

CLIM-FO Climate Change & Forestry





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I. IN THE PRESS

15 December 2011 - UNECE

The International Year of the Forest closes with an eye on the future of forests

What will European and North American forests look like in 2030? Will they store carbon, preserve biodiversity or help countries meet renewable energy commitments? Are trade-offs unavoidable?

14 December 2011 - Nature Editorial

The mask slips. The Durban meeting shows that climate policy and climate science inhabit parallel worlds

It says a lot about the outcome of the UN climate talks in South Africa at the weekend that most of the immediate reports focused on the wrangling that led to an agreement of sorts, rather than the contents and implications of the agreement itself. Late-night talks, later-night arguments and early-morning pacts between battling negotiators with the apparent fate of the world resting on their shoulders give the process a melodrama that is hard to resist, particularly for those who experienced it first hand in the chaos of the Durban meeting

14 December 2011 - CIFOR

<u>Durban talks both good and bad for REDD+, says</u> expert

The U.N. climate change talks in Durban resulted in a mixed bag for REDD+: progress on how to set reference emissions levels, progress on defining how to measure emission reductions stemming from forestry initiatives, but a weak decision on social and environmental safeguards for the program, and no advances on sources of long-term funding, according to CIFOR's leading climate scientist.

13 December 2011 - United Nations University

Why traditional knowledge holds the key to climate change

The rapid rise in the world's population and our ever-growing dependence on fossil fuel-based modes of production has played a considerable role in the growing concentration of greenhouse gases (GHG) in the atmosphere. As a result, global temperatures are increasing, the sea level is rising and precipitation patterns are changing, while storm surges, floods, droughts and heat waves are becoming more frequent and severe. Subsequently, agricultural production is decreasing, freshwater is becoming more scarce, infectious diseases are on the rise, local livelihoods are being degraded and human well-being is diminishing.

10 December 2011 - IISD

<u>GEF-managed Least Developed Countries Fund</u> receives new pledges

The Global Environment Facility (GEF) has reported that several donor countries pledged new support to the GEF-managed Least Developed Countries Fund (LDCF) for climate change adaptation during the 17th session of the Conference of the Parties (COP 17) to the UNFCCC in Durban, South Africa.

5 December 2011 - Nature News Blog

<u>Updated: Durban deforestation agreement</u> promotes transparency, scientific verification

Climate negotiators in South Africa struck a preliminary deal on forestry over the weekend, advancing a technical document that lays out what could be the first real 'rules of the road' for initiatives that seek to reduce greenhouse gases by curbing deforestation in tropical countries

30 November 2011 - FAO

<u>Satellite technology yields new forest loss</u> <u>estimates. FAO uses remote sensing survey to track</u> changes

A new, satellite-based survey released by the UN Food and Agriculture Organization (FAO) provides a more accurate picture of changes in the world's forests, showing forest land use declined between 1990 and 2005. The findings of a global remote sensing survey show the world's total forest area in 2005 was 3.69 billion hectares, or 30 percent of the global land area.

29 November 2011 - IISD

<u>How Developing Countries Can Speed Up Climate</u> Finance

Climate change is one of today's most pressing threats to achieving sustainable development goals around the world. Countries must transform their economies and angle their growth with policies and actions across multiple sectors that lower greenhouse gas emissions, reduce vulnerability to climate shocks and cut poverty.

25 November 2011 - IISD

<u>CDM executive board adopts standards, tools and procedures for CDM projects</u>

The Executive Board of the Clean Development Mechanism (CDM), at its 65th meeting, adopted various comprehensive standards, tools and procedures to guide the assessment work of third party certifiers and project participants, including standards for the demonstration of additionality and application of methodologies.

II. UNFCCC NEGOTIATIONS AND RELATED DISCUSSIONS

United Nations Framework Convention on Climate Change

UNFCCC meetings held in Durban, South Africa from 28 November until 11 December included the 17th session of the Conference of the Parties (COP17), seventh session of the Conference of the Parties serving as the

meeting of the Parties to the Kyoto Protocol (CMP7), 35th session of the Subsidiary Body for Scientific and Technological Advice (SBSTA35), 35th session of the Subsidiary Body for Implementation (SBI 35), resumed 16th session of the Ad hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP 16-4), and the resumed 14th session of the Ad hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA 14-4).

The decisions from the meetings, including those referred to below, may be accessed from the UNFCCC's home page

Key overall outcomes

Among the many outcomes of the meetings, the most notable were:

- Agreement to establish a second commitment period of the Kyoto Protocol from 2013 until either 2017 or 2020.
- Agreement to work to put in place a new, single legal instrument under UNFCCC, applicable to all parties, to be agreed by 2015 and to take effect in 2020. The Ad Hoc Working Group on the Durban Platform for Enhanced Action was established to develop the legal instrument, protocol or outcome, beginning in early 2012
- Operationalization of the Green Climate Fund.

For the past three years, UNFCCC has been engaged in parallel-track negotiations under two ad-hoc working groups. One addresses actions of all Parties under the Convention, including on climate change mitigation, adaptation, financing, capacity building and technology transfer. The other focuses on further emission reduction commitments of Annex 1 countries under the Kyoto Protocol. The goals are to advance collective efforts to limit global warming to within 2° C above pre-industrial levels to avoid severe consequences of climate change and to promote adaptation to the inevitable consequences of climate change.

These decisions address three interconnected issues: the future of the Kyoto Protocol, which defines emission reduction commitments of developed country members, but expires at the end of 2012; the need for developing countries, in particular the major emitters, to join developed countries in making emission reductions so as to achieve the goal of limiting the average global increase in temperature to within 20°C; and the need of developing countries for financial support to undertake both mitigation and adaptation measures.

AWG-LCA has been extended for one more year, until COP18, in order to conclude its work under the Bali Action Plan, which was agreed upon in COP13. A number of other decisions were adopted, including the ones to implement the Cancun Agreements.

Key outcomes related to forests

REDD+ (negotiated by SBSTA and AWG-LCA)

COP17 adopted three decisions that refer to REDD+:

- Guidance on systems for providing information on how safeguards are addressed and respected and on modalities relating to forest reference emission levels and reference levels, resulting from work undertaken by SBSTA over the past year;
- Options for REDD+ financing;
- Explicit mention in the COP decision on the Green Climate Fund that REDD+ activities are eligible for GCF support.

COP decided that countries will include in their national communications a summary on how REDD+ safeguards are being addressed and respected, taking into consideration their national circumstances and capabilities, and in accordance to national legislation and international agreements. Guidance on the systems for providing this information is given.

COP agreed that a step-wise approach to development of countries' reference levels and/or their forest emissions levels may be useful, as a means to allow improvement by incorporating better data, improved methodologies and, where appropriate, additional pools. Sub-national reference levels may be elaborated as an interim measure. COP invited parties to submit proposed reference levels to UNFCCC, with accompanying information as laid out in guidelines provided in the decision, and agreed to establish a process for technical assessment of the proposed reference levels.

The issue of sources of financing for REDD+ was addressed by AWG-LCA (see LCA decision, section IIC). It continued to be controversial. Both market and non-market financing options were considered. COP agreed on a process during 2012 to explore the options, including submissions by parties and accredited observers, the preparation of a technical paper by the UNFCCC secretariat, and the holding of a workshop. COP18 is to consider the resulting recommendations in December 2012.

No COP decision was made regarding modalities for REDD+ measurement, reporting and verification (MRV) and national forest monitoring systems. SBSTA will continue to work on REDD+ MRV and national forest monitoring systems, with the aim of completing its work and reporting to COP18 in December 2012. (See FCCC/SBSTA/2011/L.25)

Land use, land-use change and forestry (LULUCF) (negotiated by AWG-KP)

CMP reached a long-awaited agreement on LULUCF, most notably issues related to forest and forest product accounting. Agreement was reached on accounting rules for forest management, accounting for harvested wood products, and treatment of emissions from natural disturbances. Clarity on these points will help Annex I countries decide on their level of ambition for emission reductions for the second commitment period of the Kyoto Protocol. Accounting for forest management, which was voluntary during the first commitment period of the Protocol, will be mandatory during the second commitment period. Revegetation, cropland management, grazing land management and wetland drainage and rewetting will remain optional, but those countries that have elected them during the first period shall continue accounting for these activities.

Countries will also be required, during the second commitment period, to account for changes in a sixth carbon pool: harvested wood products. The CMP decision also provides rules on accounting for emissions due to natural disturbances.

Work will continue under SBSTA to explore more comprehensive accounting of emissions and removals from land use, land use change and forestry, including through more inclusion activity-based approach or a land-based approach and also to consider additional LULUCF activities that could be eligible for CDM, and to report to COP at the end of 2013.

Other relevant decisions

- The decision on the Nairobi work programme on impacts, vulnerability and adaptation to climate change calls for two technical workshops, one on water and climate change impacts and adaptation strategies, and the other on ecosystem approaches for adaptation to climate change, including taking into account the role of forests. The secretariat is requested to compile case studies on national adaptation planning processes and to develop and disseminate information and knowledge products.
- The decision on National Adaptation Plans provides guidelines for developing countries for the development of national adaptation plans.
- The proposal of a work programme on agriculture has been discussed since 2008. AWG-LCA agreed to an exchange of views in SBSTA on issues regarding agriculture, with the perspective of a potential decision in COP18.

Other events

Avoided Deforestation Partners Event. Advancing Public-Private Partnerships for REDD+ and Green Growth - 7th of December

The event featured a broad range of leaders, from the governmental and private sector and civil society who to met to carry on the work of Wangari Maathai's vision of protecting people, forests and the climate. The focus of the event was how innovative partnerships can change the current market paradigm from one that leads to the destruction of forests to one that rewards those committed to protecting them. The event featured several speeches from prominent leaders and other key stakeholders.

Ban Ki-moon, Secretary-General of the United Nations, opened the event with a talk on the importance of REDD+ to global climate change and the need to work through alliances between businesses, governments and local communities to enhance the innovative policy approaches. Dr. Jane Goodall followed up with a speech on the value of the world's remaining primary forests.

The event continued with three panel discussions discussing i) national efforts and the role of public-private partnerships, ii) innovative approaches to address the drivers of deforestation such as agricultural commodity production and iii) the human side of REDD+ and the critical needs to address poverty alleviation and the roles of local communities.

Forest Day - 4th of December

A little more than 1000 people participated in forest day 5, with 200 being official cc negotiators. Among the many discussions on Forest Day 5, REDD+ and the drivers of deforestation were discussed and in particular the role of funding, and it was mentioned that the role of agriculture as a driver should be more integrated than at present state resulting in a more broad landscape approach. To further explorer funding schemes for REDD+ was a major issue.

The Consultative Group for International Agricultural Research (CGIAR) announced a new 10 year research programme on Trees "Forests, Trees and Agroforestry". The aim of the research programme is to reduce deforestation and forest degradation and enhancing trees on farms. More

Mountain day - 4th of December

The event highlighted the critical role that mountain ecosystems play in climate adaptation and sustainable development as well as the vulnerability of mountains, and those who depend on them, to climate change. More

Agriculture and Rural Development Day - 3rd of December

Africa is a hotbed of climate-smart innovation, providing the ideal setting for this year's Agriculture and Rural Development Day. Across the continent, rural communities are experimenting with options for achieving climate-change adaptation and mitigation through more sustainable crop production, livestock rearing and management of soils, water, fish, forests, agroforestry species, and other biodiversity. More

Dry Forests Symposium - 1st of December

The Centre for International Forestry Research (CIFOR), in association with its partners and key stakeholders, convened a one-day international event on 1 December 2011, 'Dry Forests Symposium: Defining a new research agenda for Africa's dry forests', alongside the UNFCCC Conference of the Parties in Durban, South Africa. The event provided a global platform for representatives from the research and development sector to openly discuss the challenges and opportunities faced in the sustainable use of dry forests, within broader agricultural landscapes. More

REDD+, poverty reduction and sustainable development - 27th November

The workshop brought together a broad range of stakeholders from government officials to community leaders to discuss what REDD+ can learn from participatory forest management. More

III. EVENTS & MEETINGS

Upcoming events

International Year of Forests, 2011

1 January - 31 December 2011

UN General Assembly has designated 2011 as International Year of Forests. The secretariat of the UN Forum on Forests serves as the focal point for the implementation of the International Year of Forests, in collaboration with governments, the members of the Collaborative Partnership on Forests and international, regional and subregional organizations and processes as well as relevant major groups. More

A closing event was held in Rome, Italy at FAO headquarters the 20th of December 2011 celebrating the various activities and events during the international year of forests. Another closing event will be held by UNFF in New York, USA in January 2012. More

International Society of Tropical Foresters. 18th annual conference

26-28 January 2012, New Haven, USA.

The Yale School of Forestry and Environmental Studies organizes a two day conference on strategies for landscape -scale restoration in the tropics. More

Forests models for research and decision support in sustainable forest management

1-2 March 2012, Pierroton (Bordeaux), France

This international conference will focus on the current state of knowledge on forest models and their use to support decision support in sustainable forest management. It will highlight the results of the COST Action FP0603 discuss them in the context of the world research on this The conference is directed not only to researchers but provides also a forum for stakeholders where the support models to forest management will be presented discussed. and 100 to 150 scientists, policy makers, planners, managers, specialized journalists, including representatives of a wide range of socioeconomic, ecological and institutional contexts are expected. More

Beyond carbon: ensuring justice and equity in REDD+ across levels of governance

23-24 March 2012, Oxford, UK. Deadline for submission of abstracts is the 4th of January 2012.

Reducing Emissions from Deforestation and Forest Degradation (REDD+) has rapidly become a key pillar of international cooperation on climate change. Since its inception in 2005, REDD+ has grown in scope from being a cheap mitigation option and opportunity to address the 15-20% of global GHG emissions attributed to deforestation into a wider set of activities that reach beyond the carbon dimension of REDD+. They promote forest carbon stocks, sustainable management of forests and forest conservation as well as deliver co-benefits such as biodiversity conservation and poverty alleviation. A host of state and non-state actors at all levels of governance have entered this emerging policy field. This conference takes stock of these developments to date. It addresses them from both natural and social science perspectives and discusses the role of justice and equity in current debates on REDD+. Its particular aim is to discuss the limits and opportunities in deriving cobenefits from REDD+ activities. The conference calls for papers. Abstracts are invited and should be submitted by the 4th of January 2012. More

Climate Change Mitigation with Local Communities and Indigenous Peoples: Practices, Lessons Learned and Prospects.

26-28 March 2012, Cairns, Australia.

The workshop aims to reflect the wide and diverse range of perspectives concerning indigenous peoples/local communities and climate change responses (including mitigation); support the build-up of understanding and peer-reviewed literature in the field of indigenous peoples, local communities and climate change mitigation; and to compile regional and local data and grey literature that are relevant for understanding climate change mitigation at the local level. It will also support indigenous peoples', local communities' and developing country scientists' engagement and research in international climate dialogues. The workshop also intends to provide policy-makers with policy relevant information on mitigation, indigenous peoples and local communities. Selected papers will be considered for publication in a Special Issue of a peer-reviewed scientific journal. More

Planet Under Pressure: New knowledge towards solutions

26 -29 March, London, UK

The 2012 international Planet Under Pressure conference will provide a comprehensive update of the pressure planet Earth is now under. The conference will discuss solutions at all scales to move societies on to a sustainable pathway. It will provide scientific leadership towards the 2012 UN Conference on Sustainable Development - Rio+20. More

Assessing forest governance in a context of change

9-12 May 2012, Sarajevo, Bosnia & Herzegovina

The objective of the conference is to meet scientists and other experts to discuss the experiences in assessing the governance of the forest sector in various places of the world. Different approaches and methodologies will be confronted, with as a perspective to progress in the understanding of the different concepts of "governance" as applied in the forest policy and management issues. **More**

Forest for People

22 - 24 May 2012, Alpbach, Tyrol/Austria

The conference is one important part of the new IUFRO strategy based on six thematic areas. The aim of this conference is to build a systematic body of knowledge about "forest for people" and its various facets, including possible future trends and challenges. This conference and the following up process want to integrate not only the knowledge across all divisions but include the knowledge outside IUFRO. 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

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 ${\bf r}$

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-

IV. RESEARCH ARTICLES

Reducing emissions from deforestation and forest degradation

Agrawal, A., Nepsta, D., Chhatre, A

Annual Review of Environment and Resources 36: 373-396

Reducing emissions from deforestation and forest degradation (REDD+) policies, projects, and interventions are among the most prominent of recent attempts to mitigate climate change. Because REDD+ projects focus on forests, they simultaneously affect socioeconomic and ecological outcomes at local, subnational, national, regional, and global levels. This review assesses the promise of REDD+ for the continued ability of forests to provide multiple benefits to human societies at multiple scales. We survey REDD+ efforts at different levels, examining them through an actor-oriented approach. The article highlights the criticality of collaborative action to enhance desired outcomes of REDD+ efforts. In summarizing major REDD+ future trends, the paper emphasizes the need to learn from past forestry, agricultural, biodiversity, and development policies, and for adaptive policy making.

Land tenure and payment for environmental services. Challenges and opportunities for REDD+

Knox, A., Caron, C., Miner, J., Goldstein, A.

Land Tenure Journal, No 2 (2011): 17-56.

This article highlights the land tenure implications of payment for environmental services (PES) mechanisms to reduce carbon emissions and enhance carbon sequestration, and offers suggestions for incorporating tenure into PES strategies. The first section begins with an overview of PES in the context of carbon-based approaches, focusing on one mechanism: REDD+ (Reducing Emissions from Deforestation and Degradation of Forest Resources). The second section discusses the myriad of tenure challenges associated with effective implementation of carbon-based PES schemes. These challenges are often found in countries where more complex forms of tenure prevail and exist alongside civil law systems; yet, many such countries host some of the world's largest forest carbon stocks. The third section presents options for addressing tenure challenges, focusing on legal and governance measures but also stressing practical strategies that nurture the effectiveness of normative reforms. We conclude by emphasizing the importance of clarifying and securing resource users' rights to land and other natural resources to the ultimate success of climate change mitigation goals.

Forest restoration, biodiversity and ecosystem functioning

Aerts, R. & Honnay, O.

BMC Ecology. Volume 11, Number 1, 29.

Globally, forests cover nearly one third of the land area and they contain over 80% of terrestrial biodiversity. Both the extent and quality of forest habitat continue to decrease and the associated loss of biodiversity jeopardizes forest ecosystem functioning and the ability of forests to provide ecosystem services. In the light of the increasing population pressure, it is of major importance not only to conserve, but also to restore forest ecosystems. Ecological restoration has recently started to adopt insights from the biodiversity-ecosystem functioning (BEF) perspective. Central is the focus on restoring the relation between biodiversity and ecosystem functioning. Here we provide an overview of important considerations related to forest restoration that can be inferred from this BEF-perspective. Restoring multiple forest functions requires multiple species. It is highly unlikely that species-poor plantations, which may be optimal for above-ground biomass production, will outperform species diverse assemblages for a combination of functions, including overall carbon storage and control over water and nutrient flows. Restoring stable forest functions also requires multiple species. In particular in the light of global climatic change scenarios, which predict more frequent extreme disturbances and climatic events, it is important to incorporate insights from the relation between biodiversity and stability of ecosystem functioning into forest restoration projects. Rather than focussing on species per se, focussing on functional diversity of tree species assemblages seems appropriate when selecting tree species for restoration. Finally, also plant genetic diversity and above - below-ground linkages should be considered during the restoration process, as these likely have prominent but until now poorly understood effects at the level of the ecosystem. The BEF-approach provides a useful framework to evaluate forest restoration in an ecosystem functioning context, but it also highlights that much remains to be understood, especially regarding the relation between forest functioning on the one side and genetic diversity and above-ground-below-ground species associations on the other. The strong emphasis of the BEF-approach on functional rather than taxonomic diversity may also be the beginning of a paradigm shift in restoration ecology, increasing the tolerance towards allochthonous species.

Effects of climate change on biomass production and substitution in north-central Sweden

Poudel, B. C. Sathre, R. Gustavsson, L. Bergh, J. Lundstrom, A. Hyvonen, R

Biomass and Bioenergy. 2011. 35: 10, 4340-4355

In this study we estimate the effects of climate change on forest production in north-central Sweden, as well as the potential climate change mitigation feedback effects of the resulting increased carbon stock and forest product use. Our results show that an average regional temperature rise of 4 degrees C over the next 100 years may increase annual forest production by 33% and potential annual harvest by 32%, compared to a reference case without climate change. This increased biomass production, if used to substitute fossil fuels and energy-intensive materials, can result in a significant net carbon emission reduction. We find that carbon stock in forest biomass, forest soils, and wood products also increase, but this effect is less significant than biomass substitution. A total net reduction in carbon emissions of up to 104 Tg of carbon can occur over 100 years, depending on harvest level and reference fossil fuel.

Institutional perceptions of opportunities and challenges of REDD+ in the Congo basin

Brown, H.C.P., Smith, B., Sonwa, D.J., Somorin, O.A., Nkem, J.

The Journal of Environment and Development. DOI: 10.1177/1070496511426480

Tropical forests have a central role to play in a new mechanism designed to mitigate climate change, known as REDD+ (Reduced Emissions From Deforestation and Forest Degradation). Through semistructured interviews and content analysis of relevant documents, the perceptions of the opportunities and challenges of REDD+ of institutions, who may be directly implicated in or affected by its implementation are investigated. Research takes place in three Central African countries, Cameroon, Central African Republic, and Democratic Republic of Congo, which contain the Congo Basin forest. Perception of opportunities include economic development and poverty reduction, biodiversity conservation, network building, and governance reform. Challenges identified include REDD+'s complexity, lack of technical capacity for implementation, opportunities for participation, benefit sharing, and the traditional system of shifting cultivation. Those involved in designing REDD+ internationally need to understand developing-country perspectives, and institutions at all levels need to work together to develop concrete strategies to improve overall outcomes.

A review of decision-making approaches to handle uncertainty and risk in adaptive forest management under climate change

Yousefpour, R., Bredahl Jacobsen, J., Jellesmark Thorsen, B., Meilby, H., Hanewinkel, M., Oehler, K. Annals of Forest Science. 2011. DOI 10.1007/s13595-011-0153-4

This review paper provides an overview of approaches to which we may resort for handling the complex decision problems involving uncertainty and risk that climate change implies for forest managers. Modelling approaches that could support adaptive management strategies seem to be called for, not only as climate change denotes increased economic uncertainty but also because new and more reliable information becomes available as time passes and climate changes. The paper (1) provides a broad overview of state of the art methods for optimal decision making under risk and uncertainty in forestry and (2) elaborates on the possible use of these methods in adaptive forest management under climate change. A survey of the current literature is carried out to identify approaches and developments that may prove most promising in relation to different challenges to the adaptive management of forest ecosystems under climate change. Most studies focusing on changing, typically increasing, risks in forest management under climate change tend to build on existing approaches about changes in risk levels contingent on climate change scenarios. Finally, we discuss what to emphasise in future studies to improve the understanding of adaptive forest management and decision support tools needed to cope with climate change.

Tree density and species decline in the African Sahel attributable to climate

Gonzalez, P., Tucker, C.J., Sy, H.

Journal of Arid Environments. 2011. In press, corrected proof.

Increased aridity and human population have reduced tree cover in parts of the African Sahel and degraded resources for local people. Yet, tree cover trends and the relative importance of climate and population remain unresolved. From field measurements, aerial photos, and Ikonos satellite images, we detected significant 1954-2002 tree density declines in the western Sahel of $18 \pm 14\%$ (P = 0.014, n = 204) and $17 \pm 13\%$ (P = 0.0009, n = 187). From field observations, we detected a significant 1960-2000 species richness decline of $21 \pm 11\%$ (P = 0.0028, n = 14) across the Sahel and a southward shift of the Sahel, Sudan, and Guinea zones. Multivariate analyses of climate, soil, and population showed that temperature most significantly (P < 0.001) explained tree cover changes. Multivariate and bivariate tests and field observations indicated the dominance of temperature and precipitation, supporting attribution of tree cover changes to climate variability. Climate change forcing of Sahel climate variability, particularly the significant (P < 0.05) 1901-2002 temperature

increases and precipitation decreases in the research areas, connects Sahel tree cover changes to global climate change. This suggests roles for global action and local adaptation to address ecological change in the Sahel.

Building regional priorities in forests for development and adaptation to climate change in the Congo Basin

Sonwa, D.J., Nkem, J.N., Idinoba, M.E., Bele, M.Y., Jum, C.

Mitigation and adaptation strategies for global change 2011. DOI: 10.1007/s11027-011-9335-5

Indentifying common priorities in shared natural resource systems constitutes an important platform for implementing adaptation and a major step in sharing a common responsibility in addressing climate change. Predominated by discourses on REDD + (Reduced Emissions from Deforestation and Forest Degradation and conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries) with little emphasis on adaptation there is a risk of lack of policy measures in addressing climate change in the Congo Basin. Forest products and ecosystem services provide security portfolios for the predominantly rural communities, and play major roles in national development programmes in both revenue and employment opportunities. Thus, raising the profile of forests in the policy arena especially in the twin roles of addressing climate change in mitigation and adaptation and achieving resilient development is crucial. Within the framework of the Congo Basin Forests and Climate Change Adaptation project (COFCCA) project, science policy dialogue was conducted to identify and prioritize forest based sectors vulnerable to climate change but important to household livelihoods and national development. The goal of the prioritization process was for the development of intervention in forest as measures for climate change adaptation in Central Africa. Participants constituted a wide range of stakeholders (government, Non Governmental Organizations, research institutions, universities, community leaders, private sectors etc.) as representatives from three countries directly involved in the project: Cameroon, Central African Republic and Democratic Republic of Congo. Building on national priorities, four forest related sectors were identified as common priorities at the regional level for focus on climate change adaptation. These sectors included: (1) energy with emphasis on fuel wood and Charcoal; (2) Water principally quality, quantity, accessibility, etc.; (3) Food with emphasis on Non Timber Forest Products, and (4) Health linked to healthcare products (medicinal plants). Using these prioritized sectors, the project focused on addressing the impacts of climate change on local communities and the development of adaptation strategies in the three pilot countries of the Congo Basin region. The four sectors constitute the key for development in the region and equally considered as priority sectors in the poverty reduction papers. Focused research on these sectors can help to inject the role of forests in national and local development and their potentials contributions to climate change adaptation in national and public discourses. Mainstreaming forest for climate change adaptation into national development planning is the key to improve policy coherence and effectiveness in forest management in the region.

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. DOI: 10.1007/s11027-011-9328-4

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 land use-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.

Options for monitoring and estimating historical carbon emission from forest degradation in the context of REDD+

Herold, M., Román-Cuesta, R.M., Mollicone, D., Hirata, Y., Van Laake, P., Asner, G.P., Souza, C., Skutsch, M., Avitabile, V., MacDicken, K.

Carbon Balance and Management. Volume 6, Number 1, 13.

Measuring forest degradation and related forest carbon stock changes is more challenging than measuring deforestation since degradation implies changes in the structure of the forest and does not entail a change in land use, making it less easily detectable through remote sensing. Although we anticipate the use of the IPCC guidance under the United Framework Convention on Climate Change (UNFCCC), there is no one single method for monitoring forest degradation for the case of REDD+ policy. In this review paper we highlight that the choice depends upon a number of factors including the type of degradation, available historical data, capacities and resources, and the potentials and limitations of various measurement and monitoring approaches. Current degradation rates can be measured through field data (i.e. multi-date national forest inventories and permanent sample plot data, commercial forestry data sets, proxy data from domestic markets) and/or remote sensing data (i.e. direct mapping of canopy and forest structural changes or indirect mapping through modelling approaches), with the combination of techniques providing the best options. Developing countries frequently lack consistent historical field data for assessing past forest degradation, and so must rely more on remote sensing approaches mixed with current field assessments of carbon stock changes. Historical degradation estimates will have larger uncertainties as it will be difficult to determine their accuracy. However improving monitoring capacities for systematic forest degradation estimates today will help reduce uncertainties even for historical estimates.

Capability development of local communities for project sustainability in afforestation/reforestation clean development mechanism

Yamanoshita, M.Y. & Amana, M.

Mitigation and adaptation strategies for global change. DOI: 10.1007/s11027-011-9334-6

It has been recognized that the involvement of local community is essential to ensure the sustainability of A/R CDM (afforestation/reforestation clean development mechanism) project. This study verifies if the risks of non-permanence and leakage are addressed in a registered small scale A/R CDM project in Vietnam. Workshops, interviews, and a questionnaire survey of local villagers revealed that the project has caused a shortage of land for conventional activities such as grazing, fuel wood collection and shifting cultivation, and consequently posed the risks of project non-permanence and leakage. It is suggested that participation of all stakeholders in the community to the A/R CDM project beyond existing land tenure and adequate carbon benefit sharing according to the level of contribution to the project are required to reduce the risk of non permanence. To ensure the participation, the community should have capability such as consensus building and collective action. Leakage would be minimized if the community has alternative measures to the conventional activities before starting the project. We argue that it is necessary to first develop a community's capabilities in the readiness phase of any A/R CDM project in order to reduce the risks for the project sustainability, and that new sources of funding are needed for this purpose.

V. PUBLICATIONS, REPORTS AND OTHER MEDIA

Report on the expert meeting on forest reference emission levels and forest reference levels for implementation of REDD-plus activities

UNFCCC

The Subsidiary Body for Scientific and Technological Advice requested the secretariat to organize meetings of technical experts on methodological issues referred to in document FCCC/SBSTA/2011/2, paragraphs 28 and 29, including a meeting before its thirty-fifth session. A second meeting of technical experts, on forest reference emission levels and forest reference levels for implementation of REDD-plus activities, took place in Bonn, Germany, from 14 to 15 November 2011. The presentations and discussions focused on the sharing of views and experiences and the challenges faced by developing countries implementing REDD-plus activities and their efforts to construct forest reference emission levels and/or forest reference levels, lessons learned from developed countries in determining their forest reference levels for forest management and ongoing work on methodologies and approaches and their outcomes. Experts exchanged views on and addressed issues relating to the scope and purpose of reference levels, characteristics, guidance for construction and a process for

communication. They highlighted several issues and elements that may need to be considered when constructing forest reference emission levels and forest reference levels and identified issues requiring further discussion. The report

Building bridges between REDD+ and sustainable agriculture: addressing agriculture's role as a driver of deforestation

FAO

The potential role of forests in reducing of global greenhouse gas emissions is attracting considerable interest from the international community. Deforestation and forest degradation is largely being driven by forces outside the forestry sector. Many of these forces are closely tied to agriculture. For this reason, an isolated sectoral approach focusing solely on forests cannot succeed in implementing REDD+ policies. This paper suggests maximizing synergies between sustainable agriculture and REDD+ and ensuring that food production and forestry do not compete for natural resources. To accomplish this, the best way to move forward would be to adopt a cross-sectoral 'landscape approach'. This approach would promote high carbon stock land uses in forests and in agricultural areas, and would contribute to halting both deforestation and forest degradation while meeting future demands for food and nutrition. The report

Report on the DCPF workshop. Linking community monitoring with national MRV for REDD+

Forests Carbon Partnership Facility & CIGA-UNAM

This workshop was commissioned by the Forest Carbon Partnership Facility of the World Bank and organized by the Centro de Investigaciones en Geografía Ambiental of the Universidad Nacional Autónoma de México (CIGA-UNAM). Over 65 participants were involved from 15 countries in Africa, Asia, Latin America as well as from Europe, the United States of America and Canada. The aim was to discuss and if possible reach a consensus on how community monitoring can link with and contribute to national systems of Monitoring, Reporting and Verification (MRV) under national programmes for Reduced Emissions from Deforestation and forest Degradation (REDD+). The report

Wildlife in a changing climate

FAO

This paper examines the likely ecosystem and landscape changes that will occur in forests, mountains, wetlands, coastal areas, savannahs, grasslands and steppes. Impacts include changes in physical conditions, weather patterns and ecosystem functioning. As a consequence, terrestrial, freshwater and marine wildlife will be severely affected unless we manage to cope with climate changes through decisive planning and action. The main focus is on tropical terrestrial wildlife and its habitats, but other fauna, ecosystems and geographical regions are covered as well. The publication

How trees and people can co-adapt to climate change. Reducing vulnerability in multifunctional landscapes.

World Agroforestry Centre

This book focuses on the relationship between climate-change adaptation, rural development and the roles of trees and agroforestry. Rewards' schemes for environmental services (RES) in multifunctional landscapes, which provide incentives for maintaining or restoring multifunctionality, will contribute to a likely reduction in vulnerability to climate change. Rewards may well be an efficient and fair way of investing international funds in climate-change adaptation. The voluntary, conditional and pro-poor aspects of RES will also help to bring the voice of grassroots stakeholders into international and national decision-making processes on how to deal with climate change. That can ensure realism and efficiency in climate-change adaptation, which is yet another strand to be integrated in rural development programs. The argument for such an approach is built on the underlying concepts of climate change, rural livelihoods and multifunctionality of landscapes, as well as the specific roles of trees and farmers as providers of environmental services in agricultural landscapes. However, trees themselves are vulnerable to climate change and co-adaptation is needed and is possible. The book

Agroforestry in REDD+: Opportunities and Challenges.

ASB. Partnership for the tropical forest margins

Agroforestry and other tree-based systems (wood lots, afforestation) can contribute to Reducing Emissions from Deforestation and Forest Degradation (REDD+) in two ways: 1) as part of REDD+ under certain forest definitions; and / or 2) as part of a strategy for achieving REDD+ in landscapes. In the context of REDD+, agroforestry has the potential for reducing degradation by supplying timber and fuelwood that would otherwise be sourced from adjacent or distant forests. In fact, agroforestry has been used in several protected area

landscape buffer zones and within conservation as one way of alleviating pressure on forests, thereby reducing deforestation. However, enabling market infrastructure, policies on tree rights and ownership and safeguards would be necessary for agroforestry and other tree-based systems in the landscape to effectively contribute to the goals of REDD+ and Nationally Appropriate Mitigation Actions (NAMAs). The policy brief

Forest Carbon Partnership Facility. 2011 Annual report.

Forest Carbon Partnership Facility

This report marks the third year of implementation of the FCPF. The first three years have seen the development of the FCPF and REDD+ at the global and national levels. Remarkable progress was achieved in the UNFCCC, an international REDD+ Partnership was established, and global initiatives such as the FCPF, the UN-REDD Programme, the Forest Investment Programme and the GEF's new SFM/REDD+ window were set up to assist forest countries in tackling the REDD+ challenge. Under this new international framework, dozens of forest countries have started formulating broad strategies and investing in activities on the ground. The report

An assessment of opportunities for reducing emissions from all land uses. Vietnam preparing for REDD. Final national report.

ASB. Partnership for the tropical forest margins

This report presents results from a project carried out in Vietnam to assess the potential of reducing carbon emissions from all land uses, rather than only from deforestation and degradation of forests. The study explored the links between reducing emissions from all land uses and nationally appropriate actions (NAMAs). as well as market-based approaches The study found that reducing emissions from all land uses in Vietnam increases the possibility of sustaining a future carbon emissions reduction scheme because it addresses an entire landscape, not only forest, and land strengthens the participation all users, including indigenous of There are challenges to any scheme that aims to reduce emissions from all land uses. These include adopting methods, obtaining reliable data, and legal and political The report recommends that reducing emissions from all land uses would be the most effective approach and should be implemented using cross-sectoral land-use planning and co-governance that includes equitable involvement of government, private companies and smallholders. The report

REDD+ in Asia-Pacific: Are capacity building services meeting countries' needs?

RECOFTC, UNEP and UN-REDD programme

In the past three years tropical forested countries across the world have taken important institutional, policy, legal and piloting steps to become 'ready' for REDD+. Capacity building is a key component of this REDD+ readiness process and is backed by a huge investment of time and money from a large number of organizations, government agencies, communities and individuals. There has been a massive increase in capacity building during this short three year period, which begs the question: Do the organizations providing such services have the competencies to fully meet countries' REDD+ readiness needs? Surprisingly, little is known about the competencies of these organizations which include government agencies, NGOs, community groups, academic institutions, think-tanks, consultancies, legal firms and media companies. To fill this knowledge gap, RECOFTC - The Center for People and Forests, with financial and advisory support from the Global UN-REDD Programme through the United Nations Environment Programme, assessed the strengths and identified the gaps in the capacity building services being provided in a sample of Asia-Pacific countries against their REDD+ readiness needs. Recommendations were then given on how to improve the REDD+ capacity building process in the region. The report

Options for promoting high biodiversity REDD+

IIF

International climate and biodiversity conventions agree that to be effective in the long term, strategies to reduce emissions from deforestation, forest degradation, conservation and enhancement of forest carbon stocks, and sustainable forest management (REDD+), must not undermine biodiversity. But how do countries achieve 'high-biodiversity REDD+' in practice? At a global level, options include immediate policy strengthening in international negotiations; promotion of co-benefit standards; and financial incentives and preferences for buying countries. At a national level, developing countries can also promote high-biodiversity REDD+ through more coherent policies; integrated planning; regulatory and economic instruments; and improved monitoring of biodiversity impacts. The brief

The context of REDD+ in Brazil. Drivers, agents and institutions

CIFOR

The current report provides an overview of the contextual conditions that affect the REDD+ policy environment in the Brazilian Amazon. Based on reviews of existing literature, national and international data, legal opinions and selected expert interviews, it provides the background and the preliminary analysis of the context in which national REDD+ strategies are being developed. This document is organised into 5 main sections. First, it reviews the main forest and land use trends, investigating the main country-specific drivers of deforestation and degradation. The second section reviews major institutional factors linked to governance and rights, with particular emphasis on access rights to forestland and forest resources, as well as on decentralisation of governance, which has a crucial role in Brazil's REDD+ strategy. The third section encompasses political-economic factors, depicting the broader context in which drivers of deforestation and degradation operate. The fourth section moves more specifically to the development of national REDD+ policy strategies. The final section then draws on the implications of the preceding sections for prospective REDD+ outcomes by conducting an assessment of the efficiency, efficacy and equity (3Es) of execution of REDD+ strategies. The report

Beyond rhetoric: South-South collaboration for REDD+

IIED

Global debates about reducing emissions from deforestation and forest degradation, and promoting conservation, sustainable forest management and enhancement of forest carbon stocks (REDD+) emphasise the need for strategies to build on existing knowledge. In one example of South-South collaboration to do just this, IIED has helped facilitate a Mozambique-Brazil partnership to share expertise and create a unique REDD+ working group. The initiative provides key lessons for other countries contemplating South- South collaboration on REDD+, including the need for charismatic champions, continuity in government representation, and integration across sectors. The brief

REDD+: Ready to engage private investors?

IIED

The prospect of gaining carbon credits by acquiring land to implement REDD+ has caught the eye of the private sector. In many countries, including Papua New Guinea and Republic of Congo, there are reports of a carbon rush. In Mozambique, private investors have expressed an interest in acquiring more than 22 per cent of the country's land — an area that is larger than the 16 per cent of protected areas and that covers 42 per cent of forests — for REDD+. But Mozambique, like many developing countries, is still in the early stages of preparing a REDD+ strategy. Stakeholder consultations are ongoing and the country's REDD+ Working Group is still assessing social, technical and institutional capacities available to deliver REDD+ in a way that helps reduce emissions while also serving environment and social development needs. Encouraging private sector involvement before the country has the right policies and institutions in place to safeguard local environments and people risks undermining the potential of REDD+ for sustainable development. The brief

UN-REDD Lessons Learned: Asia Pacific

UN-REDD Programme

In the Asia-Pacific Programme, UN-REDD programme partner countries have generated numerous lessons that may be relevant for REDD+ readiness and implementation in other countries. While REDD+ requires the development of various elements, such as Measurement, Reporting and Verification (MRV) systems, a Benefit Distribution System (BDS), and an effective system of safeguards, all captured by the National REDD+ Strategy, most policies and measures required for REDD+ are not substantively different from those developed over many years in the context of sustainable forest management. The lessons in this booklet are grouped according to those elements of the REDD+ framework that are specific to REDD+. More lessons have been learned in other areas, as significantly more work has been implemented over the last two years. The report

Reducing emissions from all land uses in Cameroon. Final national report

ASB Partnership for the tropical forest margins

This report explores key elements required to support a whole landscape approach for carbon accounting in Cameroon - to Reduce Emissions from All Land Uses (REALU). A REALU approach requires integrating a cross-sectoral discourse into the debate about Reducing Emissions from Deforestation and forest Degradation (REDD+). Cross-sectoral issues in Cameroon include: the understanding of the main dynamics in the forest and agricultural sector; the direct and underlying causes and actors of deforestation and land use change in the humid forest zone; and the policy framework ruling the forest sector and the implementation of the 1994 Forest Code principles. Additional issues that cut across the land-use sector include the rights to resources,

tenure and potential conflicts on land and forest resources concerning REDD+, and opportunities for on-farm timber production. The report

The reality of REDD+ in Peru: Between theory and practice. Indigenous Amazonian peoples' analyses and alternatives

AIDESEP, FENAMAD, CARE and FPP

This report compiled by AIDESEP, FENAMAD, CARE (regional and national indigenous organisations) and FPP collates the experiences of indigenous peoples' organisations with REDD+ policies and projects in Peru. The report analyses the policies and strategies of the Peruvian government, examines the roles of international agencies and scrutinises pilot REDD+ initiatives already underway in indigenous territories. The report

Addressing climate change adaptation and mitigation in tropical wetland ecosystems of Indonesia

Tropical wetlands, especially peatlands and mangroves, are important in global carbon cycling. Indonesia has more tropical wetlands than any other country on Earth. Research that addresses critical information gaps and communicates the results on land use and carbon dynamics in tropical wetlands is needed to inform sound policy decisions. This work can also improve IPCC Guidelines on methodologies for greenhouse gas inventories. Standardized methods and protocols are needed for effective monitoring, reporting and verification of emissions from land use and land cover change in tropical wetlands. Low-lying coastal ecological zones are already affected by rising sea levels and other marine -related climate change effects. Mangroves are key to both climate change mitigation and adaptation. Conservation and reducing degradation to tropical wetlands are both sound mitigation approaches and important adaptation strategies. Mitigation procedures that preserve ecosystem resistance and resilience to climate change are recommended as cost-effective and ecologically sound adaptation strategies. - Ecosystem-based or watershed-wide approaches provide the best lens through which communities can assess and manage with changing climate conditions. The info brief

Local perspectives on REDD in comparison with those at the international negotiation tables and their representation in quantitative scenario models

World Agroforestry Centre

The international REDD+ debate has so far focussed on 1) the scope (RED, REDD+) of efforts to reduce emissions from a subset of wider land-use issues; 2) the financial incentives (\$/tCO2e) and associated accounting and disbursement mechanisms; and 3) safeguards that local perspectives be taken into account ('free and prior informed consent') and biodiversity co-benefits be achieved. From the local perspective of stakeholders living in tropical forest margin, the REDD+ debate is an additional complication in an already complex relationship that they have with central governments and forest authorities. Can they make use of the REDD+ interest of their national government to further their livelihoods strategies and development aspirations? Or will the REDD+ implementation measures set them back in their conflicts over resource access? We provide a number of case studies of two high carbon emission provinces in Indonesia, the land with the highest land-based carbon emissions. Conflicts over land are shown to be aggravated by a large REDD+ pilot project in Central Kalimantan, but new forms of accommodating forest-edge villages in stabilising forest margins through 'village-forest' agreements in Jambi are promising to become a major part of the solution. A deeper analysis of the community-level motivation for resource protection and household decisions about preferred land uses revealed the importance of social context in land use decisions. The model representation of 'agents' interacting in dynamic land-use models have not so far captured the richness of influences and 'bounded rationality' beyond household level economic optimisation. A nesting of models is proposed that will describe interactions between natural, social, human, financial and physical capital at multiple scales, with the primary cross-scale interactions restricted to the various capital types, and the cross-capital interactions restricted to an identical scale. A stakeholder analysis of REDD+ perspectives at provincial scale will be used in such models. The report

REDD Realities: Learning from REDD pilot projects to make REDD work

The Tanzanian Natural Resource Forum

Stakeholders in Tanzania are working on REDD through national programme development, awareness raising, advocacy and pilot project implementation. As part of this, nine REDD pilot projects are being supported by the Royal Norwegian Embassy, and are being implemented by civil society organizations and their partners. These projects cover many regions of Tanzania, and have diverse aims and approaches. Some are focused primarily on REDD readiness activities, such as establishing permanent monitoring plots and carbon baselines, and training government staff and community members in carbon monitoring, reporting, assessment and verification (MARV). Others are facilitating performance-based payments to forest community members. Some are working in community owned forests, while others are in joint forest management areas. Several are

helping communities design benefit sharing mechanisms for anticipated REDD revenues. Within these diverse contexts, some common lessons are emerging. With the aim of furthering learning and action on equitable and effective REDD, this publication highlights some key messages and lessons learned from the pilot projects in Tanzania. The report

A guide to learning about livelihood impacts of REDD+

CIFOR

This guide is about understanding the livelihood impacts of first-generation REDD+ projects. These projects are being planned and funded by a range of actors, with the aim of implementing a range of interventions to reduce deforestation and forest degradation, to promote conservation and sustainable management of forests and to enhance forest carbon stocks. The international community is looking to these projects for insight and guidance on the design of REDD+. Clearly, there are limitations to how REDD+ can be implemented and what it can achieve at the subnational level, and thus we should not expect the experience of projects to answer all of our questions about REDD+. However, by applying rigorous research designs and mapping the causal chains of projects, we can gather valuable evidence about how REDD+ interventions affect social welfare in forest regions. This guide provides an overview of such methods. The guide

Climate change and African forest and wildlife resources

The African Forest Forum

There is growing evidence that climate change and variability is impacting on forests and forest ecosystems in Africa, and therefore on the livelihoods of forest dependent communities, as well as on national economic activities that depend on forest and tree products and services. Africa is one of the most vulnerable regions in the world to climate change. Although the IPCC has published four assessment reports (ARs) that provide scientific information on climate change and variability to the international community, currently little is known about the potential of African forests and trees to adapt to climate change as well as on their potential to influence climate change. this is perhaps the first book that, based on what is known, systematically addresses climate change issues in the context of African forests, trees and wildlife resources, and therefore brings to the fore the forest and wildlife-climate change debate within and beyond the African continent. Africa has vast areas under forests and tree resources, and more than anything else these resources are at the centre of the socio-economic development and environmental protection of the continent. African forests and trees are also renowned for their habitats for wildlife resources. Climate change is argued to have the potential to adversely affect both forest and wildlife resources in almost all African countries. this book is therefore timely in that it highlights to all stakeholders, and in a systematic manner, the climate change issues relevant to the African forestry and wildlife sectors, with the view of increasing the understanding of these relationships and facilitating the development of strategies for these sectors to increase their contribution, at various levels and fora, to addressing the vagaries of climate change. The book also outlines the opportunities that climate change brings to the various development sectors of African nations. The book

REDD+ politics in the media - a case study from Cameroon

CIFOR

The purpose of this study is to identify the media discourse on the subject of avoided deforestation in Cameroon and the authors of that discourse. A second purpose is to understand the changes in such discourse whilst identifying levels and centres of interest in order to assess the evolution of REDD+ in the country. The study also identifies reforms being discussed, both on the REDD+ process and at a broader level, and identifies the main actors and the implications of Cameroon media discourse on effectiveness, efficiency, equity and cobenefits (3Es+). This analysis is based on articles published between December 2005 and December 2009 in three carefully selected national newspapers using specific criteria. They were Cameroun Tribune, Le Messager and The Post. The first is a government paper and the others are generally considered to have a critical eye on current events. To better understand the perception of media people on this issue, 12 journalists were interviewed. The results are presented and discussed bearing in mind the media's contextual conditions. A preliminary chapter provides elements to better understand the media sector and its influence on discussions about the media landscape for environment and development issues in Cameroon. The report

REDD+ politics in the media - a case study from Vietnam

CIFOR

The media can play a significant role in shaping public opinion on environmental policy and can influence the process of policy formulation and implementation. However, research exploring these impacts has been limited, particularly in developing countries and in the context of REDD+ (reducing emissions from deforestation and forest degradation). Using Vietnam as a case study, this report explores media coverage of REDD+ and discusses its impacts on REDD+ development and implementation in Vietnam. This study also

identifies key actors discussing REDD+ and opportunities and constraints for reporting on REDD+ in Vietnam. Three representative newspapers were selected and articles from these were searched using key phrases related to REDD+ and then coded using media framing and a media code book. Nine in-depth interviews with journalists who have reported on REDD+ were also conducted to complement the interpretation of the data. The report

How is REDD+ unfolding in southern Africa's dry forests?: a snapshot from Mozambique

CIFOR

Mozambique has high forest cover, a high deforestation rate and severe forest degradation. It is also one of the poorest and most vulnerable countries in the world. Therefore, Mozambique requires a pro-poor REDD+ model that progressively widens its scope to include agriculture and adaptation. Mozambican experts have drafted a national REDD+ strategy, which is currently undergoing government consultation, with public dissemination to follow later in 2011. The main REDD+ initiatives in Mozambique include a Norwegian-funded South-South cooperation programme with Brazil designed to support REDD+ strategy development, and a Japanese-funded readiness initiative on monitoring, reporting and verification and reference levels. Mozambique has a tradition of stakeholder consultation and relatively inclusive processes. However, to improve the content and acceptance of the REDD+ strategy and subsequent related legislation, greater capacity-building efforts and consultations are needed, especially at subnational levels, amongst communities and in the private sector. Important lessons for REDD+ benefit sharing can be drawn from Mozambique's innovative-yet still underimplemented-20% timber royalty distribution mechanism, as well as the two ongoing carbon forestry payments for environmental services schemes. Securing financing for REDD+ will be a challenge, and funding REDD+ implementation phases will require pooling resources from different sources. Implementation of a solid, well-developed REDD+ strategy can serve as a powerful framework to attract and coordinate such long-term financing for REDD+. The brief

VI. JOBS

Senior Research - Forest Team

IIED - deadline for application is 13th of January 2012

IIED is seeing a senior researcher for their forest team. One of the key responsibilities will be to help develop and steer a programme of policy research on tree-based enterprise, on and off-farm, to meet growing demands for food, fodder, fuel and fibre within sustainable and equitable landscapes. More

Postes d'experts en projets REDD+ basés en RDC (Kinshasa)

ONF International

ONF International prévoie de recruter un ou plusieurs experts en projets REDD+, chargés de Coordonner les activités d'ONFI sur la thématique des projets REDD+ en RDC, réaliser des missions d'expertise auprès des clients d'ONFI (Autorités Nationales, Agences de coopération, porteurs de projets, investisseurs du marché Carbone, etc.) en RDC et dans le bassin du Congo et participer à la prospection commerciale d'ONFI sur la thématique REDD + (réponses à Appels d'Offre, suivi des relations clients, etc.). Plus

Senior Programme Officer, Forests and Climate Change

UNEP - deadline for application is the 1st of January 2012

UNEP is seeking a senior programme officer to be involved in the development and implementation of UNEP's engagement in forests and climate change. More

Technical Advisor, REDD+ readiness

Conservation International - deadline for application is the 16th of December

The Technical Advisor for REDD+ Readiness is responsible for supporting the institutions' technical work on forest-based climate change mitigation, specifically supporting countries to engage in REDD+ (Reducing Emissions from Deforestation and Degradation) activities at the national and sub-national levels. He/she is part of the Climate Change Initiatives (CCI) Team which directly supports Conservation International (CI)'s field programs and their partners through the delivery of technical and capacity-building assistance and the synthesis and dissemination of knowledge related to successful forest-based climate change mitigation. More

Technical Specialist REDD+ Specialist (Anticipated Programmes - Transformational Investments Expert)

UNDP - deadline for application is 1st of February 2012

UNDP is seeking a technical specialist on REDD+ to be based in Kinshasa, Democratic Republic of Congo. More

VII. ANNOUNCEMENTS

2012 Land for Life Award

UNCCD

The Land for Life Award will recognize innovation and excellence in sustainable land management, particularly collaborative efforts that promote soil health. Three winners will be selected by an expert jury which will grant awards from a total prize fund of up to USD 100,000. Nominations are welcome from individuals, businesses, research and academic institutions, local governments, journalists and civil society organizations. The deadline for applications is 29 February 2012. More

Guidelines on Free, Prior and Informed Consent (FPIC)

UN-REDD programme

The UN-REDD Programme Guidelines FPIC developed through the regional consultations are open for a full public comment and feedback process in order to solicit input from a wider audience of stakeholders before being finalized. Comments will be accepted up until 15 January 2012 after which a final version of the Guidelines will be release. More

Call for inputs on CDM policy dialogue

UNFCCC

The CDM Executive Board, at its sixty-fourth meeting, agreed to the terms of reference for the policy dialogue on the CDM and to launch the dialogue at the seventh session of the CMP. The terms of reference, as contained in annex 1 to the report of the meeting. In this context, the Board agreed to launch a call for public inputs on issues to be addressed in the dialogue, including external forces affecting the CDM, future challenges it can be expected to face, and opportunities and possible directions for its future use and development. The inputs, and a summary of them, will be shared with the panel that will conduct the dialogue and will be considered by the Board at its sixty-sixth meeting early in 2012. The call will be open from 27 October 2011 until 16 January 2012 (24:00 GMT), but earlier submissions are encouraged. More

The journal Culture, Climate and Change: Biocultural Systems and Livelihoods. 1st edition. Call for papers

Indigenous Peoples' Biocultural Climate Change Assessment Initiative (IPCCA)

A new Journal "Culture, Climate and Change: Biocultural Systems and Livelihoods" has been initiated through the IPCCA and it is dedicated to critically engaging with and disseminating biocultural approaches to understanding and responding to climate change and global change processes. Nurtured through the Indigenous Peoples' Biocultural Climate Change Assessment initiative, the journal will facilitate epistemological bridging between different way of knowing and being in the world through an open peer review process which aims to promote an environment of cooperation, knowledge exchange and networking between authors and reviewers. This new journal is now accepting manuscripts for its First Issue. More

Climate Change Knowledge Portal. For development practitioners and policy makers

The World Bank Group

The Climate Change Knowledge Portal (CCKP) Beta is a central hub of information, data and reports about climate change around the world. Here you can query, map, compare, chart and summarize key climate and climate-related information. More

UN-REDD Programme guidelines on Free, Prior and Informed Consent (FPIC) are open for public review

UN-REDD Programme

The aim of the Guidelines is to outline a normative, policy and operational framework for UN-REDD Programme partner countries to seek FPIC, as and when appropriate, as determined by the Programme partner country in consultation with relevant rights-holders. The Guidelines also provide clear definitions of the underlying

elements of FPIC, information on grievance and accountability, and useful annexes elaborating important concepts and presenting useful tools and resources. The Guidelines were developed through a consultative process with indigenous peoples and civil society representatives via a series of regional consultations held between June 2010 and January 2011 in the 3 regions where the UN-REDD Programme is active: Africa, Asia and the Pacific, and Latin America and the Caribbean. During these consultations, participants developed definitions and processes to operationalize FPIC for the UN-REDD Programme. For more information you may access the reports for these consultations. The review is open until the 15th of January 2012. More

UN-REDD Programme draft social and environmental principles and criteria and benefits and risks tool

UN-REDD

UN-REDD invites comments on the first draft UN-REDD Programme Social and Environmental Principles and Criteria (SEPC)- Benefit and Risks Tool (BeRT). More

Global database of REDD+ and other forest carbon projects

CIFOR

CIFOR has developed an interactive map with information on REDD+ projects worldwide and other forest carbon projects. The map

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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