

CFA Newsletter



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CFA Newsletter

is the newsletter of the Commonwealth Forestry Association

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The views expressed are not necessarily those of the CFA.

Africa calling



A stand of five-year old *P. caribaea* grown from locally collected poor seed in Uganda highlighting the need for a better understanding of tree improvement.

If the headlines are anything to go by now is the time to invest in Africa. Time magazine in Dec. 2012 ran a cover story entitled "Africa Rising"; the Financial Times and The Economist followed in Feb 2013 with major features on Africa's emerging potential. With ten of the twenty fastest growing economies over the next five years from sub-Saharan Africa, it is easy to see why the interest in Africa is gaining momentum. Those who live or work on the continent certainly know that forestry investment has taken off over the last few years – particularly in Eastern Africa. With this wave of new planting it is also becoming evident that one of the major constraints to further

development is the lack of quality planting material.

A Workshop on Tree Improvement held in Nairobi, Kenya in February 18-20th 2013 was thus excellent timing. The **East Africa Regional Tree Improvement Conference** (to give it its full title) was a 2½ day meeting sponsored by The Gatsby Foundation (UK) and the Embassy of Finland in Kenya. Logistical support came from the Tree Biotechnology Program Trust (Kenya), Tanzania's Forest Research Institute, the Kenya Forest Service, Uganda's National Agricultural Research Organization and Kenya's Forestry Research Institute.

There was an impressive turnout with 67 delegates including CAMCORE's Prof. Bill Dvorak (USA), CSIRO's Dr. Jeremy Brawnner (Australia) and from South Africa – Dr Flic Blakeway (CSIR), Tammy Swain (ICFR), Prof. Mike Wingfield (FABI) and Dr Marius du Plessis (Mondi).

Understandably there was good representation from all Eastern African countries – especially Kenya, Tanzania and Uganda, but it was also encouraging to see participants from Burundi and Mozambique. Most importantly (so the author believes) there was a decent representation from the private sector too, which kept the focus on deliverables rather than just being another talking shop.

In the words of Ben Chikamai (Kenya's Director of Forest Research and CFA's Regional Coordinator in Africa) from the Programme:

"The purpose of the Conference is to bring together international and regional tree improvement experts, policy makers and practitioners in forestry to develop consensus on a regional tree improvement strategy. The Conference is based on the assumption that R&D in East Africa would benefit by sharing global expertise, regional knowledge and experiences of national programmes".

At the time of going to press, the Conference Proceedings were still being compiled. However, some of the highlights from the presentations and discussions are well worth sharing with CFA Members. The historical perspective and the urgent need for a tree improvement programme in the region were highlighted in presentations by Prof. Fred Owino and Benson Kanyi. East Africa has a huge (>80%) dependency on wood-fuel, a widening supply:demand gap, high poverty levels and a steady decline in natural forests. After various species introductions in the early 20th Century, tree improvement gained momentum in the region in the 1970s and '80s with the Oxford Forestry Institute coordinating Central American species/provenance trials and Danida funding trials of SE Asian species.

The East African Agricultural and Forestry Research Organisation (EAAFRO) was able to coordinate R&D between the countries but this organisation closed in 1976. This coincided with a decline in the forestry research institutes in the region, with a lack of resources and technical capacity cited as the main constraints. Since the 1980's focus shifted from commercial timber species to multipurpose trees used largely in agroforestry situations. This work was largely driven by ICRAF (now the World Agroforestry Centre) based in Nairobi. The next significant development was the collaboration started around 1998 between Gatsby, Mondi and the regions' research institutions, which led to the introduction and testing of eucalyptus clones: later on CAMCORE collaboration gave access to other species, notably pines from Central America.

From the other presentations and group discussions, a number of important issues emerged, which then fed into the draft strategy. These are best summarized by the following quotations:

Partnerships: *"The future is strategic Tree Improvement partnerships". "Individuals are working together but there is a lack of effective partnerships". "Partnerships are critically important as is technology transfer". "Collaboration and networking in science is largely by-passing Africa".*

Training: *"Local capacity has to be established: we cannot rely just on consultants' advice". "There is an urgent need for training in tree breeding and in modern nursery practices for multiplying and distributing plants".*

Communication & Standards: *"We foresters must get out of our comfort zone, agree how we want to see the (commercial forestry) sector develop and above all, communicate better – both amongst ourselves and to the public".*

Funding: *"There is poor funding and uncoordinated research to support commercial tree growers in the region". "The power of leverage and synergy is important: if something is good and working, it will attract funding".*



Delegates at the East Africa Regional Tree Improvement Conference listen to a presentation

Other key issues that emerged were the difficulties getting reliable information on the sector (e.g. statistics on planting, projected demand for wood and employment statistics). There was also a debate about the public-private sector interface (or "gulf" as someone said): participants were urged to appreciate that the public and private sector have a different way of thinking but if they are to work together (and attract funding), barriers must be broken down. Some success stories in the region were described as examples of what is working well – namely:

Kenya: Kenya's Tree Biotechnology Program Trust (TBPT) has been the most successful of the regional initiatives in recent years, particularly in terms of multiplying and distributing eucalypt clones suited to the region. Some 22 million plants were distributed by 2011, mostly to smallholder farmers.

Uganda: Sawlog Production Grant Scheme (SPGS) has operated since 2004. SPGS has been the catalyst for major private sector investment in tree planting in Uganda and developed a very successful, practical training programme. SPGS also developed a successful communication strategy, targeting its various stakeholders via field meetings, an informative newsletter, a regularly updated web-site and practical guidelines. SPGS has been working closely with Uganda Timber Growers Association (UTGA), which also appears to be the leading private growers' organisation in the region.

South Africa: The Forestry and Agricultural Biotechnology Institute (FABI) is based at the University of Pretoria, South Africa. Since its establishment in 1998, FABI has built a reputation internationally as a centre of excellence. FABI scientists have always maintained a very close relationship with the commercial forest industry, ensuring the relevance of their research

topics. FABI also have a very good communication strategy from the tree farmer to their peer researchers.

The Institute of Commercial Forestry Research (ICFR) is another strong collaborative model. ICFR conducts applied research on behalf of its funding Members and this demand-driven, results-focussed approach is surely the way forward for East Africa too.

In conclusion, this Conference certainly delivered on its expectations and a draft Tree Improvement strategy was produced after much interaction between participants. It was clear that there is a will to meet the rapidly rising demand for

improved planting material in the region. The challenge now is to turn the strategy into something that produces results on the ground.

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The author delivered a Keynote Paper at the Conference, entitled – The Potential of Commercial Forestry for Social & Economic Transformation in Eastern Africa.

Association news

CFA supports meeting *Bringing Forestry Back to the People*



Participants at the CFA-funded workshop

The Forestry Society of Kenya held a meeting at the Green Hills Hotel Nyeri, Kenya from 19th to 21st September 2012 sponsored by the CFA and the Ministry of Foreign Affairs of Finland entitled *Bringing Forestry Back to the People*. Its objectives were to enable foresters in Kenya, Uganda and Tanzania who are practicing forestry in various capacities outside of the state sector to be fully able to influence policies as well as creating an enabling environment for forestry practices in the country.

It is essential that such people are not left out of the current constitutional re-alignment debate in their countries otherwise, in the words of one forester in Kenya, “We are likely to be

forgotten”. The workshop was designed to clearly show benefits not only to civil society but also to the forest communities whose livelihood depends on forest sector services and goods.

The following objectives were achieved:

- Increased knowledge of members about the ongoing forest sector management devolvement within the Eastern African Region.
- Improved sharing of experiences and diversity of forest management systems in the region.
- Increased recognition of the challenges facing regional forestry professionalism in the region and strategies to overcome the challenges.

- Increased awareness about emerging forestry profession issues and how these issues are being factored in training institutions within the region.

The meeting also produced the following outcomes:

- A strong adoption was made by the AGM to on the need for representation of the forest sector in the East African Community Secretariat in Arusha.
- A draft a standard code of ethics for adoption by all national professional forestry associations in the region was produced.
- A regional Forestry Society for Eastern African countries was produced.
- Members agreed to keep updating each others' associations through inviting one another whenever they have organised Forestry conferences in their respective countries.

The most significant change that has taken place since the meeting is that a task force has been established to oversee the establishment of a Forestry Society for Eastern Africa. Through Support from AFF a draft documents has already been prepared and what remains is to start lobbying national associations to sensitize their members on the constitution and Code of Ethics after which a forum will be organised with the East Africa Community parliament for lobbying of an enactment of a professional Forestry bill to guide Forestry professionalism in the region.

Participants benefited through increased collaboration and networking, the reinvigoration of the professional forestry society in Ethiopia and the establishment of similar organisations in Rwanda and Burundi.

The CFA in conjunction with the Commonwealth Foundation sponsored a total of 12 participants two each from Rwanda, Burundi, Tanzania Uganda, Sudan and Ethiopia. Each Country representative gave a presentation on the current status of forestry profession in their countries, challenges professionals face on their day to day duties, training programmes to enhance and equip foresters with new knowledge, and lastly how each country responds to emerging forestry issues including climate change and carbon trade. Each presentation was followed by plenary discussions to understand the common issues that cut across the region.

The executive Secretary of the African Forest Forum in his presentation said that "There can never be a more opportune moment for Forest Science and practice recognition in the Eastern African Region than now." The Uganda Forest Association President Mr David Walugembe was overwhelmed by the type of knowledge the paper presenters displayed. He summarised by saying he is looking forward to reciprocating the exciting opportunity when he invites Kenyans to Kampala for UFA Conference.

Ndambiri Jamleck Kathendu

Forestry Society of Kenya, Chairman

New Chair of the IFR Editorial Board – Professor Jeff Sayer

We are very pleased to announce that Jeff Sayer, Professor of Conservation and Development at James Cook University in Australia has accepted our invitation to become the new Chair of the International Forestry Review's Editorial Board. Jeff has had a distinguished career in natural resources management. His focus has always been on practical conservation action in the field and he has pursued this interest whilst working for FAO, WWF and IUCN and as a Senior Environmental Adviser at the World Bank. He spent much of his early career in Africa and Asia. He held the chair of International Nature Conservation at the University of Utrecht in the Netherlands from 1994 – 2002. He was Director General of the



Center for International Forestry Research in Indonesia from its founding in 1994 until 2001. He is a member of the Independent Science Council of the Consultative Group for International Agricultural Research. He has authored many papers in peer reviewed journals and a number of books on natural resource topics. He has taught in a Master's programme at the University of Utrecht and has been a frequent guest lecturer on environment and development issues at international conservation events. He now manages a graduate

programme in conservation and development practice at James Cook University in Cairns, Queensland, Australia from where he maintains his involvement in practical conservation programmes in SE Asia and Central Africa.

CFA Nigeria Chapter holds proposal writing workshop



Professor Adeniyi Togun – Dean, Faculty of Agriculture and Forestry, University of Ibadan, Nigeria

Introduction Nigerian forestry has come of age. It is very pertinent that young forestry scientists, mid-career scientists and lecturers are continually taught the basics of organising research in renewable natural resources. This will enable them to favourably compete with other scientists in the world for grants, fellowships, scholarships which in turn would be a verifiable indicator of capacity building in Nigeria.

Therefore, the CFA Nigeria Chapter deemed it fit to mark its first year of inauguration with a workshop on 'Proposal Writing, Accountability in Proposal Writing, Follow-Up and Executive Report Writing after Project Implementation' in the Faculty of Agriculture and Forestry, University of Ibadan, Nigeria to unfold the 'bottleneck' that prevents our teeming forestry scientists in competing for grants, fellowships and scholarships with the rest of the world. The forum served as a catalyst in enhancing prospective forestry scientists to write acceptable proposals and to compete with other scientists in the world.

Objectives The aim of the workshop held 19-20 November, 2012 was to strengthen the network of forestry associations in Nigeria and facilitate their roles in promoting sustainable forest management. The workshop had the following objectives:

- strengthen partnership among all forestry stakeholders and other related forestry stakeholders in six Geopolitical Zones in Nigeria
- improve effectiveness, speed and accuracy of forestry stakeholders' communication and information networks
- mentor the young forestry students in Nigerian Universities and Forestry Institute

Participants The workshop enlisted the participation of academic scholars from different universities and forestry students in Nigeria. Organizations represented include: Forests and Forest Products Society (FFPS); Forestry Associations of Nigeria (FAN); Department of Forest Resources Management, University



Group photograph of participants

of Ibadan, Nigeria; Department of Forestry and Wood Technology, Federal University of Technology Akure, Nigeria; Department of Forestry and Wildlife, Federal University of Agriculture Abeokuta, Nigeria; Department of Forestry and Wildlife, Uyo, Nigeria; Department of Forestry and Wildlife, University of Benin, Nigeria; MAU TECH, Yola, Nigeria; University of Agriculture, Makurdi, Nigeria; Forestry Research Institute of Nigeria (FRIN); and International Forestry Students Association (IFSA).

Overview of Session The opening session was held at the First Bank Building, Faculty of Agriculture and Forestry, University of Ibadan, Nigeria. Introduction of guest was performed by Mr. Lawal Ibraheem, the Secretary, CFA Nigeria Chapter. The workshop was declared open by the Vice-Chancellor of the University who was ably represented by the Dean of Faculty of Agriculture and Forestry of the University. The Dean in person of Professor Adeniyi Togun also delivered a goodwill message. This was followed by a welcoming address delivered by the Head of Department of Forest Resources Management, University of Ibadan, Nigeria in Person of Associate Professor B.O. Agbeja who is also the current Chairman, CFA Nigeria Chapter. In his address, the Head of Department expressed his gratitude on behalf of the University for the opportunity to co-organize the workshop with CFA. He highlighted the importance of the workshop to the audience's goals of providing tools and skills that will enhance the establishment of strong forestry professional networks in Nigeria.

The resource persons for a two day-workshop were Associate Professor B.O. Agbeja, Associate Professor V.A.J. Adekunle, Dr. P.O. Adesoye and Dr. Salman K. Kayode. The topics presented were (i) Proposal Writing; (ii) Logical Framework Approach; (iii) Proposal and Executive Report Writing; (iv) Accountability in Proposal Execution and Follow-Up; and (v) Proposal Writing Logic. The forum enabled group interactions and questions for clarity of workshop's purpose. Nevertheless, group discussion was given a prominence to deliberate on the issues and to assess the level of understanding of the workshop.

In conclusion, the following **communiqué** was reached by all participants:

We, the participants of the CFA Nigeria Chapter submit this communiqué for information and action of the Workshop on 'Proposal Writing, Accountability in Proposal Execution, Follow Up and Executive Report Writing' that held from 19th to 20th November 2012 at First Bank Building, Faculty of Agriculture and Forestry, University of Ibadan, Ibadan, Nigeria.

We are convinced that unless networking among various Forestry Associations and other Renewable Natural Resources Affiliates become part and parcel of their functions, the vision to position the scientists in various forestry associations as knowledge-based societies will remain illusory and an unachievable goal.

We appreciate the bold initiatives taken by the current CFA Steering Committee in Nigeria to implement the 2nd CFA Workshop in Nigeria as an indicator of future outcomes on the following:

- Significant improvement in effectiveness, speed and accuracy of forestry stakeholders' communication and information networks
- Strengthening the Capacity of Forestry Academic Members of Staff to mentor the Forestry Students and



Participant receiving certificate of attendance from CFA Chairman

Mid-career Forestry Scientists in Nigerian Universities and Forestry Institute.

We believe that CFA, Nigeria Chapter has a very unique opportunity by bridging the dialogue among various Forestry Associations and Renewable Natural Resources Affiliates to provide the best of our ability reliable sources and authoritative data that could assist decision makers to make the right choices and tally their decisions on the best practices that would be objectively and scientifically tested and documented.

We make the following communiqué to CFA United Kingdom, decision makers and to our peer colleagues

1. Regular organization of science/policy dialogue interface

We recommend CFA United Kingdom and decision makers to re-engage with their respective Nigerian forestry based Universities and Forestry Research Institute of Nigeria as well as with Nigerian forestry scientists and researchers to get the best practices that have worked in the relevant fields of natural resource management. This will ensure that our common concerns are regularly assessed, monitored and new common priorities jointly articulated for the betterment of our people.

2. Innovative funding mechanisms of research on natural resources

CFA United Kingdom should help in lobbying the national government to provide innovative funding to the Universities in Nigeria where renewable natural resources are taught and training institutes to undertake vertical, horizontal and inter disciplinary researches.

3. The Future Thematic Areas of CFA Nigeria Chapter

The CFA Nigeria Chapter will focus its scientific activities on the following:

1. Environment, Climate Change and Bio-energy;
2. Forest Ecosystems, Biodiversity and Invasive Species;
3. Agro forestry and Community-Based Forestry;
4. Forest Socio-economics, Policy, Legislation and Governance Issues; and
5. Forest Products (timber and non-timber) Development and Value Addition.
6. Rural Livelihood and protected are development
7. Land reclamation

B.O. Agbeja and Ibraheem Lawal
CFA Members

Forest Scenes

Farasuto Forest in The Gambia: a relict forest patch in West Africa



After six months of the dry season the forest canopy struggles to keep the sun from the lower levels of vegetation and from the ground but greenery persists, unlike on the surrounding bush.

Early writers describing what is now The Gambia, on the northern edge of West Africa's forest belt, tell of trekking eastwards to the interior beneath continuous woodland or forest cover. The experience is very different now for tourists who flock to the country for an inexpensive package holiday in the sun. Those who do venture away from the coastal resorts and beaches will now see scattered, isolated giant trees which attained their size, shape and grandeur while growing among others now long-gone. These relicts are hints of the forest once there, much of which was lost only decades ago.

A common tourist excursion from the coast is to Abuko, a relict gallery-forest or Guinea-Congo forest; now isolated among townships it is one of the most visited forests in West Africa. Abuko, like all the country's five known relict Guinea-Congo forest patches which total around 104ha (Tucker, 2009), suffers the ongoing stress of rainfall decline from around 1,300cm/y six decades ago to around 800cm/y recently (*ibid.*). Tree removal is prevented at Abuko by its 3m high fence but other forest patches have no such security from felling, stock grazing or fire.

Farasuto is also isolated Guinea-Congo forest and a former ritual site undiscovered by 'science' until this century. The guides of Kuloro and Tunjina realised that what they had on their doorstep would be significant to their business and began taking visiting bird-watchers there to see rare forest bird species.

The villages of Kuloro and Tunjina own the forest to which I was taken by one of the guides in January 2009 and I was captivated by it. Despite its small size it was evident that Farasuto needed protection and I developed the idea of a Management Plan to establish its rightful place in The Gambia's forest ecosystem. A Management Plan would be a requirement

as the bidding document for any grant application and conservation work. With my experience writing plans for UK sites I decided I should prepare one for Farasuto.



In the depths of a bustling township a cobbler works beneath a tree showing signs of its forest origin.

Farasuto forest (FF), a mere 2.8ha in area and 300m long, is the second smallest of the five known remaining Guinea-Congo patches (Tucker, 2009), all five within 25km of the coast. FF sits on the edge of and marginally above the mangrove zone on the south bank of the River Gambia some 20km from the Atlantic coast where the river is tidal and the water table is related to it. Ironically it is after the May to October rains and during the dry season that the water table evidently rises. This is presumed to be the result of seepage from slightly higher ground to the south and away from the river (Tucker, unpublished).

There are 19 forest-adapted bird species in The Gambia (Barlow & Wacher, 1997; Tucker, 2009). Abuko, 45ha and sixteen times the area of FF, was shown to have records of 11 of these and Pirang, 49ha and 3km SE of Farasuto, has ten. Though it is equivalent in area to barely four football pitches FF has a total bird list of around 300 including records of eight forest-adapted birds one, the Leaflove, *Pyrrhurus scandens*, currently known nowhere else in the country. The list includes for example the imposing African Goshawk, *Accipiter tachiro*, the diminutive Green Crombec, *Sylvietta virens*, and a single record of the rarely-encountered Buff-spotted Flufftail, *Sarothura pulchra*. Subsequent work (Shaw, *in litt.*) has added two forest adapted birds, Buff-spotted Woodpecker, *Campeothera nivosus*, and Spotted Honeyguide, *Indicator maculatus*, to the Farasuto list in 2009 and 2011, bringing its total now to a remarkable ten.

During a one-week follow-up visit to the villages the two Alcalos (head men), together with village committees, agreed the Management Plan approach and the declaration of the site as a Community Nature Reserve. I returned to the UK and successfully applied for a grant to cover the costs of writing the plan. The grant covered real costs in the UK and The Gambia while my brother Peter, for website and plan design, and I gave our time *gratis*. The preparation of the Plan took a year during which contracts were awarded in The Gambia for several of the species lists, some very productive though others were a waste of resources. However The Gambia has very few specialist biologists and I had to use those I could find and keep in contact with. The botany of FF is not fully known but there is a good plant list compiled by a UK volunteer after a January visit. Lists of fauna other than birds are woefully inadequate.

The Plan (Tucker, 2009) was printed in March 2010 and I took copies out to The Gambia for presentation to everyone I thought potentially able to help. We began with the Minister of State for the environment, the Rt. Hon. Jato Sillah on through levels of the administration to the local council, the Alcalos Demboring Touray and Salifu Saidy and the people of Kuloro and Tunjina (population about 2,000). The stock reply was of course 'thank you for the plan but we have no resources to implement it'. The village women were particularly helpful and came forward saying that few in the village would ever see the Plan or be able to read it so offered to create a dance with song containing the key messages. This they did and took it around the villages with the messages that the site was important and there should be no hunting, fires or cutting of trees there. The noisy and exuberant dance did seem to grab people's attention.

Farasuto stands in the care of the people of Kuloro and Tunjina. The forest has survived because it was historically used for traditional ceremonies and this may ensure its survival at least in the short to medium term. The forest's close proximity



Close to a main road on the coast a lone survivor of close forest cover, its buttressed trunk not visible here. With bulky Buffalo Weaver nests.

to the river may buffer it from the effects of reduced rainfall. Grazing by stock entering through incomplete fencing is probably the greatest threat to tree regeneration. Some local funding was obtained in 2012 and spent on an as yet incomplete gate-hut still without the planned composting toilets. The Management Plan remains a potential lever in grant aid applications and fencing against stock-grazing should remain the top priority. However the villagers probably do not appreciate this potential and will require experienced help to submit and subsequently manage a bid and project.

Footnote late January 2013. A group of visiting teachers and students from the Eco & Wildlife Studies department of Helicon MBO Geldermalsen in The Netherlands became enthused by Farasuto and have raised 900 Euros donating it towards fencing the forest. The project will be managed by Mamadou W Jallow my primary local contact while working on the Plan and the website will contain updates.

John Tucker

<http://www.lanius.org.uk> <http://www.farasuto.org>

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My thanks to Gordon Shaw for additional bird records.

Forestry education in Brazil: an overview of its evolution

Forestry as an activity organized on a professional basis is relatively new in Brazil. Until the 1960s agronomists, some specializing in silviculture, performed the forester's tasks. FAO provided the necessary support for the first forestry school, which was established in the 'Universidade Federal de Viçosa' in the State of Minas Gerais. However, for political reasons this school was closed and transferred to 'Universidade Federal do Paraná' in the State of Paraná where the first team of Brazilian foresters were graduated in 1964. Later, the forestry school in the 'Universidade Federal de Viçosa' was re-opened and Brazil had two forestry schools. Since then many other forestry schools have been established throughout Brazil; a process to which FAO and Freiburg University have played an important role.

It is interesting to note that the creation of the first forestry school took place just in the 1960s during a period when a major aim of the Brazilian model of development was to move the Brazilian economy from an agricultural economy to a more industrial one. The Brazilian government launched two programmes of particular interest to the forestry sector; the National Programme for Pulp and Paper and the National Metallurgy Based on Charcoal. Within this context, a series of policies and actions took place in order to promote forestry development. Highlights included the creation of the Brazilian Institute for Forestry Development (IBDF) and the development of the fiscal incentives scheme in order to stimulate large scale tree plantations. This meant that the focus of the first Brazilian forestry graduates was to promote tree plantations, particularly large scale plantations. The result was that plantations were established all over Brazil with the predominance in the South and Southeast regions.

This approach to forestry development based mainly on large scale plantations lasted until the end of the 1980s when the fiscal incentives scheme for forest plantations ended and the IBDF was extinguished and replaced by the creation of the Brazilian Institute of Environment and Renewable Resources – IBAMA. These changes can be attributed to a global emphasis on environment that was evolving following the UN Conference on Environment and Development which took place in Sweden in 1972 and gained momentum from the 1980s onwards. This change in focus penetrated the Brazilian forestry schools at the time and has been retained since then.

It is important to call attention to the fact that the teaching of the forestry in Brazil has evolved quite a bit since the 1960s and it is fair to assume that amongst a series of changes the major one was the development of an emphasis on the relationship between forest resources and environment allied to forest ecological functions. On the other hand, it is interesting to note that forest plantations continue to take place in Brazil, particularly in order to supply wood for the pulp and paper companies. However, they do not place in the same way as in the 1960s and 1970s, with the new foresters having a major concern about environmental matters. In other words a change has occurred from an extreme, utilitarian perception of forest resource to a major focus on preservation. So, the great challenge is to find middle ground that can combine forestry development with conservation. If the forest resource does not have economic value it increases the potential risk of its conversion to other uses, particularly agricultural ones, including pasture. Getting this balance right is a great task for Brazilian foresters, particularly the young generation.

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Sustainable Forestry in Papua New Guinea? It is difficult – part 2*



Log barge on the Kikori River

The poor reputation of the logging industry has resulted in the Australian Government drafting an Illegal Logging Prohibition Bill that resulted in submissions by the PNG FIA to defend the PNG logging industry.

Australia is the largest importer of sawn wood from PNG, however banning imports from PNG would have negligible effect given that most of the timber is exported in log form to China and a lesser extent to Vietnam. What is clearly needed is substantial and long term capacity building in the forestry sector. Australia, through its aid agency AUSAID was engaged with the forestry sector in the late 90's but little has been done since. The Forestry Research Institute in Lae is in terrible condition with few scientific publications produced over the last 15 years. Moreover the forestry degree course was subject to a damaging review by international educators in the late 1990s, which reduced an emphasis on forest botany so that now many forest graduates lack the ability to identify many of the common commercial species. This skill is fundamental to working as a forester in PNG.

* Part 1 appeared in the December 2012 Newsletter.

While these concerns remain unaddressed and forestry capacity dwindles in PNG the logging industry has grasped a new opportunity for a resource grab. Over the last few years there has been a rush by logging companies to gain Special Agriculture and Business Leases (SABLs) that allow forest to be cleared under the condition that the land is converted to productive agriculture. According to Greenpeace, since 2003 the PNG Department of Lands and Physical Planning has approved 74 SABLs covering about 5.2 million ha of forested customary land. This area is 11% of PNG's total land area or about 18% of its remaining forest. Although this statistic is hard to believe given that the approximately 30 forest logging concessions currently in production, operate over an area of only 3-4 million ha.

The leases can run for 99 years and potentially alienate customary owners who can only remain on their land at the discretion of the leaseholder. The push for these leases has been driven by the lack of new logging concessions (FMAs). It has been many years since the PNG Forest Authority has approved an FMA or an extension to an FMA. Consequently logging companies apply for an SABL to short cut the process. The fact that there is little or no reported agricultural activity in most cleared SABLs suggests that the SABLs are clearly being abused. Most SABLs are applied for to convert natural forest to oil palm. Unless an SABL is near existing plantations this is clearly an abuse. To run a profitable oil palm plantation in PNG requires at least 10,000 ha of land which must be located near a port and within 24 hours transport of a processing plant. A minimum investment of PGK 230 million is required to establish the required infrastructure and processing mill. Where blocks of land have been proposed to be cleared in potentially suitable locations there are endless claims that clearance progresses without informed consent. The situation resulted in the UN High Commission for Human Rights (UNHCHR) sending an early warning letter to PNG's UN Ambassador expressing concerns over SABLs, particularly in relation to landowners rights and potential alienation of their land. As a result in 2011 a moratorium on the issuing of SABLs was granted and an inquiry was set up. It is a controversial issue for the PNG Government since some politicians are associated with several of the SABL applications, but the main applicants are the Malaysian owned logging companies.

Sustainable forestry has an important role to play in PNG, providing income for remote village communities, employment and government revenues. However government revenues from logging will be dwarfed by revenues from the soon to be finished PNG Liquefied Natural Gas Project which will export natural gas reserves from the Southern Highlands of PNG. Revenues from this project will be billions of Kina. Similarly the proposed Wafi gold mine in Morobe Province, which contains some of the largest known deposits of gold will eventually add significantly to government revenues. This provides an opportunity to rethink the benefits of the logging industry, and consider whose needs it is really serving. There will be the opportunity to bring good governance to the industry and to properly manage the forests, if there is the will.

Despite the gloomy picture forestry in PNG presents the country still has a huge area of forest, and even those forests clear felled have an enormous regenerative capacity if the soil seed bank remains intact. This I have observed throughout PNG, provided fire is excluded.

It is hard to predict the future of PNGs forests. Extensive degradation is probably more of a threat than large scale forest

clearance, particularly with a rapid rise in the population and increased access to remote forests from industrial developments. With an increased population I suspect that in the next El Nino climatic perturbation large areas of forest will be lost to fire in the highland provinces where extensive untouched tracts of montane forests occur. This happened extensively in the 1997/1998 El Nino event. In addition those areas free from loggers are increasingly subject to interest from the mining, oil and gas industries. Although these industries worst impacts are normally relatively small in area the associated infrastructure can spread for hundreds of kilometres allowing population migration and potentially extensive degradation of previously remote forest wilderness areas. The PNG LNG project in constructing over 300 km of roads from the coastal plains of Gulf Province to the high mountains of the Southern Highlands. This infrastructure is opening up huge forest wilderness areas where the tentacles of forest degradation will spread.

As a final note, in 2011 I was based in a remote oil camp in PNG, travelling by helicopter most days to distant forests to benchmark the forest condition prior to potential impacts from industrial development. One morning we awoke to the noise of the lock down siren. No movement was allowed outside of the camp. A fleet of helicopters were ferrying terrified staff from a camp downstream to our camp. The camp had been attacked by over a 100 locals armed with bush knives and bows and arrows. The police, having run out of ammunition and tear gas had retreated and left the camp unprotected despite a large number of expatriate staff. The camp was ransacked overnight. I sighed at the news, since for me it was just an inconvenience that meant more boredom in lockdown. I knew it was more about showing who owns the land than an intention to harm. The landowners were simply aggrieved and were expressing their displeasure. No expatriates were hurt and nor was the intention to hurt anyone, but it was unfortunately a typical PNG event. The large international companies working in PNG are making the same mistake as those 20 years earlier. Always remember who owns the land, the forests and the mineral resources in PNG and engage with them thoroughly to ensure equitable benefits. If not I hope you can run fast!



The author (second from left) with the PNG team

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News from Guyana

Norway is keen to use its Memorandum of Understanding (MoU) with Guyana as part of its global model of how REDD+ (Reduced Emissions from Deforestation and forest Degradation) might work across all countries, with high or low forest cover and high or low rates of deforestation¹. Guyana, by reason of the extreme natural infertility of its hinterland soils, has high cover and low deforestation. Norway insists on annual estimates of current deforestation during the period of the MoU, November 2009 until 2015. As much of Guyana is cloud-covered for much of the year, and rainfall is tropical bi-modal and heavy, it is difficult to obtain public-domain satellite imagery which is suitable for detecting relatively minute changes in forest cover dispersed across the landscape: there is no large-scale clearing for commercial or peasant agriculture, nor for industrial-scale mining.

Assessment for forest/non-forest cover for 2010-11 was contracted to Indufor Pacific². The selected combination of satellite sensor and frequency band has not been able to detect reliably what is forest and what is non-forest, according to ground checks in some areas by a community-based monitoring, reporting and verification (MRV) project coordinated by the Oxford-based Global Canopy Programme³. Also, although pilots and regular passengers on internal airlines have reported notable increases in damage from mining – deforestation and river turbidity – and although Government itself has estimated that the number of artisanal miners has increased from 20,000 to 130,000 in four years because of the high price of gold, Indufor estimates that deforestation from mining had decreased in 2010-11⁴.

In spite of these contradictions, and in spite of Indufor repeating the error of Poyry New Zealand in 2010 of not using the prime data sources – the maps of logging concessions and logging blocks, and the mining licences and dredge locations – Norway has handed over a further USD 45 million to the World Bank trust fund for Guyana⁵. That transfer, and release of documents, occurred just one day after the last session of the National Assembly in Guyana before the end-of-year break, so impeding parliamentary questions about this curious transfer.

The transfer means that there is now more than USD 100 million in the trust fund, for which Guyana has no prepared project proposals under the Low Carbon Development Strategy. Less than USD 10 million has been disbursed previously from that fund (GRIF), the largest a tranche of USD 3.1 million to the

Office of the President just before the elections in November 2011. The Guyana Forestry Commission (GFC) has received USD 2.9 million for capacity building in MRV from the GRIF, plus another USD 1.2 million from Norway channelled through Conservation International⁶ but has failed to pay for the results from the sample field checks on forest/non-forest by the community-based MRV teams.

Although the Norway-Guyana MoU is set in the overall REDD+ context, Guyana has made no changes to either policies or practices to reduce deforestation or degradation. The third version of the Joint Concept Note (JCN) under the MoU, also issued in December 2012, does not mention 'logging' at all. And in spite of the less-than-stringent evaluations by Norway's consultants, even the mild questioning has so irritated the government agencies in Guyana that 'verification' of progress will not be attempted in future. Footnote 3 in the revised JCN says 'Up until now the enabling activities have been 'verified', this has been a challenging exercise since qualitative and subjective views highly influence the understanding and verification of the indicators. The Governments of Guyana and Norway have therefore chosen to change the language from 'verified' to 'independently assessed' in order to accommodate for the qualitative nature of these indicators⁷. Most of the indicators are actually quantitative. The indicator for area of Intact Forest Landscapes, whose assessment has twice been queried mildly by Rainforest Foundation Norway, will be abandoned⁸, thus facilitating logging and mining in such near-pristine tropical rainforests.

Could one hope that these huge incentives from Norway would lead to more sustainable and less wasteful forestry? Unfortunately this is not happening. Under pressure from Chinese-owned loggers, the GFC has relaxed the restriction on inter-stump distance, so allowing natural clumps of trees to be felled. My observation of the huge numbers of small logs in the sawmill yard operated by the same Chinese company suggest that the relaxation is allowing Sarawak-style 're-entry' into previously logged areas which should now be under protective regeneration.

And the GFC is encouraging more tree felling⁹ instead of more addition of value to the forest products, as the national

¹ Jagdeo, Bharrat. 'Rediscovering ambition on forests: maintaining one of the world's greatest assets'. Draft for review. Bharrat Jagdeo, Roving Ambassador for the Three Basins Initiative. December 2012.

² Guyana Forestry Commission and Indufor. 2012. 'Guyana REDD+ Monitoring Reporting & Verification System (MRVS) Interim Measures Report. 01 October to 31 December 2011. Version 1'. Georgetown, Guyana; Guyana Forestry Commission. Pp.285.

³ <http://www.globalcanopy.org/projects/community-mrv>

⁴ GFC and Indufor, 2012, page 71

⁵ <http://www.regjeringen.no/nb/dep/md/pressemeldinger/2012/norway-announces-new-contribution-to-guy.html?id=710846>

⁶ http://www.guyanareddfund.org/index.php?option=com_content&view=article&id=103:interim-funding-for-a-national-system-for-monitoring-reporting-and-verification-for-2011&catid=46:news&Itemid=127

⁷ Norway-Guyana Joint Concept Note, v. 3, December 2012, page 6. <http://www.regjeringen.no/nb/dep/md/pressemeldinger/2012/norway-announces-new-contribution-to-guy.html?id=710846>

⁸ Norway-Guyana Joint Concept Note, v. 3, December 2012, page 2, note 3. <http://www.regjeringen.no/nb/dep/md/pressemeldinger/2012/norway-announces-new-contribution-to-guy.html?id=710846>

⁹ Kaieteur News news item, Sunday 03 February 2013 – 'Harvest more logs – Commissioner Singh' - <http://www.kaieteurnews.com/2013/02/03/harvest-more-logs-commissioner-singh/>

policies demand¹⁰. Even the 2006 and 2011 election manifestos of the ruling political party encouraged value addition instead of export of unprocessed logs.

It is difficult to reconcile the masses of procedural documents (which are being produced in and for Guyana to improve forest management) with the unverifiable and unsupported claims made by the government agencies and the strenuous opposition of those agencies to even mild external review. The Government of Guyana has applied for a Voluntary Partnership

Agreement with the European Union, but that involves a legality verification system (LVS) in place and independent forest monitoring. Guyana's LVS is inadequate¹¹ and the IFM needs to be a lot more transparent¹². It is unclear just now if Guyana has the will at government level to set aside the stifling political philosophy of 'democratic centralism', which resists openness and transparency and which encourages, corruption and nepotism.

Janette Bulkan

CFA Governing Council

¹⁰ Stabroek News Letter to the Editor, Tuesday 05 February 2013 – 'The GFC should not focus on more logging but on helping to secure greater in-Guyana benefits from what is logged now', <http://www.stabroeknews.com/2013/opinion/letters/02/05/the-gfc-should-not-focus-on-more-logging-but-on-helping-to-secure-greater-in-guyana-benefits-from-what-is-logged-now/>

¹¹ USAID/Guyana Trade & Investment Support. May 2011. 'Review of Guyana's Legality Assurance System'. Conducted by Efeca. Pp. 90.

¹² http://www.forestry.gov.gy/Downloads/Independent_Forest_Monitoring_in_Guyana_Scoping_Report.pdf

Big Bamboo



Big Bambù in Rome

Newly dominating the skyline of the Testaccio district of Rome is a 30 metre tall tower built solely of bamboo, held together only with twine. Called *Big Bambù* in Italian, it is the brainchild of twin brothers Mike and Doug Starn from New Jersey in the USA, who have already erected the first version at the Museum of Modern Art (MOMA) in New York, and a reduced version in Venice. It is hardly a "formal" tower of four sides ascending in an orderly fashion, but more like an organic shape, which took two months and the hard work of 25 *scalatori* (climbers) to complete. The finished product may sway a little, but is strong enough to bear the weight of up to 120 people at a time, who can climb the helical stairs and explore the labyrinth of eight thousand separate pieces of bamboo from Bali which form this sort of cathedral and (for those who don't suffer vertigo) ascend to the crow's nest at the top.

Big Bambù is sponsored by Enel, the Italian electricity giant, which has made this contribution to contemporary art, located in the courtyard of the former Rome abattoir, where the "unpredictable criss-crossing of the bamboo reflects the contradictions of human life... there is a playful element of continual transformation in an organism which grows not in physical dimensions but in sensations" as the Enel manager responsible says. It has certainly captured the imagination of the Roman people, many of whom have made the journey to Testaccio to stand wondering and gazing skywards, inspired by the order and stability which has arisen out of the seeming chaos of a heap of bamboo.

Jim Ball

CFA President

The REDD Desk – an online resource



As tropical forest nations advance in their efforts to reduce emissions from deforestation and forest degradation (REDD+¹), the design of their national REDD+ readiness processes, and the accessibility and transparency of information, are becoming increasingly key determinants of effective stakeholder engagement and of the fast, effective and equitable adoption of the foundations for REDD+ itself.

The Global Canopy Programme (GCP)'s Internet platform – the REDD Desk – (www.theredddesk.org) was launched in late 2009 as a centralised and collaborative, multi-language knowledge platform to disseminate information on REDD+ readiness at all levels (international to local). It was developed after the success of GCP's first publication, *The Little REDD Book*², launched in Poznan in 2008, and is now accessed by approximately 8 000 unique visitors per month from over 203 countries worldwide.

The REDD Desk has successfully established itself as a key resource for news, events and the latest REDD+ research for the international REDD+ community, aggregating information on

REDD+ from partner sites, list servers, conferences and news services. In addition to this, and to meet the needs of diverse stakeholders in gaining a better understanding of the various elements of a REDD+ framework and related concepts, issues and tools, GCP is currently building a multi-language 'REDD Encyclopedia' which will explain key issues in non-technical language, using a Wikipedia-style interface.

The REDD Desk also includes information on REDD+ readiness in a range of tropical countries around the world. The REDD Countries Database presents key information on REDD+ related financing, activities, policies, plans and statistics across 18 tropical countries around the world (set to grow to 26 country profiles by December 2013). Future developments will also include analyses of legal frameworks for REDD+ within tropical forest countries and the ability to compare different standards and methodologies for REDD+ design.

Working with a global network of developed and developing country partners engaged in tropical forest conservation, the REDD Desk is the single largest online library of REDD+ activities globally.

We are continually aiming to improve and update information on the REDD Desk and your feedback is welcome. Please send comments to contact@theredddesk.org. Follow @theREDDdesk on Twitter for REDD+ news and platform updates.

¹ The "+" in REDD+ stands for efforts to foster conservation or the enhancement of forest carbon stocks and the sustainable management of forests.

² www.theredddesk.org/redd_book

ADF urges better natural resource utilisation

African countries have been urged to implement better ways of utilising natural resources to promote people-centred sustainable development. According to resolutions adopted at the recently held 8th Africa Development Forum (ADF VIII) held in Addis Ababa, Ethiopia, it was noted that policy, legal, regulatory, economic, governance, equity, knowledge, institutional and environmental constraints were critical to the sustainable management of Africa's natural resources with a developmental vision.

"Overcoming these constraints is key for attaining inter-sectoral linkages between agriculture, forest, industries and human settlement in Africa," it stated. The 8th ADF that was held under the theme 'Governing and Harnessing Natural Resources for Africa's Development', focused on how to generate maximum benefits from the exploitation of Africa's lands, minerals, fisheries and forests for the benefit of its people.

On issues of land which have come under intense speculative pressure from local and foreign investors, the adopted resolutions stated that scientific and methodical approaches to land would guarantee transparency, equity and sustainability. "These include strengthening policy, access, property rights, and investment in large-scale agriculture in line with the existing Comprehensive African Agriculture Development Programme (CAADP)," it stated. "Africa accounts for 60 per cent of the

world's uncultivated arable land that need to be protected against rapacious speculation."

On mining, the adopted resolutions stated that transparent, equitable and optimal exploitation of mineral resources should underpin broad-based sustainable growth and socioeconomic development. "The continent is home to one-fifth of global gold and uranium supplies, while over 30 countries produce oil and gas in commercial quantity so implementation of the African Mining Vision adopted by African leaders in 2009 is important since the vision sets out how mining can be used to drive the development of their countries," it stated. On fisheries and aquatic resources, the forum called for the strengthening of policies, legislation, strategies, investment and collaboration among states in various areas to develop the sector.

"Greater attention also needed to be paid to the New Partnership for Africa's Development (NEPAD) action plan on inland, coastal and marine fisheries and aquaculture at the national and regional levels especially that Africa loses a million tons of fishery resources estimated at over US \$ 600 million annually to illegal and unreported fishing," stated the forum.

Victor Kawanga
CFA Zambia

Publications

Air temperature regulation by urban trees

**Kieron Doick and Tony Hutchings,
Forest Research, UK**

The vital role of urban trees in helping to lower temperatures in cities is described in a new publication by scientists from Forest Research, the research agency of the Forestry Commission.

Built up urban environments can be as much as 9°C warmer than the surrounding area with buildings, road traffic and human activities all contributing to the 'urban heat island' effect. Vegetation, especially trees, has a crucial role to play in lowering temperatures by providing shade, reflecting sunlight and by evaporation. Strategic selection and placement of trees in cities can cool the air by between 2°C and 8°C which could reduce heat-related stress and premature human deaths during heat waves.

Under the changing climate predicted for the UK there are likely to be an increasing



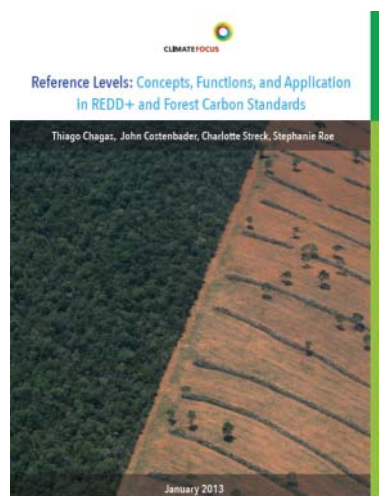
number of incidences where the average day-time temperature is 30°C or above and the night time temperature exceeds 15°C for two consecutive days – the Department of Health threshold value for temperatures that could significantly affect health. While the South East, London, the East and West Midlands are projected to be the most vulnerable, excess deaths due to heat are forecast to increase in Scotland and Wales. The risks are greatest in large metropolitan areas such as London, Manchester and Birmingham.

Dr Kieron Doick and Tony Hutchings from Forest Research have undertaken an extensive survey of research on the cooling effects of urban trees. In this review for the Forestry Commission, *Air Temperature regulation by urban trees and green infrastructure* they examine how the type of tree, its planting location, together with the mix of vegetation and paved surfaces in greenspace all contribute to countering the effects of urban heat islands.

Reference Levels: concepts, functions and applications in REDD+ and forest carbon standards

Climate Focus

Climate Focus has just finished the second report in an evolving series surveying forest carbon standards for their insight relevant to results-based payments for REDD+. The objective of this paper is to assess how different results-based initiatives deal with common

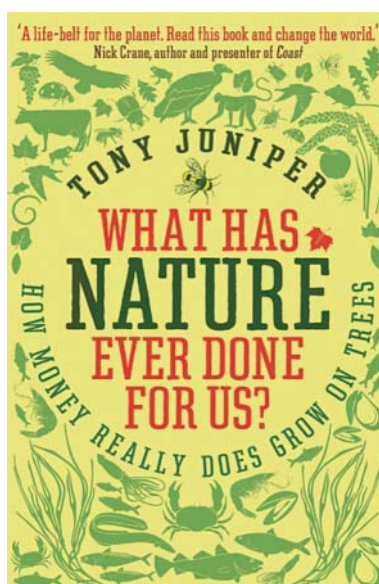


Reference Level (RL) design problems in order to inform REDD+ negotiations and policy makers. It is also intended to serve as a reference for a consolidated overview of options for constructing RLs, and enhance understanding of how their different forms and function will impact the overall design of REDD+ mechanisms.

What has nature ever done for us?

Profile Books

From Indian vultures to Chinese bees, nature provides the ‘natural services’ that keep the economy going. From the recycling miracles in the soil; an army of predators ridding us of unwanted pests; an abundance of life creating a genetic codebook that underpins our food, pharmaceutical industries and much more. It has been estimated that these and other services are each year worth about double global GDP. Yet we take most of Nature’s services



for granted, imagining them free and limitless. . . until they suddenly switch off. This is a book full of immediate, impactful stories, containing both warnings (such as in the tale of India’s vultures, killed off by drugs given to cattle, leading to an epidemic of rabies) but also the positive (how birds protect fruit harvests, coral reefs protect coasts from storms and how the rainforests absorb billions of tonnes of carbon released from cars and power stations). Tony Juniper’s book will change the whole way you think about life, the planet and the economy.

Around the World

UK: Practices used in certified forests help improve biodiversity confirms RSPB study

Forestry practices, such as clear-felling and replanting, coppicing, and even widening roads and enlarging glades, can all have a positive effect on biodiversity in commercial forests, confirms a study commissioned by the Alliance of Beverage Cartons and the Environment (ACE) UK.

According to the Royal Society for the Protection of Birds (RSPB), which undertook the desk-based study, these practices can help support a range of biodiversity, which wouldn’t be present if forests were planted as large monocultures and left unmanaged.

However, the study also highlights gaps in existing research, such as: a lack of data on the magnitude of additional benefits that can be derived from partaking in forest certification schemes; and a need for more research into the effectiveness of forest management for biodiversity enhancement that is aimed at specific groups of species.

The research, which was commissioned by ACE UK, reviewed published sources, to understand the sustainable forest management and planning practices, set out in the UK Woodland Assurance Standard (UKWAS), and their impacts on biodiversity. In the UK, sustainable forestry can be independently certified by two schemes: Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (PEFC), both use UKWAS for their audits.

While the cartons made by ACE UK members – Tetra Pak, Elopak and SIG Combibloc – are made primarily from wood from Nordic forests, as opposed to UK forests, as part of its continued commitment to environmental responsibility, the beverage carton industry was keen to support the RSPB in furthering understanding of the contribution of commercial forestry to biodiversity in Britain and Ireland, as well as how biodiversity can be improved.

Richard Hands, Chief Executive of ACE UK, commented on the findings: *“We believe that using renewable materials is preferable to using non-renewable ones where possible. It’s encouraging to see that the forestry industry’s efforts, verified through independent certification, not only ensure that forests can provide a renewable resource for generations to come, but that they can also deliver benefits for biodiversity. We hope the research findings will prove useful to all those sourcing wood-based materials who seek to understand more about enhancing biodiversity, and that more work will now be done to fill in the gaps in understanding that our study revealed.”*

Paul Bellamy, a conservation scientist from the RSPB, commented: *“At a time of increasing demands for natural resources, such as wood and wood products, it is important that we leave space for biodiversity within forests. In managed forests, producing raw materials for industry, we can use our knowledge of the effects of management to maximise the value of these sensitive ecosystems.”*

"This report highlights the limited nature of our understanding of biodiversity in managed forests. Although there were many reports on the effects of the main forest management cycle on birds, plants and some insects, other important groups such as

fungi had not been studied at all. There were also no studies on the effectiveness of management guidelines aimed at improving the wildlife value of forests."

collegehill.com

Zambia: Successive governments keep neglecting the Forestry Department

It is so disappointing that Government has been so selective in making efforts to enhance operations and functions of some of its departments in an effort to deliver services to the general public. While it is appreciated that some departments are given priority because of the critical role they play in running affairs of Government, some other important ones have still been neglected to the extent of even neglecting officers in those departments.

Forestry Department is one such a Government department that has been neglected so much, not only by the current Patriotic Front Government but also other previous Governments that were in power before. The most critical issues contributing to non effectiveness of the department include erratic and inadequate funding to the department for its operations. This has affected mostly District Offices in all the provinces of the Country where the office of the Forestry exist.

However, the Minister of Lands, Natural Resources and Environmental Protection has tried to support the department by promoting tree planting after a very long time of about over 20 years, though with bad timing and lack of proper advise from forest professionals at Forestry Headquarters.

Deforestation is increasing at an alarming rate with over 300,000 hectares degraded annually in Zambia.

Secondly the non restructuring of the department cannot pass without any comment. Officers are still under old conditions of services making them among Government officers that are paid very low salaries. Why should a situation where under the same Government but in different ministries, some officers are paid higher salaries while others are paid very low salaries yet they hold the same qualifications for the jobs they do.

The Government must show some seriousness in addressing some of these serious anomalies which have made certain

ministries become non effective with demotivated officers. Government cannot fail to secure funds for restructuring such smaller departments if it managed to restructure bigger ones like health.

This cannot go on without mentioning that it is very much possible that some money meant to commence the restructuring of Forestry Department could have been released by Government but might have been diverted by unscrupulous leaders within the Government system. I therefore wish to call upon His Excellency, President Michael Chilufya Sata to develop interest in the matter and follow it up critically because Forestry Department is an important department which plays a vital role in conserving the country's environment. Deforestation is increasing at an alarming rate with over 300,000 hectares been degraded annually in Zambia. It's up to the Government to ensure that the department is fully funded as well as officers are paid accordingly especially that the Government recently conducted Job valuations in all ministries. I only hope that there will be a good report out of it and that as they start negotiating for good conditions of service for public workers, a positive result shall come forth.

The other area to be looked at is the issue of having district offices run by officers with different qualifications whereby at one district, its run by a degree holder while at another district, it's run by a Classified Daily Employee even when there is someone with better qualifications. I hear that the Minister of Lands, Natural Resources and Environmental Protection will be presenting the Bill for restructuring the department in Parliament and only hope that every meaningful Member of Parliament will be able to support it.

www.lusakatimes.com

Zimbabwe: Deforestation on the rise

Zimbabwe has lost 4 989 548 hectares of wooded land to various causes inspired by both human and natural factors between 1992 and 2008, an official with the Forestry Commission has said. In an interview on the sidelines of a Regional Workshop on Reduction of Deforestation and Degradation in Kariba last week, Mr Member Mushongahande said Zimbabwe had the highest level of deforestation that was pegged at 1.6 percent per year while Malawi had one percent with Zambia experiencing the least at between 0.3 and 0.4 percent per year.

The workshop, dubbed the "Regional Workshop on REDD+ Readiness in Miombo Woodland Countries" drew participants from Malawi, Zambia and Zimbabwe.

The participants sought to find ways of containing deforestation, environmental degradation and strategies of producing and harnessing carbon for commercial purposes in the Miombo eco-region.

herald.co.zw

USA: Climate change thins forests in Eastern US

Years of drought and high temperatures are thinning forests in the upper Great Lakes and the eastern United States, NASA satellites show. Nearly 40% of the Mid-Atlantic's forests lost tree canopy cover, ranging from 10% to 15% between 2000 and 2010, according to a NASA study released this week. Other afflicted areas include southern Appalachia, the southeastern coast and to a lesser extent, the Rocky Mountains and the Sierra Nevada.

"There has been a series of summers — growing seasons for trees — that have been deficient in moisture. When you combine that with higher temperatures, it's stressing the trees," says author Christopher Potter, a research scientist at NASA's Ames Research Center in Moffett Field, Calif. This double whammy is making trees, especially southern pines and the upper Midwest's hardwoods, more vulnerable to insects and new pathogens. "No tree is safe," Potter says.

Climate change is increasing the risk of forest death through wildfires, insect infestations, drought, and disease outbreaks, according to a 1,000-plus-page draft of the third National Climate Assessment, released by the U.S. government in January. The NASA study was done as part of that assessment.

If more trees die, the planet warms more. Trees absorb heat-trapping carbon dioxide emissions and thus can reduce the effects of climate change. In 2010, they absorbed 13% of U.S. emissions, the Environmental Protection Agency says.

Potter's study is based on monthly images from a new series of NASA satellites, launched in 2000. The series' continuous monitoring provides a more detailed picture of changes in forests, wetlands and grasslands over extended periods of time. It shows that in the western parts of Alaska, higher temperatures have helped by expanding the growing season for trees.

usatoday.com

Pakistan: Terminal operator realizes the importance of mangrove forests

As the city of Karachi continues to grow, the surrounding ecology is gobbled up by rapid urbanisation. The mangrove belt along the Korangi Creek was one of the casualties — until some companies which operate terminals saw the error in their ways and made an effort to reverse the damage.

Sharique Siddiqui, the chief executive officer of the Pakistan International Bulk Terminal Limited (PIBT), said that the organisation inadvertently damaged mangroves during a construction project. But following the laws laid out by the Sindh Environmental Protection Agency (Sepa), the PIBT compensated by planting more saplings. "Yes the laws of the Sepa are very strict, but we are following all of them," he told The Express Tribune. According to the law, any organisation which damages mangroves must plant saplings over the same amount of land plus an additional 10 per cent. "But we are doing more than that," said Siddiqui.

The PIBT, in collaboration with the International Union for Conservation of Nature (IUCN), has initiated a project to plant mangroves at Korangi Creek near Port Qasim. Since June 2012, the organisation has planted saplings over 60 hectares. It plans to plant saplings over 500 hectares. More than 42,000 saplings will be planted over 190 hectares in the upcoming season.

On Thursday, IUCN and PIBT invited environmentalists, government officials and other development authorities to the site. Among them was Port Qasim Authority's chairperson, Admiral Muhammad Shafi, who said that his organisation would strive not to harm the ecology with any of the projects initiated under it. "On a personal level, I don't like someone chopping away mangrove forests. I encourage others to plant this environment-friendly tree." The environment secretary, Mir

Hussain Ali, told The Express Tribune that Sepa was keeping a very close watch on the environment and those who violated the laws would be taken to court.

Haleem Siddiqui, the chairperson of the Marine Group of Companies, also lauded the efforts of the IUCN and PIBT. He said that though the PIBT had disturbed mangroves on 25 acres, it had gone out of its way to make up for the damage by planting sapling over 500 acres. "I believe that people are more conscious about environmental issues now," he said.

Aban Marker Kabraji, IUCN's regional director for Asia, said that by damaging the environment, the country is losing around Rs365 billion each year. "Though the public sector has the strongest and most direct incentives to adapt to climate change, the private sector typically does not take initiative for coastal adaptation as benefits are small or uncertain."

IUCN's country representative, Mahmood Akhtar Cheema, said that his organisation has planted around 5 million mangrove saplings in Sindh and Balochistan. He added that mangroves serve as natural barriers against tsunamis and cyclones. "If the ecosystem is protected, the livelihood of many people is protected."

Myhammad Yaseen Jat, who has been planting mangroves at the site for two years, said, "There was a jungle of mangroves on this area when I was a child." He added that over the years, the mangrove forests steady vanished and so did the wildlife which inhabited them. But he was very happy at the initiative. "Now my grandchildren will be able to see the same mangrove forests which I did when I was young."

tribune.com.pk

Mozambique: Nearly half the timber from Mozambique to China is illegal

Forty-eight percent of the timber making its way from Mozambique's forests to Chinese companies was harvested illegally, according to a new report by the Environmental Investigation Agency (EIA), which blames the problem on widespread corruption and poor governance. The illegal logging cost Mozambique, the world's fourth least-developed country in the world according to the UN, \$29 million in tax revenue, says the report.

"Despite recent commendable efforts by the Mozambican Government to control the illegal trade in timber to China, our investigation uncovers how high-level politicians, in league with unscrupulous Chinese traders, continue to not only breach Mozambique's export and forest laws but are now putting pressure on the sustainable yield of Mozambique's forests," said EIA forests campaigner Chris Moye. The EIA went undercover both in Mozambique and China to expose the scale of the forest crime.

"In 2012 the Mozambican Government registered 260,385 cubic meters of log and sawn timber exports to world markets, including China, 20 while China alone registered 450,000 cubic meters of log and sawn timber imports from Mozambique," the report reads. "The 189,615 cubic meter discrepancy is made up almost entirely of logs smuggled out of Mozambique by Chinese companies."

Mozambique has placed 22 of its 118 commercial tree species under partial bans, meaning these so-called "1st class"

species must be processed into Mozambique before export, which means more revenue and jobs for the country. However, the EIA believes much of the timber smuggling into China was of these 22 species.

Illegal logging deprives locals of a hugely important natural resource, including injuring biodiversity, erosion buffers, watersheds and other ecosystem services. In addition, illegal logging often occurs in tandem with other organized crimes, such as drug and human trafficking.

The EIA calls on Mozambique to immediately ban log exports and kickstart a number of investigations into the illegal trade, including taking a look at corruption by forest officials, police, customs agents, and corporations. Around half of Mozambique is still under forest cover.

EIA says China should prohibit importing illegal timber, something the U.S., Australia, and soon the EU have already implemented. However, it's unlikely China will stop importing illegal wood anytime soon. Last November another report by the EIA found that China was the world's largest importer of illegally-logged wood, estimating that in 2011 the country imported at least 18.5 million cubic meters of sawn timber, 86 times that taken from Mozambique.

mongabay.com

China Forestry advocates development and utilization of forest-based ecological energy

China Forestry(www.chinaforestryholding.com) Holdings Co., Ltd., a leading private operator of naturally regenerated and plantation forests in China, advocated the development and utilization of forest-based ecological energy at the 2013 China Energy Strategy Summit. The Company will strive to promote the development of forest-based ecological energy by providing technical services and high-tech products for the utilization and development of this energy resource in China. Forest-based ecological energy includes large-scale, environmental friendly, and inexhaustible regenerative resources from forests such as wind power, solar power, hydro power and high-low potential energy. By developing new methods to harmless energy, forests can be turned into power generators.

The Summit was held in Beijing from January 19 to 20, 2013, and was sponsored by organizations that included the National Development and Reform Commission, the National Energy Commission, China Forestry and other government authorities and corporate units. Among the speakers at forum were Mr. Zhang Guobao, Chairman of the National Energy Expert Consultation Committee; Mr. Han Wenke, Head of the Energy Research Institute of the National Development and Reform Commission; Mr. Feng Fei, Head of Research at the Department

of Industrial Economics at the Development Research Center of the State Council; and Mr. Shi Dinghuan, State Council advisor and chairman of the China Renewable Energy Society. Professor Chen Hongqiang, Chief Scientist of China Forestry, delivered a speech, entitled "The Development of and Research on Forest-based Ecological Energy in China", advocating that forestry corporations in China focus on the development and utilization of forest-based ecological energy.

Professor Chen Hongqiang said, "China Forestry does not confine itself within the traditional mode of development in the forestry industry. In addition to incorporating recycling, sustainability and diversity in our operations, we are also promoting research and development in the area of forest-based ecological energy. We aim to become the leading supplier of technical services and high-tech products in forest energy in China."

In the first half of 2012, China Forestry strategically developed the wood-frame house manufacturing and construction business with a view to accelerating the Company's downstream forestry operations. With its existing wood-frame house projects, China Forestry is currently developing technologies in built-in power, water supply and utilization, domestic rubbish disposal, indoor temperature control, etc. Meanwhile, the Company has enhanced the anticorrosion, fungus proof, water proof and

insect proof effects of its products by developing biological wood preservatives, carburizers, biosynthetic binders and biological asphalt based on ACQ (Ammoniacal Copper Quaternary). We are also committing considerable effort to integrate advanced technology into wood-frame house construction and aim to apply our research output to our future wood-frame house projects.

Professor Chen Hongqiang reiterated, "Forests have always been the foundation of China Forestry's business, and we are

committed to making constant improvements in our sustainable forestry operations with knowledge and technology. Therefore, China Forestry is intent on engaging in research and development on new forest energy and aims to make forests into biological factories. Our engagement in the natural energy industry through the development of renewable forestry energy will eventually benefit the Company and our investors."

www.elp.com

Indonesia: Leading paper firm pledges to halt Indonesian deforestation

Asia Pulp and Paper will end the clearing of forest across its supply chain by preserving high-carbon stock rainforests. The world's third biggest paper company has pledged to halt deforestation in Indonesia, and help to restore the habitats of the rare Sumatran tiger and orangutan, following a long-running campaign by environmentalists.

Asia Pulp and Paper (APP) said on Tuesday that it would end the "clearing of natural forest" across its entire supply chain, with immediate effect. From now on, it has pledged to work to preserve "high conservation value" and "high-carbon stock" forests. The move marks a major victory for green campaigners, as paper made from the pulped remains of some of the last virgin rainforests of south-east Asia has been found in products across the world, and its manufacture has contributed to the endangerment of threatened wildlife.

Aida Greenbury, managing director for sustainability at APP, told the Guardian the company was keen to show an example to the rest of the industry. "It is time to stop talking and fighting – it is time for us to show real action on the ground. It is time to stop talking about climate change but address it."

After a long investigation by Greenpeace, APP was found last year to have used trees that are endangered and cannot legally be logged in Indonesia in packaging for major clients. The green group traced DNA from ramin trees – native to the same habitat as the rare Sumatran tiger – to packaging in consumer products. That investigation, and similar findings, resulted in an exodus of key clients, including Xerox, Danone, KFC UK, Disney and Mattel, and a long series of complaints. At the time, the company said it would look into its supply chain more closely, but progress was slow. APP's change of heart on Tuesday was hailed by Greenpeace as a breakthrough.

John Sauven, executive director of Greenpeace UK, who was in 2011 refused entry to Indonesia owing to his campaigning on the subject, said the move was "highly significant". APP is part of Sinar Mas, one of the biggest companies in south-east Asia, with interests including palm oil as well as pulp and paper. The company has long been resistant to calls from campaigners to be more transparent about its business practices, and has been accused of contributing to the massive deforestation taking place in Indonesia. But Sauven said the company was now willing to co-operate with campaigners.

Scott Poynton, head of the Tropical Forest Trust, the non-governmental organisation that helped broker the deal with APP, said: "If the third-largest paper company in the world can

commit to forest preservation – despite the complex social, political, economic and environmental challenges they have to navigate to do so—then any company can do it. Now, there is no excuse for companies – whether operating in Indonesia, Africa, or other forest-rich regions – to destroy forests as a consequence of feeding global demand for the goods they produce."

He said that private sector companies would be key in any attempts to tackle climate change. "Deforestation has always been a primary target of efforts to slow climate change. What we've shown here is that the answer can lie in the private sector – after all, it is the private sector that cuts down trees. We've been looking in the wrong place for our solutions – the United Nations has little understanding of the forces driving deforestation – or how to influence the private sector to stop behaving in ways that harm the environment." However, APP only said it would focus on "high-carbon stock" and "high-conservation value" forest and peatlands. That could leave out swaths of forest that have already been degraded in some way, for instance by partial deforestation.

Bustar Maitar, head of Greenpeace's forest campaign in Indonesia, said the company must now prove it would follow through on its pledges: "We commend APP for making this commitment to end deforestation, but it's what happens in the forest that counts and we will be monitoring progress closely. If APP fully implements its new policies it will mark a dramatic change in direction, after years of deforestation in Indonesia."

Further political moves in Indonesia will be watched closely. In May this year, a two-year moratorium on deforestation announced by president Susilo Bambang Yudhoyono in 2011 will expire.

Maitar said: "We urge Indonesia's government to use the momentum of APP's move to strengthen and extend the moratorium, starting with a review of all existing forest concessions. As a matter of urgency, the government should improve the enforcement of forestry laws to help companies like APP implement their conservation policies. Only concerted action from government, industry and Indonesian civil society can finally turn the tide of extinction facing Sumatra's tigers."

The spotlight will also now fall on Asia Pacific Resources International, the second biggest pulp and paper producer in Indonesia, which has not yet made such a pledge against deforestation. Greenpeace has written to the company to ask for its plans.

Guardian.co.uk

Australia: Qld's state forests reopen to logging

The Queensland Government has reopened hundreds of thousands of hectares of state forests for logging. Up to 30,000 hectares a year may now be logged in western, central and northern Queensland.

Queensland Forestry Minister John McVeigh says the land had always been available for commercial timber before it was locked up by the former Labor government. "We're talking about what have traditionally been logged, sustainable state forests," he said. "They have been logged and accessed as such for well over 100 years and have therefore been supporting many hundreds of regional jobs across Queensland for many years."

The Wilderness Society and the Greens say it is a devastating blow for the environment. However, Greens Senator Larissa Waters says it is environmentally sensitive native forest. "This is after decades of an agreement between the industry and the environment groups to phase out native forest logging because we've got better alternatives with plantation forestry," she said. "[A] huge habitat value, huge carbon store and of course what

an economic risk given that the plantation forestry industry is far more sustainable."

But Timber Queensland spokesman Rod McInnes says it is sensible to use a resource that has been locked up for years. "The reality of life is that forest needs disturbance and forests which are selectively disturbed by logging, as we do, are going to be better forests in the fullness of time," he said. "Rather than those that are left alone to just grow rampantly without any management at all."

Mr McInnes says the public should not panic about trees being cut down. "It's not death and destruction – it's about sensible management," he said.

"We've got a proud history in Queensland of doing that and all of our foresters activities are internationally certified by third party auditors who come from other parts of the world. "All of our forestry practices are world's best."

abc.net.au

Indonesia: ADB to help conserve threatened forests in Borneo

The Asian Development Bank (ADB) is providing financial support of nearly US\$ 4.5 million to help conserve one of the world's most critical but threatened forest areas in the Indonesian portion of the island of Borneo.

"The Heart of Borneo, covering about 22 million hectares, has some of the world's most important equatorial forests which act as 'lungs of the earth' but it is under siege threat from illegal logging and other harmful activities like poaching," said Pavit Ramachandran, Environment Specialist in ADB's Southeast Asia Department.

An estimated 12 million local and indigenous people depend on the Heart of Borneo. Each year, an estimated 1 million cubic meters of timber is smuggled out of the area, leaving destroyed forests, threatened biodiversity, lost livelihood opportunities, and higher costs for forest rehabilitation. Conflicting laws and ambiguity over areas of responsibility for managing resources has left the region highly vulnerable.

The project will provide support to strengthen policies and institutions for improved sustainable forest and biodiversity management, and it will help raise the capacity of government agencies to develop sustainable livelihood opportunities, with measures such as pilot schemes for local communities to be paid for ecosystem services.

The project performance targets by 2016 include a 2 percent decrease in forest loss (against a 2013 baseline); a 5 percent reduction in the incidence of wildlife poaching; the enactment of a draft national policy and reform agenda for forest resource management. The project will also undertake an in-depth study of supply chains related to mining, palm oil, rubber, and tourism, all of which are expanding and exacting an increasingly adverse toll on forest resources.

The technical assistance of nearly \$4.5 million for the Government of Indonesia includes grants from the ADB's Climate Change Fund and the Regional Cooperation and Integration Fund. It also includes over \$2.5 million from the Global Environment Facility, which ADB will administer. The project, which will be carried out by Indonesia's Ministry of Forestry, Directorate of Environmental Services and Conservation Areas, is expected to run from September 2013 to August 2016.

ADB, based in Manila, is dedicated to reducing poverty in Asia and the Pacific through inclusive economic growth, environmentally sustainable growth, and regional integration. Established in 1966, it is owned by 67 members – 48 from the region.

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