>. Engagement is vital, as it not only ensures wide-ranging acceptance and interest in REDD+, but also builds

trust and supports stakeholders' capacity to participate and deliver REDD+ in a meaningful and effective way.

Direct private sector involvement in REDD+ to date has been limited and has related largely to the voluntary carbon markets. Nevertheless, experiences have been accrued in engaging the private sector in related activities, such as certification initiatives, commodity roundtables and moratoria, all of which can potentially help reduce deforestation and forest degradation.

National REDD+ strategies will have repercussions on a large segment of the private sector, with considerable potential implications for direct and indirect land users. Engagement will, therefore, need to be more comprehensive than it currently is in order to reflect the heterogeneity of the private sector's activities beyond carbon markets. Broad engagement of the private sector is important during the development of the strategy and also at the policy design phase in order to ensure that efficient and effective social, financial, economic and political mechanisms are in place to slow, halt and reverse forest loss.

The UN-REDD Programme can leverage the UN's neutrality in facilitating, promoting and supporting REDD+ policy dialogue. It can support REDD+ countries in engaging the private sector through the creation of national stakeholder dialogues, and also support existing in-country initiatives in contributing to the development of mutually acceptable frameworks for REDD+ progress. The UN-REDD Programme can provide expertise in a diverse range of relevant fields and mobilize national and

international experts to enhance capacity development. This support will contribute to the development of practical strategies to slow, halt and reverse forest loss.

#### 4. Influencing the behaviour of the private sector – different types of interventions

Interventions that alter the private sector's impact on land use can range from the implementation of policies to the creation of financial instruments, development of certification schemes and other interventions of a voluntary nature. These interventions influence behaviour through varying degrees of legality, price and awareness<sup>27</sup>.

##### 4.1 Public sector interventions

Public sector interventions are necessary to address the market, policy and governance failures that are a significant contributing factor to global deforestation and forest degradation<sup>28</sup>. Public sector interventions that influence private sector behaviour can be grouped into several broad approaches, within which a variety of tools exist that can be employed. As with any complex problem, there is no single optimum set of policy interventions, and the effectiveness of interventions will be contingent on the extent to which they can be successfully adapted to the local context. The four broad approaches are:

- **Incentives:** Incentive mechanisms can be either positive or negative. Incentives are used to steer behaviour, but ultimately leave the decision to the actor being influenced. Examples of interventions that incentivize forest-friendly behaviour include: i) non-financial incentives, such as the clarification of land tenure and granting clear rights over use of the land<sup>29</sup>; and ii) financial incentives, which can take the form of upfront payments, such as grants or taxation, or results-based payments, such as payments for environmental services, which might include carbon.
- **Risk mitigation instruments:** Often provided by the international community on developmental or environmental grounds in the context of official development assistance or international climate finance. In the absence of more comprehensive economy-wide reform (see 'enabling conditions' below), these strategic tools can be used to reduce or share risks related to specific activities. Examples of these instruments include financial, commercial and political risk insurance, guarantees and other instruments that mitigate risk<sup>30</sup>.
- **Minimum standards of behaviour:** These can be applied in a wide range of scenarios to prevent unsustainable practices. They can be applied to land, as when developed under a moratorium or the Forest Codes in many countries; to information, as via mandatory







standards for labelling and reporting; to trade, as via the Lacey Act; and to finance, through financial regulation or through social and environmental criteria set out by organizations such as the UN-REDD Programme, the UNFCCC or the International Finance Corporation.

- **Enabling conditions:** Risk mitigation solutions – as described above – are short-term solutions to attract investment and build confidence. In the long-term, however, only national governments can implement the more fundamental reform processes in political, legal, economic and societal structures that will address the underlying drivers of the relevant risk categories. This suite of structural – rather than strategic – interventions can include institutional reform and capacity building, investments in research and infrastructure development, increased coordination between government ministries and agencies, creation of effective information systems, investment in education, sound legal framework, increasing transparency through reporting and accounting frameworks, law enforcement capacity, clear signs of strong political will and stakeholder consultation<sup>31</sup>.

## 4.2 Demand and supply side interventions

Although attempts to label all interventions discretely can be challenging, another way of categorizing private sector interventions is to contrast demand-side with supply-side measures. Demand-side measures refer to measures taken where a commodity is being used or consumed, and supply-side

measures refer to those taken where a commodity is produced. As with many complex problems, these measures are less effective in isolation, and positive outcomes are more likely where combinations of mutually reinforcing policies are used<sup>32</sup>.

- **Demand-side interventions:** Can range from strategies involving coercion (law) to those involving persuasion (campaigns)<sup>33</sup>. They cannot directly impact land use governance, but can create signals that shape the production and trade of forest-risk commodities. Legislation has been increasing in the timber sector: the Lacey Act in the US, the Australian Illegal Logging Prohibition Bill and the EU Timber Regulation all ban the import of illegally harvested timber. The public sector can also employ non-legislative measures to alter demand, such as procurement policies on legal or sustainable wood products, which are being used by several European governments. Segments of the private sector can also play a role in demand-side measures. This might include consumers demanding the use of commodity certification standards (e.g., Forest Stewardship Council for timber, Roundtable on Responsible Soy Association for soy, Roundtable on Sustainable Palm Oil for palm oil), voluntary pledges on either an international level, such as the Consumer Goods Forum pledging to achieve zero net deforestation by 2020<sup>34</sup>, or on a national level, such as the 2,800 member Brazilian Association of Supermarkets banning the sale of beef from illegally cleared rainforest<sup>35</sup>, and voluntary disclosure initiatives such as the Forest Footprint Disclosure Project<sup>36</sup>.

- **Supply-side interventions:** These measures take place in forest countries and generally apply to the start of supply chains. Measures can be legal, such as clarifying conflicts and issues relating to land tenure, addressing bureaucratic barriers to change and clarifying conflicting or confusing regulations; technical, such as providing extension services and assistance to help farmers and producers shift to more sustainable production methods; spatial, such as landscape mapping and planning; financial, such as providing and increasing ease of access to grants, loans and investments or removing perverse incentives for activities leading to forest loss; informational, such as providing information on market and environmental trends to aid good decision-making; technological, such as distributing mobile payment systems or using mapping tools; or related to reforming governance and institutions and enhancing law enforcement that can reduce illegal activity.

These interventions need not, and often should not, happen in isolation. For example, measures introduced under Brazil's Action Plan for the Prevention and Control of Deforestation in the Legal Amazon include initiatives such as greater inter-ministerial coordination, real-time forest monitoring, expansion of protected territories, prioritization of specific high-risk municipalities for

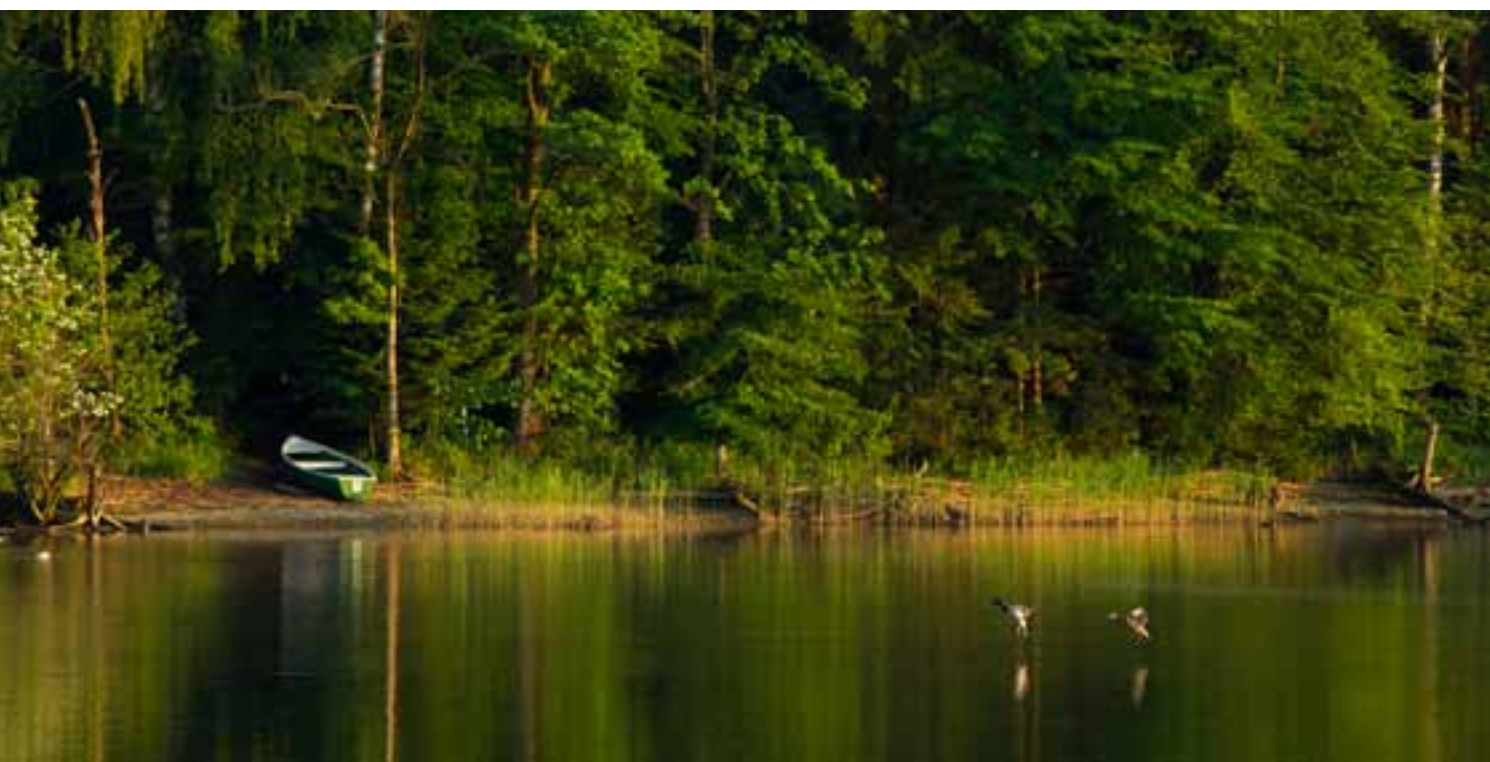
stricter measures, revision of environmental legislation and a rural credit policy linked to environmental compliance. Platforms such as UNDP's Green Commodities Facility are another means to combine many of these elements at the national level<sup>37</sup>. UNDP's involvement with the Indonesian Sustainable Palm Oil Initiative is a practical example of stakeholder engagement around a forest-risk commodity at country level<sup>38</sup>.

## 5. The potential role of financial intermediaries in addressing the drivers of deforestation and degradation

Financial intermediaries (FIs) fulfil a range of functions which are necessary in order for large segments of the private sector to operate (including both of the categories described above)<sup>39</sup>. FIs are critical to the functioning of most of the global commodity supply chains driving deforestation and forest degradation. Many physical activities related to land use, such as growing, harvesting or trading, usually require one or more enabling financial transactions. As such, changes in the way in which FIs operate, as well as changes in their lending policies and investment and underwriting decisions, can have a high degree of influence over the behaviour of private actors at the length of different global commodity supply chains.







The following examples illustrate different ways in which FIs can contribute to slowing, halting and reversing forest loss by influencing private sector behaviour.

### **Banks**

A primary role that banks play is lending money to customers, or 'providing credit'. There are a wide range of other services that banks provide that might impact behaviour, such as conducting research on companies, helping enterprises raise money on capital markets and advisory services. The following two case studies are examples of the different ways in which banks can directly or indirectly influence behaviour:

- Rural lending policies in the Brazilian Amazon (minimum standards of behaviour)<sup>40</sup>: Brazilian deforestation rates fell significantly in the Amazon in the second half of the 2000s, from a peak of 27,000 km<sup>2</sup> in 2004 to 5,000 km<sup>2</sup> in 2011<sup>41</sup>. Two possible explanations for this are that falling agricultural commodity prices may have inhibited the clearing of forest areas for the expansion of farmland or that conservation policies that were introduced after 2004 were successful. Analysis by the Climate Policy Initiative (CPI) indicates that policies introduced to achieve conservation outcomes accounted for roughly half the reduction of deforestation.

One of the policies introduced in 2008 was the Brazilian Central Bank Resolution 3545. This placed an obligation

on rural borrowers in the Amazon biome to produce proof of compliance with environmental regulations. Rural borrowing or credit is a key mechanism to support agriculture in Brazil, and the Ministry of Agriculture estimates that approximately 30 per cent of a farmer's resources in a typical harvest year come from rural borrowing. CPI analysis of the policy found that it was most effective in areas where cattle ranching, rather than crop production, dominate. An estimated BRL2.9 billion (US\$1.4 billion) in rural credit was not contracted in the 2008 through 2011 period due to the restrictions imposed by Resolution 3545. This prevented roughly 2,700 km<sup>2</sup> from being deforested which equates to a 15 per cent reduction in deforestation over the observation period.

- United States Agency for International Development (USAID) loan guarantee programme (risk mitigation instrument)<sup>42</sup>: The Development Credit Authority (DCA) of USAID provides loan guarantees to encourage risk-averse financial institutions to lend to creditworthy but underserved borrowers in developing countries. The scheme has been running since 1999 and has facilitated over US\$2.3 billion of private finance through 200 local financial institutions in 64 countries. The loan guarantees can cover up to 50 per cent of the potential loss to which local bank or investor is exposed, subject to strict social and environmental criteria.

The guarantees can cover an individual loan or a portfolio of loans and have a considerable leveraging effect, helping to unlock private sector investment in order to stimulate development objectives. Since the DCA programme started in 1999, there has been an average of US\$28 of private sector funds mobilized for every dollar spent by the US government. Although the DCA already focuses, among other things, on agriculture, it is not used for REDD+. This appropriateness of the DCA for REDD+ funds deserves further examination. Loan guarantee programmes could help increase the supply of credit to key economic sectors where access to funds is one of the barriers preventing a transition to more sustainable production<sup>43</sup>.

### **Institutional investors**

Institutional investors are the ultimate owners of a large proportion of the equity of publicly listed companies. As such, their investment decisions and ownership practices can have a high degree of influence over the behaviour of the companies they own and invest in. The case study below shows how institutional investors can drive corporate change.

- Palm oil investments from Norway's Government Pension Fund Global (GPF) <sup>44</sup>: the Sovereign Wealth Fund in Norway, referred to as the GPF, is one of the largest in the world. Two Norwegian non-governmental organizations, Rainforest Foundation Norway and Friends of the Earth Norway, recently lobbied the GPF to reduce its investments in companies within sensitive sectors that can contribute to forest loss, such as palm oil in Borneo and beef production in the Amazon. The 2012 GPF annual report states that deforestation is now an explicit component of the fund's social and environmental risk management strategy. As a result of this new policy, GPF divested from around US\$300 million of equity investments in 23 companies that it considered were producing palm oil unsustainably. This sends a strong message to both the palm oil sector and other investors that the managers of the vast sums of institutional finance are expecting increasingly higher standards in terms of social and environmental safeguards, and that business models predicated on forest loss are unacceptable to responsible investors.

### **Conclusion**

A shift to a green economy is the only long-term sustainable development trajectory; business-as-usual is simply not a viable option. REDD+ is a critical part of the green economy, and the engagement and involvement of the private sector is a pre-condition for REDD+ to succeed. If comprehensive engagement is not prioritized, there is a high probability that social, financial, economic and political mechanisms designed to reduce forest loss will be ineffective, wasting valuable time along with scarce human, political and financial capital.

The UN-REDD Programme is committed to helping REDD+ countries engage with key stakeholders, including the private sector. It can play a convening and catalyzing role to ensure that trust and consensus are built alongside capacity and knowledge. The UN-REDD Programme is engaging the private sector through national stakeholder dialogues in a number of pilot countries and through regional and global events; and it will continue to assist UN-REDD partner countries in bridging the 'perspective gap' that exists between the private sector and other actors in REDD+.



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## Endnotes

<sup>1</sup> REDD+ stands for Reducing Emissions from Deforestation and forest Degradation; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.

<sup>2</sup> The term 'forest loss' will hereafter be used to refer to both deforestation and forest degradation.

<sup>3</sup> UNEP. 2011. Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication.

<sup>4</sup> Despite the degree of uncertainty over the value of forest ecosystem services, conservative estimates tend to be measured in trillions of US dollars (UNEP 2011). Under current accounting frameworks, these values and services are not captured in national accounting systems. However, FAO indicates that values and services that can be measured in monetary terms are significant. The forest industry in 2006 contributed approximately US\$468 billion or one per cent of global gross value added to global gross domestic product. FAO. 2009. State of the world's forests 2009.

<sup>5</sup> FAO. 2010. Global Resources Assessment.

<sup>6</sup> Rockström, J et al. 2009. *Planetary boundaries: exploring the safe operating space for humanity*. Ecology and Society 14 (2): 32.

<sup>7</sup> Eliasch, J. 2008. The Eliasch Review - climate change: Financing global forests.

<sup>8</sup> For instance, a study by the TEEB for Business Coalition indicates that cattle ranching and farming in South America generates revenues of US\$16.6 billion while it has a cost on natural capital of US\$312.1 billion. Trucost. 2013. Natural Capital at Risk: The Top 100 Externalities of Business.

<sup>9</sup> UNEP defines a green economy as one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. It is low carbon, resource efficient and socially inclusive. UNEP. 2011. Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication.

<sup>10</sup> International Sustainability Unit. 2012. Interim REDD+ Finance, Current Status and Ways Forward for 2013-2020.

<sup>11</sup> United Nations. 2009. Guidelines on Cooperation between the United Nations and the Private Sector.

<sup>12</sup> For a definition of the informal sector, see the ICLS. 2003. Guidelines concerning a statistical definition of informal employment.

<sup>13</sup> These two broad groups are not mutually exclusive - a farmer could be simultaneously addressing drivers of deforestation and also implementing activities that produce verified emission reductions for example.

<sup>14</sup> Ecosystem Marketplace. 2012. State of the Forest Carbon Markets 2012: Leveraging the Landscape.

<sup>15</sup> These are the activities that lead to forest loss.

<sup>16</sup> Agriculture is estimated to be the proximate driver for about 80 per cent of deforestation worldwide (Kissinger et al. 2012). Soya, palm oil and cattle are key commodities driving forest loss within agriculture but other sectors outside agriculture such as mining and construction are important drivers of deforestation too. Kissinger et al. 2012. Drivers of Deforestation and Forest Degradation: A Synthesis Report for REDD+ Policy Makers.

<sup>17</sup> The value of goods generated by many small-scale producers can be considerable. For example, the charcoal manufacturing sector in the Democratic Republic of the Congo is estimated to generate annual revenue in excess of US\$1 billion. Debroux, L. et al. 2007. Forests in post-conflict Democratic Republic of Congo: Analysis of a priority agenda.

<sup>18</sup> Global Canopy Programme. 2012. The Little Forest Finance Book.

<sup>19</sup> FAO. 2012. State of the World's Forests 2012.

<sup>20</sup> UNEP. 2011. Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication.

<sup>21</sup> Bates et al. 2008. Climate Change and Water. Technical Paper of the Intergovernmental Panel on Climate Change, IPCC Secretariat.

<sup>22</sup> UNEP. 2012. Fifth Global Environment Outlook (GEO-5): Summary for Policy Makers.

<sup>23</sup> Between 300 and 500 companies control roughly 70 per cent of the supply chains of 15 of the major commodities globally and can, therefore, exert varying degrees of influence on how these supply chains operate. WWF. 2012. Better Production for a Living Planet.

<sup>24</sup> UNEP. 2011. Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication.

<sup>25</sup> TEEB. 2010. The Economics of Ecosystems and Biodiversity: Mainstreaming the Economics of Nature: A synthesis of the approach, conclusions and recommendations of TEEB.



<sup>26</sup> CIF Learning. 2013. Incentivizing the Involvement of the Private Sector in REDD+.

<sup>27</sup> For a full discussion on the possible range of interventions and their scope see Whitley, S. 2013. At cross-purposes: subsidies and climate compatible investment.

<sup>28</sup> Kissinger et al. 2012. Drivers of Deforestation and Forest Degradation: A Synthesis Report for REDD+ Policy Makers. For a full discussion on the need for public intervention see Creed, A. 2013. Halting and Reversing Forest Loss at Jurisdictional Scale: How Interim Climate Finance can Incentivise the Private Sector.

<sup>29</sup> The granting of rights over land could also be viewed as an enabling condition.

<sup>30</sup> For more information on different risk mitigation products, see Chapter 4 of The Forest Investment Report by Gaines and Grayson. 2009. Forum for the Future.

<sup>31</sup> Kissinger et al. 2012. Drivers of Deforestation and Forest Degradation: A Synthesis Report for REDD+ Policy Makers.

<sup>32</sup> It should be noted there are challenges associated with measuring the effectiveness of an intervention. This can be due to the lack of empirical evidence and the potential for leakage (or displacement) to another region.

<sup>33</sup> IIED. 2013. Demand-side interventions to reduce deforestation and forest degradation.

<sup>34</sup> The Consumer Goods Forum is a high-level global industry network consisting of over 400 retailers, manufacturers, service providers and other stakeholders with combined sales of EUR2.5 trillion.

<sup>35</sup> For more information see: [www.abras.com.br/supermercadosustentavel/seguranca-alimentar/carne/ministerio-publico-federal-e-abras-assinam-termo-de-cooperacao-tecnica-pela-pecuaria-sustentavel/](http://www.abras.com.br/supermercadosustentavel/seguranca-alimentar/carne/ministerio-publico-federal-e-abras-assinam-termo-de-cooperacao-tecnica-pela-pecuaria-sustentavel/)

<sup>36</sup> The Forest Footprint Disclosure Project merged with the Carbon Disclosure Project in February 2013.

<sup>37</sup> For more on UNDP's Green Commodities Facility, see: [www.greencommodities.org/](http://www.greencommodities.org/)

<sup>38</sup> For more on the Indonesian Sustainable Palm Oil Initiative, see: [www.undp.or.id/press/view.asp?FileID=20121220-1&lang=en](http://www.undp.or.id/press/view.asp?FileID=20121220-1&lang=en)

<sup>39</sup> Although FIs prefer exposure to activities at a scale where the risks can be clearly assessed, this is not inconsistent with large-scale national REDD+ programmes. For a full discussion see International Sustainability Unit. 2012. REDD+ and the Agricultural Drivers of Deforestation.

<sup>40</sup> Material for this case study is taken from Climate Policy Initiative paper. 2013. Does Credit Affect Deforestation? Evidence from a Rural Credit Policy in the Brazilian Amazon.

<sup>41</sup> For the official data, see: [www.obt.inpe.br/prodes/index.php](http://www.obt.inpe.br/prodes/index.php)

<sup>42</sup> For more on the USAID Development Credit Authority, see: [www.usaid.gov/dca/dca-impact-brief](http://www.usaid.gov/dca/dca-impact-brief)

<sup>43</sup> For case studies on where the access to funding is part of the barrier to a more sustainable method of production, see International Sustainability Unit. 2012. REDD+ and the Agricultural Drivers of Deforestation.

<sup>44</sup> Material for this case study is taken from Rainforest Foundation Norway. 2013. Beauty and the Beast. Norway's investments in rainforest protection and rainforest destruction.

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PROGRAMME



The United Nations Collaborative Programme  
on Reducing Emissions from Deforestation and  
Forest Degradation in Developing Countries