

Bridges Trade



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Trading Forests

Taking stock of trade and the planet's woodlands in the International Year of Forests

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Editorial

Forests provide vital resources to humanity, both directly in the form of timber and non-timber products and indirectly in the form of ecosystem services, such as biodiversity, carbon storage, and soil and watershed management. But pressure on forests has increased dramatically in recent decades, due not only to timber harvesting but, increasingly, to land conversion for producing food, feed, and bio-fuel for a growing global population. Trade is a driving force behind the forest sector, but unless the right laws and policies are in place – and effectively enforced – the sustainable potential imbued in the world's forests will never be realised.

This issue of BioRes Review explores some of the issues underlying trade and sustainable development in the forest sector. It addresses global policy issues at a general level, and focuses on the palm oil industry as a special case. Through this lens, the complex relationship between global trade, deforestation, and land use change, along with the policy framework at various levels and the role of important stakeholders, is uncovered.

Saskia Ozinga of FERN delves into the comprehensive agreements that the EU is tying with important timber-producing countries to ensure that timber imports have been legally harvested and do not drive deforestation.

Turning to a specific case, several articles in this issue explore aspects of trade and sustainability in Southeast Asian forests. While the rapid growth and development of the palm oil industry has been a major economic force in the region, it has also been responsible for a massive loss of forest coverage and peatlands. Despite the best intentions, the economic, development, and environmental pressures at work in the region can often end up at odds with one another.

Abigail Hunter, a graduate student specialising in international trade, takes a broad look at the palm oil sector and delves into approaches being taken to make the US\$30 billion industry more sustainable.

Hans Brattskar, director of Norway's International Climate and Forest Initiative, then outlines a groundbreaking Norwegian initiative to support the Indonesian government's implementation of policies and institutions directed at protecting forests and peatlands.

Next, in an interview, Denis Ruyschaert of PanEco Foundation talks about current drivers of deforestation as they relate to globally-traded palm oil, as well as providing nuance to the various initiatives established to address the issue. He contends that it is possible to reverse deforestation trends while increasing palm oil production, but that doing so would require a major change to the current business model.

Ahmad Maryudi, a lecturer at Gadjah Mada University in Yogyakarta, Indonesia, discusses the Indonesian palm sector in the context of the two-year freeze on new forest conversion permits. He suggests that despite the moratorium, the industry has already secured access to land and is well positioned for expansion.

We then feature our second Rio+20 briefing in our trade and sustainable development series, paving the way for next year's Earth Summit. In this issue, we highlight the work of some IGOs and NGOs on the forest sector in the context of the green economy.

Finally, WWF provides an overview of sustainability issues in the forest sector – including the role of trade – and concludes the issue by calling for tough discussions on how to ensure the world's forests remain standing for the benefit of future generations.

We hope you enjoy the issue!

EU forestry partnerships: Rethinking timber trade agreements

By Saskia Ozinga

Through its voluntary partnership agreements with timber producing countries, the EU has established a new trade mechanism set to steer countries towards sustainable forestry practices. The comprehensive approach taken to good governance has yielded positive societal and environmental outcomes. Current initiatives under the climate regimes focusing more narrowly on forest carbon threaten to undo some of these. However, the voluntary partnership process could provide valuable lessons for forestry initiatives under the climate regime.

Although passing relatively unnoticed, the EU presented a revolutionary approach to negotiate trade agreements eight years ago. This approach was contained in the 2003 EU FLEGT Action Plan. FLEGT stands for Forest Law Enforcement, Governance and Trade while the EU FLEGT Action Plan sets out a range of measures that aim to combat the problem of illegal logging, including government procurement policies, financial due diligence and a regulation to control the sale of illegal timber. The FLEGT Programme aims to control illegal logging by improving governance in the forestry sector in producer countries and strengthening the role of civil society actors and tenure rights of local communities. Voluntary partnership agreements (VPAs) are legally binding trade agreements between the EU and timber producing countries and form the central plank of the EU's fast growing FLEGT Programme. Liberia was the sixth country to sign a VPA with the EU in May 2011, following Ghana, Cameroon, the Republic of Congo, Central African Republic and Indonesia. The six agreements concluded to date now cover a forest area of 168 million hectares and could positively impact the lives of over 100 million forest peoples.

A truly multi-stakeholder process

The multi-stakeholder nature of the FLEGT VPAs is what makes them unique. VPAs set out actions the EU and timber-exporting countries need to take to tackle illegal logging, including measures to increase participation of non-state actors, to recognise tenure rights of communities and to address corruption. Although a VPA is negotiated by two parties – the EU on behalf of its Member States and the government of the timber exporting country concerned – it is understood by both negotiating parties that VPAs must have the approval of national stakeholders, including NGOs, forest dependent communities, indigenous peoples and the timber industry. The six VPAs concluded to date have been developed through multi-stakeholder processes with the timber industry, environmental and social NGOs all around the table. In all African countries, this was the first time that a legally binding trade agreement had been entered into with the full support of civil society actors as well as the timber industry. In Liberia, local communities from most counties were directly represented in the negotiations by elected community representatives.

A VPA includes three key steps: A) Defining legality, or deciding which laws impact on forest use and trade and will be enforced for the implementation of the agreement, laid down in a legal definition. B) Developing a Legality Assurance System (LAS) that includes timber tracking, government legality controls, licensing plus systems to verify the legality of the timber. C) Independent audits of the whole system, to ensure credibility of the export licenses. In some countries the independent audit is further strengthened by an independent monitor. In addition, the last countries that have signed the agreement (RoC, Indonesia and Liberia) have foreseen a clear role of civil society organisations in monitoring the implementation of the agreement.

The geographical scope of the VPAs

Six voluntary partnership agreements (VPAs) between the EU and timber producing countries have now been finalised and are in different stages of the ratification process, as mentioned above. Four more agreements with Democratic Republic of Congo (DRC), Malaysia, Gabon and Vietnam are under negotiation. Because the 2010

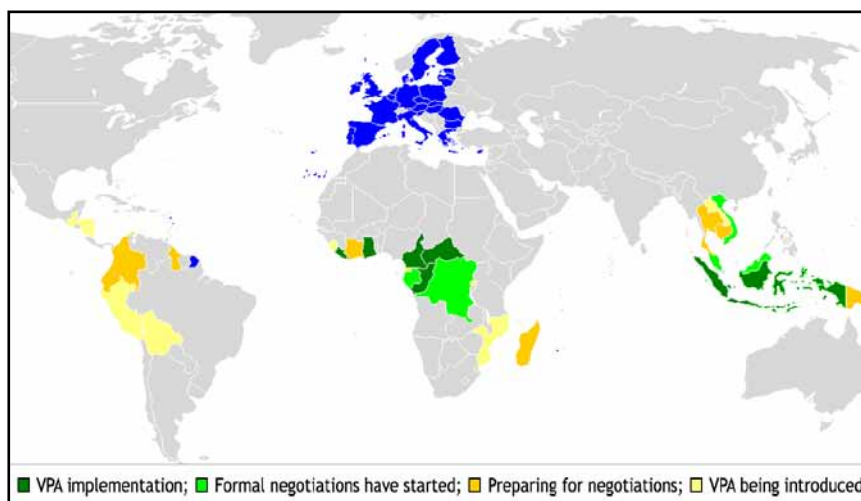
Once a VPA has been signed and a LAS is in place, the EU will ban all non-licensed imports from that country. However, although six VPAs have been signed - requiring each country to ensure that all exports and domestic production are legally sourced - there is no operational LAS in place yet. The first FLEGT-licensed timber is expected to arrive in the EU in 2012.

The LAS under development in all six countries that have signed a VPA will include not only exports to the EU but all exports, as well as all timber sold on the domestic market.¹ Therefore, although exports to non-EU countries may not be licensed - as the FLEGT license is not yet accepted outside the EU - they will have gone through a LAS and therefore should provide guarantee of legality. It would therefore be wise for the US to accept the FLEGT license as proof of legality under its own legislation addressing illegal logging: the US Lacey Act. The scope of products covered by the VPAs' LAS differs per country and is specified in the VPA. In all cases the scope is very wide and includes in most cases all timber and timber products sold, including in the case of Liberia rubberwood from agricultural plantations and, in some countries, fuelwood as well.

The VPA process has the capacity to bring about real improvements in forest governance since it addresses some of the underlying and direct causes of illegal logging that result from a lack of good governance. By remedying core governance failures, FLEGT VPAs can also bring about improvements in the way that citizens participate in policy-making and implementation as well as their ability to hold their governments accountable. Most resource rich countries face serious problems to ensure that the benefits fall to the local people because of lack of transparency - corruption, lack of accountability, lack of capacity and lack of coherence and coordination that are all symptoms of bad governance. If implemented properly, the VPA could contribute to important governance improvements. In fact, during the VPA negotiation process, governance in the forestry sector in the first six countries has improved due to increased transparency.

capacity building and participation of civil society actors and communities involved in negotiation of the agreement.

There are clear limits to FLEGT VPAs. First, they only relate to the forestry sector, while other sectors (agriculture, mining, carbon, etc) in some countries form a much bigger threat to the forest resource and lives of local communities. Second, these are early days. No FLEGT timber is yet on the market and the gains made during negotiation could still easily be lost during implementation if the political situation changes or the government, civil society actors or timber traders give up on proper implementation. Third, the FLEGT and forests in general face serious threats due to the 'carbon' focus of the climate discussions.



Attention on forests peaked at the 16th Conference of Parties of the United Nations Framework Convention on Climate Change (UNFCCC), with the Cancun Agreements establishing a REDD+ mechanism, supposedly designed to reverse deforestation trends and to halt forest cover loss.² The need to keep forests standing has never been more urgent than it is

now. However, as FLEGT advances, so do national plans to reduce emissions from deforestation and forest degradation (REDD). Despite the lack of an international framework to define REDD, Northern governments are committing money to the process and international institutions such as the World Bank are pushing through national-level REDD plans. A recent study by FERN, an NGO working on forest and sustainability issues, and Forest Peoples Programme (FPP) - "Smoke and Mirrors" - shows that these REDD activities are not likely to lead to improved forest governance as they are not based on truly participatory stakeholder processes, re-affirm state ownership of land, strengthen international NGOs over local NGOs, and focus on counting carbon rather than on addressing the underlying causes of deforestation.³ These developments therefore need to be closely monitored to ensure forests are being well managed or preserved, and rights recognised. In virtually all countries that form part of the VPA process, national level REDD processes have undermined the inclusive participatory process that is the hallmark of FLEGT, and hence the future of REDD in terms of impacts to improve forest governance does not look bright. It is therefore not surprising that civil society actors from Liberia to Congo call upon the donor community to ensure that any REDD process builds on existing FLEGT processes. To date, their calls have not been adhered to, however,

3 Smoke and Mirrors: a critical assessment of the Forest Carbon Partnership Facility

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Palm oil: Firmly planted at the crossroads of trade and sustainable development

By Abigail Hunter

In the past 20 years, world demand for palm oil increased by over 120 percent. The upcoming decade is expected to see an even steeper growth as global population bulges, leading to unprecedented demand for food and fuel and an upward pressure on commodity prices.

The palm oil industry, which supplies the majority of traded vegetable oil and is a major feedstock for biodiesel, will be driven to produce. Pressure will mount on forests and peatland in palm oil cultivating countries seeking to increase areas under plantation to gain larger harvests.

Indonesia and Malaysia are the largest producers of palm oil in the world. The neighbours champion the market, delivering 86 percent of global supply. This market advantage has been a key factor contributing to deforestation and peatland destruction rates, which are among the highest in Southeast Asia.

While secondary producers such as Colombia, Ghana, Nigeria, Costa Rica, Guatemala and Honduras hold only fractional market shares, growing global demand means larger fractions for these developing nations. If production were to be developed in the same fashion as it was in Southeast Asia, the consequences for forest coverage would be dismal.

Palm cultivation not inherently destructive to forests

While oil palm expansion in Southeast Asia has meant vast deforestation and rapid destruction of peatland, such environmentally harmful practices do not have to be the norm.

Requiring the least amount of pesticides, fertilizers and fuel for cultivation and harvesting, natural oil palm produces five times more output per unit cultivated than any other oil bearing crop.

Of the 229 million hectares of oil crops planted in the world, only 12.2 million hectares are under oil palm cultivation. This implies that 5.3 percent of land devoted to growing oil seeds produces over half of total supply of vegetable oil. Examined in relation to its competitors – rapeseed, cotton, coconut, sunflower, groundnut, and soy – palm oil requires the fewest inputs to achieve the greatest quantity of output.

Because of lax policies and implementation in Southeast Asia thus far, oil palm growers were able to continuously expand their land with little concern for the destruction they were wreaking on habitats.

Thus, they established plantations by harvesting forested land for timber and funding plantings with the proceeds, or instead drained peatlands to grow palm on the nutrient-rich soil. These practices were financially beneficial for plantation operators, but destroyed natural forests, decimated biodiversity, and turned carbon sinks into massive carbon sources.

Overall, producers had greater incentive to expand land under cultivation instead of increasing productivity and crop yield on land already in use.

Palm oil capable of meeting mounting world demand

If appropriately developed, the productive palm oil sector is in a strong position vis-a-vis other vegetable oils in terms of meeting growing demand. The key would be to focus on increasing yields and confining expansion to existing agricultural land.

Neither Indonesian nor Malaysian palm oil producers hit peak potential in terms of yields, which average between 3.0 to 4.4 tonnes of oil per hectare. Productivity could however, rise to 8.6 tonnes per hectare under a best-case scenario.¹

New initiatives to protect forests and peatlands – such as the Norwegian-sponsored Forest Clearing Moratorium in Indonesia – will provide incentives for increasing productivity instead of expanding holdings, which could potentially double production capacity on current land.

However, according to the World Bank Group, productivity increases alone will not suffice and an estimated 6.3 million hectares of palm oil plantations will be needed.²

Studies show that areas once used for agriculture production, along with grasslands and kerangous heathlands, can host productive oil palm plantations.³ The Indonesian government

1 Teoh, Cheng Hai, 2010. "Key Sustainability Issues in the Palm Oil Sector," Discussion Paper for Multi-stakeholder Consultations commissioned by the World Bank Group.

2 World Bank Group, 31 March 2011. "The World Bank group Framework and IFC Strategy for Engagement in the Palm Oil Sector."

3 Fairhurst, T and McLaughlin, 2009. "Sustainable Oil Palm Develop-

Global demand to hit unprecedented heights

Palm oil is the most used vegetable oil in the world. Eighty percent of palm oil is traded as cooking oil, mostly to large, developing nations such as China, India and Pakistan. The oil also serves as an additive in many processed foods on supermarket shelves and as the oleochemical base in soaps, detergents and cosmetics. The most rapidly growing use for palm oil is, however, as a feedstock for biofuel.*

According to projections, 27.7 million additional tonnes of vegetable oil are needed annually by 2020 to meet the demands of a growing global population. Rising per capita consumption and biofuel initiatives in the EU and US add further pressure.

*Kline, Oladosu, Wolfe, Perlack, Dale, McMahon, Biofuel Feedstock Assessment for Selected Countries, US Department of Energy, February 2008.

has presented this fact, stressing that their needs for cropland expansion can be met on existing agricultural lands until 2020. The country is not expected to require an advance into degraded forests anytime before then to meet demands for palm oil expansion.⁴

New strategy

Increased yields and a focus on previously-used agricultural areas could cut the threat to forests if policies that encourage these forms of sustainable cultivation can be successfully employed.

On 1 April 2011, the World Bank Group lifted an 18 month moratorium on new investments in the global palm oil sector outlining a strategy to do just that: encourage increased productivity and incentivise production on degraded lands.

The World Bank Group Framework and International Finance Corporation (IFC) Strategy for Engagement in the Palm Oil Sector, developed through a multi-stakeholder process, sites socio-economic benefits that investment in palm cultivation holds for the six million people employed in the sector and other ground-level stakeholders. Smallholders, which represent 60 percent of total oil palm growers, would be one group of stakeholders to receive benefits.⁵

Investment geared towards smallholder productivity would support sustainable forest management. Currently, smallholders are the least efficient producers in the industry, with a yield 35 percent below average. The reasons for this are their lack of knowledge, technology and manpower to efficiently collect and transport harvested bunches to the mill. Strategic investment schemes could focus on their ability to plant, cultivate and collect fresh bunches of palm, as well as on the infrastructure and means for smallholders to get their product to mill for extraction within the recommended 24 hours after harvest, vastly increasing yields.

Under the restructured World Bank and IFC investment framework, the higher yields could provide a win-win solution for poverty reduction by driving up profits and supplying sustainable wages for smallholders, while also easing pressure on expansion into forested area.

Investment geared towards boosting production on degraded lands provides another example of indirect measures encouraging reduction in deforestation.

However, the strategy should be employed in a targeted fashion that matches the needs of individual producer countries; the role of institutions is key. The production environment in up-and-coming palm oil nations such as Colombia and Nigeria is different from that of Indonesia or Malaysia.

Effective monitoring and certification

While investment may encourage more sustainable practices, the new monitoring scheme set forth by the Roundtable on Sustainable Palm Oil (RSPO) can serve as a deterrent against unsustainable practices.

ment on Degraded Land in Kalimantan.” World Wildlife Foundation.
4 Saxon, E and Roquemore, S, June 2011. “The Root of the Problem: What’s driving tropical deforestation today?” *Chapter 6: Palm Oil*.
5 World Bank Group, 31 March 2011. “The World Bank group Framework and IFC Strategy for Engagement in the Palm Oil Sector.”

Founded in 2004 to develop and implement a certification standard for sustainable palm oil, the RSPO is a multi-stakeholder body created in response to growing global demand for greater accountability in the industry.

Its Certified Sustainable Palm Oil (CSPO) certification system was launched in 2009 and saw a 100 percent year-on-year growth from 2009-2010 with nine percent of globally-traded palm oil now certified. In Indonesia alone, CSPO certified palm oil has gone from 200,000 metric tonnes in 2009 to 1.2 million metric tonnes as of April 2011.

This move by large multinationals - such as Unilever and Walmart - to certify their products is the result of strong advocacy campaigns run by green groups such as Greenpeace and Friends of the Earth. These campaigns rallied the support of citizens and put global pressure on suppliers to prove that their products are not contributing to further destruction of forests and biodiversity.

Some parties remain sceptical of the RSPO’s effectiveness, given the powerful members of the palm oil producing industry on its board. Green groups site cases of the RSPO allowing corporations - such as Unilever and GAR - to be registered with the RSPO even though they do not comply with regulations. Furthermore, critics contend, the RSPO lacks a legal framework and leaves major voids in systems for establishing accountability.

Yet since its establishment in 2004, the RSPO has only been gaining ground in monitoring one of the most complex and fragmented supply chains of the global marketplace.⁶ It is working to correct its mistakes and those of the companies registered with them.

Furthermore, while the requirements for RSPO and its certification scheme are being tightened and monitored more closely, the percentage of CSPO palm oil is growing.

The launch of the CSPO label on oil-related products earlier this year highlights the desire of consumers and a plethora of international stakeholders to see meaningful reform in the management of palm oil supply chains. The stronger the CSPO certification scheme becomes, the more difficult it will be for producers to rely on unsustainable forest practices.

Understanding the past to ensure a greener future

Between 2005 and 2010, Indonesia lost 3.4 million hectares of forest coverage. In Malaysia, forest area decreased by 434,000 hectares on the mainland over the same period, and the region of Sarawak alone lost 65 percent of peatland to palm cultivation.

Yet with its high yield per unit as compared to other vegetable oils and potential for use of secondary and degraded agricultural land, palm oil expansion can be carried out sustainably.

The revised World Bank and IFC investment framework and the RSPO are initiatives towards this end. A dynamic change in the nature of oil palm cultivation is possible.

6 Lucas, Louise, 22 May 2011. “Growing issue for palm oil producers,” *Financial Times*.

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Safeguarding the world's forests: Indonesia's promising future

By Hans Brattskar

Through his unilateral pledges for ground-breaking climate change action, President Susilo Bambang Yudhoyono has positioned Indonesia as one of the global leaders on climate change. If Indonesia succeeds in reducing emissions by 26 percent from expected levels by 2020, 750 million tonnes of carbon emissions could be saved annually, potentially equalling as much as 5 percent of what is needed on a global basis to meet the target of capping climate change at maximum increase of 2 degrees Celsius. To support these remarkable efforts, Norway has pledged US\$1 billion in support to Indonesia, to be paid based on independently verified results in reaching the goals.

With its 240 million people, Indonesia is the world's fourth most populous country, and the country with the largest Muslim population in the world. It has the world's third largest tropical rainforest, and has the highest number of plant and animal species of any country on the planet. Indonesia's rainforest covers an area of 1 million square kilometers. It is Southeast Asia's largest, and the world's seventeenth largest, economy, with an economic growth rate of around 6 percent.

Indonesia also has the world's third largest greenhouse gas emissions, after the US and China. Approximately 78 percent of these emissions stem from deforestation and forest degradation, as well as the conversion and burning of carbon-rich peatlands to plantations. Jakarta estimates that, in a business-as-usual scenario, the total emissions are expected to increase to three billion tonnes of CO₂ by 2020; emissions from forests make up as much as 50-60 percent of this total. Globally, emissions from deforestation and forest degradation in developing countries account for approximately one-sixth of the total emissions.

At a G-20 meeting in Pittsburgh in 2009, Indonesia's President Yudhoyono delighted the world by making a significant commitment. He promised that Indonesia would reduce emissions by 26 percent from expected emissions levels in a business-as-usual scenario by 2020 without international assistance and by as much as 41 percent with international assistance. President Yudhoyono's pledge to reduce emissions was - together with a similar pledge from President Lula da Silva of Brazil - the most significant made by any developing country in the context of climate change.

Climate change and economic growth

Almost half of Indonesia's population still lives below the UN poverty line of US\$2 a day. Food prices have increased. Indonesia's planned reduction in deforestation should not hamper development. While economic growth is key for achieving social and environmental goals, long-term economic growth and lasting competitiveness can only be secured through environmentally sustainable and climate-friendly development policies. Efforts to battle climate change, poverty, and food, water and energy insecurity, are mutually reinforcing.

As made clear by President Yudhoyono, the only way to truly succeed with any of these goals is by striving to reach them all. In Indonesia, two aspirations are intertwined through the President's 26/7 goal, which refers to the goal of 26

percent reduction in emissions and the President's stated goal of reaching 7 percent annual economic growth by 2014. Climate change, economic growth and poverty reduction is at the forefront of politics in Indonesia, demonstrated by the President's four main goals for his presidency: pro jobs, pro poor, pro growth and pro green.

Indonesia is the world's twenty-seventh largest exporter overall, and the largest exporter of palm oil. The increasing global demand for minerals, logs, paper and palm oil is among the main drivers of deforestation and peat-land destruction. Logging does not in itself lead to deforestation, but may, if not carried out sustainably, destroy the forest to such an extent that the area is eventually reclassified and made accessible for plantations. Moreover, unsustainable logging contributes significantly to CO₂ emissions, as well as the loss of biodiversity and livelihoods that depend on the ecosystem services of intact natural forests.

As the Indonesian governments REDD+ strategy makes clear, with sufficient political control and satisfactory land-use planning, forest-based industries such as palm oil and pulp-and-paper may continue to contribute to economic growth, without destruction of natural forests and peat lands. According to some estimates, Indonesia may have as much as 35 million hectares of degraded land, and has offered to allocate the expansion of plantations and other economic activities to already-degraded or low-carbon areas. This proposition raises new challenges in the form of the need to sort out land use rights in these areas - so there are no simple solutions - but they can be handled as part of a more comprehensive, less carbon-intensive approach to land use, tenure and spatial planning.

If Indonesia succeeds in reducing emissions by 26 percent from expected levels by 2020, as much as 750 million tonnes of carbon emissions could be saved annually, potentially equalling as much as 5 percent of what is needed on a global basis to reach the 2 degrees target.

The pledge and the partnership

On 26 May 2010, Indonesia and Norway signed a letter of intent, during the Oslo Climate and Forest Conference. Norway will pay for results delivered in three phases, first in the form of institutional development, capacity building, forest governance reform and enabling policies, and eventually, from 2014, for independently verified emission reductions.

It is essential to emphasise, from a Norwegian viewpoint,

that we are supporting an already established Indonesian effort. REDD+, or any aspect of low carbon growth for that matter, cannot and should not be imposed from abroad; it must be domestically owned and run. That is why Norway is proud to support President Yudhoyono's and his Cabinet's efforts.

Based on Indonesia's priorities, the mutually agreed deliverables for the first phase include a comprehensive, national REDD+ strategy addressing all significant drivers of deforestation and forest degradation; an independent REDD+ Agency, reporting directly to the president; an independent institution for monitoring, reporting and verifying forest emissions; development of a financial mechanism and benefit sharing system according to international fiduciary, social and environmental standards, and the identification of a pilot province for experimenting with results based support for measures and policies to reduce emissions from deforestation and degradation of peatlands.

In Oslo in May 2010, President Yudhoyono also declared that he would introduce a two-year moratorium on conversion of natural forests and peatlands. One year later, the president launched a two-year suspension on the issuance of new licenses for conversion of primary forest and peatlands. The moratorium may help facilitate the president's 2020 goals, and constitutes an important part of a broader forest and land use reform agenda in Indonesia, though it will not in itself ensure success. Transparency and multi-stakeholder involvement in all stages of implementation will be crucial to achieve precise coverage and reconciliation with other land uses, including existing concessions that cover large areas of the country. The moratorium, however, only signals the beginning of more comprehensive forest governance reform, which over the next couple of years may encompass increased efforts against illegal logging and clearing of forests, prosecution of organised forest crime, review of existing concessions, land tenure and conflict resolution mechanisms for dealing with overlapping land claims.

What Indonesia is embarking on is a very serious development choice. The ultimate goal of the Indonesian-Norwegian partnership is to pay for results in the form of emission reductions from deforestation and forest degradation within 2014 (phase III), and earlier in the pilot province. The magnitude of the financial contributions from Norway in this phase will depend on the extent to which Indonesia

succeeds in reducing emissions.

Before reaching this phase, however, an annual evaluation will be carried out by a third-party identified by international tender, which will verify results in phase I and phase II. Their work will be based upon deliverables identified in a mutually agreed joint concept note, which again is derived from Indonesia's REDD+ priorities and ambitions. The verification reports

will form part of the basis of payments from Norway before phase III. The third party will verify the progress in delivery of mutually agreed enabling policies and forest governance reform measures. The first report, undertaken by the Finnish consulting firm Gaia Ltd in association with Crea-tura Ltd, noted good progress in a number of areas, as well as

the challenges involved in completing the remaining, and most difficult deliveries related to institutional responsibilities and monitoring of emissions.

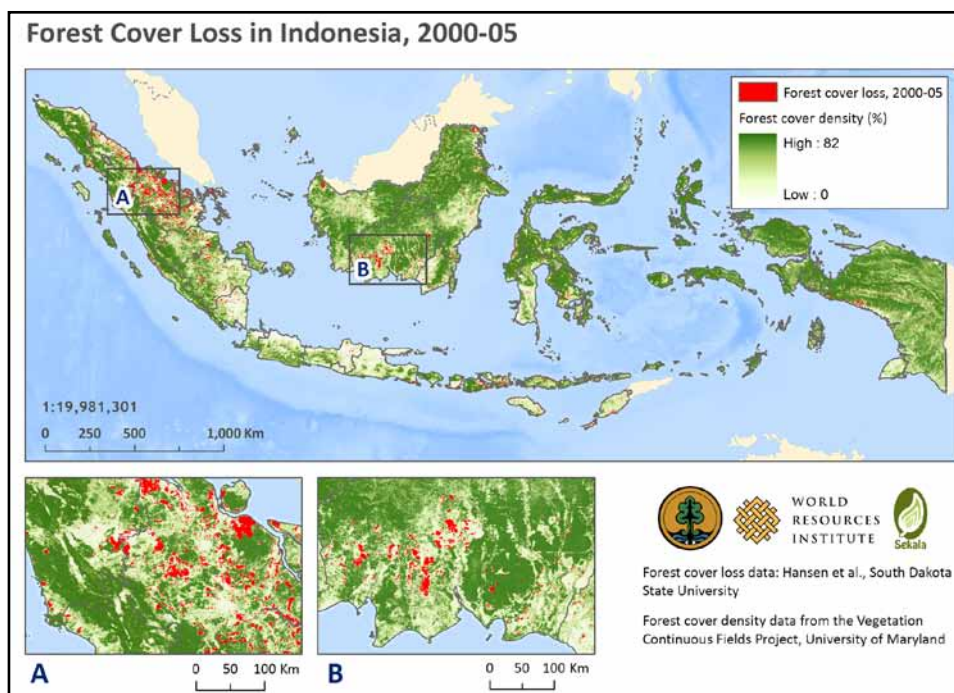
The challenge of climate change remains a global one, and we continue to need a plan in the form of a global regime if we are to reach the 2 degree target. Only the United Nations can offer this framework.

However, greenhouse gas emissions continue to rise towards a dangerous tipping point, without waiting for diplomatic solutions. In addition to the negotiation track, therefore, an action track is needed. Norway's partnership with Indonesia is one of many elements of this action track. In the years to come Indonesia's efforts may contribute significantly to reducing the global emissions from deforestation and forest degradation.

As mentioned, REDD+ cannot be imposed from abroad, but must be domestically owned and run. Over the past few years, a broad constituency of forest countries has emerged, eager to get REDD+ off the ground.

Now, adequate, predictable and sustainable medium and long-term funding is needed to deliver and reward large-scale verified results in reducing tropical deforestation. There is every reason to be optimistic. This is an area where we can achieve significant results - even before a final international climate agreement is settled.

Ambassador Hans Brattskar is the director of Norway's International Climate and Forest Initiative.



BioRes in conversation with PanEco's Denis Ruysschaert

New developments in palm oil: Opportunities and risks

BioRes met with Denis Ruysschaert, Director of International Affairs at the PanEco Foundation, to discuss current challenges facing sustainable development in the palm oil sector from an NGO perspective. The PanEco Foundation is involved in improving oil palm practices at the grassroots level in Sumatra, Indonesia through demonstration projects and verification. The foundation is also active in the international policy arena, including as a member of the Roundtable on Sustainable Palm Oil (RSPO).

BIORES: Palm oil development in South-East Asia has traditionally been associated with massive forest and peatland destruction and associated biodiversity loss and greenhouse gas emissions. New initiatives - such as the Roundtable on Sustainable Palm Oil (RSPO) and the Norwegian-backed moratorium on new concessions - are now in place to seek to ensure a more sustainable future in this area. Which do you think are the keys to success?

RUYSSCHAERT: Let's first define deforestation rates in simple numbers. According to CIFOR, 100,000 hectares of peatland are lost in Southeast Asia every year, and WWF has estimated that in the period between 1985 and 2008, 75 percent of lowland forests disappeared in Sumatra alone. The annual deforestation rate stands at three percent, and this trend just continues. The percentage of land that has been deforested is staggering, especially for lowland forests, which are the areas that palm oil is planted on - so this is the issue. If current trends continue, in 10-15 years there will be no lowland forest left, and these are the forests that host the richest habitat and biodiversity, both structurally and because they are so scarce. For this reason, NGOs are focusing on lowland forests.

The contradiction is that Indonesia has all the laws and policies in place that it needs in order to protect remaining lowland forest - it has ratified all international conventions and implemented all national laws related to them, requires environmental impact assessment, and has a clear strategy in the area of forest conversion. But deforestation continues. That's just the reality.

BIORES: So why are the laws and policies not enforced?

RUYSSCHAERT: That's the real issue. One can focus on institutional challenges and means of implementation. But at the same time, the system is such that the central government and major stakeholders have no interest in saving the forest - because so many can benefit from

deforestation, at every single level, from international to national, regional and local.

Against this backdrop, you have two options: working through a voluntary approach, the way the RSPO does, involving the business sector since the government doesn't deliver; or to provide incentives (through the government) - the Norway approach [*Editor's note: see related article, this issue*]. The system doesn't work the way it is, so you provide alternative funding. In a sense, the two initiatives are linked, or complementary, seeking to deal with the same issues.

BIORES: How does the RSPO work?

RUYSSCHAERT: The striking point about the RSPO is that it really provides a forum for all stakeholders from around the world and all parts of the supply chain. Together, they represent 50-60 percent of world production, and have developed sustainability criteria. It's an impressive forum, through which big producers expose themselves to the public eye and can be cross-checked for compliance. Certainly, many NGOs cross-check that they live up to their commitments, which has not necessarily been the case.

BIORES: What are some of the challenges being faced currently by the RSPO?

RUYSSCHAERT: A tricky issue has been that big industry players in the RSPO have wanted to reassure their consumers, and reassure them quickly. Therefore, it has been in their interest to adopt standards sooner rather than later, sometimes even before they have been adequately developed and tested. So the big players are now branding a standard that addresses many problems, but leaves out some core environmental ones - namely greenhouse gas emissions and expansion on secondary forests. The rush to have a standard in place rather than working out all the details has led to a confusing situation.

The challenge then is that on the one hand, producers think that they have done enough as compared to other players in the palm oil industry that have not joined the RSPO. On the other hand, NGOs are saying it's just branding without much behind it. Retailers and processors tend to be with the producers on this since they want a stamp on their product to reassure their consumers.

The second problem is the nature of the RSPO. It was set up by the big players to reassure consumers in Europe and excludes 50 percent of production - the production that comes from smallholders. This is a structural problem, as the big players have no incentive to incorporate them. Smallholder issues are messy and complicated, as they pertain to land rights, access to capital for seedlings and technology, correct pricing, efficient organisation among each other, relationship with the big oil palm companies, and so on.

So what would be needed are stricter sustainability criteria and smallholders participation within the RSPO. So we're back at the issue of the government, as the RSPO is voluntary and will go only so far. To effectively deal with strict sustainability criteria and the smallholders you need the government to ensure that laws and policies are in place and adhered to.

BIORES: Could you give an example?

RUYSCHAERT: As a concrete example, lands containing peat layers deeper than three meters - the really rich carbon sinks - are legally off-limits to development. However, in our experience on the ground, we have found plenty of evidence of such lands being developed. In reality, the government provides companies with concessions on such lands and has no way of checking compliance. So if the government doesn't put its feet down, the RSPO cannot go any further because the interpretation of the law is with concession holders and NGOs have to prove them wrong.

BIORES: And what about the Norwegian deal?

RUYSCHAERT: The deal is a real commitment by Norway to support the Indonesian government to enforce existing laws and the new decree. The government would need to help reform the sector.

BIORES: So you're looking at sector reform?

RUYSCHAERT: The potential is there. Now, smallholders produce two tonnes of palm oil per hectare, large plantations four, while they could produce up to seven tonnes per hectare. So palm oil production could easily expand over the next ten years simply through reforming the sector.

The bottleneck is that at the moment, despite the efforts made through the RSPO and the moratorium, there is no

incentive for large-scale companies to drastically change and develop new business models that support smallholders, respecting policies and laws, focusing on transformation, higher yields, and redistribution of income at the local level. Now the incentives are for big palm oil players to improve their usual practice, continuing business as usual. They have plenty of concessions still under forest in their banks. So neither the RSPO nor the moratorium will change business as usual, so they're not going to have much effect.

For NGOs this is disappointing. But in a sense everyone is wrong. NGOs think stringent laws and the moratorium will solve the issue. Industry thinks there still is time, and they'll improve later.

An initiative that does seek to address this is the World Bank Group Framework and International Finance Corporation (IFC) [Strategy for Engagement in the Palm Oil Sector](#). They will work with smallholders. But the Indonesian government is also needed to focus on and work with smallholders and their relationship with big companies. What is needed is information and transparency - transparent licensing, a focus on land tenure rights.

BIORES: And what about corruption and related problems?

RUYSCHAERT: There are many layers of people with their own interests in this business. At the PanEco Foundation we work on the issue indirectly by addressing the need for better and transparent information and clear land rights - but not in a coercive manner, which won't work. Oil palm producers are supported by police and

local politicians, so it's better avoiding problems in the first place by ensuring that licensing takes place correctly, that the government takes the right decisions on where to implement oil palm concessions.

And we know that developing the palm oil sector doesn't have to imply forest destruction. Palm oil production could expand for 20 years simply by focusing on degraded land (of which there is 7.4 million hectares) and smallholder capacity. We have projects that demonstrate the power of this path.

BIORES: What other activities are PanEco involved in?

RUYSCHAERT: We are an active member of the RSPO and have developed a consortium with the Biodiversity and Agricultural Commodities Program (BACP) from IFC based on their new strategy focusing on smallholders. Going beyond RSPO, we develop the whole plantation organically. As such, we seek to play a constructive role as a business partner in finding alternative, sustainable ways in the palm oil business. We also use the avenue of exposing irregular practices by palm oil companies, banks, retailers, and others in the supply chain to make them responsible for their actions.

Indonesia's forest moratorium: A decent deal for palm oil

By Ahmad Maryudi

The recent Indonesian decree imposing a 2-year moratorium on new permits to convert natural forests and peatlands was initially thought to have adverse impacts on palm oil development, by limiting the land reserves for expansion. In reality, the decree still provides significant space for the expansion of palm oil plantations. First of all, the moratorium exempts concessions covered by "in principle" permits. This means that those that have secured permits prior the moratorium's entry into force can continue to convert forests. More importantly, the country's vast secondary natural forests fall outside the moratorium's scope, meaning their conversion, including for palm oil plantation, is made possible. Overall, business as usual is expected for palm oil development.

Indonesia plays an important role in the global effort to slow down climate change due to its vast tropical forests and carbon-rich peatlands. However, rapid forest loss and forest degradation have raised global concerns. In order to address the problem, the government of Indonesia signed a deal with the Norwegian government last year. The deal outlined a number of tasks on the side of Indonesia, relating to conserving its forest resources and ensuring sustainable forest management. Norway, on its part, has committed itself to financial support amounting to US\$one billion. To fulfil its commitments, Indonesia is now imposing a two-year moratorium on new permits to convert natural forests and peatlands, which came into effect on 20 May this year.

At first glance, the decree would provide a major boost for the conservation of the country's forests, while dealing a major blow to the country's rapidly expanding palm oil plantations, which have been largely based on conversion of forest and peatlands. Understandably, the Indonesian Palm Oil Association bemoaned that the decree creates uncertainty for the palm oil business. Their concerns include a shortage of land reserves for plantations - which could eventually lead investors to consider turning their back on the country - and risks related to slower profit growth and reduced market shares. In fact, the moratorium was initially thought to come at a cost to the Indonesian economy. According to a US-based non-government organization, *World Growth*, the export earnings from palm oil related products, amount to approximately US\$15 billion and provide millions of jobs to rural people.¹ This means that losses due to the moratorium would not necessarily be offset by the payment made by Norway.

Palming the forests

Over the past few years, palm oil has become one of the world's leading agricultural commodities. It is a highly versatile product with a diverse usage as cooking oil, an ingredient in food products, cosmetics and biofuels. In recent years, palm oil demand has exceeded supply. The increasing demand is principally due to trends in many developed

¹ The Economic Benefit of Palm Oil to Indonesia (World Growth 2011)

countries to use healthier (but low-cost) alternatives to trans-fats, as well as growing use of biofuels. Correspondingly, the price of palm oil has been soaring. *Oil World* reported that the price of crude palm oil recently rallied to a level of 1,100 USD/ tonne, compared to a low of just over 400 USD/tonne in 2008.

Considering the prospects, and hosting vast hospitable land for growing palm oil, the government of Indonesia has aggressively developed its palm oil plantations and industries. In 1996, it announced its aim to become the world's biggest

The additional incentives provided by valuable trees have made investments in palm oil development all the more attractive, as the cash from the timber can be used to finance the planting.

palm oil producer, which has been duly met. In fact, the area of Indonesia's oil palm plantations has increased remarkably from about 100 thousand hectares in 1967 to more than 10 million hectares in 2010. Aside from the much higher returns from palm oil than other crops driving rapid development, this trend has been facilitated by government provisions of low-cost capital, as well as the availability of land-banks. Plantation

area and the production of palm oil have increased in tandem. Being 'neck and neck' with Malaysia as the world's major producers for years, Indonesia finally surpassed the neighbouring country in production in 2008, producing over 18 million tonnes of palm oil.

The prolific expansion of palm oil plantations has, however, posed an increasing threat to the country's natural forest cover. The majority of Indonesia's palm crop is located in Sumatra, planted in areas that were previously forested. An independent study has revealed that palm oil plantations have contributed nearly 50 percent of rainforest loss in Indonesia. A preference among developers for newly cleared rainforest and peat-swamp forests – given that these areas are more suitable palm oil trees than degraded lands – has reinforced this trend. The additional incentives provided by valuable trees have made investments in palm oil development all the more attractive, as the cash from the timber can be used to finance the planting.

In a recent ambitious plan, Indonesia has committed itself to doubling its production of crude palm oil by 2020. Under this plan, the government is emphasising palm oil devel-

Indonesia's Increasing Dominance of Global Palm Oil Supply and Trade

Year	Global Supply (Mmt*)	Indonesian Supply (Mmt*)	Indonesian Supply (% of Global)	Global Exports (Mmt*)	Indonesian Exports (Mmt*)	Indonesian Exports (% of Global)
1990/2000	28.1	7.2	33%	14.0	3.9	28%
2001/2002	25.3	9.2	36%	17.7	4.3	24%
2007/2008	41.1	19.7	48%	32.2	14.6	45%
2010/2011	48.0	23.0	48%	37.3	18.4	49%

Indonesia overtook Malaysia as the largest palm oil producer in 2006, and now has a larger palm oil plantation area and a greater component of immature trees, guaranteeing its continued global dominance of production and trade.

*Mmt = million metric tons

Sources: USDA Foreign Agricultural Service (FAS) 2011; FAS 2010; FAS 2009

opment on forestland on islands beyond Sumatra, notably Indonesian-Borneo and Papua. Under a strategic plan prepared by the ministry of forestry, millions of hectares of forest land have been appropriated for plantations.

Unsurprisingly, the continued forest clearance for palm oil plantations has come under strong opposition from environmental activists. Beyond the loss of forest cover, environmental concerns include the loss of biodiversity – as monoculture plantations replace the biodiverse rain forests – and the loss of habitats for endangered species. Recently, carbon emissions have emerged as a major concern related to palm oil development. Once a primary forest is logged, it releases significant amounts of carbon into the atmosphere, and the new secondary forest will not be able to sequester equivalent amounts. Poor practices, such as burning the land in preparation for planting, as well as constructing drainage canals, do not help as they lead to further carbon being released. Amidst these concerns, last year the government of Indonesia made an “audacious” plan to classify palm oil plantations as forests, although the plan has never been put in place.

Palm oil industries benefiting from moratorium's exceptions

The growing concerns regarding the adverse impacts of palm oil development on forests has led the government of Indonesia to take on board environmental issues in national economic development planning. The new moratorium decree itself resulted from long and cautious examination of the likely impacts on sectors other than forestry, and of identifying appropriate ways to cut emissions while still spurring economic growth. Still, prior to the issuance of the moratorium, concerns have been growing that Norway's contribution to conservation efforts will not offset the losses if palm oil development is jeopardized. The bottom line is that the expansion of palm oil plantation remains a bold government agenda, including in the recent decree on the forest moratorium. This was manifested in the way the decree was developed.

Initially, the government promised to impose the moratorium by the start of this year. There have been some allegations that its delay until May was intentionally set, in order for the government to issue licenses prior to the moratorium's entry into force. As it reads, the moratorium exempts concessions covered by “in principle” permits. This means that those that secured permits prior the moratorium can

continue to convert forests. As to new mills, the government has already issued 40 new permits, covering an area of approximately three million hectares. The staggering area of forestland assigned in the new permits clearly satisfy the expected annual growth of plantations, which - according to the Indonesian Palm Oil Association - is planned at about half a million hectares. Thus, expansion is safe and secure over the two-year period of the moratorium, and even beyond.

The decree itself also still allows the development of palm oil plantations. The Indonesian president's special advisor on climate change has also reassured investors that banning firms from palm oil expansion has never come into the equation. A “vital for development” clause has been included in the decree, and given the economic opportunities previously mentioned, palm oil plantations and industries are strongly favoured by the government. Concerns related to the land-banks for expansion were quelled, as the moratorium in fact formally allows expansion on secondary natural forests. Although what is meant by secondary forests remains undefined, no less than 35 million hectares of forestland are classified as such.

A win to toast for palm oil plantations

The moratorium has marked a great win for Indonesia's palm oil plantations and industries. Contrary to the general perception, the moratorium will have limited impact on palm oil development. Areas for expansion are still abundantly available. Those committed to investment in palm oil development should welcome the moratorium for it provides them a great favour. Therefore, the growth of the industry, based on expansion, can still respond to the expected future increase in demand for palm oil. Some stock markets warmly responded to the development of the decree, as the shares of Indonesia-listed plantation firms mostly have improved. This all reflects the bright future of palm oil plantations. On the other hand, the moratorium is less likely to achieve its formal objective of reducing emissions, as it does not directly address the underlying causes of deforestation and degradation – principally the conversions of the natural forests and peatlands. Furthermore, the fate of the forests remains in doubt as the moratorium can be lifted at any time.

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Rio+20 Briefing #2: Forests and the green economy

On the road to Rio+20, the UN Environment Programme (UNEP), the UN Economic Commission for Europe (UNECE), the Food and Agriculture Organization (FAO), and civil society organisations have been conducting extensive research on the appropriate role of forests in the transition to the “green economy.” The studies have overwhelmingly found that forests can be a powerful tool for sustainable economic development and successful global transition to a green economy if action plans are implemented over a carefully planned governance framework.

Forests naturally embody the ideal characteristics of a green economy: low carbon, resource efficient, and socially inclusive.¹ They also offer exceptional opportunities for green employment with jobs that can reduce consumption of energy and raw materials, avoid greenhouse gas emissions, and minimise waste and pollution while protecting and restoring ecosystems.² In order to be brought to fruition, these natural characteristics of forests require proper governance.

The UN Conference on Sustainable Development (Rio+20) will have the opportunity to draft a framework of forest governance schemes with the context of the global initiative to transition to a green economy. Products and services from forests not only constitute a significant portion of the global economy but they are also tools that can instigate sustainable development within the context of a green economy. Forest management, meanwhile, adds to production and services by bolstering the green job market. Reports produced by UNEP, UNECE - in cooperation with the FAO, and the Pardee Center all make the case that forests must play a major role in transitioning to a more sustainable economic system.

Mounting pressures on forests

World forest cover continues to shrink by 13 million hectares a year.³ With the world's population expected to hit 9 billion by 2050 and consumption per capita on the rise, the pressure to tear down forests for urban construction and agricultural use will undoubtedly intensify. The competition in developing countries over use of agricultural land for food production or for biofuel cultivation will put forests at even greater risk. Coupled with the destructive effects of climate change on land, such as desertification in Africa and land erosion in coastal nations, forests worldwide are increasingly under threat. The global economic downturn, multiple financial crises, and competition over use of dwindling natural resources are also major factors accelerating deforestation.

The fact that forests are influenced by everything from population and development to climate change and economics, is evidence of how interweaved forests are into the web of global society. Therefore, if forests can be impacted by various factors occurring in the world today, one can imply that the reverse is also true.

1 UNECE-FAO (May 2011). *Draft Action Plan for sustainable forest management in a green economy.*

2 ILO (May 2011).

3 UNEP (May 2011). *Forests in a Green Economy: A Synthesis*

Studies now show that indeed, forests do have power – tremendous power – to positively impact poverty reduction, human health, international trade, economic development, security, biodiversity, and climate change. According to a recent UNEP study, “biologically-rich forest ecosystems provide shelter, food, jobs, water, medicine and security to more than 1 billion people, as well as regulate our climate.”⁴ The forest sector - which includes forest management, forests products, and services - employs somewhere between 119 million to 1.42 billion people the world over across a vast range of products and services (See Table 1).

While timber, pulp, and paper stand out as the largest forest products traded internationally, forests are also an important source of energy, food, and firewood for local economies. In-tact forests also provide crucial services for forest communities such as storing drain-off water in water tables, acting as carbon sinks, and attracting tourism. Products and services of forestry comprise around 1 percent of world gross domestic product (GDP).

Products and services originating from forests present substantial monetary value within the current economy but the system fails to acknowledge the intrinsic values of forests as a protector of biodiversity and valuable resources, thus greatly under-representing the worth of forests to society. Under a green economy - a system of interactions among markets, environmental forces and social policies sustainable over the long run⁵ - forests can be realised for their intrinsic value as well. Therefore, in a green economy, forests will be more valuable in-tact and sustainably managed, rather than clear cut for short-run monetary gain. In this manner, the natural capital of the forestry sector for aspects such as water collection, energy storage and species protection will have a place in the system.

Mixed mechanisms for forest governance

At Rio+20, the international community will have to tackle the issue of how forest governance can attribute veracious figures to the natural capital of the forestry sector in order for the green economy to meet its potential. In order to ensure proper assessment of forest values, a variety of stakeholders from across the world are being included in the process.⁶ These stakeholders range from

4 Et al

5 Melendez-Ortiz, Ricardo (April 2011). *Governance of international trade for the green economy, BRIDGES TRADE BIORES REVIEW Vol 5 No 1.*

6 UNECE-FAO (May 2011). *Draft Action Plan for sustainable forest management in a green economy.*

Forest-Dependent Employment and Livelihoods

Scope	Estimates (number of people)
Formal employment in forestry (wood processing/pulp & paper)	14 million (FAO)
Formal employment in furniture industry	4 million
Informal small forest enterprises	30-140 million
Indigenous people dependent on forests	500 million - 1.2 billion
People dependent on agroforestry	71-588 million
Total	119 million - 1.42 billion

Source: UNEP *Forests in a Green Economy*

local and international nongovernmental organisations to governments, international organisations, forest governing bodies, biodiversity specialists and indigenous groups. The plethora of stakeholders is integral to proper policy assessment because forests span a wide range of issues including those of commodities to biodiversity, sustainable development to human rights issues and beyond.⁷

Stakeholder contributions to the Rio+20 consultative process have revealed a worrisome North/South divide on approaches to forest governance. In general, developed economies in the North believe their boreal forests hold greater value as standing ecosystems while developing countries in the South tend to view more economic development potential in the harvesting products from their forest - like timber.⁸ A symptom of this division is the complexity of forest governance structures the world over. "The multiplicity of issues, users, uses, and views of forests has led to a myriad governance mechanisms, instruments, and diverse approaches to the implementation and enforcement of sustainable forest management," points out the Pardee Center study.⁹

Instead of attempting to "silo" forest governance mechanisms, the Pardee Center report chapter on "Transforming Global Forest Governance," recommends embracing the complex nature of such laws because it allows for differentiation on a country by country level where issues of actual implementation are best understood and implemented. Therefore, the authors contend, objectives should be put in place to better manage the existing governance systems instead of replacing them.

UNEP, in their Green Economy Report, advocate for the international community to take on a role that strengthens forest-related governance by creating, implementing, and supporting transparency mechanisms. According to the report, the best opportunity the international community has to both address poor forest management and to raise funds to protect forests is by passing the enhanced UN Reducing Emissions from Deforestation and Forest Degradation (REDD+) scheme. The REDD+ scheme would offer monetary and competitiveness incentives for actors in the forestry sector to embrace a paradigm shift to a more sustainable forest value chain, the UNEP report finds.

⁷ Hoogeveen, H & Verkooijen, P (May 2011). *Transforming Global Forest Governance as part of Beyond Rio +20: Governance for a Green Economy*, THE PARDEE CENTER

⁸ Et al

⁹ Hoogeveen, H & Verkooijen, P (May 2011). *Transforming Global Forest Governance as part of Beyond Rio +20: Governance for a Green Economy*, THE PARDEE CENTER

The UNECE-FAO "Draft Action Plan" outlines a framework for developing indicators of sustainable forest management and instruments for assessment of such governance. The framework focuses on detailed study of the systems currently in place and evaluation of such policies through communication and outreach throughout the sector across the globe.

Combined, the advocated approaches describe a governance scheme for the forest sector that is dynamic and differentiated to allow for country-specific implementation with international monitoring and support. If a like scheme is to be adopted and successfully implemented at Rio+20, UNEP points out that transparency and knowledge building on forests would have to be at its core. Forest management policies built upon a strong governance framework would assist in the transition of the sector into the green economy.

Investment

Some critics argue that a "greening" of the forestry sector is inherently impossible because products produced from forests automatically represent ecological damage to the forest itself. This argument hinges on the concept that standing forests could never be properly assessed for their value to society. But stakeholder consultations have already led to a better realisation of the private and social benefits of forests, according to UNEP.

Today, US\$60 million is invested annually in the forestry sector. With increased public and private investment in green services, products, management, and employment, UNEP contends that the world will see a reduction in carbon emissions, an enhancement of resource efficiency, and a reduced loss of forest biodiversity. UNEP has found that with an additional .034 percent of world GDP - US\$40 billion - invested annually in the forestry sector, deforestation could be halved and value added in forestry could be raised US\$600 billion by 2050.¹⁰

This initial investment would create the means for forests - already a powerful sector in economic and social development - to become more sustainably managed. Through international support, the forestry sector will have the capacity to make a paradigm shift in stewardship and production. On the road to Rio+20, the forestry sector is in an advantageous position to become a powerful tool in the global transition to "green economy" if governance strategies harness it correctly.

¹⁰ UNEP (May 2011). *Forests in a Green Economy: A Synthesis*

WWF on the International Year of Forests: It's time to turn a new leaf

By Rodney Taylor

This year's celebration of the United Nations' International Year of Forests has cast a spotlight on forests across the world. But while the festivities offer some much needed attention for a sector facing significant adversity, the occasion should be seen as an opportunity to go beyond the fanfare.

It is time the world recognised the true value and crucial role of forests as a cornerstone to building a future world where humanity is living within the Earth's ecological limits and sharing its resources more equitably.

In addition to observing International Year of Forests, 2011 also marks WWF's fiftieth anniversary. WWF is proud that forests have been at the heart of its work for half a century. But while there have been many successes, the work to save forests is not over. In many frontier regions, sensitive woodlands continue to be under threat, despite conservation and restoration efforts.

ZNDD - A global target

WWF is proposing that policymakers and businesses unite around a goal of "zero net deforestation and forest degradation" (ZNDD) by 2020. This target clearly illustrates the scale and urgency of action needed to avoid runaway climate change and curb biodiversity loss. Successfully achieving the 2020 target would see the forest sector contributing to an early peak and decline in greenhouse gas emissions, and an end to the habitat loss that endangers iconic species, such as tigers.

Because zero net deforestation and forest degradation means no overall loss of forest area or forest quality, a new monoculture plantation will not offset the loss of primary natural forest. The target requires the loss of natural or semi-natural forest to be reduced to near zero - down from the current 13 million hectares a year, and held at that level indefinitely.

To this end, WWF is running the Living Forests Campaign to bring together partners, policymakers, and business to address the many drivers of deforestation and forest degradation, and to challenge them to support the ZNDD target.

But a target of near zero forest loss presents several challenges. For example, how do we meet the world's demand for [timber, pulp and paper](#) while protecting forests for wildlife and traditional livelihoods? Turning to climate change, can [carbon markets](#) reduce emissions and simultaneously generate economic benefits? And as population grows, how much land will be needed to feed the world? These are tough questions that require concrete answers.

The Living Forests Report and Model

WWF's [Living Forests Report](#) explores opportunities to shift to a new model of sustainable forestry, farming, and consumption that will enable the human population to live within the earth's carrying capacity.

The report assumes that forests can only contribute their full potential, in terms of ecosystem services and as sources of wood and other renewable resources, if forest loss and degradation are stopped. It thus discusses key questions on achieving near zero forest loss and maintaining it over time - how to produce more with less land, water, and pollution as population grows and incomes rise; how limiting the land

available for agriculture affects food prices; how diet and lifestyle shifts can help reduce demand for commodities that impact forests; whether 100 percent renewable energy be achieved without deforestation; and if deforestation can be halted while safeguarding rural people's livelihoods.

WWF developed the Living Forests Model, with the International Institute for Applied Systems Analysis (IIASA), an Austria-based research centre. The model, which forms the basis of the Living Forests Report, allows for the exploration of various global land-use scenarios coupled with the effect of forces such as population growth and consumer demand.

The model describes possible consequences of forest conservation measures on key areas such as food production, climate change, biodiversity, commodity prices, and economic development.

Forests can be conserved

The first chapter of the Living Forests Report states that the dual imperatives of halting forest loss and degradation and meeting global demand for food, materials, and energy pose both challenges and business opportunities for the forest products sector. Forest products are renewable and, when sourced from well-managed natural forests and plantations, tend to have a smaller footprint than fossil fuel-intensive alternatives like steel, concrete, and plastics.

Using the Living Forests Model, this first chapter concludes that halting deforestation is all about better governance in the short term. Better governance and economic incentives will enable sound stewardship of forests and more productive use of already-degraded land. With improved governance, the world would have enough farming land, timber plantations, and well-managed forests to meet current global demand for wood and food without further forest loss.

But if current projections are accurate and the world's population passes 9 billion by 2050, over-consumption and food and energy waste will have to be slashed while productivity of farms and forestry are boosted to keep forest loss at near zero.

The Model projects that by "doing nothing" we could lose more than 230 million hectares between now and 2050.

Among other findings, the model suggests that it is possible to achieve ZNDD by 2020, through better governance, a shift to sound forest stewardship, and more productive use of arable non-forest land. Another finding is that maintaining ZNDD after 2030, as population and incomes grow, will require forestry and farming practices that produce more with less land and water, and new consumption patterns that meet the needs of the poor while eliminating waste and over-consumption. As a caveat, the model predicts that delaying ZNDD until 2030, or taking "half-measures", would lead to huge and irreversible losses in biodiversity and ecosystem services - including runaway climate change.

In essence, the Living Forests Model shows that conserving our forests is possible - and urgent. But it won't be easy.

What's next?

The second chapter of the Living Forests Report, to be released in August 2011, will examine the circumstances in which bioenergy production can be a threat or a solution for biodiversity conservation, climate change, and communities.

For millennia we have managed forests and harvested wood for energy. But the world is still dependent on oil, coal, and gas. The use of these energy sources is both unsustainable and contributes to climate change through the release of huge amounts of carbon dioxide, a greenhouse gas. WWF's vision is that by 2050, the world will be powered 100 percent by renewable energy, including bioenergy.

In Europe, wood harvested from forest and fast-growing plantations already plays a key role in renewable energy production - 50 percent of biomass electricity in the European Union is wood-based and this is set to increase significantly according to National Renewable Energy Action Plans. Supply will come from EU forests, dedicated fast growing plantations and imports.

Bioenergy offers the prospect of greenhouse gas savings, increased national energy security and a new market for forest stewards and farmers. However, the projected expansion in bioenergy use and production could create a major additional stress on the planet's land and water resources. Bioenergy use and development must therefore be carefully planned, implemented and continually monitored for environment and social impacts. Safeguards are needed to ensure that bioenergy use and production does not compromise people or nature.

Rethinking plantations

Approaching forestry issues from another angle, WWF has been working with partners to develop the "[New Generation Plantations](#)" principles, which aim to avoid unwanted environmental and social impacts related to the expansion of fast-growing plantations.

Plantations that are based on these principles maintain ecosystem integrity, protect high conservation values, are developed through effective stakeholder involvement, and contribute to economic growth and employment.

These principles were developed jointly by WWF, private companies, and government authorities participating in the New Generation Plantations programme. The core concept of the initiative, which was launched in 2007, is that well-managed plantations in the right places can help conserve biodiversity and meet resource needs.

The programme has just released a [new report](#) looking at how plantations can store carbon and supply biomass to produce renewable energy. The report analyses several bioenergy and carbon projects of programme participants.

The study found that carbon and bioenergy are significant and growing markets for plantation owners and show that the New Generation Plantations concept and principles work - whether the plantations are providing wood, fibre, bioenergy, or carbon storage.

This supports the idea that there is a need for a major rethink on how forest plantations are run. Indeed, such a restructuring is crucial to secure long-term natural resources - such as wood and plants to produce renewable products and energy - and to help avoid the catastrophic results of climate change and biodiversity loss.

Resource use and equity

Forests are a crucial pillar of the world's natural resource base. They provide us with natural resources - such as timber to build homes, act as carbon sinks to help offset carbon emissions, and host habitats for an immeasurable wealth of biodiversity.

But if they are to continue to provide us with the goods and services we depend on, we urgently need to stop deforestation and forest degradation.

The International Year of the Forest is the perfect platform to start having the tough conversation about how we're going to do that. Because inaction is not option.

Rodney Taylor is director of forests at WWF International.

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Upcoming Events

July 2011

- 10-13 Dubai, UAE. 2011 GLOBAL CARBON MARKETS & GREEN ENERGY CONFERENCE.
- 11-15 Lombok, Indonesia. INTERNATIONAL CONFERENCE ON FOREST TENURE, GOVERNANCE AND ENTERPRISE: EXPERIENCES AND OPPORTUNITIES FOR ASIA IN A CHANGING CONTEXT.
- 13-14 Auckland, New Zealand. CARBON FORESTRY 2011.
- 16-22 Rome, Italy. THIRTEENTH SESSION OF THE COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE (CGRFA 13).
- 22 London, UK. THE FUTURE OF THE WORLD TRADING SYSTEM.

August 2011

- 1 London, UK. NEXT GENERATION BIOFUELS.
- 2-5 Medellín, Colombia. BIO-ENERGY CONFERENCE OF THE AMERICAS.
- 17-19 Ottawa, Canada. INTERNATIONAL CONFERENCE ON ENVIRONMENTAL POLLUTION AND REMEDIATION.
- 21-25 Mérida, Mexico. 4TH WORLD CONFERENCE ON ECOLOGICAL RESTORATION.
- 22-26 Montréal, Canada. ECOCITY WORLD SUMMIT 2011.
- 23-25 Acre, Brazil. INTERNATIONAL EXPERTS MEETING ON SUSTAINABLE FOREST MANAGEMENT.
- 28 Geneva, Switzerland. INTERNATIONAL ECONOMICS ACADEMY: MANAGEMENT OF NATURAL RESOURCES AND INTERNATIONAL TRADE. (1 week)

September 2011

- 3-5 Bonn, Germany. 64TH ANNUAL UN DPI/NGO CONFERENCE: SUSTAINABLE SOCIETIES; RESPONSIVE CITIZENS.
- 7-8 The Hague, The Netherlands. TENTH RRI DIALOGUE ON FORESTS, GOVERNANCE AND CLIMATE CHANGE.
- 20 New York, United States. UNGA HIGH-LEVEL MEETING ON DESERTIFICATION.
- 21-23 Sekocin Stary, Poland. CARBOFOREST CONFERENCE.
- 21-23 Nadi, Fiji. PACIFIC REGIONAL FOREST TECHNICAL MEETING.
- 22 Geneva, Switzerland. WTO PUBLIC FORUM.
- 27 Geneva, Switzerland. ICTSD BRIDGES CHINA DIALOGUE 2011.
- 28-29 São Paulo, Brazil. WORLD BIOFUELS MARKETS BRAZIL.
- 29-30 Geneva, Switzerland. UNCTAD AD HOC EXPERT MEETING ON CLIMATE CHANGE IMPACTS AND ADAPTATION: A CHALLENGE FOR GLOBAL PORTS.

Resources

ICTSD Resources

THE CLIMATE TECHNOLOGY MECHANISM: ISSUES AND CHALLENGES. By ICTSD Intellectual Property Programme. (8 April 2011).

THE TRADE AND CLIMATE CHANGE LINKAGES. Brief for UNFCCC negotiators (5 May 2011).

SUBMISSION TO UNFCCC ON TECHNOLOGICAL INFORMATION. (5 May 2011).

SUBMISSION TO UNFCCC ON RESPONSE MEASURES WORK PROGRAMME AND POSSIBLE FUTURE FORUM (5 May 2011).

SUBMISSION TO UNFCCC ON EMISSIONS TRADING SCHEMES. (5 May 2011).

MEANINGFUL TECHNOLOGY TRANSFER TO LDCs: A PROPOSAL FOR A MONITORING MECHANISM FOR TRIPS ARTICLE 66.2. By Suerie Moon. Policy Brief 9. (13 May 2011).

THE IMPACT OF US BIOFUEL POLICIES ON AGRICULTURAL PRICE LEVELS AND VOLATILITY. By Bruce A. Babcock. Issue Paper 35. (21 June 2011).

Other Resources

BIOTECHNOLOGIES FOR AGRICULTURAL DEVELOPMENT. Produced by the UN Food and Agriculture Organization. (June 2011).

COSTA RICA'S SUSTAINABLE RESOURCE MANAGEMENT: SUCCESSFULLY TACKLING TROPICAL DEFORESTATION. By Jessica Brown and Neil Bird. (June 2011).

REDD+ AND TENURE: A REVIEW OF THE LATEST DEVELOPMENTS IN RESEARCH, IMPLEMENTATION AND DEBATE. By Lisa Westholm, Robin Biddulph, Ida Hellmark and Anders Ekblom. (27 June 2011).

THE INTERFACE BETWEEN TRADE AND CLIMATE REGIMES: SCOPING THE ISSUES. By Patrick Low, Gabrielle Marceau, and Julia Reinaud. World Trade Organization. Working Paper. (January 2011).

FROM COLLISION TO VISION: CLIMATE CHANGE AND WORLD TRADE. World Economic Forum Ad Hoc Working Group on Trade and Climate Change. (November 2010).

BIOFUELS PRODUCTION, TRADE AND SUSTAINABLE DEVELOPMENT. Edited by Annie Dufrey and Maryanne Grieg-Gran. International Institute for Sustainable Development. (November 2010).

OUTSTANDING ISSUES ON ACCESS AND BENEFIT SHARING UNDER THE MULTILATERAL SYSTEM OF THE INTERNATIONAL TREATY ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE (ITPGRFA). Published by the Berne Declaration (March 2011).

CARBON FINANCE: A GUIDE FOR SUSTAINABLE ENERGY ENTERPRISES AND NGOS. Published by Global Village Energy Partnership International (March 2011).