

# CFA Newsletter



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### Around the World

#### **CFA Newsletter**

is the newsletter of the Commonwealth Forestry Association

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The views expressed are not necessarily those of the CFA.

## The Tropical managed Forests Observatory: a new research network addressing the resilience of tropical logged forests



*Logged forest are home to high levels of biodiversity: a Poison Dart frog in an Amazonian logged forest*

### Why managed forests deserve our attention?

The conservation of tropical forests is, without doubt, one of the main challenges of this century. Home to more than two-thirds of all terrestrial living species, tropical forests are still disappearing at an alarming rate. Tropical deforestation is mainly due to the boom of cash crops (oil palm, soybean, etc.) and cattle ranching.

Although concerted efforts are needed to preserve undisturbed primary forests, the creation of conservation units alone is unlikely to tackle biodiversity and ecosystem services erosions. Nowadays, the role of so-called degraded

forests (secondary, logged, domesticated) in maintaining biodiversity or forest services (i.e. wood provision, carbon sequestration) is widely recognized (Putz *et al.* 2012, Laurance *et al.* 2013). Presently, over half of all tropical forests have been cleared or logged (Laurance *et al.* 2013), and almost half of standing primary tropical forests, up to 400 million ha, are designated by national forest services for timber production (Blaser *et al.* 2011). These so-called degraded forests are already a major component of tropical landscapes and therefore will play key roles in the trade-off between provision of goods and maintenance of key environmental services such as carbon stocks and biodiversity.

So far, most studies have focused on old-growth primary forests or secondary

forests with regional or global assessment of the dynamic of managed forests still largely lacking (Sist *et al.* 2014). Monitoring of managed forests is required to better understand their roles in the global carbon cycle and define trade-offs between environmental impacts and human benefits. Moreover, given that forest management practices, forest structure and dynamics differ widely among tropical countries and regions, assessments of the impacts of different practices are needed at regional and continental scales to inform policy makers about the best practices adapted to these possible regional variations (Sist *et al.* 2008).

### Presentation of the network



*Location of the 24 experimental sites of TmFO*

The Tropical managed Forests Observatory (TmFO) merges information from 24 experimental sites across three main tropical regions: Amazon Basin (11 sites, 5 countries); Congo Basin (6 sites, 2 countries); and South East Asia (7 sites, 2 countries). These sites are formed of several permanent sample plots (PSP) that cover a total area of 924 ha of logged forests from which 59 (12%) remain unmanaged and serve as control plots. The total number of trees currently included in TmFO is estimated at c. 300,000, representing almost 3 million measurements.

TmFO spans a large gradient of logging intensities (5–60% of above-ground biomass removed) and silviculture practices (reduced-impact logging, conventional logging, and post-logging silvicultural treatments). These features offer unique opportunities to investigate post-logging dynamics over a wide range of conditions, up to those that were heavily degraded by high-intensity unplanned logging. While logging intensity and practices are important factors in the trade-off between commercial production and environmental services provision, accounting for biotic and abiotic differences among sites is also important.

TmFO aims to assess the impact of logging on forest dynamics, carbon storage and tree species composition at the regional level in the three main targeted regions as well as to carry out global comparison between continents. The results are expected to provide important information on forest dynamics after logging to be used to recommend new forest management practices based on the conciliation of compromises between benefits and environmental services.

TmFO's guiding questions are: (1) how resilient are tropical forest structure, function and composition to logging; (2) how do forest responses to logging and other silvicultural treatments vary across regions and continents; (3) what are the trade-offs between financial viability and environmental sustainability of commercial logging; and (4) what is the role of silviculture in forest conservation?

One important operating principle of TmFO relates to data sharing among the different institutions. In order to respect data ownership and ensure equitable co-authorship, no raw data are shared among researchers. The management and intellectual property of a given data set resides exclusively with scientist(s) or institution(s) that own the data. For each site, one to two site leaders have been identified to coordinate TmFO's activities, such as computing the required summary data (i.e. biomass or stem density per hectare, diversity indices) and performing relevant analyses (see [www.tmfo.org](http://www.tmfo.org) for more details on data management policy). All research questions and protocols of data analysis are discussed, developed, and agreed upon by all researchers. Once these participatory steps are achieved and summary data are produced, a collaborative regional analysis is performed among TmFO researchers. We believe that this strategy favours capacity building and data management in partner's institutions leads to build an exchange platform for researchers involved in the Observatory.

### Conclusions

With its extensive spatial (pan-tropical) and temporal (up to 35 years) coverage of post-logging forest dynamics, TmFO offers unique opportunities to address the resilience of tropical forests to anthropogenic disturbances and climate change, and their potential interactions. TmFO fills the gap in the tropical forests science community between secondary and undisturbed natural forests. TmFO is an open network, and scientists, institutions and NGOs interested in the resilience of managed tropical forests are most welcome.

TmFO is coordinated by Cirad and is supported by the Sentinel Landscape program of CGIAR (Consultative Group on International Agricultural Research) Forest Tree and Agroforestry Research Program.

For more information visit the website at [www.tmfo.org](http://www.tmfo.org) or send an email to [contact@tmfo.org](mailto:contact@tmfo.org)

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# Association news

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## CFA Youth Officer at the World Conference on Youth 2014

The world's youth converged in Sri Lanka from the 6<sup>th</sup>–10<sup>th</sup> of May 2014 to make their voices heard at the **World Conference on Youth 2014**. The conference was generously hosted by the people and government of Sri Lanka and registered about 1500 participants from all around the world representing different groups, including the far marginalized groups, making the conference one of the most well represented youth events at the global level.



The main objective of the conference was to create an inclusive youth participation platform to enable young people from every corners of the world to review the progress on the achievement of the Millennium Development Goals, share new ideas, experiences and innovative approaches for effectively contributing to the post-2015 development agenda and its implementation.



CFA Youth Officer, Tolulope Daramola, was one of the international facilitators invited by the organizers to moderate a

panel discussion on *Poverty Eradication and Food & Nutrition Security* and coordinate the breakout sessions to generate the key solutions/actions needed to address poverty issues in our society especially amongst the youths. By the end of the conference the “Colombo Declaration on Youth” was developed, covering the seven foundation and seven thematic areas of global development as designed in the *Zero Draft of the Colombo Declaration on Youth* which was developed earlier this year. Please go to the **Youth** page on the CFA website to download a copy of the *Colombo Declaration on Youth*.



While the conference recorded success, it also opens a new chapter for debates and reflections amongst us, the foresters, on the perception of the rest of the world on forest. Words about forests and their roles in poverty eradication were hardly mentioned during the conference, and in fact nothing in the *Colombo Declaration* stressed the importance of forest to a sustainable livelihood. Forests remain an essential component of life and provide various goods and services that support human existence. We still have about 1.6 billion people; more than 25% of the world's population that rely directly or indirectly on forest resources yet forests do not get the recognition they deserve.

No doubt, there is more work that needs to be done to make sure that forest are not taken to be of secondary importance when issues around development are being discussed, and we can do better as young people to propagate this message around the world, starting with local communities.

**Tolulope Daramola**  
CFA Youth Officer

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# Forest Scenes

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## National Trees: ZIMBABWE

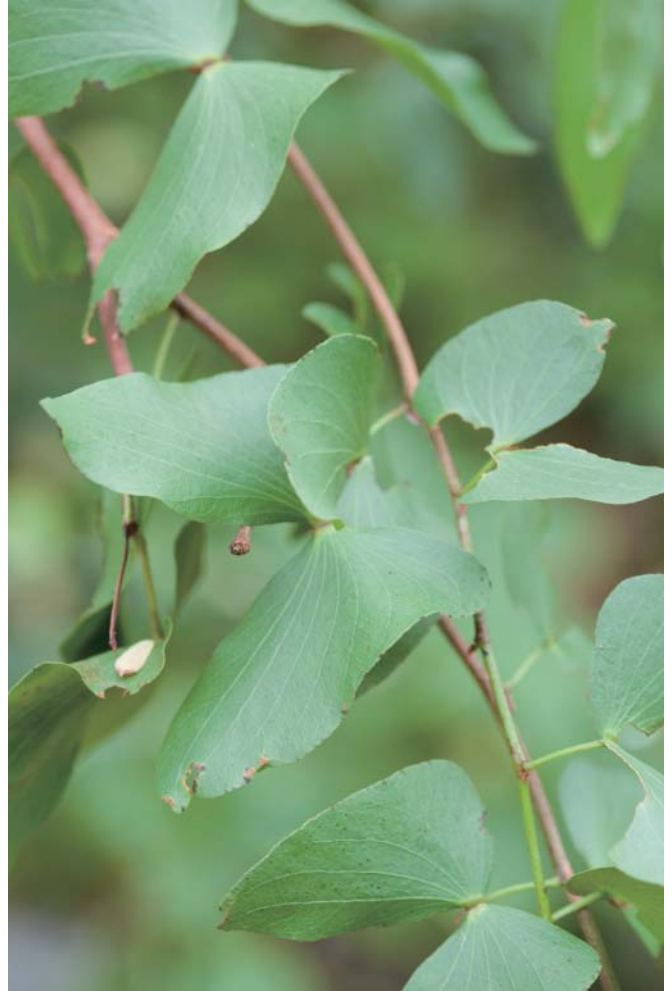
Climate and geology dictate that there are probably three national trees in Zimbabwe. Mashonaland to the north of the country has the higher rainfall and more fertile soils which gave rise to the tobacco and dairy industries which in turn rely on *Brachystegia spiciformis* (msasa/mnondo) woodlands ('miombo' in the colonial north) for fuel and building materials. *Brachystegia spiciformis* (msasa) is a handsome tree producing a hard and durable timber widely used as a mining timber and also as for parquet flooring,



*Brachystegia spiciformis* (Photo: Jonathan Timberlake)

Matabeleland in the south has poorer soils and lower rainfall. Mopani woodlands thrive under these conditions and support large scale cattle and wild life ranching. *Colophospermum mopane* is the predominant tree species. Mopani produces a very hard and durable, reddish timber and its leaves are much sought after by cattle and wildlife as fodder and timber for the mining industry and a source of poles for cattle kraals.

The Kalahari sands are found in the west of Zimbabwe along the line of rail between Bulawayo and Victoria Falls. The sand is very deep – hundreds of feet until one finds basalt. Rainfall is very much lower and seasonal. Agriculture is confined mainly to



*Colophospermum mopane* (Photo: John Innes)

cattle ranching, Wildlife management goes hand in hand with a thriving safari industry. On the downside poaching is rife.

Albert Giese was among the first to recognise the value of Rhodesian teak (*Baikiaea plurijuga*). He was unfortunately interned for the duration of the war (1914/18) and faded from the timber scene. The Hepker Brothers, Victor and Alan, came into the picture and formed Rhodesia Native Timber Concessions (RNTC) which company lasted till its takeover in 1971 by the African Lumber Company (ALCO). All these enterprises based themselves on producing 10x5inch railway sleepers for Rhodesia Railways and the mines. Teak trees were not felled unless they could produce two 10x5 sleepers. The Beira/Mashonaland railway was laid on wooden teak sleepers. A spinoff was the production of parquet flooring. The grain market in London had a Rhodesia teak parquet block floor. Latterly parquet block gave way to the current smaller mosaic parquet fillets.

There are many more tree species in Zimbabwe but none as important as those described above.

**Gavin Judge**

# Update on Implementation of Malaysian Timber Certification Scheme (MTCS)



*PEFC-certified timber products*

Malaysia, as a major producer and exporter of tropical timber products, has made tremendous efforts to ensure that it is able to supply timber products that are sourced from sustainably managed forests. For this purpose, the Malaysian Timber Certification Council (MTCC) was set up in October 1998 as an independent organisation to develop and operate the Malaysian Timber Certification Scheme (MTCS) as a voluntary national timber certification scheme. The MTCS provides for the assessment of forest management practices, to ensure the sustainable management of Malaysia's Permanent Reserved Forests (PRFs) as well as to meet the increasing demand for certified timber products globally.

The MTCS started operating in 2001 and is a leading timber certification scheme in the South East Asia region for tropical forests. Besides fulfilling the growing demand for certified timber products by the environmentally and socially sensitive markets, the rationale for implementing the MTCS was also rooted on the national initiative to ensure its rich forest resources are sustainably managed to protect the interest and well-being of its people and the nation in the long-term. The MTCS achieved a significant milestone in 2009 when it was accorded international recognition by becoming the first tropical timber certification scheme in the region to be endorsed by the Programme for the Endorsement of Forest Certification (PEFC), the largest forest certification system in the world.

Under the MTCS, the standard used forest management certification of natural forest is the *Malaysian Criteria and Indicators for Forest Management Certification (Natural Forest)* [MC&I (Natural Forest)] while that for assessing forest plantation is the MC&I (Forest Plantations). The development of the certification standards under the MTCS involved broad-based consultations amongst social, environmental and economic stakeholder groups and the relevant government agencies, through meetings of a multi-stakeholder committee, as well as regional and national-level consultations. MTCC has always strived to ensure that the process for development and revision of standards under the MTCS are balanced, transparent and participatory to provide a forum for all stakeholder groups to contribute inputs, deliberate and arrive at decisions with regard

to the requirements of the certification standards, taking into account the three pillars of sustainability, covering the social, environmental and economic aspects.

## Malaysian Timber Certification Council



*Independent auditing in progress*

As a PEFC-endorsed scheme, the PEFC certificates for forest management and chain of custody under the MTCS are issued by independent PEFC-notified certification bodies (CBs) which have obtained accreditation from STANDARDS MALAYSIA, the national accreditation body. The award of these certificates is based on the results of the audits carried out on the applicants by the notified CBs.

The *Certificate for Forest Management* is awarded to the Forest Management Unit (FMU) that has complied with the requirements of the forest management standard while the *Certificate for Chain of Custody* for the timber product manufacturer or



*Landscape within Malaysian forest showing the importance of conserving water resources*

exporter that has complied with the requirements of the PEFC international standard for chain of custody. The MTCS provides an assurance to buyers that PEFC-certified timber products supplied by the certified companies originate from PEFC-certified FMUs.

Presently, ten FMUs, accounting for 4.65 million ha or 32% of the total PRFs in Malaysia have become PEFC-certified under the MTCS. The timber originating from these FMUs is the source of PEFC-certified material for more than 250 timber companies in Malaysia that have obtained the MTCS chain of custody certification.

The range of PEFC-certified timber products exported includes sawn timber, plywood, mouldings, veneer, laminated

finger-jointed timber, finger-jointed dressed timber (S4S), furniture components, door and window components, picture frames, parquet flooring and paper and packaging.

As a PEFC-endorsed scheme, the MTCS has been accepted under the national timber procurement policies of Denmark, the United Kingdom, Germany, Finland, Belgium, Switzerland, France and New Zealand, and recognised by green building systems in Australia, Italy, Singapore, The Netherlands, the United Kingdom, USA, Japan, Canada and Abu Dhabi, United Arab Emirates, as well as by the Green Building Index (GBI) in Malaysia.

For more information regarding the MTCS, visit [www.mtcc.com.my](http://www.mtcc.com.my)

## Tanzania, Kenya and Uganda unite in efforts to combat illegal timber trade in East Africa



**H**igh-level government representatives from Kenya, Uganda and Tanzania have announced their intention to work together, along with INTERPOL and UN agencies, to curb the illegal timber trade that is stripping East Africa of one of its most valuable natural resources.

*The East Africa Initiative on Illegal Timber Trade and REDD+* represents an innovative cross-border, multi-sectoral effort that will create a powerful deterrent to Africa's illegal timber trade.

Illegal logging degrades forests, causes economic loss, destroys biodiversity and livelihoods, promotes corruption, and funds armed conflict. The economic costs of illegal logging are staggering. Including processing, an estimated US\$30–100 billion is lost to the global economy through illegal logging every year, making the trade in illegally harvested timber highly damaging to national and regional economies.

Well-managed forests are a vital economic resource that supports the livelihoods of 1.6 billion people. Ecosystem services from tropical forests alone are estimated to be worth, on average, US\$6,120 per hectare each year. Africa's forest cover is estimated at 675 million hectares, or 23 per cent of the continent's total land area continent. Between 2000 and 2010, 3.4 million hectares were lost annually to illegal logging – equivalent to an area 322 times the size of Paris, or 5.1 million football pitches.

In addition to facing the challenges of illegal logging within their borders, Tanzania, Kenya and Uganda are also used as transit countries for timber illegally logged in other countries such as the Democratic Republic of the Congo (DRC).

The Tanzanian strategy to reduce emissions from deforestation and forest degradation (REDD+), the on-going Kenya REDD+ governance project and the Uganda REDD+ readiness plan highlight the importance of strengthening law enforcement and forest governance to address the illegal timber trade as one of the key drivers of deforestation.

These countries recognize that illegal logging must be mitigated, and forests managed sustainably, in order to reduce emissions from forest loss. As such, a key goal of the initiative is to curb illegal logging and trade in East Africa as a way to address deforestation and subsequently reduce emissions from forests.

*The East Africa Initiative on Illegal Timber Trade and REDD+* provides an opportunity to build on each country's experiences combatting the illegal timber trade, and brings in the specialized expertise of INTERPOL and each collaborating UN agency. The five agencies will assist the governments of Kenya, Uganda and Tanzania to address a different facet of the illegal trade in timber: from economic drivers, and corruption, to law enforcement, customs control, and monitoring.

Given the multi-sectoral negative impact of the illegal timber trade, the initiative will receive strong implementation support from Interpol, the Food and Agriculture Organization of the United Nations (FAO), the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), the United Nations Office on Drugs and Crime (UNODC).

A key element of the initiative's strategy is to support countries in addressing the illegal timber trade from source (illegal logging) to export. This will focus on increasing accountability, transparency and developing the technical capacities to deliver effective enforcement and verification.

"Wildlife and forest crime demands a global solution that offers international cooperation founded on joint operations, intelligence sharing and strong and compatible national legislations," said Yury Fedotov, Executive Director, United Nations Office on Drugs and Crime (UNODC). "We can do nothing less. This is our shared planet; wildlife and forest crime is our shared responsibility."

Enforcement plays a critical role in the process. The apprehension and prosecution of those involved in the illegal timber trade and in illegal logging reduces the perceived rewards of taking part in these illegal activities. For this reason, the initiative will also include, with the support of INTERPOL, and with the engagement of police forces, strengthened exchange of intelligence and communication across borders.

“We remain committed to developing and maintaining networks of cooperation like the one we see here today between UN agencies and INTERPOL,” said David Higgins, Head of INTERPOL’s Environmental Security Unit. “Through collaboration and coordination, we are building an unprecedented approach to address illegal logging and trade in East Africa.”

[www.unep.org](http://www.unep.org)

## The new wildfire law in South Africa: what consequence? – part 2

Part 1 of this article, published in the previous CFA Newsletter, contained an account of the new regime of enabling and frameworking statutes that were passed from 1998 onward in South Africa, and the place of new wildfire law in this regime. In this account, the author examines the character of the new wildfire law, its key provisions, and progress with its implementation.

### The character of the National Veld and Forest Fire Act

The NVFFA is a risk-based statute: it applies only where land is ‘subject to a risk of veldfire’. In that case, the law sets certain minimum standards for landowners—the duty to prepare firebreaks, and requirements regarding fire preparedness and response to the outbreak of fire. These requirements are not specified, and the Act allows room for local practice and precedent to determine these. And the Act prescribes few offences: only in such things as the failure to meet these standards, or to allow Fire Protection Officers access in the case of fire, or of neglecting a fire or transgressing the prohibitions under high fire danger conditions. The law does not criminalise unduly the actions involved in the use of fire and the management of fire risk.

Instead of broad criminalisation, the NVFFA makes two important provisions designed to enable systematic, locally-appropriate management of veldfire: first, the National Fire Danger Rating as an early-warning system, and, second, Fire Protection Associations as institutions for local fire management.

Hard work followed passage of the NVFFA. Detailed consultation and analysis, involving stakeholders from across the country, and thorough formulation of guidance and communications followed on promulgation of the Act, reaching all interested parties or the colleagues and representatives<sup>1</sup>. A national veldfire risk assessment, since refined, determined what area in the 1.2 million square kilometres the land is ‘subject to a risk of veldfire’ (74%) and provided geographical risk ratings to guide public priorities (62% of the country being exposed to High or Extreme fire risk)—see Figure 2<sup>2</sup>. Officials campaigned nationwide to promote its provisions.

### The National Fire Danger Rating System

The National Fire Danger Rating System, launched on 2005<sup>3</sup>, provides for regional forecasting and communication of fire danger in different regions, with a trigger that effects open-air fire prohibitions and communal precaution when the danger is rated extreme. The launch of the system followed thorough analysis of optional fire danger rating systems. It involved the delineation of 41 fire danger rating regions, designed to take account of ecological conditions as well as to fit with weather forecasting regions, and region-specific statistical definitions of fire danger index intervals<sup>4</sup>. But, despite the official launch, the system has not been properly implemented, owing to failed uptake in the South African Weather Service, and resistance among fire suppression organisations to the ‘complex’ rating model adopted (i.e. the US Forest Service model, selected because it could accommodate diverse vegetation types). Current reports claim that a home-grown fire danger index is to be employed, amended to take account of grass fuels.

### Fire Protection Associations

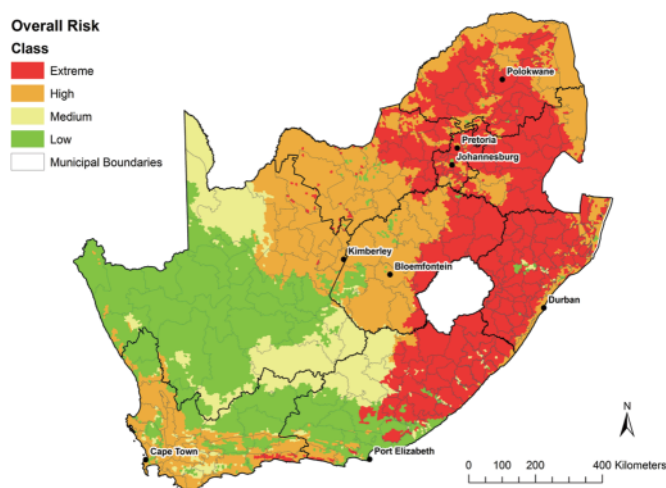
A central element of the NVFFA is the chapter on fire protection associations (FPAs). These are voluntary associations of landowners in any region where there is a uniform risk of fire. Government registers any FPA once members have agreed on their constitution, the rules that govern members with respect to fire management, and a ‘business plan’, based on a local wildfire risk assessment. Once registered, FPA has the power to appoint a Fire Protection Officer with statutory powers such as for fire-response coordination and the enforcement of FPA rules, and to raise contributions from members. Through these means, members of an FPA bind themselves to agreed local norms, standards and procedures. Members decide themselves what sanctions apply in the case of a breach of rules, although the courts now take into account such breach in the case of criminal or civil action, and insurance companies load their premiums and assess damage claims in the light of FPA membership and compliance with rules, or the absence of this.

<sup>1</sup> See e.g. Kruger *et al.* 2004.

<sup>2</sup> Forsyth *et al.* 2010, Le Maitre *et al.* 2013, Department of Agriculture, Forestry and Fisheries 2005.

<sup>3</sup> Launch of the National Fire Danger Rating System <http://www.daff.gov.za/doaDev/sideMenu/ForestryWeb/dwaf/cmsdocs/Elsa/Docs/Home/Press%20Release%20NFDRS%207Sep05.pdf> accessed 15 April 2014.

<sup>4</sup> Willis *et al.* 2001, Bridgett *et al.* 2003.



*Map of South Africa delineating veldfire risk classes, from Forsyth et al. (2010). Risk was assessed as a function of the joint likelihood and consequence of dangerous fire scenarios, and aggregated for social, economic and environmental consequences. The area of extreme risk is largely within the Grassland and Savanna Biomes. This where grass fuels accumulate annually to amounts sufficient to carry hazardous fires, and which cure during the dry winters, when episodes of extreme fire weather are regular, but also where, because of largely accessible terrain, many people and their assets are exposed to the hazard.*

FPA form and operate according to a guideline document issued by government in 2004, and regulations promulgated to set minimum requirements for collectives seeking registration of FPAs, both formulated after much consultation, which took account of stakeholders' experience and interests, biodiversity management considerations, and governance concerns. These requirements assist in achieving consistency within and among FPAs, and meet the stipulations in disaster management frameworks and regional biodiversity management plans. The guideline states explicitly that 'South Africa is a country of great social, economic and ecological diversity. It is impossible to have a blueprint for the management of a phenomenon such as veldfires for the country as a whole. Local knowledge and judgement must determine the way veldfires are managed.'<sup>5</sup>

It is too early to say what effect the new law has had on the management of veldfire. There has been no repetition of the disasters of 2007 and 2008, but this is likely because of a favourable run of years in South Africa's quasi-cyclic climate change. But there has been good progress in deploying some of the instruments of the law. By 2010, 196 FPAs had been registered, receiving their statutory powers, and covering 50 million hectares of South Africa's 122 million ha of land area; 185 of these FPAs are registered in high to extreme veldfire risk areas.<sup>6</sup> Umbrella FPAs each serve up to 19 member FPAs with common services, such as training. In many cases, FPAs formed on institutional foundations laid up to 60 years before, when landowners had begun to collaborate for fire management, soil conservation, or community protection. The newly registered FPAs

in many cases have now extended their reach to include small-holders, and communities in communal tenure, previously excluded. They also successfully serve as a focal point from the harmonisation of standards of practice in prescribed burning.

Members of FPAs, and their umbrella organisations, receive guidance and advice from government, but operational support comes especially from two new entities, Working on Fire, and the Forest Fire Association (FFA). Working on Fire is a funded from the exchequer via South Africa's Natural Resources Management Programmes, part of Expanded Public Works Programme, which creates work opportunities in public environment and culture programmes (the programme as a whole spent R2.8 bn in the fiscal year ending March 2013). FFA is a holding company contracted to manage Working on Fire on behalf of government, but has further subsidiaries that provide air services for fire suppression, and fire management services to FPA members through its management of Working on Fire.

### Concluding assessment

This remarkable progress in extending community-based fire management through much of South Africa's fire-prone rural environments owes partly to the history of local institutional development over prior decades, but also extensive consultation prior to new law-making as well as proper investment in communication and training. The new regime has made progress in extending fire management to previously under-served communities. However, there are still important gaps, and many FPAs are not yet properly operational: only 44 of the 196 required to do so complied by submitting annual reports for 2009; many struggle to appoint and retain competent Fire Protection Officers. Government departments and government organisations in general, frequently do not comply with the law, while enforcement of the Act is in general hampered by limitations within the judiciary and the South African Police Service. And in many cases, significant numbers of landowners within the boundaries of a given FPA are not yet members, and effectively freeload on the Association. In some FPAs, members are mainly from the corporate forest sector, and dominate the interests of other landowners.

Equally problematic is the failure, to date, to implement the National Fire Danger Rating System. One consequence is that the old-regime regulation of seasonal fire prohibitions has continued, possibly ultra vires, and involving the annual issue and enforcement of 100's or thousands of burning permits, and thus costly policing: a situation inconsistent with the intention of the Act. This, at least in one case, links with an excessively large FPA, with 515 members and a territory extending 200 km E-W and again 200 km N-S, is too large to achieve communal action, resulting in a return toward a command-and-control ethos, rather than the collaborative approach intended in the Act.

In summary, the NVFFA like its sister statutes does not impose a blueprint on the institutions of natural-resource management. In this system, the state is to play a limited role: of setting minimum standards, and of providing guidance and advice to the common-pool institutions, the Fire Protection Associations, while monitoring and evaluating progress toward sound natural-resource management and healthy and safe environment.

Veldfire management as an element of the social-ecological-system is marked by the need to manage risks shared among neighbours, a communal problem requiring local solutions. It is

<sup>5</sup> Department of Agriculture, Forestry and Fisheries 2005.

<sup>6</sup> Department of Agriculture, Forestry and Fisheries 2010.



analogous to the 'common-pool-resource' problem, i.e. a problem requiring both private action as well, simultaneously, of collective and public action, at several levels, involving different spheres of government, but with 'key management decisions ... made as close to the scene of events and the actors involved as possible'<sup>7</sup>. The key institution, the FPA, meets many of the desired features of the CPR institution: clearly defined boundaries, the moderate territorial size that is most conducive to self-organization, local rules and norms for managing the resource, full autonomy at the collective-choice level to craft and enforce own rules, and so on<sup>8</sup>. Still, strong leadership at all levels and in the different local spheres is needed to ensure continued progress, to capacitate weaker FPAs, to correct inequitable distribution of power within FPAs and nudge other departures toward desired norms. Leadership is needed and to close the hiatuses in the statutory regime, such as the absence of the fire danger rating system, and the consequent persistence of anachronistic anomalies. As Richard Lazarus cautions, the law-making moment is a great opportunity for reform, but the hard work comes afterward, 'famously so in environmental law': and 'Rather than a one-shot static affair, policy reform must be seen as a *dynamic process*, in which political forces seeking to protect a general-interest reform may be opposed by forces seeking to undermine it'<sup>9</sup> The past decade of progress in South Africa's wildfire management is only a first step in this long dynamic process.

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*The author is a former Director of the South African Forestry Research Institute and the Division of Forest Science and Technology at South Africa's CSIR, and as an independent expert held policy oversight in the writing of the draft bills for the National Veld and Forest Fire Act as well as the National Forests Act. In this article he writes in his personal capacity. The UK*

<sup>7</sup> Trond 2010, Nagendra and Ostrom 2012.

<sup>8</sup> Ostrom, Governing the Commons: The Evolution of Institutions for Collective Action 1990, Ostrom, A general framework for analyzing sustainability of social-ecological systems 2009.

<sup>9</sup> Lazarus 2010, and Patashnik in Lazarus.

*Department for International Development funded much of the work required for the new laws discussed here as well as the subsequent work to assist their implementation.*

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## News from Guyana

Through the persistence of a third party, it has been revealed that the Forests Act 2009 became operational law on 08 August 2012, through a commencement order backdated to the Presidential assent on 12 October 2010, itself an extraordinary 628 days after enactment by the National Assembly in January 2009. This information corrects my statement in the last report for Q1 2014 in CFA Newsletter number 65, 2014, page 15, that the Act was not yet operational law. The commencement order required by section 2 of the Act was published in the Official Gazette, an almost inaccessible document, although the Gazette has been placed online since January 2013. It is hardly surprising that almost

nobody knows of this commencement order, least of all the library staff of the National Assembly. The commencement order was not announced by either the Guyana Forestry Commission (GFC) or the Ministry of Natural Resources and the Environment, and no government website carries either a notice or a copy of the order. The lack of public protest about the lengthy and probably unconstitutional delay is a reflection of the informal, under-the-table way of managing disputes about legality in the forest sector in Guyana, prevalent since the 1970s.

The Forests Act 2009 to replace the Forests Act 1953/1997 was drafted in 2007 and, like some other legislation of the same period, is written in a complex structure and convoluted

language, difficult for even a lawyer to understand. The Act differs greatly from best international practice. It was not developed by any public participatory process, unlike the 2004 version which was abandoned without explanation. The Act gives extraordinary administrative discretion to the Commissioner of the GFC, with no guidance on criteria for decisions and no processes for appeal against administrative decisions. The normal provision for clarification through subsidiary Regulations has not been implemented; seven years after the 2007 drafting of the Act, no Regulations have been presented for Ministerial approval.

The GFC is notorious for not taking alleged offenders to court for prosecution. Instead, the GFC misuses the 'compounding' administrative procedure intended only for trivial or minor offences (section 71 (2)). The vague wording of the Forests Act 2009 allows the GFC to determine 'off the cuff' the nature of the offence, the penalty and the size of the monetary fine. This abuse of process has allowed the GFC to levy penalties totalling between US\$ 169,000 and US\$ 910,000 annually during 2005–2012.<sup>1</sup> None of this money has apparently been paid into the Consolidated Fund of the Ministry of Finance. These penalties have been lumped with licence fees in the much-delayed GFC annual reports 2005–2012 presented to the National Assembly in November 2013, but licence fees are small for the forest sector of Guyana, so it is reasonable to say that almost all of these large amounts are comprised of administratively determined fines. Members of associations of small-scale chainsaw millers say that the GFC operates an informal procedure such that 1/3 of the compounding fine goes as a reward to the GFC staff who detect the alleged offence, and 2/3 to the GFC HQ. Licence fees are properly 'money lawfully received by the Commission for the purposes of the Commission' (section 14 (1) (b) of the Guyana Forestry Commission Act – cap. 76:02 of 2007). In contrast, fines are not 'for the purpose of the Commission', should not have been lumped with licences in the summary accounts attached to the annual reports, and should not be retained by the GFC. Unfortunately the Auditor General has failed to notice this mal-administration.

The public summary of the second independent forest monitoring (IFM) report, dated April 2014, was issued in mid-July. IFM is being carried out as a commitment under the Norway-Guyana MoU of November 2009. The field work for the GFA Consulting Group (Hamburg, Germany) was carried out during one week in November 2013. This is the third report from GFA, the first being a scoping visit in September-October 2011 (scoping report published December 2011) and the second was on the first IFM verification in mid-2012 (report published October 2013). The long delays between field work and public summary presumably indicate the resistance of the GFC to any remotely critical comment or observation, as also demonstrated in the retorts to mild comments made by the Rainforest Alliance in December 2012.<sup>2</sup>

<sup>1</sup> See BULKAN, J and PALMER J. 2014. Why the National Assembly should hold public hearings on the Guyana Forestry Commission. *Stabroek News*, January 22–31, 2014. <http://www.redd-monitor.org/2014/02/07/why-the-national-assembly-should-hold-public-hearings-on-the-guyana-forestry-commission/#more-14839>

<sup>2</sup> RAINFOREST ALLIANCE. 2012. Verification of progress related to indicators for the Guyana-Norway REDD+ Agreement. 2<sup>nd</sup> Verification audit covering the period October 1, 2010–June 30, 2012. Vermont: Rainforest Alliance.

The IFM is intended to assess the validity, reliability and effectiveness of the GFC monitoring system and checks on legal compliance. The GFC has been insistent that the IFM is to verify the existence of systems, not whether or not they function. GFA gently insisted in the first IFM report that checking for the system necessarily involves looking at functionality, but this was repeatedly rejected by the GFC. Criteria for the IFM are in the GFA's terms of reference but not reproduced in any of the three reports. Criteria have been modified or removed in Guyana, in some cases to remove ambiguities in the original version but, it appears, more often because there has been widespread non-conformity noted in the first IFM verification. In addition, failures to follow GFC standard procedures have in some cases been excused as being covered by a 'special condition'. This is nowhere described but in practice represents an undocumented deal between the concession holder and senior staff of the GFC and/or the Ministry of Natural Resources and the Environment. Some significant criteria which are found in international forest certification systems are missing from the Guyana IFM, such as whether the process for issuing logging concessions has been compliant with law and administratively prescribed procedures, or whether the rights of indigenous peoples have been infringed. This omission is not surprising, as some major concession allocations have clearly not been compliant. Similarly, the opportunity to check GFC claims against Customs data has been missed, through non-inclusion of relevant criteria.

It is disappointing that, in spite of having a local lawyer on the GFA team for the second verification, GFA has failed to notice when GFC practice is non-compliant with law; for example, GFA has not understood that all logs being transported out of a concession in State Forest, or out of Amerindian Village Lands or agricultural lands, should always be accompanied by one of a specified set of GFC-issued documents.

Given that GFA has agreed to verify mostly through matching GFC reports to law and procedures, it is not possible to say if those reports actually represent reality. It is clear that in the scoping and first verification study GFA put in a considerable effort to understand the GFC's claimed systems and the actual practices. In this public summary of the second verification report, notably shorter and issued after a similar long delay, there is an impression that GFA has become unwilling to argue against GFC's traditional intransigence. It is unclear what the Norwegian International Climate and Forest Initiative expects to gain from continued engagement with the Government of Guyana, given this record of intransigence and repudiation of even mild observations. This pattern of defending long-known illegalities and the selective application of law and procedures is not a good omen for the slowly progressing negotiations towards an EU-FLEGT voluntary partnership agreement with the European Union.

It is unfortunate that the National Assembly, through its sectoral committee on natural resources, does not itself scrutinize and critically examine the performance on the agencies and Ministries of the Government of Guyana. Why should taxpayers' money from donor countries be used to check on the performance of Guyana government agencies when the national legislature does not attempt to carry out that function itself?

**Janette Bulkan**  
CFA Governing Council

# The devolution of land rights, empowering local indigenous communities in the Guyana context



Fair View Village (Photo: Courtesy of Iwokrama International Centre)

Land and property rights play a central and critical role in the development process of numerous rural communities, thereby promoting and enhancing community development. It is vital for social, legal and economic empowerment, conservation, climate change mitigation, improvement in livelihoods etc, as well as a tool for promoting better governance.

What has been happening in Guyana in this regard stems out of strong and effective guarantee for Amerindian land rights, as being fundamental to economic security and to their cultural survival and well-being. The land forms the basis for Amerindian existence, both physical and spiritual, as an independent entity. Territorial space is the foundation and source of their relationship with the universe and the mainstay of their view of the world. Of crucial importance, is the understanding that the relationships that indigenous peoples have with land and resources have been prominently recognized by intergovernmental and non-governmental organizations as well as by many states. A point articulated in the 1981 UNESCO *Declaration of San Jose on Ethno-Development and Ethnocide in Latin America*.

It is not in all instance of land use, that traditional, customary, community and social rights are clear. In some or many case, hereditary use of such lands can be overturned with considerable ease by those in authority for investment or other national uses, without factoring the inherent traditional rights and uses of these lands. Therefore securing property rights for native peoples become a matter of urgent priority and concern which involves at a basic levels some of the following:

- Providing statutory recognition for customary tenure within the legal frame work
- Clarity on land ownership and recognition of traditional uses
- Establishment of clear rights and privileges
- State respect for ensuring that community rights are not extinguished arbitrarily
- Providing clear title
- Securing property rights etc.

In the case of Guyana an Act of Parliament in the form of the 2006 Amerindian Act helps guarantee those rights. The intention of this statutory instrument is to provide for the recognition and protection of the collective rights of Amerindian Villages and Communities, the granting of land to Amerindian Villages and Communities and the promotion of good governance within Amerindian Villages and Communities.

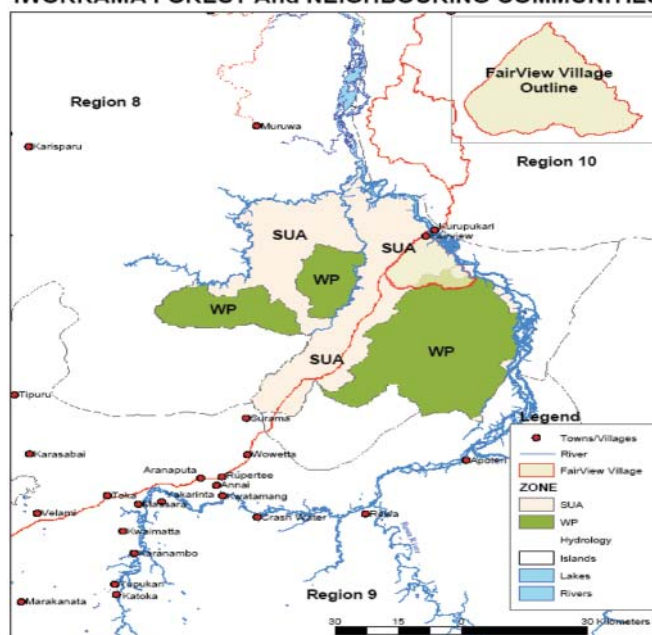
The operational heart and central nervous system which complements this initiative through co-management arrangements is the Iwokrama International Centre for Rainforest Conservation and Development, which forms the lifeblood, nervous system and vital nexus in engaging community cooperation. Iwokrama is an international programme that is firmly grounded in the reality of people, who live in tropical forests and whose entire economies rest on the fate of their environment.

This is enshrined in the centre's mission dedicated **“to promote the conservation and the sustainable and equitable use of tropical rain forests in a manner that will lead to lasting ecological, economic and social benefits to the people of Guyana and to the world in general, by undertaking research, training, and the development and dissemination of technologies.”**

Iwokrama International Centre (IIC) manages approximately 360,000 hectares (one million hectares) of intact tropical rainforest donated by the Government and People of Guyana to the International Community. The responsibility for management, conservation and sustainable development of this forest area (the Iwokrama Forest) has been entrusted to the Iwokrama International Centre, through the Iwokrama International Centre for Rainforest Conservation and Development Act of 1996, and an Agreement between the Government of Guyana and the Commonwealth signed on November 9<sup>th</sup> 1995.

## Community Development and Collaborative Management at the Iwokrama International Centre (IIC)

### IWOKRAMA FOREST And NEIGHBOURING COMMUNITIES



Pivotal to the Centre's success is its involvement with local communities in the North Rupununi area. Building on local knowledge and expertise, Iwokrama has proven itself a leader in sustainable resource management. As part of our mission, Iwokrama works with the 16 Amerindian communities, our closest neighbours, in the North Rupununi, to ensure that environmental, economic and social benefits are returned to them for use of resources that they have used in centuries past. One community, Fair View, lies within the Iwokrama Forest and since 2006 has title (ownership) of 22,000 hectares of the Iwokrama Forest.

On December 21<sup>st</sup> 2006, The Iwokrama Centre and the village of Fair View signed a Co-Management Agreement which was witnessed by Hon. Min. Carolyn Rodrigues, Foreign Affairs Minister of Guyana. The signing of this agreement marked an important milestone in the development of Protected Areas Management in Guyana and demonstrated that it is possible that people can live, sustain their livelihoods find self advancement, and fulfill their aspirations, whilst living and working within a park. With this Co-Management agreement a formal relationship between local communities and protected areas was forged. The **granting of title to a community** (indigenous might I add) in a Protected Area is a global model for Protected Areas Management. This will strive to show that people can live within protected areas, and that the objectives of a community can be aligned and integrated with the objectives of protected areas management.

The co-management agreement between Fair View and Iwokrama is the means by which all parties can continue to collaborate in an equitable manner towards management of the Iwokrama Forest. **Fair View will part own Iwokrama businesses**, and Iwokrama will participate in the life of the Fair View Community.

This approach to community involvement and collaboration involves key aspects which forms the critical links to sustainability, empowerment and people participation. These elements include a process that:

- **Is Democratic**
- **Is Inclusive**
- **Is Non-authoritarian**
- **Focuses on Community self determination**
- **Embraces Community Ownership**
- **Enhance natural capacities and networks**
- **Promotes Social justice and equity**
- **Recognizes Universality**
- **Involves Service Integration**

Through this process there are some key agreements which illustrate the commitment to community revolves around social acceptability, environmental soundness, economic feasibility and community ownership which help to form the basis of sustainable livelihoods.

### **Collaborative Management Agreement with the NRDDB**

This agreement between Iwokrama and the North Rupununi District Development Board (NRDDB) out the framework under which the Iwokrama Programme Site shall be managed collaboratively between Iwokrama and the communities and the Amerindians, represented by the NRDDB, who have a particular connection with any area of land within or neighbouring the programme site.

This agreement also sets out the process by which the Programme site will be protected and sustainably utilized to bring lasting benefits to these local communities and their members, in accordance with the Iwokrama Act. It is important to note that this agreement was signed in July of 2005 and amended in 2008.

Additionally, according to Deininger, Klaus et.al, 2012 in a World Bank Report on *The Land Governance Assessment Framework: Identifying and Monitoring Good Practice in the Land Sector*, establishing the infrastructure necessary to proactively deal with the challenges (relating to the devolution of land rights) can require large amounts of resources. Yet with land tenure deeply rooted in any country's history, a wide continuum of land rights, and vast differences in the level of socioeconomic development, the benefits to be expected and the challenges faced will vary across and even within countries, implying a need to adapt the nature and sequencing of reforms to country circumstances. As reforms will take time to bear fruit and may be opposed by vested interests, there is a need to identify challenges and to reach consensus on how to address them in a way that allows objective monitoring of progress over time. Without this being done, the chances of making quick progress in addressing key land policy challenges are likely to be much reduced.

Guyana like other countries which have pursued similar trajectories on addressing issues of land rights have boldly gone where many have never gone and perhaps few will ever go.

**Andrew R. Alexander**

Managing Director Nature's Love Consultancy  
Saint Lucia

## **The 2014 Marcus Wallenberg Prize Award**

**T**he 2014 Marcus Wallenberg Prize was awarded to Professor Magnus Berggren for his broad and path-breaking contributions to the basic science as well as to several applications of electronics applied on paper. His alternative approach to develop ion-based electrochemical transistors instead of silicon-based is well adapted for printing on paper because they operate at low voltages, do not require extremely thin layers and are easy to apply by traditional

printing methods even on rough surfaces such as paper. This paved the way for important potential applications like colour switching paper-based displays, smart packages or labels, including different kinds of disposable sensors and testers. Using the same basic technologies Berggren has also been actively developing "organic bio-electronics", in particular components that can communicate between biological systems (ion communication) and electronics (electrons) – primarily for

use in medicine and diagnostic tools, some of which are printed on paper.”

Magnus Berggren is one of the most widely acknowledged forerunners in the field of paper electronics. The idea to print electronics on flexible paper and plastic substrates had started in the 1960's with the deposition of silicon-based thin film transistors on paper and board. At the end of the 1990's Berggren and his group initiated an alternative approach, namely ion-based electrochemical devices (instead of silicon-based), ideal for paper since they are easy to apply by traditional high-speed printing and operate at low voltages (1–2 V). This new approach renewed the interest in using paper substrates for electronics. One basis for the advance was the development of high-performance electro-active materials that can be processed in a liquid state enabling their use in printing inks.

Owing to a colour shift associated with the state of oxidation, the electrochemical transistors can also in a simple way be used as electro-chromic pixels (colour switching) and therefore combine a logic function and visualization. The disadvantage is the slowness of ion motion, typically on timescales from tenths of milliseconds and upwards. To solve this issue, Berggren and his group further developed electrolyte gated Organic Field Effect Transistors, by replacing the thin isolator with a solid electrolyte. This in turn was partly based on previous discoveries in Professor Ronald Österbacka's group at the Åbo Akademi and Professor Daniel Frisbie's group at the University of Minnesota.

Berggren initiated and led the early development of a large number of applications at the research institute, Acreo Swedish ICT, in Norrköping, among them projects in cooperation with a

number of paper and packaging industries. Examples are new functions added to packages or labels including printed disposable sensors. The low voltage operation has made it possible to power the electrochemical components by printing of single cell batteries and energy harvesting devices (solar, heat or radio-frequency) on to paper and thus strongly facilitate integration of several functions. One recent example is a totally printed wireless humidity sensor label. 3 (3)

Using the same basic technologies Berggren has, in cooperation with the Karolinska Institutet and Acreo Swedish ICT, actively developed “organic bio-electronics” – primarily to be used in medicine and diagnostics. The focus is on devices that can communicate between biological systems (ion communication) and electronics (electrons) such as ion pumps and ion transistors.

Magnus Berggren was born in 1968. He received his PhD at Linköping University in 1996 and continued his research as a postdoctoral fellow at Bell Labs, in Murray Hill, USA. Magnus Berggren was one of the driving forces in the establishment of the company Thin Film Electronics AB and was its managing director between 1997 and 1998. Between 1998 and 2002 Magnus Berggren was Project Leader at the Acreo Swedish ICT and associate professor at Linköping University. Since 2002 he has been Professor in Organic Electronics at Linköping University heading a group of 35 researchers, at the same time keeping close links to Acreo Swedish ICT. Magnus Berggren is involved in a large number of patents and more than 150 articles in well recognized international conference proceedings and scientific journals, among them both Science and Nature.



## Association of Women in Forestry and Environment (AWIFE)

### BRIEF HISTORY OF THE ASSOCIATION

The Association of Women in Forestry and Environment (AWIFE) was registered on the 10th of March, 2003 despite being in operation since 1999. The Association is a Non-Governmental Organization that stands out among others. It is unique in the sense that it is composed of women from various professional backgrounds, who are interested in nature and the environment at large. Its audience is the women folk especially in the rural communities whose dependence on the forest cannot be over-emphasised.

The National President of this Association is Dr. (Mrs.) Aderonke Somade – Adio. She is also a Director and Head of Department of Sustainable Forest Management at the Forestry Research Institute of Nigeria, Ibadan, Nigeria.

The objectives of the Association include among other things, to increase the participation of women in managing forest resources as a means of self-reliance, to make rural and

urban women more environmentally aware of the alarming rate of extinction of plant species, to provide training/skills to transform the lives of women in the rural communities, to complement government efforts in conservation programmes, to introduce alternative strategies for forest conservation, and environmental protection, by creating awareness on the economic values of Multipurpose Tress Species (MPTs) and popularizing them as potential sources of livelihood.

The Association has been able to organise training workshops on Forest Nursery Techniques with the support of the Global Fund for Women, USA. It has had Annual Conferences with the last one held at the Federal University of Technology, Akure, Ondo State, Nigeria. The theme was *Trade & Investment Opportunities In Non-Timber Forest Products (NTFPs) in Wealth Creation & Mitigating Climate* held on the 6th May, 2014.

The Association also has Journal publications on sustainable environmental management to assist scientists publish results of their findings. We have published 5 volumes to date.

The Association marked 2014 World Environment Day on 5th June on the theme **Raise your voice and not the sea level**. We went around market places to educate people on the dangers of dumping refuse in streams and rivers and on the need to plant trees, especially those ones that have health, nutritional and economic benefits.

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## VPA-FLEGT and community forests in Cameroon



*Timber processing using a Lucas Mill in a Community Forest in Southeast Cameroon*

**T**wenty years after the promulgation of the Forest, Wildlife and Fishery Law 94/01 of 20 January 1994 in which the implication of local communities in the management and conservation of natural resources constituted a great innovation, community forestry in Cameroon is still characterized by wild sawing with severe consequences on forest cover and lack of income for local populations. One of the major reasons is the insufficient financial and technical capacities to satisfy current regulations, resulting in the promotion of illegal activities and high corruption throughout the process of attributing, managing and exploiting Community Forests (CF). In order to propose a Wood Tracking System applicable to CF in Cameroon based on the National Tracking System developed by the STBC Project<sup>1</sup>, a study was undertaken in 2012 in a community forest in South Cameroon and funded by the SNV/PELFC<sup>2</sup> project. We interviewed resource persons working with NGO, CF and local communities, in order to evaluate their perception on the feasibility of this tracking system. Results revealed that among the 60 interviewed community members, 90% are not aware of its existence; 70 to 80% of the legal documents required to track timber are not available in the visited CF; even when NGO are supporting the process within a community, the success is not guaranteed and the durability of their actions remains questionable. Staying within current mood and based on problems mentioned above, we are promoting a basic

documentary tracking system where forest inventories, geo referencing of trees and the establishment of Annual Certificate of Exploitation (ACE) are cancelled. We propose that an annual quota (in m<sup>3</sup> of wood per species) and a minimum exploitable diameter per species, based on scientific researches in each forest zone in Cameroon (Centre, South, Southwest, Southeast, East), should be imposed on CF in order to ensure a sustainable management of the resources. We also propose the decentralization of administrative procedures that should be fully accomplished at the sub divisional level.

Even for such a basic timber tracking system, the total engagement of the forest administration and the law enforcement are the pre-requisites. For example, is it necessary for the elaboration of a 'simple management plan' to do forest management inventory, particularly knowing that the CF is located in the non-permanent forest domain? Is it feasible to ask to a community, who does not have the technical capacity and have no means, to recruit a consultant up to the task? Is it necessary to issue an ACE that is based on fake forest inventory results? In other words, the current requirements of community forestry in Cameroon looks like 'asking a five years old child grown in a Cameroon rural environment to do advanced mathematics!' With the Voluntary Partnership Agreement (VPA) – Forest Law Enforcement, Governance and Trade (FLEGT) signed between Cameroon and the EU, all timber and timber products from Cameroon have to fulfill all the legal requirements. This means that the CF timbers are at risk to be out of the process. Why not shape regulations that are basic and based on what local communities are capable of doing with few innovations and less additional costs? Is it not advisable to revise a law even if it will result in 'downgrading' it for the promotion of its respect and maximum application by local communities and the forestry administration? We are convinced that by doing so the community forestry will contribute effectively to poverty reduction and to sustainable management of natural resources in rural areas.

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<sup>1</sup> Projet système de traçabilité des bois du Cameroun.

<sup>2</sup> Projet Promotion de la production et de l'exportation légales des bois issus des forêts communautaires.



Canadian Institute of Forestry  
Institut forestier du Canada



Canadian Forestry Association  
Association forestière canadienne

## The Prince of Wales Forest Leadership Award announced

The Canadian Institute of Forestry – Institut forestier du Canada (CIF-IFC) is pleased to announce that, during a meeting in May 2014 with its National Executive, His Royal Highness The Prince of Wales endorsed a new international student exchange program. *The Prince of Wales Forest Leadership Award* will recognize outstanding students in Canada and the United Kingdom (UK) and encourage their personal and professional development through employment experiences.

Geraint Richards, Head Forester for The Duchy of Cornwall, has been working closely with the CIF-IFC to develop the program. Mr. Richards, who attended the meeting in Charlottetown, said, “I am delighted with the creation of *The Prince of Wales Forest Leadership Award* which will sit well alongside The Prince of Wales Award for Sustainable Forestry, launched last year. I am especially keen that this new Award provides our future forest leaders with a wonderful learning experience early on in their training, helping them better understand and, ultimately, use and promote sustainable methods of forest management in both the United Kingdom and Canada.”

The Award will provide two students from each country with direct financial support and an exciting work opportunity during summer. Created by the CIF/IFC with support from a partnership comprised of the Duchy of Cornwall and the Institute of Chartered Foresters (ICF), the award is sponsored by TD Bank Group.

“This is an exciting new exchange program with the intent of connecting forestry students with the necessary resources required for success,” said Dr. Tat Smith, President of the CIF-IFC. “We are recognizing the great importance of personal networking, professional experience and mentoring towards the development of young professionals. This program aims to provide much needed assistance in dealing with the challenges that come with beginning a new career.”

*The Prince of Wales Forest Leadership Award* will inspire knowledge and cultural exchange between students, employers and their host countries by providing a unique learning opportunity combined with professional development. It will

contribute to creating the future leaders of the world’s forestry community by delivering a high quality experience in addition to promoting the all-important sustainable forestry philosophies of the four main supporting organizations, and His Royal Highness.

“We have established an excellent international relationship with the Duchy of Cornwall and the ICF, and we are also grateful to TD for their support of this student exchange program,” said Matt Meade, Executive Director of the CIF/IFC. “The Award demonstrates all of our organizations’ and His Royal Highness’ commitment to promoting success of the world’s youth through unique experiential learning.”

Participating students will be connected with the resources required for success through the program while being provided with a unique international experiences and life-long memories. A nomination process has been developed, with the first exchange to take place in summer 2015.

“Providing opportunities for the next generation of forest professionals to build and demonstrate their knowledge and skills is incredibly important,” said Mary Desjardins, Executive Director, TD Friends of the Environment Foundation. “We are thrilled to support this program which will inspire our future environmental leaders to expand their education while making a significant impact in the world of forestry.”

“A career in forestry is diverse. It can take you to an urban forest or deep into remote woodlands, to a laboratory, or into communities to live and work with individuals whose livelihoods depend on forest resources,” said John Pineau, CEO of the CIF/IFC. “Whether outdoors or indoors, students with a passion for the environment and who thrive on solving complex problems will find this Award and exchange program to be a great opportunity!”

For additional information please contact:

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# Publications

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## Securing Rights, Combating Climate Change: How Strengthening Community Forest Rights Mitigates Climate Change

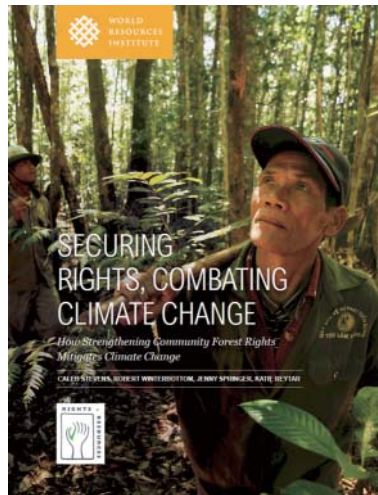
**World Resources Institute**

**S**ecuring Rights, Combating Climate Change analyzes the growing body of evidence linking community forest rights with healthier forests and lower carbon dioxide (CO<sub>2</sub>) emissions from deforestation and forest degradation.

This report makes a strong case for strengthening the rights of indigenous and local communities over their forests as a policy tool for mitigating climate change.

Key findings:

- When Indigenous Peoples and local communities have no or weak legal rights, their forests tend to be vulnerable to deforestation and thus become the source of carbon dioxide emissions



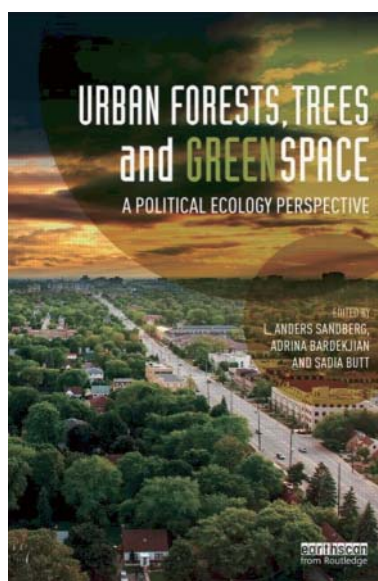
- Legal forest rights for communities and government protection of their rights tend to lower carbon dioxide emissions and deforestation
- Indigenous Peoples and local communities with legal forest rights maintain or improve their forests' carbon storage
- Even when communities have legal rights to their forest, government actions that weaken those rights can lead to high carbon dioxide emissions and deforestation
- Communities can partially overcome government actions that weaken their forest rights

Download from <http://www.wri.org/securingrights>

## Urban Forests, Trees, and Greenspace: A Political Ecology Perspective

**Routledge**

**U**rban forests, trees and greenspace are critical in contemporary planning and development of the city. Their study is not only a question of the growth and conservation of green spaces, but also has social, cultural and psychological dimensions. This book brings a perspective of political ecology to the complexities of urban trees and forests through three themes: human agency in urban forests



and greenspace; arboreal and greenspace agency in the urban landscape; and actions and interventions in the urban forest.

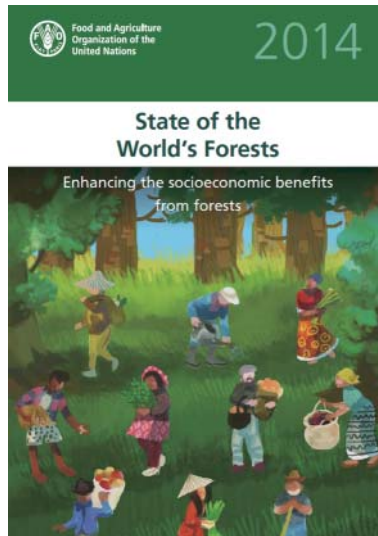
Contributors include leading authorities from North America and Europe from a range of disciplines, including forestry, ecology, geography, landscape design, municipal planning, environmental policy and environmental history.



# State of the World's Forests 2014

FAO

**A**cross the world, forests, trees on farms, and agroforestry systems play a crucial role in the livelihoods of rural people by providing employment, energy, nutritious foods and a wide range of other goods and ecosystem services. They have tremendous potential to contribute to sustainable development and to a greener economy. Yet, clear evidence of this has been lacking.



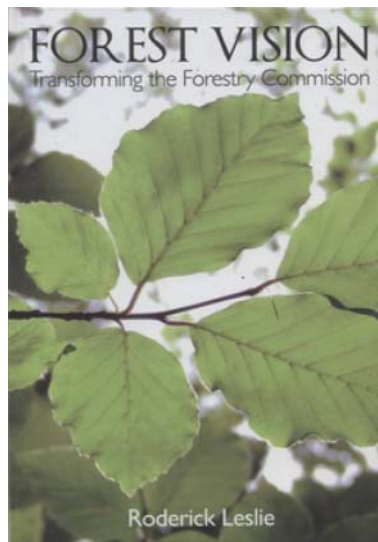
This edition of State of the World's Forests addresses this knowledge gap by systematically gathering and analysing available data on forests' contributions to people's livelihoods, food, health, shelter and energy needs. Crucially, the report also suggests how information might be improved and policies adjusted, so that the socioeconomic benefits from forests can be enhanced in the future.

Download a free copy at <http://publications-sales.fao.msgfocus.com/>

## Forest Vision: Transforming the Forestry Commission

**Roderick Leslie**  
**New Environment Books**

**T**his is a personal memoir, reflecting the author's experience of some 40 years in UK forestry (spent mainly in managing England's state-owned forests). The book has two major themes: the changing approach to management, from a single-interest focus on timber production to more broad based multi-purpose forestry; and the politics of privatisation. Written in a compelling – and, at times, idiosyncratic – way, the author displays a remarkable memory for people, places and incidents, which add colour to his story of how Forestry Commission staff sought to find increasingly innovative ways to realise the environmental and social potential of the woodlands they managed. He tells, for example, of how recreation moved on from the simple provision of car parks to embrace venues for concerts, mountain biking and tree-top “Go-Ape” adventures. An accomplished ornithologist in his own right, he also has much to say on the positive impact of informed habitat management and restoration, as well as offering good insights into the pioneering work



of creating new woodlands in derelict post-industrial landscapes. Moving on to discuss the Government's political “U-turn” on forestry in 2011, he directly links the unprecedented outcry against “privatisation” with all that had been done by the Forestry Commission to generate public benefits from public forests. Throughout, the author offers perspicacious comments on the interplay between the “doers” working in the field, and the complex maze of bureaucracy that had to be navigated to secure funds. Looking ahead, he sees major opportunities in a landscape-scale approach, making full use of the hard-won skills and lessons learned by the Commission over recent decades. This book will be of particular interest to anyone with parallel experiences – and if they do not agree with everything that is said then let them write their own story! Its language is accessible to non-professionals. And, for students of forest policy, it will provide valuable “primary source” material on the evolution of sustainable forest management in the UK during the late 20<sup>th</sup> and early 21<sup>st</sup> century.

**David Henderson-Howat**

# Love-infused Development – in search of a development ethic to halt poverty and forest loss

Duncan J Macqueen  
IIED

It takes a brave researcher to tackle both religious and scientific disciplines, given the current polemic that exists between them in many parts of the world. The idea of “faith” has been considered in the context of many titles such as “Managing as if Faith Mattered” and “Faith in Development” which seem fairly uncontroversial, but to come across a paper entitled “Love-infused Development” did take me by surprise – especially coming from an organisation such as the Institute for Environment and Development.

So full marks to IIED for being prepared to publish something with this title, and congratulations to the author Duncan Macqueen for putting together a very readable, thoughtful and timely argument for infusing the idea of “love” into our deliberations on development, especially in terms of forests and forestry. It’s the first time I have seen the theologian C.S.Lewis referenced (though details omitted) in a technical paper on the environment!

Lewis wrote a seminal book entitled the “The Four Loves” which Macqueen uses to help explain his idea. Three of these loves motivate us to put value on various aspects or needs of life, but the sustainability of the outcome depends on the extent to which we exercise these loves for our own or others’ well-being. It is only the fourth – unconditional “agape” love,



described – as the author points out – in various terms in many religions, that will ensure we meet our needs in ways which help others meet theirs, thus promoting fair and true development.

A minimum of six aspects of what humans value are identified by the author, and are: Stewardship of natural and cultural heritage; material health and wellbeing; affirmative social relationships; present and future security; creative fulfilment of potential and sense of identity and purpose (shades of Maslow here). A very useful summary table shows how each of these effect development if they are pursued either unconditionally through agape-love/transcendence or conditionally through ego/selfishness/self enhancement, and what are the consequences

Macqueen concludes by arguing that future sustainable development goals (SDGs) must be based on institutional constructs that promote these values via the way of agape-love transcendence, and not self-enhancement. And that, to my mind, is where religions / faiths, properly understood and practiced corporately and individually, come in to complement and form a partnership with the sciences of development. Promoters and practitioners of forestry in development – this is essential reading!

A Marcus J Robbins  
Treasurer, CFA

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## Around the World

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### Uganda: Mobile phone alerts help Uganda nab forest criminals

A forest monitoring system that uses text messaging on mobile phones has helped the Ugandan government to intercept six cartels involved in forest crimes, within just four months of its launch. The community-based forest monitoring tool allows anyone who witnesses a suspected illegal activity in a Ugandan forest to send an SMS message describing what they have seen and where to a common code: 6006.

Uganda’s *Observer* weekly newspaper, for example, published an article in March about an incident in which a community member spotted and reported a green truck with the registration number UAN 591A being loaded with logs in Kiyuni sub-county, in the central district of Mubende. Though he didn’t know whether the activity was criminal, he sent a message to

the common code to alert the authorities about what was happening. This prompted forest officers to rush to the location, where they found loggers with a false permit bearing a fake District Education Officer signature. In Uganda, such permits must be issued by District Forest Officers. The culprits were immediately arrested and charged in court.

“The technique is our new undercover lens that allows communities to participate in forest governance,” said Annet Kandole of CARE International in Uganda. The aid group developed the system in partnership with the Anticorruption Coalition of Uganda and Kampala-based NGO Joint Effort to Save the Environment. Messages are received by a central server that identifies where they originate from. They are then directed to the nearest concerned authorities to enable swift action.

Those receiving the messages include officers with the police and the National Forestry Authority, as well as selected politicians and civil society groups. "This is one of the tools we all need to embrace for integrated landscape management," Chris Planicka, programme associate at EcoAgriculture Partners, told Thomson Reuters Foundation at a recent conference in Nairobi.

By the end of June, four months after the tool's launch, six cartels had been netted, two of them linked to powerful Ugandan politicians, CARE's Kandole said. "Involvement of politicians and related forces is one of the biggest challenges we are facing for forest governance in this country," she said.

CARE is now including selected journalists as recipients of the alerts so that culprits can be exposed in the media before 'powerful' contacts come to their rescue. The tool is still new and little known to many Ugandans. CARE is in the process of popularising it through community radio, newspaper adverts and whenever an opportunity to talk about it arises, Kandole said.

Use of mobile phones for forest governance is one of the many innovative uses that have sprung up in East Africa following the region's cell phone boom. Studies have shown that nearly 100 percent of households have direct access to a mobile phone owned by an adult family member, or can access one through a close neighbour. Mobile telephones are a blessing, particularly for poor countries, said Gaster Kiyangi, a communications expert at the Straight Talk Foundation, which promotes conversations about the environment and forestry among schoolchildren in Uganda. "We've witnessed forest destruction

in many protected areas, but reaching the authorities has always been a challenge," said Kiyangi, who previously worked for the National Forestry Authority. "With the use of mobile phones, I believe many more cartels will be intercepted," he added.

Across East Africa, cell phones are also used by farmers to receive information about the weather, markets and agricultural prices, and to transfer money, among other innovations. "By using this tool, we will be able to reduce forest crimes substantially for the sake of the environment and future generations," CARE's Kandole said.

In the last 100 years, Uganda's forests have faced severe pressures, mainly from agricultural conversion due to population growth, urban demand for charcoal, over-grazing and uncontrolled timber harvesting, according to the U.N. Food and Agriculture Organisation (FAO).

The FAO reports that Uganda's forest cover has shrunk from 45 percent in 1890 to just over 20 percent of the country's total land area today. The current rate of deforestation is estimated to be around 1 percent per year, and the annual cost of deforestation has been conservatively estimated at \$3.8 million-\$5.7 million, according to the FAO.

"The government is working with us, and I believe they will continue supporting this community-based forest governing system because the forests form a greater part of livelihoods, particularly for poor communities," said Kandole. If funds are available, CARE hopes to introduce the tool soon in Kenya, another East African country where forest-related crime is rife.

[www.trust.org](http://www.trust.org)

## Canada: Island Timberlands logs old-growth forests near Port Alberni

Conservationists expressed alarm over a logging company's logging of rare old-growth Douglas Fir trees near Port Alberni. Island Timberlands had reportedly logged a hundred-metre wide section of old-growth trees in the previously intact part of McLaughlin Ridge's forest.

The Port Alberni Watershed-Forest Alliance and Ancient Forest Alliance have urged the BC government – which deregulated the land in 2004 – to work toward conservation of McLaughlin Ridge and other endangered old-growth forests jeopardized by Island Timberlands.

"This magnificent old growth forest is being reduced to stumps, logs and huge amounts of waste that will most likely end up in massive burn piles," said Port Alberni Watershed Forest Alliance coordinator Jane Morden.

"Anyone who sees this area now will never be able to imagine the centuries old forest that once stood here, nor will the forest ever grow back the same. It is a tragic loss for not only the wildlife that depended on it, but also for future generations...What's going on right now is a first rate environmental emergency in this province."

Logging by Island Timberlands was also at the centre of controversy on Cortes Island, where protesters tried to block loggers' access to the island's forests.

"By all measures, McLaughlin Ridge is of the highest conservation priority...McLaughlin Ridge was supposed to be protected as part of the agreement to remove the lands from the Tree Farm Licence in 2004, but the BC government and Island Timberlands dropped the ball on the subsequent negotiations," said TJ Watt, Ancient Forest Alliance campaigner. "We need Island Timberlands to cease and desist immediately from their old-growth logging operations, and for the BC government to ensure a conservation solution for this endangered ancient forest."

A few hundred hectares of endangered old growth forests and mature second-growth forests remain in the area, but activists worry they, too, may soon be cut down. McLaughlin Ridge has been recognized by the provincial government's own biologists as one of the most important habitats for the red-listed Queen Charlotte Goshawk (an endangered bird of prey) and as one of the finest ungulate wintering ranges for coastal black-tailed deer on Vancouver Island.

[vancouverobserver.com](http://vancouverobserver.com)

## Ghana: Illegal chainsaw operators make \$200m annually

Illegal chainsaw milling across the country accounts for over 84 percent of Ghana's lumber supply annually with an estimated volume of 497,000 cubic metres and a market value of over \$200 million, according to the Ghana Integrity Initiative (GII).

Executive Director of GII, an anti-corruption agency, Vitus A. Azeem, disclosed in Accra at the launch of a regional climate change and corruption control programme dubbed: 'Reducing Emissions from Deforestation and Forest Degradation (REDD+) Governance and Finance Integrity for Africa.'

"This is making government to lose huge tax revenues annually," he noted. He observed that the chainsaw activities significantly contribute to deforestation in the country which "if not tackled with the seriousness that it deserves could spell doom for the country." According to him, Ghana's total forest cover, which stood at 8.2 million hectares at the turn of the 20th century, has decreased to 1.6 million hectares. The current rate of deforestation in the country, the Director noted, is calculated at about 65,000 hectares per annum of which one of the major causes is illegal chainsaw milling."

Board Chair for GII, Moses Aristophanes Kwame Gyasi, stated that Ghana has not made any meaningful strides in bringing an end to illegal chainsaw operations because of the corruption and poor governance issues in the country. He noted that corruption was becoming rampant in every sector of the economy and the absence of structures and systems in place to check and correct wrongdoings leads to an increase in the chainsaw operations.

The Project, REDD+, proposed under the United Nations Framework Convention on Climate Change, has the aim of is to incentivize the reduction of emissions from deforestation and forest degradation in developing countries, as well as the conservation of forest carbon stocks, sustainable management of forests, and the enhancement of forest carbon stocks.

The project received funding from the European Commission and other donors to implement this three-year project in other African countries such as Cameroon and Zambia, with outreach to the Congo Basin, Central Africa Republic and Democratic Republic of Congo.

The primary goals of REDD+ are to strengthen citizens' engagement to increase the demand for transparency and accountability in the project's governance and finance policy development and monitoring to empower potential victims and witnesses of corruption and fraud and to strengthen national, regional and global anti-corruption policies and practices.

Kwame Agyei, an official of the Forestry Commission, claimed in a presentation to highlight REDD+'s importance in Ghana that the transparency of the project would be regulated by international mechanism with global checks and balances.

In a presentation about the funding of REDD+, Dr. Rebecca Ashley Asare said, "Specifically, the donors, who funded the project are Japan and the European Commission and other stakeholders such as private businesses, local communities, the media and farmers."

[www.ghanaweb.com](http://www.ghanaweb.com)

## India's natural forests half of what ministry claims

India has no more than 3.3 lakh sq kms of land under real forests, less than half the number claimed by the environment ministry in the 2013 forest survey released recently.

Among other impacts, low forest cover might be a contributing factor for poor rains as is the case so far this year. Says TR Shankar Raman, a forest biologist with Nature Conservation Foundation, "Studies have shown retaining forests is good for rainfall: air that passes over extensive forests brings more rain. Climate models have also shown how large-scale deforestation can reduce regional rainfall. Retaining natural forests in watersheds also helps sustain water flows in streams for longer periods during the dry season."

The divergence has come to light due to a new methodology adopted by the Dehradun-based Forest Survey of India (FSI) this year. Till now, the Forest Survey of India (FSI) was following a very expansive international definition for calculating forest cover: all lands, over a hectare in size, with tree canopies over at least 10 per cent of that area, irrespective of tree species and land ownership are counted as forest cover. It is a definition which incorporates coffee plantations, orchards and even urban parks – like Delhi's Lodhi Gardens – into a country's land under forests.

Another definition, recorded forest area, gets closer to the popular understanding of a forest. Pertaining to all areas

recorded as forests in government records, these largely consist of reserved forests and protected forests. These fall under the jurisdiction of the forest department and provide ecological security to India -rivers originate from them, for one.

It is important to not mix up these two definitions. As a paper titled "Forest area estimation and reporting: implications for conservation, management and REDD+", published in Current Science's 10 May, 2014, issue noted, if a forest is cut down and a plantation goes up elsewhere, "it will be recorded as a net gain in forest cover." Even though a plantation cannot perform all the functions of a forest.

And yet, for years now, mix them up is what the FSI did. Its reports presented forest cover data but were silent on how recorded forest areas were doing. That was because while the FSI was getting satellite images chronicling the distribution of trees and forests across the country, it did not have digitised forest boundaries it could use to isolate recorded forests for closer study.

It is this problem that has now been fixed. The FSI, says Rajesh Kumar, senior deputy director at the institution, turned to the Survey Of India's (SOI) topographic maps. While being prepared, these maps highlighted forest boundaries. Even today, says the FSI report, these boundaries "by and large" correspond to recorded forest area of the country. "This is not the perfect answer," says a former director-general of forests.

Even so, the 2013 FSI report is a step towards understanding how India's forests are doing. While the forest department (FD) has 771,821 sq km under its jurisdiction, we now know forests cover just 530,779 sq km of that land.

Seed forests, originating from seeds that naturally germinated in that area, account for just 63 per cent (or 334,390.77 sq km) of the land under the FD's command. In other words,

natural forests account for just 43 per cent of the land under the forest department.

Similarly, states have been claiming that forests are present in almost all of their recorded forest areas. However, forest cover numbers in the so-called "greenwash" areas – lands marked as forestlands in the SOI reports – shows large declines.

[economictimes.indiatimes.com](http://economictimes.indiatimes.com)

## Russia: FSC Certifying the destruction of intact forest landscapes

**A** new Greenpeace report reveals that the Forest Stewardship Council (FSC) is failing to protect Russia's remaining wild intact forest landscapes (IFLs). Greenpeace analysed 11 years of satellite data (2002–2013) for the area between the Northern Dvina and Pinega Rivers in the Archangelsk region of northwest Russia, which has a high concentration of former or current FSC-certified forestry operations. The study shows how the high conservation value Dvinsky Forest intact forest landscape (IFL) is being destroyed, despite much of the area being formerly or currently FSC certified.

Key findings of the study:

- FSC is certifying logging practices that are destroying irreplaceable forests, including areas slated for legal

protection, and has become a serious threat to Russia's taiga IFLs.

- FSC is failing to distinguish good forest management practices from the typical model of unsustainable forest exploitation widely employed in Russia's taiga forests
- The destruction of intact forest landscapes is widespread throughout Russia's taiga.

The report can be downloaded at <http://www.greenpeace.org/international/en/publications/Campaign-reports/Forests-Reports/FSC-Case-Studies/>

[greenpeace.org](http://greenpeace.org)

## Africa's Green Wall to block terrorism

**A**n ambitious plan to stop the southward advance of the Sahara Desert also aims halt the spread of Islamic terror. Scientists are planting a wall of trees and shrubs 15km (nine miles) wide that will stretch 7,000km across the continent. When completed, it will be the largest horticultural feature in history.

The Great Green Wall project is designed to stop the degradation of the Sahel, the arid region just south of the desert proper which is the poorest area of the world's poorest continent. The southward extension of the Sahara is causing poverty which is believed to feed militant Islamist groups such as Boko Haram in Nigeria, which kidnapped more than 200 schoolgirls in April. Insurgencies have also been active in Algeria and Chad. The British House of Commons foreign affairs committee warned in March of "A new frontline of violent extremism" saying that, unless it was checked, troubles in the Sahel could have effects "felt more widely across the world".

The region's population is set to triple to more than 300 million by 2050, putting additional pressure on food and water while the productive capacity of the land is declining. "The effects of desertification are increasingly felt globally as victims turn into refugees" or "turn to radicalisation, extremism or resource-driven wars for survival," warned the UN.

Lake Chad, which supports 30 million people in four countries, has shrunk to a fifth of its size 50 years ago.

"Most of the guys who are into terrorism in that region used to be farmers, fishermen and herders who depended on the lakes," said Uche Okpara, an expert on agricultural economics from Leeds University.

The Great Green Wall project, conceived by British explorer Richard St Barbe Baker during a 40,000km expedition to the region in the 1950s, is being spearheaded by botanists and seedologists from the Royal Botanic Gardens, Kew, with the support of the World Bank, the African Union, the UN's Food and Agriculture Organisation and national governments.

Eleven countries, Burkina Faso, Djibouti, Eritrea, Ethiopia, Mali, Mauritania, Niger, Nigeria, Senegal, Sudan and Chad, have created the Panafrican Agency of the Great Green Wall.

"Not every species will grow in the Sahel," said Moctar Sacande, a Kew seedologist from Burkina Faso who is leading a team. "The main challenge is getting the villagers to maintain their involvement. We're trying to show them that they don't need to wait four or five years to see the benefit." The Kew team hopes to have planted two million seedlings on 4,000 acres near 120 villages by next year. The plants are hardy, but sometimes need special treatment.

[forbes.com](http://forbes.com)

## DRC: CITES failing to adequately protect endangered Afrormosia tree

International trade in Afrormosia wood should be suspended and a drastic improvement in enforcement is required if the species is not to remain at great risk of extinction in the Democratic Republic of Congo (DRC) according to Greenpeace International and the Center for International Environmental Law (CIEL). The Standing Committee of the Convention of International Trade in Endangered Species of Wild Fauna and Flora (CITES) failed to take strong measures in July to protect Afrormosia during its annual meeting in Geneva.

Despite strong intervention from the European Union (EU), the species remains at great risk due to widespread illegal logging and international export. "Increased transparency in CITES is needed," says Melissa Blue Sky, a staff attorney with CIEL. "It was an unwelcome surprise that Afrormosia was eliminated from the Review of Significant Trade prior to this meeting."

"Although we need much stronger measures if the species is to survive, the intervention the EU made, urging DRC to deliver strong evidence for the 2015 export quota and putting Afrormosia on the agenda of the next Plants Committee meeting provides opportunities for continued monitoring of DRC's compliance and a basis for future enforcement measures."

Danielle Van Oijen, forests campaigner with Greenpeace Netherlands, says: "Sitting in a meeting room in Geneva it is hard not to think of the huge piles of Afrormosia logs I saw in DRC's

logging yards and port, most of it harvested illegally and causing forest destruction."

"Belgium and Italy are main importers, and therefore these countries need to make sure they do extensive checks on all documentation from DRC with shipments of Afrormosia, because they are most likely not valid."

Afrormosia, or *Pericopsis elata*, has been listed under Annex II of CITES since 1992. DRC is under a review under Article XIII of the Convention because of huge issues with compliance. This year parties were notified that they should not accept CITES permits from the DRC until they have been verified by the Secretariat. There is a new incentive to cheat with CITES permits since the coming into force of the EUTR in March 2013, where CITES species have a green lane.

Afrormosia is one of the world's most valuable tropical hardwoods and the DRC is home to the vast majority of the species' remaining stocks.

Greenpeace and CIEL urge the DRC to immediately suspend all cutting of Afrormosia, to cancel all authorizations for its cutting, and to take legal action against the companies in the DRC that were issued CITES permits only to then inform the Secretariat that they were "unaccounted for".

**Greenpeace.org**

## Global: Neil Young signs on to save the rainforest – using solar powered mobile phones

The composer of *After The Goldrush* has teamed up with Rainforest Connection – the brainchild of American physicist Topher White.

Neil Young's concern for the environment shows no sign of abating. 44 years after first singing "look at Mother Nature on the run in the 1970s", the Canadian legend is following in Sting's footsteps by throwing his weight behind a new project to save the rainforest.

The project takes old mobile phones, retrofits them with solar panels and places them in trees around the forest. When their microphones pick up the sound of chainsaws, animals in distress or gunshots, they alert authorities in "real time" so they can apprehend the criminals.

"Climate change is the defining issue of the 21st Century – there are a lot of factors but these forests are one of the big ones. This enables the forest to talk to the world. When the forest is threatened it can speak and you can hear it," said Mr Young.

The project has already completed one pilot project in Indonesia and is in the process of raising money for three more. It is using the Kickstarter online crowdfunding site, which connects projects with donors. "Current detection systems rely on satellites which show rainforest destruction days or weeks too late," according to the Kickstarter site.

"Our system provides the world's first real time logging/poaching detection system. We can pinpoint deforestation activity the moment it begins, while simultaneously streaming the data openly and immediately to anyone round the world," it adds.

Between 50 and 90 per cent of logging in the rainforest is illegal, according to Interpol, the international police organisation. The project hopes to be able to raise enough money to help the Tembe indigenous people of Brazil fight black market illegal logging operations. It also hopes to place the system in trees across Indonesia.

**Independent.co.uk**

## Indonesia: REDD+ agency hopes for committed new government

Officials from the Reducing Emissions from Deforestation and Forest Degradation plus (REDD+) Management Agency have urged the incoming government to remain committed to the ongoing efforts to reduce carbon emissions. REDD+ chairman Heru Prasetyo said that the next government had a big task ahead, as it not only had to maintain momentum but must also ensure the indigenous groups' rights bill was passed.

The bill, if passed by the House of Representatives, is expected to empower indigenous groups in reclaiming and sustaining customary forests for sustainable development.

"By acknowledging their rights, indigenous groups can serve as strategic partners in the protection of forests," said Heru. He said that indigenous groups were estimated to hold the rights to around 45 million hectares of forest currently being misused as commercial concessions.

REDD+, setup this year to protect rainforests and peatland, has advocated the rights of indigenous people and local communities, including the 2012 Constitutional Court verdict stating that customary forests should no longer belong to the state. "The indigenous community can also be strategic to reclaiming land from concession holders," REDD+ chief operating officer William Sabandar said.

The next administration, of president-elect Joko "Jokowi" Widodo, was also urged to help smooth policy reviews under the authority of the agency. "We expect there will be a change in the mechanism of license provisions so they prioritize the protection of the environment," said Heru.

REDD+ must be brought to the regional level as regents held just as much authority in influencing the deforestation debate as the central government, according to William. The agency is also in the process of preparing the operational and institutional aspects of the REDD+ initiatives in measuring and reporting on carbon emissions by the end of 2016.

"As much as 18 percent of all carbon emissions in the country are caused by the misappropriation of forests and critical land," he revealed. According to a national survey from 2006, Indonesia would be contributing 2.9 gigatons of carbon emissions by 2020 if the government continued with its laissez-faire policy. Heru estimated that 88 percent of that burden came from the forestry and agriculture sectors.

Indonesia's target is to cut greenhouse-gas emissions by 26 percent by its own volition or as much as 41 percent with international aid. The nation started dozens of demonstration projects for REDD, which was sponsored by the United Nations to measure the climate benefits of slowing deforestation and awarded credits based on each ton of emissions prevented by saving forests.

This initiative was recognized by Norway, with its ample US\$850 billion sovereign-wealth fund, which agreed to grant Indonesia up to \$1 billion for verified reductions of forest-based carbon emissions.

[thejakartapost.com](http://thejakartapost.com)

## Australia approves increased use of timber in tall buildings

Australia is expected to see more structural timber in taller buildings following changes announced at the end of January 2014 to its building code. Australian designers and builders have to comply with the building Code of Australia (BCA) that includes performance standards for different classes of buildings and specified approved materials.

Previously, three-storey timber framing was not an approved method of construction for Class 3 buildings such as hotels, motels, hotels and residential parts of health care facilities for staff accommodation. The new regulations, applying from May 2014, allow fire and acoustic-rated timber framed construction systems for three-story Class 3 buildings.

The change follows three years' work orchestrated by industry body, Forest and Wood Products Australia (FWPA). Said FWPA managing director, Ric Sinclair "This is a positive development for all stakeholders. However, as the international comparison shows, there's still an enormous opportunity to increase the use of timber in taller buildings."

University of Tasmania School of Architecture associate professor, Gregory Nolan, said the deemed-to-satisfy change would allow architects and building designers to use more wood and wood products. "Hopefully, this is the tip of the iceberg and we can look forward to more approved applications for traditional wood framing and new engineered wood products in taller buildings."

**Timber Malaysia, MTC**

## Nepal: 1000 kg+ red sandalwood seized from Sindhupalchok

Police seized 1,046 kilogram of red sandalwood from a forest of Sindhupalchok, bordering Kavre district. A team deployed from the Area Police Post, Barhabise confiscated the precious wood from two container vans (Na 2 Kha 5868 and Na 2 Kha 315) at the Barhabise check post at around 8 am today. According to Police Inspector Jayeshwor Rimal, the vehicles had 860 kg and 186 kg sandalwood logs respectively.

Police said the wooden logs were being supplied to China from Kathmandu via the Araniko Highway. Drivers of the vehicle, Chhewang Lama of Listi-6, Sindhupalchok and Phurwa Tamang of Tatopani-4, Sindhupalchok were also nabbed along with two other suspects. Police handed over the seized wooden logs, vehicles and arrested persons to the District Forests Office, Sindhupalchok.

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## Ireland: Hungry deer should not be barred from protected native forests, botanists have declared

A decades-long study of national parks in Ireland has found that grazing deer in oak woodlands is actually good for diversity and helps prevent some plants from taking over the valuable ecosystem. Researchers found that if red and sika deer and the red-sika hybrid are fenced off, or shot in annual culls as a way of protecting the forest, it becomes significantly less diverse. But botanists from the School of Natural Sciences in Trinity College Dublin warned that attempts to reintroduce deer should be in moderation as uncontrolled grazing will also have a damaging effect on the woods.

A network of seven experimental deer "exclosures" were surveyed periodically in three national parks in Ireland over 41 years to explain how woods grow and change over time. The sites inside protected oak woodlands in the Wicklow Mountains, Killarney, Co Kerry, and Glenveagh, Donegal, revealed the surprising results that stopping hungry deer from munching on plants actually decreases floral biodiversity.

Researcher Dr Miles Newman said deer grazing at the correct level is highly important for the conservation of native oak woodlands. "Our results certainly have implications for the management of these woodlands as future policy should focus

on managing deer – rather than simply excluding them – as part of the overall biodiversity objective," he said. "We are now working on the next step to identify what the optimal level of deer grazing may be."

The results of the study, published in the journal *Forest Ecology and Management*, show that when deer are blocked from semi-natural oak woodlands the composition and abundance of forest-floor plants is greatly changed. It said that if the deer and other large herbivores are no longer a threat there is a significantly less diverse collection of plants as some species begin to dominate.

Semi-natural woodlands are a globally important relict ecosystem for biodiversity but it now makes up less than 2% of Ireland's land cover. Fencing is increasingly used to protect forests but so too is culling, what the researchers called an emotive issue and beset with practical difficulties.

The botanists said that when appropriate culling is not achievable fencing remains a viable alternative but should only be used for a maximum of 12 years. The researchers added: "Woodland ecology, it seems, is a little like life – it's often best to do things in moderation."

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