CLIM-FO Climate Change & Forestry

Electronic Journal and Newsletter May 2012

FAO, Forestry Department, Forest and Climate Change Team
Food and Agriculture Organization of the United Nations

CONTENTS

I. IN THE PRESS 3

II. UNFCCC NEGOTIATIONS AND RELATED DISCUSSIONS 4

United Nations Framework Convention on Climate Change 4

III. EVENTS & MEETINGS 4

Upcoming events 4
Tackling Climate Change: The Contribution of Forest Scientific Knowledge 4
Adaptation Futures – 2012 International Conference on Climate Adaptation 4
Rio + 20. United Nations Conference on Sustainable Development 4
The future potential of European Mountain forests – Final Conference of the MANFRED project 4
First IUFRO-FORNESSA - Regional Congress 5
International conference – Forest-water interactions with respect to air pollution and climate change 5
International Conference on sustainable forest management adapting to climate change 5
Illegal logging and legality verification – the FLEGT / VPA as new modes of governance 5

IV. RESEARCH ARTICLES 5

Assessing REDD+ performance of countries with low monitoring capacities: the matrix approach 5
The influence of DEM quality on mapping accuracy of coniferous- and deciduous-dominated forest using TerraSAR-X images 6
Climate and land-use change as driving forces in lowland semi-natural vegetation dynamics 6
Additional CO_2 emissions from land use change - forest conservation as a precondition for sustainable production of second generation bioenergy 7
Comprehensive evaluation of the climate-change implications of shifting land use between forest and grassland: New Zealand as a case study 7
Impact of possible climate and land use changes in the semi arid regions: a case study from North Eastern Brazil 7
Agricultural land allocation in small farms around Maasai Mau forest, Kenya and the implications on carbon stocks 8
A review of the state of research, policies and strategies in addressing leakage from reducing emissions from deforestation and forest degradation (REDD+). 8
Emission removal capability of India's forest and tree cover 8
Splitting the difference: a proposal for benefit sharing in reduced emissions from deforestation and forest degradation (REDD+) 9
Drivers of secondary succession rates across temperate latitudes of the Eastern USA: climate, soils, and species pools 9
Adaptation of forests and forest management to climate change: an editorial 9
Climate change mitigation through reduced-impact logging and the hierarchy of production forest management 10
Assessing capacities of non-Annex I countries for national forest monitoring in the context of REDD+ 10
Environmental Science & Policy 19-20:33-48 10
South Africa's national REDD+ initiative: assessing the potential of the forestry sector on climate change mitigation 10
How accurately may we project tropical forest-cover change? A validation of a forward-looking baseline for REDD 11
The REDD menace: Resurgent protectionism in Tanzania's mangrove forests 11
The Australia clause and REDD: a cautionary tale 11
Timing of carbon emissions from global forest clearance 12
Assessing REDD+ performance of countries with low monitoring capacities: the matrix approach 12
The theoretical battlefield: accounting for the carbon benefits of maintaining Brazil's Amazon forest 12

Legal framework for payments for forest ecosystem services in the Czech Republic 13
V. PUBLICATIONS, REPORTS AND OTHER MEDIA 13
Forests and Climate Change Working Paper 11. Forest Management and Climate Change: stakeholder perceptions 13
Putting Free, Prior, and Informed Consent into Practice in REDD+ Initiatives 13
Forest carbon tenure in Asia-Pacific. A comparative analysis of legal trends to define carbon rights in Asia-Pacific. 13
Taking stock of Durban: Review of Key Outcomes and the Road Ahead 14
Payments for Environmental Services: A Way Forward for Mediterranean Forests? 14
A step-wise framework for setting REDD+ forest reference emission levels and forest reference levels 14
European Tropical Forest Research Network (ETFRN) News 53. 14
A year for forests. Annual Report 2011 14
The UNFCCC after Durban: Recognizing limitation and calling for a multi-track approach to climate multilateralism and action. 15
Quantified economy-wide emission reduction targets by developed country Parties to the Convention: assumptions, conditions, commonalities and differences in approaches and comparison of the level of emission reduction efforts 15
UNFCCC 15
VI. JOBS 15
TECHNICAL EXPERTS – REDD+ AND CLIMATE CHANGE ADAPTATION – CENTRAL and SOUTH AMERICA 15
TECHNICAL EXPERTS – REDD+ AND CLIMATE CHANGE ADAPTATION – South East Asia 15
REDD+ Coordinator 15
Verified Carbon Standard (VCS) - deadline for application is 8th of June 2012 15
Senior Forestry/Carbon Expert 15
Technical Specialist – Climate Program 16
VII. ANNOUNCEMENTS 16
Wangari Maathai Award 2012 16
RIO+20 Dialogues 16
CLIM-FO INFORMATION 17

I. IN THE PRESS

16 May 2012 - CIFOR

Bonn climate talks: Forest-rich nations need progress on MRV and REDD+ financing

Discussions on how mitigation and adaptation funds will be raised and used in the second commitment period of Kyoto Protocol from 2013-2020 will be key during the climate change talks in Bonn to ensure that REDD+ can move forward. Forest-rich nations cannot wait much longer without progress in financing, said an expert.

16 May 2012 - FAO

FAO helps Tanzania monitor carbon stocks. Soil carbon assessment is key to reducing emissions

FAO is helping scientists and policymakers in Tanzania evaluate how much carbon is stored in forests and forests soils, which will enable them to reduce greenhouse gas emissions.

15 May 2012 - CIFOR

Rio+20 Dialogues: Water scarcity under a changing climate, can forests help win the battle?

Despite recent research that has closely linked climate change and water scarcity with a rapidly rising deforestation rates, the international climate community still mainly thinks of forests in terms of their carbon storage potential rather than the critical role they play in regulating rainfall and other climate patterns. Over the last week, participants in the Rio+20 Dialogues on Sustainable Development have been discussing how forest and water managers on the ground can overcome these challenges to help solve future water problems.

11 May 2012 - red-monitor

Additional Guidance on REDD+ Safeguards Information Systems

The REDD+ Safeguards Information System Working Group has produced a briefing paper on safeguards information systems. The briefing was produced ahead of the climate meetings in May 2012 in Bonn.

09 May 2012 - CIFOR

Rio+20 Dialogues: Are we felling forests to fuel our future?

Forests are an important source of energy for rural and urban households around the world. And many believe that renewable energy provision as part of a green economy will be the next biggest challenge human civilisation will face. However the assumption that renewable energy sources, such as biofuels, are completely environmentally friendly is often erroneous, according to participants in the Rio+20 dialogues on sustainable development.

07 May 2012 - IISD

Summary of the sixteenth session of the subsidiary body on scientific, technical and technological advice to the convention on biological diversity.

The sixteenth session of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) to the Convention on Biological Diversity (CBD) convened from 30 April - 5 May 2012 in Montreal, Canada, directly prior to the fourth meeting of the Ad hoc Working Group on the Review of Implementation of the Convention (WGRI). More than 400 representatives from governments, intergovernmental and non-governmental organizations, indigenous and local communities, business and academia attended the meeting.

01 May 2012 – Nature

Brazil set to cut forest protection. Environmentalists pin hopes on presidential veto to reduce harmful impact of weakened legislation.

The sound of chainsaws in the Amazon rainforest has faded in recent years as deforestation has slowed, last year dropping to less than one-third of its long-term average. But last week, the lower house of Brazil's National Congress passed a bill that observers say could drastically reduce forest protection.

26 April 2012 - Government of Norway

Ambitious Norwegian white paper on climate efforts

The Norwegian Government intends to take a number of steps to reduce greenhouse gas emissions and promote technological advances. Some of the most important are: establishing a new climate and energy fund, raising the CO2 tax rate for the offshore industry, and improving public transport.

17 April 2012 – CIFOR

Global community needs to invest in MRV capacity in forest-rich developing countries to make REDD+ work

The international community needs to help developing countries increase their ability to measure and monitor the amount of greenhouse gas emissions that they save by safeguarding their forests if a UN-backed climate change mechanism known as REDD+ is to attain its objective of cutting emissions, according to a new study that reveals major capacity gaps in most tropical forest-rich nations.

II. UNFCCC NEGOTIATIONS AND RELATED DISCUSSIONS

United Nations Framework Convention on Climate Change

Negotiations are currently underway in Bonn, Germany (14 May to 25 May). The following bodies and working groups are meeting: the 36th sessions of the Subsidiary Body for Implementation (SBI) and the Subsidiary Body for Scientific and Technological Advice (SBSTA), the 15th session of the AWG-LCA, the 17th session of the AWG-KP and the first session of the Ad Hoc Working Group on the Durban Platform for Enhanced Action. Detailed information on agenda items at the Bonn meetings of relevance is available on FAO's forests and climate change website (**http://www.fao.org/forestry/climatechange/en**). The June issue of Clim-Fo-L will present a brief summary of the main outcomes of the negotiations relating to forests.

III. EVENTS & MEETINGS

Upcoming events

Tackling Climate Change: The Contribution of Forest Scientific Knowledge

21-24 May 2012, Tours, France

This international conference will focus on the current state of knowledge on climate change impacts on forest ecosystems, services and activities. It will highlight methods and challenges to mitigate or tackle climate change impacts, both before they arise and once they have occurred. It will show how emerging science can address the issues facing forest managers. **More**

Adaptation Futures – 2012 International Conference on Climate Adaptation

29-31 May 2012, Arizona, USA

The conference focuses on adaptation to climate variability and change. The conference will bring together researchers, policy makers, and practitioners from developed and developing countries to share insights into the challenges and opportunities that adaptation presents. It will showcase cutting-edge research from around the world, focusing on themes of equity and risk, learning, capacity building, methodology, and adaptation finance and investment. It will explore practical adaptation policies and approaches, and share strategies for decision making from the international to the local scale. **More**

Rio + 20. United Nations Conference on Sustainable Development

13-22 June 2012, Rio de Janeiro, Brazil

The objective of the Conference is to secure renewed political commitment for sustainable development, assess the progress to date and the remaining gaps in the implementation of the outcomes of the major summits on sustainable development, and address new and emerging challenges. The Conference will focus on two themes: i) green economy in the context of sustainable development and ii) the institutional framework for sustainable development. **More**

The future potential of European Mountain forests – Final Conference of the MANFRED project

28 June 2012, Rome, Italy

The Final Conference of the European Project Management Strategies to adapt Alpine Space Forests to Climate Change Risks (MANFRED) will be held on 28 June 2012, on the premises of the Food and Agriculture Organization (FAO) of the United Nations in Rome (Italy). The conference, titled "The future potential of European Mountain forests: challenges and solutions between Green Economy and Climate Change", will be organized by the MANFRED project partners in cooperation with the Mountain Partnership Secretariat. The event aims at exploring future scenarios for European mountain forests as linked to the challenges posed by climate change and the opportunities presented by a green economy. MANFRED, launched in the framework of the European Territorial Cooperation Programme "Alpine Space 2007-2013" to implement the Alpine Convention Protocol on "Mountain Forests", aims at defining adaptation strategies for the alpine forests, in light of the potential impacts and hazard factors connected to climate change. More information on the

conference, including the programme and registration form, will be available soon on the MANFRED project website. More

First IUFRO-FORNESSA - Regional Congress

25-30 June 2012, Nairobi, Kenya

The Congress will provide a platform for African forest scientists, forest managers and policy makers and their colleagues from other parts of the world to share and exchange information and experiences on critical issues affecting forest and wildlife resources in Africa. The overall goal of the congress is to demonstrate how forest science is impacting on livelihoods, environmental management and development in Africa. The congress will highlight research that puts relevant information in the hands of forest communities, forest managers, policy makers, the private sector and civil society. More

International conference – Forest-water interactions with respect to air pollution and climate change

3-6 September 2012, Kahramanmaraş, Turkey.

Forest and water is one of the high priority areas of IUFRO. The forest-water interaction becomes a major concern in both local and global scales due to anthropogenic stressors like climate change and air pollution. Therefore, the management of forests towards water and carbon management and air pollution mitigation becomes a challenging issue and concern to be addressed. The aim of the conference is to provide a harmonization of forests, water cycle, climate change and air pollution issues. Presentations are welcome from various geographies on ecological, economical and social aspects of listed conference topics. More

International Conference on sustainable forest management adapting to climate change

13-16 October 2012, Beijing, PR. China

In order to promote knowledge exchanges of the latest scientific findings in sustainable forest management and to strengthen international collaborations in implementing forest management adapting to climate change, Chinese Society of Forestry(CSF), International Union for Forest Research Organizations(IUFRO) and International Union for Conservation of Nature(IUCN) will co-sponsor the Second Forest Science Forum—International Conference on Sustainable Forest Management Adapting to Climate Change. The conference will be organized by the Chinese Society of Forestry and Beijing Forestry University in Beijing, during October 13-16, 2012. The conference calls for session proposals related to conference topics. More

Illegal logging and legality verification – the FLEGT / VPA as new modes of governance

6-7 December, 2012, Copenhagen, Denmark. Deadline for submission of abstracts is 15 May 2012.

In 2003 the EU adopted its Action Plan on Forest Law Enforcement, Governance and Trade (FLEGT). In order to promote the import to Europe of legal timber, the EU proceeded in 2005 to introduce Voluntary Partnership Agreements (VPAs) with countries that export tropical timber. As of March 2013, timber placed on the European market must be documented legal, and traders will be required to exercise due diligence to ensure that the timber they deal with is from legal sources. At this backdrop, this international academic conference will discuss a number of theoretical and empirical issues related to the practice of illegal logging and trade in illegal tropical timber as well as measures to counteract such practices. Although main focus will be on the EU modalities, presentations on other related initiatives are welcome as well. More

IV. RESEARCH ARTICLES

Assessing REDD+ performance of countries with low monitoring capacities: the matrix approach

Bucki, M., Cuypers, D., Mayaux, P., Achard, F., Estreguil, C., Grassi, G.

Environmental Research Letters 7 (1) doi:10.1088/1748-9326/7/1/014031

Estimating emissions from deforestation and degradation of forests in many developing countries is so uncertain that the effects of changes in forest management could remain within error ranges (i.e. undetectable) for several years. Meanwhile UNFCCC Parties need consistent time series of meaningful performance indicators to set credible benchmarks and allocate REDD+ incentives to the countries, programs and activities that actually reduce emissions, while providing social and environmental benefits. Introducing widespread measuring of carbon in forest land (which would be required to estimate more accurately changes in emissions from degradation and forest management) will take time and considerable resources. To ensure the overall credibility and effectiveness of REDD+, parties must consider the design of cost-effective systems which can provide reliable and comparable data on anthropogenic forest emissions. Remote sensing can

provide consistent time series of land cover maps for most non-Annex-I countries, retrospectively. These maps can be analyzed to identify the forests that are intact (i.e. beyond significant human influence), and whose fragmentation could be a proxy for degradation. This binary stratification of forests biomes (intact/non-intact), a transition matrix and the use of default carbon stock change factors can then be used to provide initial estimates of trends in emission changes. A proof-of-concept is provided for one biome of the Democratic Republic of the Congo over a virtual commitment period (2005–2010). This approach could allow assessment of the performance of the five REDD+ activities (deforestation, degradation, conservation, management and enhancement of forest carbon stocks) in a spatially explicit, verifiable manner. Incentives could then be tailored to prioritize activities depending on the national context and objectives.

The influence of DEM quality on mapping accuracy of coniferous- and deciduous-dominated forest using TerraSAR-X images

Ortiz, S. M.; Breidenbach, J.; Knuth, R.; Kandler, G.;
Remote Sensing. 2012. 4: 3, 661-681

Climate change is a factor that largely contributes to the increase of forest areas affected by natural damages. Therefore, the development of methodologies for forest monitoring and rapid assessment of affected areas is required. Space-borne synthetic aperture radar (SAR) imagery with high resolution is now available for large-scale forest mapping and forest monitoring applications. However, a correct interpretation of SAR images requires an adequate preprocessing of the data consisting of orthorectification and radiometric calibration. The resolution and quality of the digital elevation model (DEM) used as reference is crucial for this purpose. Therefore, the primary aim of this study was to analyze the influence of the DEM quality used in the preprocessing of the SAR data on the mapping accuracy of forest types. In order to examine TerraSAR-X images to map forest dominated by deciduous and coniferous trees, High Resolution SpotLight images were acquired for two study sites in southern Germany. The SAR images were preprocessed with a Shuttle Radar Topography Mission (SRTM) DEM (resolution approximately 90 m), an airborne laser scanning (ALS) digital terrain model (DTM) (5 m resolution), and an ALS digital surface model (DSM) (5 m resolution). The orthorectification of the SAR images using high resolution ALS DEMs was found to be important for the reduction of errors in pixel location and to increase the classification accuracy of forest types. SAR images preprocessed with ALS DTMs resulted in the highest classification accuracies, with kappa coefficients of 0.49 and 0.41, respectively. SAR images preprocessed with ALS DTMs resulted in greater accuracy than those preprocessed with ALS DSMs in most cases. The classification accuracy of forest types using SAR images preprocessed with the SRTM DEM was fair, with kappa coefficients of 0.23 and 0.32, respectively. Analysis of the radar backscatter indicated that sample plots dominated by coniferous trees tended to have lower scattering coefficients than plots dominated by deciduous trees. Leaf-off images were only slightly better suited for the classification than leaf-on images. The combination of leaf-off and leaf-on improved the classification accuracy considerably since the backscatter changed between seasons, especially in deciduous-dominated forest.

Climate and land-use change as driving forces in lowland semi-natural vegetation dynamics

Lundberg, A.
Erdkunde. 2011. 65: 4, 335-353

In many parts of Europe, extensive changes in vegetation have taken place during recent decades. In Norway, forest expansion is a major trend, with an increase in volume of 20.3% during the period 1994-2008. The annual increase has more than doubled since 1967. This study was carried out to gain more insight into the complexity of vegetation dynamics and alterations in a lowland area on the coast of W Norway, and to identify the driving forces behind these changes. Field surveys were carried out with aerial photo interpretation and vegetation mapping. Spatial analysis was carried out using GIS. Historical sources were identified, interpreted, and used to generate information on land-use during recent centuries. Supplementary methods consisted of soil profile analysis and dendrochronology. Climate data were used to analyse climatic trends in the past 90 years since 1923. Forest expansion was a major trend during 1956-1994. In 1956, 49.5% of the area was covered by forest, and by 1994 the coverage had increased with 53.4%. Forestation continued during 1994-2003 and 2003-2007, but at rates far lower than in the previous period (4.0 and 3.8% increases, compared to 53.4%). Forest expansion was most extensive during 1956-1994, a period with no clear trend in mean July temperatures. A distinct increase in mean July temperatures occurred during the period 1994-2003 and again in 2003-2007, when the rate of forestation was far lower than in previous decades. This is an indication that a factor other than climate change is the most important driving force for vegetation change, forest expansion in particular. Forestation did not start simultaneously throughout all parts of the study area, but at different times on different landholdings. Forestation initially started on plots where livestock grazing first came to an end (in the 1930s), and lastly on plots where grazing came to an end three decades later, in the 1960s. The different starting times of forestation is reflected in the present age structure of the forest stands on the eight landholdings studied. The conclusion is drawn that changes in land-use are the major driving force behind the distinct process of forestation that occurred during the 20th century.

Additional CO_2 emissions from land use change - forest conservation as a precondition for sustainable production of second generation bioenergy

Popp, A.; Krause, M.; Dietrich, J. P.; Lotze-Campen, H.; Leimbach, M.; Beringer, T.; Bauer, N.

Ecological Economics. 2012. 74: 64-70

In the past, deforestation, mainly driven by the conversion of natural forests to agricultural land, contributed up to one-fifth of global human induced carbon dioxide (CO₂) emissions. Substitution of bioenergy for fossil energy is an intensely discussed option for mitigating CO₂ emissions. This paper, by applying a global land-use model and a global energyeconomy- climate model, explores how demand for cellulosic bioenergy crops will add an additional pressure on the land system in the future. In accordance with other studies, we find that CO₂ emissions from land use change due to energy crop production will be an important factor in the GHG balance of bioenergy if natural forests will not be protected. But restricting land availability for biomass plantations by conserving natural forests requires additional efforts in the agricultural sector: First, our simulation results indicate that significant additional crop yield increases will be needed due to the combination of forest conservation and the cultivation of dedicated bioenergy crops. Secondly, our simulation results show that forest conservation in combination with increasing demand for dedicated bioenergy crops will lead to higher agricultural production costs of approximately 20%.

Comprehensive evaluation of the climate-change implications of shifting land use between forest and grassland: New Zealand as a case study

Kirschbaum, M. U. F.; Saggar, S.; Tate, K. R.; Giltrap, D. L.; Ausseil, A. G. E.; Greenhalgh, S.; Whitehead, D.;

Agriculture, Ecosystems & Environment. 2012. 150: 123-138.

The transition of land between forest and grassland has important implications for greenhouse gas emissions and removals. In this paper, we use New Zealand as a case study to comprehensively assess, compare and quantify the net climate change impact of shifting land use between temperate forest and grassland. Forests store large amounts of carbon in their biomass, whereas grasslands contain relatively little biomass carbon. These biomass changes tend to dominate the carbon balance under land-use change. Soil carbon stocks usually do not change much after deforestation unless subsequent erosion occurs, but some soil carbon is often lost when grasslands are reforested with exotic plantations. Forest soils usually release little nitrous oxide or methane and can even oxidise small amounts of methane. Grasslands, on the other hand, can release a large amount of nitrous oxide, which may be further increased with fertilisation, and is higher for cattle- than sheep-grazed systems. Grazing animals increase emissions because the concentrated forms of nitrogen in their excreta allow it to escape from the system. Ruminant animals can also emit large amounts of methane. Land cover change in addition has direct radiative effects through the amount of solar radiation that is either absorbed by vegetated surfaces or reflected back into space. As forests typically absorb more radiation than grasslands, this slightly negates the greenhouse consequences of changes in carbon storage, and methane and nitrous oxide emissions under land-use change.

Impact of possible climate and land use changes in the semi arid regions: a case study from North Eastern Brazil

Montenegro, S.; Ragab, R

Journal of Hydrology 434/435: 55-68

This paper combines hydrological observations and modelling results of a semi arid catchment in Brazil that could lead to a better understanding of the hydrology of similar catchments in semi-arid regions. The Tapacura catchment (area 470.5 km²) in the Northeast of Brazil was selected for this study. The Distributed Catchment Scale Model, DiCaSM, was calibrated and validated for the stream flows of the Tapacura catchment. The model performance was further tested by comparing simulated and observed scaled soil moisture. The results showed the ability of the model to simulate the stream flow and the scaled soil moisture. The simulated impacts of climate change of low emission (B1) scenarios, on the worst perspective, indicated the possibility of reduction in surface water availability by -13.90%, -22.63% and -32.91% in groundwater recharge and by -4.98%, -14.28% and -20.58% in surface flows for the time spans 2010-2039, 2040-2069, 2070-2099, respectively. This would cause severe impacts on water supply in the region. Changing the land use, for example by reforestation of part of the catchment area which is currently arable land, would lead to a decrease in both groundwater recharge by -4.2% and stream flow by -2.7%. Changing land use from vegetables to sugar cane would result in decreasing groundwater recharge by almost -11%, and increasing stream flow by almost 5%. The combination of possible impacts of climate change and land use requires a proper plan for water resources management and mitigation strategies.

Agricultural land allocation in small farms around Maasai Mau forest, Kenya and the implications on carbon stocks

Atela, J. O.; Denich, M.; Kaguamba, R.; Kibwage, J

Journal of Ecology and the Natural Environment. 2012. 4: 4, 98-108

Recent assessment of the Maasai Mau forest-part of the largest remaining natural forest in Kenya revealed that direct expansion of small farms into the forest in response to population and climate induced land use pressures, largely contributed to a 42% loss in forest cover between 1995 and 2008. In response, the Kenyan government plans to integrate farmers into forest management initiatives through incentive schemes such as on-farm carbon payments. To contribute to the envisaged carbon payment scheme(s), a regression model depicting the most efficient land use design with higher net carbon addition was derived based on existing land use types, respective allocations and carbon stocks in 30 small farms of 2 to 6 ha occurring within 5 km from the forest boundary. Results confirmed that smallholder land allocation is a function of first, food crops for subsistence (p<=0.01) followed by cash crop for income (p<=0.01) while tree planting is least prioritized. Aboveground carbon stock per farm, on average, amounted to 13.2 t/ha. Based on a linear model (R²=68%), trading off 10% of open grazing land for farm forest, while unchanging the traditional land allocated to food crops and cash crops, doubles carbon stocks per hectare of these farms. While incorporating carbon sequestration potential into small farms require careful tradeoffs between environmental, social and economic land demands, it presents a win-win incentive oriented strategy to restore Maasai Mau and the larger Mau forest. However, such initiatives must be informed by ordered empirical research on land use demands and associated costs and benefits within the forest and its surrounding.

A review of the state of research, policies and strategies in addressing leakage from reducing emissions from deforestation and forest degradation (REDD+).

Atmadja, S.; Verchot, L.

Mitigation and Adaptation Strategies for Global Change. 2012. 17: 3, 311-336

Leakage from policies to reduce emissions from deforestation and forest degradation (REDD+) must be monitored, measured and mitigated to ensure their effectiveness. This paper reviews research on leakage at the large (international and national) and small (subnational and project) scales to summarize what we already know, and highlight areas where research is urgently needed. Most (11 of 15) studies published until 2005 estimated leakage of fossil-fuel-based emissions from large-scale interventions such as the United Nations Framework Convention on Climate Change Kyoto Protocol. Many studies on leakage from landuse-based emissions more relevant for REDD+ emerged afterwards (11 of 15), mostly focusing on smaller-scale interventions (8 of the 11 studies). There is a deficiency in qualitative studies showing how leakage develops from an intervention, and the factors influencing this process. In-depth empirical research is needed to understand activities and actors causing emissions (Emissions), the way those activities move spatially in response to policies (Displacement), the way policies affect carbon (C) emitting activities (Attribution) and the amount of resulting emissions produced (Quantification). The cart is thence before the horse: the knowledge necessary to form practical and accurate working definitions, typologies and characterizations of leakage is still absent. Despite this, there is a rush to measure, monitor and mitigate leakage. The concept of leakage has not matured enough, leading to vague definitions of leakage, its components, and scale. We suggest ways to improve the concept of leakage and argue for more empirical research and at various scales to add to our collective knowledge of Emissions, Displacement, Attribution and Quantification.

Emission removal capability of India's forest and tree cover

Jagdish Kishwan; Rajiv Pandey; Dadhwal, V. K.;

Small-scale Forestry. 2012. 11: 1, 61-72

India is the world's tenth most forested nation with 76.87 M ha of forest and tree cover occupying 23.4% of its geographical area. Forests - with their intrinsic of carbon sequestration and storage values - are in the front line of India's climate change mitigation strategies. This paper provides estimates of sequestered carbon in India's forest and tree cover for the years 1995 and 2005 as per the IPCC good practice guidelines method. It is based on the primary data for the soil carbon pool through collecting soil samples by laying out quadrats across the country and secondary data for the growing stock of all forest and tree cover in the country. The estimates are compared with current and future projected emissions. It is found that conservation policies have resulted in increase of the country's forest carbon stocks from 6244.8 to 6621.6 Mt with an annual increment of 37.7 Mt of the carbon from 1995 to 2005. Annual CO₂ removal by the forests is enough to neutralise 9.3% of the country's 2000 level emissions. Continued removals by the forest and tree cover would offset 6.5 and 4.9% of India's projected annual emissions in 2010 and 2020 respectively. Economically, the annual value of this forest carbon in the international market is about US $188 million. The result is of use in the REDD and REDD+ context for India

Splitting the difference: a proposal for benefit sharing in reduced emissions from deforestation and forest degradation (REDD+)

Torres, A. B.; Skutsch, M

Forests. 2012. 3: 1, 137-154

The objective of REDD+ is to create incentives for the reduction of emissions from deforestation and forest degradation and for the increase of carbon stocks through the enhancement, conservation and sustainable management of forests in developing countries. As part of the international negotiations under the United Nations Framework Convention on Climate Change (UNFCCC), compensation would be estimated in relation to national performance but how these incentives will be channeled within countries has not been specified and there are concerns about how the benefits will be shared among different stakeholders. One central issue is that under the national approach good performance in one region can be offset by underperformance in other regions of the country thus preventing the generation of predictable local incentives. Other issues relate to the need to provide incentives to a wide range of stakeholders and to avoid perverse reactions. To address these and other issues we propose separating the accounting of reduced deforestation, reduced degradation and enhancement of forests. The local attribution of credits would be easier for carbon enhancement, and possibly reduced degradation, than for reduced deforestation, since carbon gains can, in principle, be measured locally in the first two cases, while estimating achievements in reduced deforestation requires a regional approach. This separation in attribution of rewards can help to create adequate incentives for the different stakeholders and overcome some of the problems associated with the design and implementation of national REDD+ programs.

Drivers of secondary succession rates across temperate latitudes of the Eastern USA: climate, soils, and species pools

Fridley, J. D.; Wright, J. P

Oecologia. 2012. 168: 4, 1069-1077

Climate change is widely expected to induce large shifts in the geographic distribution of plant communities, but early successional ecosystems may be less sensitive to broad-scale climatic trends because they are driven by interactions between species that are only indirectly related to temperature and rainfall. Building on a biogeographic analysis of secondary succession rates across the Eastern Deciduous Forest (EDF) of North America, we describe an experimental study designed to quantify the relative extent to which climate, soil properties, and geographic species pools drive variation in woody colonization rates of old fields across the EDF. Using a network of five sites of varying soil fertility spanning a latitudinal gradient from central New York to northern Florida, we added seeds of nine woody pioneer species to recently tilled old fields and monitored first-year growth and survivorship. Results suggest seedlings of southern woody pioneer species are better able to quickly establish in fields after abandonment, regardless of climate regime. Sites of lower soil fertility also exhibited faster rates of seedling growth, likely due to the slower development of the successional herbaceous community. We suggest that climate plays a relatively minor role in community dynamics at the onset of secondary succession, and that site edaphic conditions are a stronger determinant of the rate at which ecosystems develop to a woody-dominated state. More experimental research is necessary to determine the nature of the herbaceous-woody competitive interface and its sensitivity to environmental conditions.

Adaptation of forests and forest management to climate change: an editorial

Keenan, R. J

Forests. 2012. 3: 1, 75-82.

Climate change presents potential risks to forests and challenges for forest managers. Adaptation to climate change involves monitoring and anticipating change and undertaking actions to avoid the negative consequences and take advantage of potential benefits of those changes. Forest managers are accustomed to considering the long-term implications of their decisions. However, many are now responding to much shorter term economic or political imperatives. Climate change potentially increases the consequences of many existing challenges associated with environmental, social or economic change. Some current management measures may continue to be suitable in responding to increasing pressures under climate change, while for other situations new measures will be required. This special issue presents papers from Africa, Europe, and North America that provide examples of the type of analysis being implemented to support forest management in a changing climate. The implications in the context of uncertainty in climate projections and ecosystem responses are discussed.

Climate change mitigation through reduced-impact logging and the hierarchy of production forest management

Galante, M. V.; Dutschke, M.; Patenaude, G.; Vickers, B

Forests. 2012. 3: 1, 59-74.

The proposed hierarchy of production forest management provides modus operandi for forest concessions to move incrementally towards Sustainable Forest Management (SFM) via Reduced-Impact Logging (RIL) and forest certification. Financial benefits are sourced in the "Additionality Zone", financing the rise in the hierarchy and offsetting prohibitive forest and carbon certification costs. RIL carbon registration components consist of developing credible baseline, additionality and leakage arguments around the business-as-usual scenario through the quantification of historical forest inventory and production records, forest infrastructure records and damage to the residual forest. If conventional harvesting is taken as a baseline, research indicates RIL can potentially reduce emissions by approximately 1-7 tCO₂e ha⁻¹yr⁻¹. The current market price of USD $7.30 per tCO₂e may result in over USD $50 ha⁻¹yr⁻¹ in additional revenue, well above the estimated USD $3-5 ha⁻¹ in carbon transaction costs. Concessions in Sabah Malaysia demonstrate the financial viability of long-term RIL and certification planning. This may act as a basis for future planned forest management activities involving RIL, carbon and forest certification through the hierarchy of production forest management.

Assessing capacities of non-Annex I countries for national forest monitoring in the context of REDD+

Romijn, E., Herold, M., Kooistra, L., Murdiyarso, D., Verchot, L.

Environmental Science & Policy 19-20:33-48

Countries participating in REDD+ need to prepare to report on their forest carbon stocks changes. Remote sensing and forest inventories are key tools and data sources for moni-toring but the capacities within non-Annex I countries needed for reporting to the UN Framework Convention on Climate Change (UNFCCC) vary considerably. The purpose of this study was to assess the status and development of national monitoring capacities between 2005 and 2010 in tropical non-Annex I countries. Different global data sources were integrated for the comparative analysis of 99 countries. Indicators were derived for four main categories: national engagement in the REDD+ process, existing monitoring capacities, challenges with respect to REDD+ monitoring under particular national circumstances and technical challenges for the use of remote sensing. Very large capacity gaps were observed in forty nine countries, mostly in Africa, while only four countries had a very small capacity gap. These four countries show a net increase in forest area with 2513 ha _ 1000 ha, while all other countries together have a forest loss of 8299 ha _ 1000 ha in total. Modest improve-ments were observed over the last five years, especially with regard to carbon pool reporting. Based on the different circumstances and current capacities of each country, general recommendations are made for the design and planning of a national REDD+ forest monitoring system and for capacity development investments. The four countries with good capacities for both monitoring of forest area change and for performing regular forest inventories could have an important role in South-South capacity development.

South Africa's national REDD+ initiative: assessing the potential of the forestry sector on climate change mitigation

Rahlao, S., Mantlana, B., Winkler, H., Knowles, T

Environmental Science & Policy 17: 24-32

Reducing emissions from deforestation and forest degradation in developing countries (REDD+) is regarded by its proponents as one of the more efficient and cost effective ways to mitigate climatechange. There was further progress toward the implementation of this mechanism at the 16th Conference of Parties (COP) in Cancun in December 2010. Many countries in southern African, including South Africa, have not been integrated (do not participate) into the UN-REDD+ programme, probably due to their low forest cover and national rates of deforestation. This paper discusses the potential contribution of REDD+ activities to the South African Government's pledge of reducing national greenhouse gas (GHG) emissions by 34% below business as usual by 2020. A number of issues such as complex land tenure system, limited forest cover and other conflicting environmental issues present challenges for REDD+ in South Africa. Despite these genuine concerns, REDD+ remains a practical strategy to contribute to climatechange mitigation for South Africa. The paper raises the need for development of a variety of emission reduction programmes – not only in the energy sector. The paper also assesses several national options and opportunities towards a working REDD+ mechanism. It concludes by identifying key mechanisms for moving forward to prepare for REDD+ actions in South Africa and raises the urgent need for national dialogue between stakeholders and institutions to evaluate the feasibility of making use of the mechanism in South Africa and the Southern African Development Cooperation (SADC) region. The paper further addresses possible synergies and conflicts between the national climatechange and forestry policies towards REDD+ development. It suggests that REDD+ should be part of the national dialogue on

policy to respond to climatechange and should be integrated into the national flagship programmes that the national climatechange white paper seeks to implement. A multiple-benefit REDD+ initiative for South Africa can benefit from these international financial initiatives. It is anticipated that this initiative will provide a platform to enhance policy, institutional and technical stakeholder capacities to access financial incentives that may lead to sound environmental practises.

How accurately may we project tropical forest-cover change? A validation of a forward-looking baseline for REDD

Sloan, S. & Pelletier, J
Global Environmental Change 22(2): 440-453

The Reduced Emissions from Deforestation and forest Degradation (REDD+) mechanism of a future post-2012 global climate-change treaty would aim to give incentive to tropical countries to reduce deforestation and thus forest-carbon emissions. It would do so by crediting tropical countries for reducing deforestation relative to a baseline scenario describing carbon emissions and removals from forest-cover changeexpected in the absence of REDD+. Defining a credible and accurate baseline is both critical and challenging. One approach considered promising is spatial modelling to project forest-cover change on the basis of historical trends; yet few such projections have been validated at a national scale. We develop and validate a novel GEOMOD projection of forest-cover change in Panama over 2000–2008, based on trends over 1990–2000 and 25 drivers of forest-cover change. Compared with the actual landscape of 2008, our projection is 85.2% accurate at a 100-m pixel resolution. More error is attributable to the location of projectedforest (8.6%) than to its area (6.2%). Accuracy was least where forest regeneration predominated (80%), and greatest where deforestation predominated (90%). Despite the sophistication of our projection, it is slightly less accurate than if we had assumed no forest-cover change over 2000–2008. We identify factors limiting projection accuracy, including the complexity of forest-cover change, the spatial variability offorest-carbon density, and the relatively small area of change at the national scale. We conclude that, with the exception of contexts where forest-cover change is significant and straightforward and where forest-carbon density relatively uniform (e.g., agricultural frontiers), spatially projected baselines are of limited value for REDD+ – their accuracy is too limited given their relative lack of transparency. Simpler, relatively coarse scale, retrospective baselines are recommended instead.

The REDD menace: Resurgent protectionism in Tanzania's mangrove forests

Beymer-Farris, B.A. & Basset, T.J.
Global Environmental Change 22(2): 332-341

Reduced Emissions from Deforestation and Degradation (REDD+) is being proclaimed as "a new direction in forest conservation" (Anglesen, 2009: 125). This financial incentives-based climate change mitigation strategy proposed by the UNEP, World Bank, GEF and environmental NGOs seeks to integrate forests into carbon sequestration schemes. Its proponents view REDD+ as part of an adaptive strategy to counter the effects of global climate change. This paper combines the theoretical approaches of market environmentalism and environmental narratives to examine the politics of environmental knowledge that are redefining socio-nature relations in the Rufiji Delta, Tanzania to make mangrove forests amenable to markets. Through a case study of a "REDD-readiness" climate change mitigation and adaptation project, we demonstrate how a shift in resource control and management from local to global actors builds upon narratives of environmental change (forest loss) that have little factual basis in environmental histories. We argue that the proponents of REDD+ (Tanzanian state, aid donors, environmental NGOs) underestimate the agency of forest-reliant communities who have played a major role in the making of the delta landscape and who will certainly resist the injustices they are facing as a result of this shift from community-based resource management to fortress conservation.

The Australia clause and REDD: a cautionary tale

Macintosh, A.
Climatic Change 112(2):169-188

If a binding agreement can be reached on a post-2012 international climate regime, it is likely to include the phased introduction of a market-linked mechanism for reducing emissions from deforestation and forest degradation in developing countries (REDD). Under such a scheme, countries that reduce net REDD emissions below a pre-set baseline would receive credits that could be sold in carbon markets and used by purchasing nations to meet their international mitigation obligations. This paper draws on the Australian experience with deforestation to identify some of the issues that might obstruct progress on REDD. For the past 20 years, Australia has had the highest rate of deforestation in the developed world; ~416,000 ha of forests were cleared

annually between 1990 and 2009, resulting in the emission of almost 80 MtCO2-e/yr. It is also the only developed country that will rely on reduced deforestation emissions as the primary way of meeting its quantified emissions target under the Kyoto Protocol. Australia's approach to deforestation issues provides valuable insights into the difficulties an international REDD scheme might encounter.

Timing of carbon emissions from global forest clearance

Mason Earles, J., Yeh, S., Skog, K.E.

Nature Climate Change (2012). doi:10.1038/nclimate1535

Land-use change, primarily from conventional agricultural expansion and deforestation, contributes to approximately 17% of global greenhouse-gas emissions1. The fate of cleared wood and subsequent carbon storage as wood products, however, has not been consistently estimated, and is largely ignored or oversimplified by most models estimating greenhouse-gas emissions from global land-use conversion2, 3. Here, we estimate the fate of cleared wood and timing of atmospheric carbon emissions for 169 countries. We show that 30 years after forest clearance the percentage of carbon stored in wood products and landfills ranges from about 0% to 62% globally. For 90 countries, less than 5% of carbon remains after 30 years, whereas 34 countries have more than 25% in storage. Higher storage rates result primarily from a greater percentage of long-lived products such as wood panels and lumber, and tend to occur in countries with predominantly temperate forests. Alternatively, lower storage rates are associated with a greater fraction of non-merchantable wood and more wood used for energy and paper production, which tend to occur in countries with predominantly tropical forests. Hence, the country and fate of cleared wood can considerably affect the timing of greenhouse-gas emissions from forest clearance.

Assessing REDD+ performance of countries with low monitoring capacities: the matrix approach

Bucki, M.; Cuypers, D.; Mayaux, P.; Achard, F.; Estreguil, C.; Grassi, G

Environmental Research Letters. 2012. 7: 1, 014031.

Estimating emissions from deforestation and degradation of forests in many developing countries is so uncertain that the effects of changes in forest management could remain within error ranges (i.e. undetectable) for several years. Meanwhile UNFCCC Parties need consistent time series of meaningful performance indicators to set credible benchmarks and allocate REDD+ incentives to the countries, programs and activities that actually reduce emissions, while providing social and environmental benefits. Introducing widespread measuring of carbon in forest land (which would be required to estimate more accurately changes in emissions from degradation and forest management) will take time and considerable resources. To ensure the overall credibility and effectiveness of REDD+, parties must consider the design of cost-effective systems which can provide reliable and comparable data on anthropogenic forest emissions. Remote sensing can provide consistent time series of land cover maps for most non-Annex-I countries, retrospectively. These maps can be analyzed to identify the forests that are intact (i.e. beyond significant human influence), and whose fragmentation could be a proxy for degradation. This binary stratification of forests biomes (intact/non-intact), a transition matrix and the use of default carbon stock change factors can then be used to provide initial estimates of trends in emission changes. A proof-of concept is provided for one biome of the Democratic Republic of the Congo over a virtual commitment period (2005-2010). This approach could allow assessment of the performance of the five REDD+ activities (deforestation, degradation, conservation, management and enhancement of forest carbon stocks) in a spatially explicit, verifiable manner. Incentives could then be tailored to prioritize activities depending on the national context and objectives.

The theoretical battlefield: accounting for the carbon benefits of maintaining Brazil's Amazon forest

Fearnside, P. M

Carbon Management. 2012. 3: 2, 145-158

The way that carbon accounting is done greatly influences the value attributed to maintaining tropical forests. Accounting choices will be determining factors in the role that Brazil's Amazon forest plays in global mitigation efforts and in the role that funds from mitigation will play in redirecting the course of history in Amazonia. Critical decisions include the form of accounting (stocks versus flows) that are applicable under different circumstances, baselines for establishing additionality, and the restrictions and adjustments (including discounting to attribute value to time) applied to reflect differences in permanence, leakage and uncertainty. None of these problems is insurmountable, but addressing them will require both academic effort and the political courage of decision-makers to act on available information.

Legal framework for payments for forest ecosystem services in the Czech Republic

Ventrubova, K.; Dvorak, P

Journal of Forest Science. 2012. 58: 3, 131-136

Although examples of payments for ecosystem services (PES) can be traced back at least as far as the 1980's, it is still a relatively new instrument, and the hitherto experience in many parts of the world is not extensive yet, or based on a very long timeframe. In addition, PES is being introduced in more and more sectors (agriculture, water supply, carbon sequestration, biodiversity conservation, etc.) and in relation to more and more ecosystems (surface water, groundwater, forest, etc.). But such PES can work only with good governance in place, comprising an effective political, legislative as well as institutional system. Nevertheless, an effective introduction of PES system into national legislation calls for an appropriate analysis of the current legal system so that duplications can be excluded and only valuable measures can be added. The main goal of this paper is to analyze if the current legal framework of the Czech Republic provides an appropriate basis for establishing payments for a forest ecosystem services scheme.

V. PUBLICATIONS, REPORTS AND OTHER MEDIA

Forests and Climate Change Working Paper 11. Forest Management and Climate Change: stakeholder perceptions

FAO

FAO, in collaboration with forest management, climate change experts and relevant stakeholders, is developing guidelines to assist forest managers to effectively respond to climate change challenges and opportunities. These guidelines will include actions related to both climate change adaptation and mitigation and will be relevant to all types of forests, all management objectives and all types of managers. To facilitate the development of the guidelines, a survey was conducted through which forest stakeholders provided their views and perceptions on factors that influence the ability of forest managers to respond to climate change. This publication presents the results of the survey. **The publication**

Putting Free, Prior, and Informed Consent into Practice in REDD+ Initiatives

RECOFTC

The principle that indigenous peoples and local communities have a right to give or withhold their Free, Prior, and Informed Consent (FPIC) to developments affecting natural resources is not new. However, experience using FPIC in REDD+ implementation is still limited in the Asia-Pacific region, and there are few materials that explain and train practitioners in its concepts and practice. There is still subjective understanding of the terms and requirements of FPIC, influenced by both cultural interpretations and interests. To address this resource gap, RECOFTC is pleased to announce the publication of a new Training Manual on Putting Free, Prior, and Informed Consent into Practice in REDD+ Initiatives. This manual, developed with financial and advisory support from the Institute for Global Environmental Strategies (IGES) and Norad, serves as a practical tool for trainers and facilitators to improve understanding of FPIC among stakeholders at all levels. **The manual**

Forest carbon tenure in Asia-Pacific. A comparative analysis of legal trends to define carbon rights in Asia-Pacific.

FAO

The complexities of the United Nations Framework Convention on Climate Change (UNFCCC) negotiations and Kyoto Protocol, highlighted several issues concerning the approaches to be adopted to use, promote and regulate the use of forests as carbon sinks, reservoirs, service providers and source of renewable energy.

Recently, inside and outside the UNFCCC negotiations, a series of efforts have begun to develop mechanisms for “Reducing Emissions from Deforestation and forest Degradation” (REDD+). The UNFCCC in Cancun (Mexico), held in December 2010, identified several areas where a balanced “package” of outcomes could be agreed. These issues include reducing emissions from deforestation and forest degradation in developing countries, including conservation, sustainable management of forests and enhancement of forest carbon sinks (REDD+). Those developments pose dilemma for decision-makers and legislators to establish how climate change mitigation and adaptation initiatives will have to address forest tenure issues in order to foresee, plan and distribute risks and benefits derived from carbon sequestration activities. Most Asia-Pacific countries do not specify ownership of sequestered carbon. Presumably, ownership, or substantive use rights of forests should be

the first step for determining the entity most likely to have rights to carbon sequestered by forests. This is particularly true in Asia-Pacific, considering that many forest-dependent communities reject the notion that carbon can be divided and sold separately from other forestry rights. Therefore, a clear understanding of forest tenure and ownership in Asia-Pacific should be the first step to determine who owns carbon (I). Carbon rights have been defined in different ways by international experts, and a comparative analysis of advanced legal frameworks in integrating specific provisions on carbon rights highlights the latest developments in this respect (II). As the majority of Asia-Pacific countries have not yet adopted specific definitions on carbon rights, identifying institutional responsibilities and instruments endorsed by Asian-Pacific countries with respect to forest carbon is a key element to articulate rights on carbon. (III). An in-depth analysis of the forest tenure legislation follows, focusing on the implications related to ownership or usufruct rights in carbon and benefit sharing mechanisms (IV). Finally, conclusive thoughts focused on national legislations and final recommendations pave the way for upcoming considerations to define carbon rights in Asia-Pacific (V). **The report**

Taking stock of Durban: Review of Key Outcomes and the Road Ahead

UNDP

This paper will evaluate the substantive results of the Durban conference, draw implications for developing countries and consider the next steps as a new phase of intergovernmental climate negotiations gets underway. **The report**

Payments for Environmental Services: A Way Forward for Mediterranean Forests?

EFI Policy Brief 7

Payments for environmental services (ES) are an increasingly popular incentive mechanism, and have recently attracted considerable attention from policy makers as an alternative to traditional environmental management approaches. The new EFI Policy Brief "Payments for Environmental Services: A Way Forward for Mediterranean Forests" looks at the concept of PES, and focuses on their potential applicability in the Mediterranean region. It outlines the status of current knowledge on PES, including lessons learned from a variety of case studies. It also identifies the challenges which need to be addressed by policy makers, public officials and researchers for their successful implementation. **The Policy Brief**

A step-wise framework for setting REDD+ forest reference emission levels and forest reference levels

CIFOR

This policy brief: 1) highlights relevant paragraphs and guidance in this decision; 2) presents the step-wise approach we believe would be helpful to countries; 3) stresses the importance of the quality of historical data and capacity-building; and 4) provides conclusions and some takehome messages for scientists, technical experts and policymakers involved in this process. **The policy brief**

European Tropical Forest Research Network (ETFRN) News 53.

TROPENBOS International

The need to improve forest governance as an important prerequisite for promoting sustainable forest management and reducing deforestation and forest degradation is widely acknowledged. To make governance better work for people and forests is not an easy challenge due to divergent interests and mind-sets and imbalanced power relations and unequal access to information, decision-making, resources and benefits. The 29 articles in this ETFRN News showcase a rich diversity of examples of how forest governance have been addressed in various settings. This issue brings together experiences from a wide variety of forest governance reform initiatives. Some relate to new lessons from relatively well established approaches to forest governance reform, such as community forestry; others relate to more recently developed approaches, such as FLEGT and REDD+. The articles show that international instruments — such as FLEGT, forest certification and more recently, REDD+ — have been and are important drivers to address governance in the forest sector.. **The Issue**

A year for forests. Annual Report 2011

CIFOR

The Center for International Forestry Research has released its annual report for 2011, highlighting its research and impact in relation to forests and climate change across the globe during the International Year of Forests. **The report**

The UNFCCC after Durban: Recognizing limitation and calling for a multi-track approach to climate multilateralism and action.

FIELD (Foundation for International Environmental Law and Development)

The Durban Climate Change Conference held last December 2011 had all the elements of a highly charged political drama: global leaders in a high-stakes game to save the world, the palatable tension over clashing interests, claims of sabotage and backdoor deals juxtaposed with impassioned demonstrations and panicky news blitzes, the climax into near-chaos, the last-ditch effort for compromise now known as the "huddle", and, of course, the miraculous "save". Then ominously, though probably anticipated, big questions emerge as the screen fades to black. **The working paper**

Quantified economy-wide emission reduction targets by developed country Parties to the Convention: assumptions, conditions, commonalities and differences in approaches and comparison of the level of emission reduction efforts

UNFCCC

This technical paper presents an overview of the quantified economy-wide emission reduction targets to be implemented by developed country Parties, as well as assumptions and conditions related to individual targets and associated assumptions and conditions related to the ambition of the pledges. It explores commonalities and differences of approaches to measure progress towards the achievement of economy-wide emission reduction targets and discusses the comparison of the emission reduction efforts. This paper is intended to facilitate understanding of these assumptions and conditions. The paper updates the information contained in document FCCC/TP/2011/1 and is based on submissions from Parties and their contributions to the workshops on assumptions and conditions related to the attainment of quantified economy-wide emission reduction targets by developed country Parties, which were held in Bangkok, Thailand, on 3 April 2011 and in Bonn, Germany, on 9 June 2011. **The report**

VI. JOBS

TECHNICAL EXPERTS – REDD+ AND CLIMATE CHANGE ADAPTATION – CENTRAL and SOUTH AMERICA

Tetra Tech ARD - deadline for application is 31st of May 2012

Tetra Tech ARD is currently accepting expressions of interest from qualified regional and local technical experts for anticipated USAID-funded climate change adaptation and REDD+ projects in Latin America and the Caribbean. The anticipated projects will focus on policy and implementation of efforts to reduce emissions from deforestation and forest degradation (REDD+), as well as efforts to build the resilience of vulnerable populations to adapt to the impacts of climate change that will be felt in a variety of sectors, including agriculture, fisheries and infrastructure; as well as geographies, such as coastal zones, river basins, and mountainous areas. **More**

TECHNICAL EXPERTS – REDD+ AND CLIMATE CHANGE ADAPTATION – South East Asia

Tetra Tech ARD - deadline for application is 31st of May 2012

Tetra Tech ARD is currently accepting expressions of interest from qualified regional and local technical experts for anticipated USAID-funded climate change adaptation and REDD+ projects in South East Asia. The anticipated projects will focus on policy and implementation of efforts to reduce emissions from deforestation and forest degradation (REDD+), as well as efforts to build the resilience of vulnerable populations to adapt to the impacts of climate change that will be felt in a variety of sectors, including agriculture, fisheries and infrastructure; as well as geographies, such as coastal zones, river basins, and mountainous areas. More

REDD+ Coordinator

Verified Carbon Standard (VCS) - deadline for application is 8th of June 2012

The VCSA is looking for REDD+ Coordinator to advance a number of emerging Jurisdictional and Nested REDD+ (JNR) pilot activities. While this is initially a limited time engagement, there could be an opportunity, dependent on funding, for permanent employment with the VCS Association once the initial term expires. **More**

Senior Forestry/Carbon Expert

MGM Innova - open for application until suitable application is found

MGM Innova is seeking a senior professional with background in forestry, agronomy, biology or relevant and applicable science background with proven experience in GHG inventories, Carbon Sequestration, development and implementation of REDD+ projects and knowledge about different standards applicable to carbon projects,

to lead the company's forestry practice and support other practices. **More**

Technical Specialist – Climate Program

Rainforest Alliance – open for application until suitable application is found

The Technical Specialist will be responsible for technical project coordination, verification systems and tools development, training, and supporting the growth of Rainforest Alliance's Climate Program. S/he will be expected to effectively provide scientific and technical rigor to Rainforest Alliance validation/verification of carbon sequestration and emissions reductions projects according to internationally accepted standards, focusing primarily on forestry, agroforestry, and agriculture, but monitoring all technical work across divisions. This position will work with Climate Program staff, as well as technical and managerial staff from the Sustainable Forestry, Agriculture, and Tourism Divisions, to develop the organization's activities to address climate change. The Technical Specialist will represent the Climate Program to businesses, NGOs, project developers, carbon credit and offset service providers, investors, and corporations. **More**

VII. ANNOUNCEMENTS

Wangari Maathai Award 2012

CPF

The Collaborative Partnership on Forests (CPF) has launched the first ever Wangari Maathai Award to honour and commemorate the impact of this extraordinary woman who championed forest issues around the world. The award in the amount of USD20,000 will be given in recognition of outstanding contributions made by an individual to preserve, restore and sustainably manage forests and to communicate the key role forests play in rural livelihoods and the environment across generations. **More**

RIO+20 Dialogues

RIO+20

The Sustainable Development Dialogues, to be held in Riocentro, between June 16 to 19, in the context of the Conference, is an instrument to convene experts and stakeholders from civil society, including private sector, NGOs, scientific community, among other major groups, with a view to defining recommendations that will be taken directly to the Heads of State and Government during the High-Level Segment of Rio+20. This online platform is an instrument to ensure broad, democratic and diverse participation in the Sustainable Development Dialogues process. **More**

CLIM-FO INFORMATION

The **objective** of CLIM-FO-L is to compile and distribute recent information about climate change and forestry. CLIM-FO-L is issued monthly.

Past issues of CLIM-FO-L are available on the website of ***FAO Forest and Climate Change***:

http://www.fao.org/forestry/climatechange/en/

For technical help or questions contact **CLIM-FO-Owner@fao.org**

The Newsletter is compiled by Marc Dumas-Johansen and Susan Braatz.

We appreciate any comments or feedback.

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