



## CONTENTS

<b>MESSAGE TO CLIM-FO-L READER .....</b>	<b>3</b>
<b>I. IN THE PRESS .....</b>	<b>3</b>
<b>II. UNFCCC NEGOTIATIONS AND RELATED DISCUSSIONS.....</b>	<b>4</b>
The Climate Change Talks 1-7 October 2011, Panama City, Panama.....	4
REDD+ Partnership Meeting and Workshops, 28 and 30 September 2011 - Panama City, Panama .....	5
<b>III. EVENTS &amp; MEETINGS.....</b>	<b>6</b>
International Year of Forests, 2011 .....	6
Carbon in a changing world.....	6
Asia Pacific Forestry Week and the FAO Asia-Pacific Forestry Commission Session .....	6
Research Priorities in Tropical Silviculture: Towards New Paradigms? .....	6
Forest Day 5.....	6
Forests models for research and decision support in sustainable forest management.....	6
Assessing forest governance in a context of change.....	7
Forest for People.....	7
First IUFRO-FORNESSA Regional Congress .....	7
International conference - Forest-water interactions with respect to air pollution and climate change.....	7
International Conference on sustainable forest management adapting to climate change .....	7
<b>IV. RESEARCH ARTICLES.....</b>	<b>8</b>
Boundary work for sustainable development: Natural resource management at the Consultative Group on International Agricultural Research (CGIAR) .....	8
Gender, climate change and REDD+ in the Congo Basin forests of Central Africa .....	8
Adaptation of forest management to climate change among private individual forest owners in Sweden .....	8
The role of forest ecosystems in community-based coping strategies to climate hazards: Three examples from rural areas in Africa .....	9
Win-win scenarios at the climate - development interface: Challenges and opportunities for stove replacement programs through carbon finance .....	9
A landscape mosaics approach for characterizing swidden systems from a REDD+ perspective.....	9
Modified taungya system in Ghana: a win-win practice for forestry and adaptation to climate change?.....	10
A bioeconomic analysis of the potential of Indonesian agroforests as carbon sinks .....	10
Reconstruction and attribution of the carbon sink of European forests between 1950 and 2000 .....	10
How well do tree plantations comply with the twin targets of the Clean Development Mechanism? - The case of tree plantations in Tanzania .....	11
Reconciling timber provision with carbon sequestration opportunities in the tropical forests of Central America ..	11
<b>V. PUBLICATIONS, REPORTS AND OTHER MEDIA.....</b>	<b>11</b>
Climate change impacts and adaptation in European forests .....	11
Swidden, Rubber and Carbon - Can REDD+ work for people and the environment in Montane Mainland Southeast Asia? .....	11
Analysis of the Potential of Sustainable Forest-based Bio energy for Climate Change Mitigation .....	11
UN-REDD launches new REDD+ capacity building studies for Asia and Africa.....	12
Learning from Norway - A review of lessons learned for REDD+ donors .....	12
State of Forest Carbon Markets 2011 - From Canopy to Currency .....	12
Letting the market play: corporate lobbying and the financial regulation of EU carbon trading .....	12
Institutions for adaptation - Towards an effective multi-level interplay .....	12
Benefit sharing to make REDD+ work for communities and forest conservation in Tanzania: The Community Carbon Enterprise (CCE) Model.....	12
<b>VI. JOBS.....</b>	<b>13</b>
REDD+ Monitoring Reporting and Verification (MRV) Specialists.....	13
Senior scientist in climate change and development.....	13

<b>VII. ANNOUNCEMENTS .....</b>	<b>13</b>
Norway launches energy+ initiative at energy for all conference .....	13
Zoom in on climate and food security research .....	13
CCAFS .....	13
Climate Change Practice Institute.....	13
UN-REDD programme approves US\$4 million in critical funding for REDD+ in Nigeria .....	13
<b>CLIM-FO INFORMATION .....</b>	<b>14</b>

## MESSAGE TO CLIM-FO-L READER

Dear CLIM-FO-L Reader,

I would like to announce a new addition to the FAO's forest and climate change team - Marc Dumas-Johansen. Marc recently joined FAO, and has taken over the responsibility for compiling CLIM-FO-L. I take this opportunity to thank Jesper Tranberg for his outstanding work in compiling CLIM-FO-L over the past three years.

With best regards,  
Susan Braatz,  
Forest and Climate Change Team Leader  
FAO Forestry Department

### I. IN THE PRESS

21 September 2011- Naturenews

#### [China's new forests aren't as green as they seem](#)

China's forest areas are growing with 4 million trees planted each year since the 1990s and an additional 40 million hectares will be planted during the next decade. However the improvement in forest cover is mainly based on monoculture plantations of exotic species.

30 September 2011- IISD

#### [CBD sends input to UNFCCC on biodiversity, ILC aspects of REDD+ safeguards](#)

A submission of the Secretariat of the Convention on Biological Diversity (CBD) to the UNFCCC contains summaries of four expert workshops on the links between biodiversity and REDD+ (reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries).

03 October 2011 - The Guardian.

#### [EU carbon credits scheme tarnished by alleged murders in Honduras](#)

Calls for Honduran credits to be thrown out of ETS following alleged killings, while consultation process goes under review.

03 October 2011 - Mongabay

#### [A revolutionary technology is unlocking secrets of the forest](#)

A new imaging system that uses a suite of airborne sensors is capable of providing detailed, three-dimensional pictures of tropical forests – including the species they contain and the amount of CO<sub>2</sub> they store – at astonishing speed. These advances could play a key role in preserving the world's beleaguered rainforests.

05 October 2011- Forest Carbon Asia

#### [Lao-German REDD+ project pioneers FPIC in Sayabouri Province, Laos](#)

Villagers around the Nam Phui NPA will become the first in Laos to formally give consent on whether or not to participate in a REDD+ project.

12 October 2011 - IISD

#### [RRI dialogue examines role of finance in reducing forest loss](#)

The 11th Rights and Resources Initiative (RRI) Dialogue convened under the theme “Status and Role of Public and Private Finance to Reduce Forest Loss and Degradation.”

13 October 2011- Mongabay

#### [Five ways to feed billions without trashing the planet](#)

At the end of this month the UN predicts global population will hit 7 billion people, having doubled from 3.5 billion in less than 50 years.

13 October 2011 - Alertnet

#### [Forest protection efforts faltering - experts](#)

Curbing climate change by paying to protect the world's forests has proved much more challenging than first expected - mainly because of rising demand for forest land to grow food, widespread economic recession and failing efforts to create a global carbon market.

17 October 2011 - ICTSD

#### [US swaps debt with Indonesia to preserve Borneo forests](#)

The US and Indonesia have struck a seldom seen debt-for-nature exchange deal aimed at helping to protect rapidly declining forest cover in Indonesian Borneo. The deal will divert US\$28.5 million intended to repay Indonesia's debts to the US into a fund for improving local land use techniques.

## II. UNFCCC NEGOTIATIONS AND RELATED DISCUSSIONS

### The Climate Change Talks 1-7 October 2011, Panama City, Panama.

The latest round of climate change meetings under the UNFCCC took place from 1-7 October 2011 in Panama City, Panama. The session included the continuation of the fourteenth session of the Ad Hoc Working Groups on Long Term Cooperative Action under the Convention (AWG-LCA) and the sixteenth session of the Ad Hoc Working Group on Further Commitments of Annex 1 parties under the Kyoto Protocol (AWG-KP). On the request of SBSTA the expert meeting on “Guidance on systems for providing information on how safeguards for REDD-plus activities are addressed and respected” were held during in connection the meeting from 8 - 9 October, 2011.

While some progress was made on technical issues related to the implementation of the Cancun Agreement the general progress was reported as modest. One of the key issues discussed at the session was the question of the future of the Kyoto Protocol, i.e. a second commitment period and the risk of a regulatory gap between Kyoto Protocol commitment periods. In focus was the preparation of text for COP 17 in Durban and the AWG-KP forwarded a draft text to be negotiated Durban. The outcome of the AWG-LCA was mainly text from the informal working group and it was agreed to continue work on the text in order to further streamline it and incorporate submissions before Durban.

#### Issues related to forests

The forest issues addressed in Panama included REDD+ and forest management accounting rules for Annex 1 Parties under the Kyoto Protocol (LULUCF).

#### REDD+

The AWG-LCA continued the discussion on source for REDD+ finance (e.g. fund-based, market-based or a mix of the two), the definition and scope of result based activities and actions and the linkage with the Green Climate Fund. Parties agreed that the approach should be to build on a diversity of sources when funding REDD+ activities and include both public and private finance. In this relation it was underlined by most non-annex I Parties that the main funding should come from public sector and the private sector funding should be seen as complementary. As earlier it was emphasized by many parties that each country should be able to decide on the sources of funding they would seek.

Many non annex I Parties raised the issue of a REDD-plus window as part of the institutional framework of the Green Climate Fund. A number of Parties raised the issue that REDD+ activities should not only include forest carbon stocks but also cover biodiversity conservation, the provision of ecological services and in clued forests role in adaptation.

The facilitator asked Parties to submit views and proposals to the secretariat that will compile these before Durban and allow Parties to begin work on a full text during the session.

The Cancun Agreement (COP16) confirmed the scope of REDD+, outlining five mitigation activities as well as principles and safeguards to be respected while undertaking these activities. The focus at COP 17, 28 November - 9 December in Durban will be the unresolved issues related to reference (emission) levels; the financing of REDD+, modalities to address measuring; reporting and verification (MRV) of REDD+ activities; and how Parties will provide information on safeguards.

#### SBSTA Expert meeting on safeguards for REDD-plus

As part of the decision from Cancun, SBSTA was requested to work on technical/methodological issues in relation to REDD+. In relation to this work an expert meeting on “Guidance on systems for providing information on how safeguards for REDD-plus activities are addressed and respected” was held from 8 - 9 October, 2011 in Panama City, Panama.

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 Parties 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.

The official outcome of the meeting was a summary that includes a number of recommendations to be forwarded to Durban including a list of suggested elements to be included in a COP decision. The elements discussed covered in some detail the possible characteristics and design of a system to report on safeguards as well as a recommendation to report through national communication. The chairs' [summary](#).

### Clean Development Mechanism

Discussions on the Clean Development Mechanism (CDM) were linked with the key issue of what happens in the case of a gap between the current commitment period of the Kyoto Protocol and the next commitment period, or if agreement cannot be reached to continue the Kyoto Protocol. In Panama many parties expressed concerns about the fact that, should access to CDM credits be made conditional on second commitment period targets, parties might be forced to create their own rules through bilateral deals. EU emphasized that demand for projects and emission reduction credits will continue in Europe, regardless of adoption of a second commitment period while Venezuela, with Brazil and Bolivia, underscored that the CDM cannot function without a second commitment period.

### Land use, land-use change and forestry (LULUCF)

The key issue under discussion in relation to LULUCF lies with accounting rules for forest management, for which reporting was made optional under the first commitment period. One of the central unresolved issues is the baseline for accounting for changes in emissions from forest management. This is important because the determination of whether emissions have gone up or down entirely depends on how the baseline is set. Agreement on this issue remains elusive after the Bonn session.

Apart from the overall discussion on forest management, the areas of debate include: whether a cap should be applied to emissions and removals from forest management; if and how emissions from extraordinary occurrences (“Natural Disturbances”) would be accounted for; how to set a baseline or forest reference (emissions) level; and how to factor in changes in forest carbon stocks that are not caused by human intervention.

In Panama parties exchanged views on force majeure versus natural disturbances, including the commonalities and differences of both concepts. Delegates eventually agreed to a revised text on force majeure where “disturbances” were included. Furthermore a cap on forest management and harvested wood products was discussed. Apart from this, the draft text for Durban was streamlined on issues related to reference levels; and rewetting and drainage. Unresolved issues are still a cap for forest management and a proposal on flexible land use.

The discussions under the KP negotiation track on carbon accounting rules for forest management -- a complex and controversial issue -- have stimulated debates on what constitutes good forest management and how to incentivize it. Of relevance to the climate change community is how forests could contribute more to climate change mitigation, while of interest to foresters is whether incentives for better forest management will be forthcoming as a result of climate change decisions.

Apart from being a major issue in relation to forestry, agreement on revised LULUCF accounting rules for the second commitment period of the Kyoto Protocol (after 2012) could influence the level of emission reduction commitments by Annex 1 parties and thereby have a significant influence on emission pledges by parties. Furthermore, the approaches agreed under LULUCF might have an effect on developing Parties as they might be reflected in the modalities to be agreed upon for REDD+.

### REDD+ Partnership Meeting and Workshops, 28 and 30 September 2011 - Panama City, Panama

In connection to the UNFCCC meeting the Partnership held their third official meeting in 2011. Apart from the meeting itself, two workshops were held on REDD+ Safeguards and REDD+ MRV.

The Partnership meeting took place on the 28 September and discussed the further development and use of the Voluntary REDD+ Database; recommendations from the study on Effectiveness of Multilateral Initiatives were discussed. Also, guidance from partners on communication and use of the website were given. Finally the participants also discussed the status of the current budget and upcoming REDD+ events and initiatives. In the afternoon of the 28 September 2011, the workshop focusing on Safeguards discussed practical experience on the ground and a donor's perspective on safeguards. The second workshop was held on the 30 September 2011 and focused on the conceptual and factual aspects of monitoring and measuring systems as well as lessons learned from practical implementation by Partners and stakeholders on the ground. [Summary](#) of the meeting and workshops.

### **III. EVENTS & MEETINGS**

#### **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 sub regional organizations and processes as well as relevant major groups. [More](#).

#### **Carbon in a changing world**

*24-26 October, 2011, FAO, ROME*

This event is jointly organized by the Food and Agriculture Organization of the United Nations (FAO) and the Coordination Action on Carbon Observation Systems of the European Commission, and contributes to the Group on Earth Observations (GEO) carbon task. The aims are to i) present the latest scientific developments in understanding the global carbon cycle, ii) present an overview of the building and implementation of a Global Carbon Observing System for land, oceans and atmosphere and iii) identify progress and gaps in obtaining policy relevant estimates of regional carbon budgets on land and ocean. [More](#).

#### **Asia Pacific Forestry Week and the FAO Asia-Pacific Forestry Commission Session**

*7-11 November 2011, Beijing, China*

The Second Asia-Pacific Forestry Week, including the 24th session of the FAO Asia-Pacific Forestry Commission, promises to be the most significant forestry event of the year in the Asia-Pacific region. The event will bring together a large and diverse group of stakeholders to deal comprehensively with the most relevant challenges facing the sector today. Climate change issue will take central stage in one plenary session and several partner events. More details will be available soon on the websites of the [Asia-Pacific Forestry Week](#) and the [Asia-Pacific Forestry Commission](#).

#### **Research Priorities in Tropical Silviculture: Towards New Paradigms?**

*15-18 of November 2011. Montpellier, France.*

CIRAD, CIFOR and Ecofor have joint forces hosting an international conference on tropical forest research within the frame of the international year of forests. With more than 50 years of research history, the research community has been engaged in a wide range of activities. Sustainable forest management is recognized as being a core part of preservation of forests. [More](#).

#### **Forest Day 5**

*4 December 2011, Durban, South Africa*

Forest Day meets once a year on the sidelines of the UNFCCC Conference of the Parties to ensure that forests remains high on the agenda of global and national climate strategies, and that those strategies are informed by the most up-to-date knowledge and experience. Forest Day 5 will seek to inform the UNFCCC global agenda and forest stakeholders on ways to implement an international REDD+ funding mechanism that produces social and environmental benefits, above and beyond avoided emissions. The event will have a particular African focus, looking at the tropical forests of the Congo Basin and elsewhere, and the continent's wide expanses of dry forest areas. [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 and discuss them in the context of the world research on this topic. The conference is directed not only to researchers but provides also a forum for stakeholders where the support of models to forest management will be presented and discussed. 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](#).



## **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](#).

## **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](#).

## IV. RESEARCH ARTICLES

### **Boundary work for sustainable development: Natural resource management at the Consultative Group on International Agricultural Research (CGIAR)**

Clarck, W.C., Tomich, P.T., van Noordwijk, M., Guston, D., Catacutan, D., Dickson, N.M., McNie, E. *National Academy of Sciences*. 2011. 8.

Previous research on the determinants of effectiveness in knowledge systems seeking to support sustainable development has highlighted the importance of “boundary work” through which research communities organize their relations with new science, other sources of knowledge, and the worlds of action and policy making. A growing body of scholarship postulates specific attributes of boundary work that promote used and useful research. These propositions, however, are largely based on the experience of a few industrialized countries. We report here on an effort to evaluate their relevance for efforts to harness science in support of sustainability in the developing world. We carried out a multicountry comparative analysis of natural resource management programs conducted under the auspices of the Consultative Group on International Agricultural Research. We discovered six distinctive kinds of boundary work contributing to the successes of those programs—a greater variety than has been documented in previous studies. We argue that these different kinds of boundary work can be understood as a dual response to the different uses for which the results of specific research programs are intended, and the different sources of knowledge drawn on by those programs. We show that these distinctive kinds of boundary work require distinctive strategies to organize them effectively. Especially important are arrangements regarding participation of stakeholders, accountability in governance, and the use of “boundary objects.” We conclude that improving the ability of research programs to produce useful knowledge for sustainable development will require both greater and differentiated support for multiple forms of boundary work

### **Gender, climate change and REDD+ in the Congo Basin forests of Central Africa**

Brown, H.C.P.

*International Forestry Review*. 2011. Vol. 13.2, 163-176.

The Congo Basin region of Central Africa contains the second largest contiguous tropical rainforest in the world, which is an important source of livelihood for millions of people. It is also important for climate change adaptation, as well as mitigation policies on Reducing Emissions from Deforestation and Forest Degradation (REDD+). Men and women relate to and use the forest differently and so may experience the effects of climate change and REDD+ policies differently. Investigations through semi-structured interviews and document reviews in three countries of the region revealed that women have had limited participation in discussions on issues of climate change or REDD+. There is some evidence that gender consideration will become part of future national REDD+ strategies. Strategies to foster the effective participation of all stakeholders are essential to ensure that gender dimensions are addressed in issues of climate change, forest access, forest management and distribution of carbon benefits.

### **Adaptation of forest management to climate change among private individual forest owners in Sweden**

Blennow, K.

*Forest Policy and Economics*. In press, corrected proof. Available online 31 May 2011.

Available climate change scenarios indicate that climate change will affect elements of the Swedish climate, and that the exposure and sensitivity of the forest to climate change will differ between regions. Adaptation to climate change is conceptually closely linked to the reduction of the risk of disasters. Based on contemporary theory in behavioural risk research, the aim was to improve the knowledge on the process of adaptation of forest management to climate change among Swedish private individual forest owners. The responses from two questionnaires from 1999 to 2004, respectively, were analysed. Adaptation of forest management to climate change by private individual forest owners in what is currently the hemiboreal bio-climatic zone of Sweden was quantified and shown to increase over the five year period. In 2004 adaptive measures had been taken on a limited fraction of the forest land owned by private individuals in three study areas located along a latitudinal gradient ranging from the nemoral to the boreal bio-climatic zones in Sweden. Adaptive measures were more frequent in two southern study areas than in a northern study area. Measures taken to adapt were similar in all three study areas, except for those strongly conditioned by the current local climate. Among forest owners who had taken measure to adapt, perceptions of much higher risk due to climate change was more frequent for the risk of damage by wind, drought, fungi, and insects than for other risk factors. Further improvement of the knowledge on how the individual forest owners' learn and perceive of climate change, its impacts on risks and options for adaptation is required to develop and successfully implement adaptive climate change policies



## **The role of forest ecosystems in community-based coping strategies to climate hazards: Three examples from rural areas in Africa**

Robledo, C., Clot, N., Hammill, A., Riché, B.

*Forest Policy and Economics. In press, corrected proof.*

In developing countries, forests play an important role in supplying goods and services. These ecosystems are under many stresses due to unsustainable management practices, lack of clarity on tenure and access rights, and persistent pressure for land-use change. Climate change is exacerbating the impact of these stresses on both forest ecosystems and forest dependent people. What are the current forest coping strategies of different livelihoods? What is the role of forest ecosystems in increasing the resilience of rural communities? Over a two-year period, an interdisciplinary team of civil society researchers and development practitioners made an attempt to address these questions in a systematic manner through the use of the CRiSTAL tool - Community-based Risk Screening Tool for Adaptation and Livelihoods - in different countries. For this publication, case studies conducted in three African countries -Zambia, Mali and Tanzania - are presented. Particular focus is given to the coping strategies used forest, livestock and agriculture based livelihoods. In all cases, forest ecosystems provided key goods and services during extreme events (droughts and floods) and become key assets for reducing vulnerability in the context of climate change. However, issues related to unclear land tenure, as well as legislation forbidding forest use, strengthen underlying conflicts over natural resources and therefore increase the high pressure on forest ecosystems and thus the overall vulnerability of poor rural communities. This paper analyzes the corresponding challenges and offers a number of recommendations for decision- and policy-makers, on how to support local adaptation to climate change.

## **Win-win scenarios at the climate - development interface: Challenges and opportunities for stove replacement programs through carbon finance**

Simon, G.L., Bumpus, A.G., Mann, P.

*Global Environmental Change. 2011. In press, corrected proof.*

Achieving win-win outcomes in environment-development programs is a laudable goal, but frequently difficult to realize. In this paper we review the possibilities for win-win climate and development outcomes in programs that distribute improved cookstoves with the use of carbon finance. We show that improved cookstove technologies form an important, if asymmetrical, environment-development interface, and illustrate the mutually supported local (development) and global (◀climate▶▶change▶) benefits of continued improved stoves use—where success in one program area is directly tied to benefits in the other. We also describe how program results are highly contextual and that, in practice, there are a number of challenges to achieving effective ‘win-win’ outcomes—including cultural, financial, governance and technological barriers. While carbon finance provides an opportunity to fund scaleable and enforceable stove programs, it may also introduce mutually supported impediments—where progress towards one set of program objectives, directly compromises progress towards other objectives. Drawing on development debates for improved cookstove use, scientific reports on stove-based greenhouse gas reductions, and preexisting case studies of carbon and non-carbon financed cookstoves in Peru, Uganda and Cambodia, we conclude that the challenge for future carbon financed improved cookstove projects will be to leverage inherent symbioses between climate and development arenas in order to overcome mutually supported impediments. Achieving substantive win-win conditions will require further scholarly and practical engagement to tackle the many outstanding challenges and uncertainties reviewed in this essay.

## **A landscape mosaics approach for characterizing swidden systems from a REDD+ perspective**

Hett, C., Castella, J.C., Heinemann, A., Messerli, P., Pfund, J.L.

*Applied Geography 2012. Vol. 32, issue 2. 608-618.*

Swidden agriculture is often deemed responsible for deforestation and forest degradation in tropical regions, yet swidden landscapes are commonly not visible on land cover/use maps, making it difficult to prove this assertion. For a future REDD+ scheme, the correct identification of deforestation and forest degradation and linking these processes to land use is crucial. However, it is a key challenge to distinguish degradation and deforestation from temporal vegetation dynamics inherent to swiddening. In this article we present an approach for spatial delineation of swidden systems based on landscape mosaics. Furthermore we introduce a classification for ◀change▶ processes based on the change matrix of these landscape mosaics. Our approach is illustrated by a case study in Viengkham district in northern Laos. Over a 30-year time period the swidden landscapes have increased in extent and they have degraded, shifting from long crop-fallow cycles to short cycles. From 2007 to 2009 degradation within the swidden system accounted for half of all the landscape mosaics change processes. Pioneering shifting cultivation did not prevail. The landscape mosaics approach could be used in a swidden compatible monitoring, reporting and verification (MRV) system of a future REDD+ framework.

## **Modified taungya system in Ghana: a win-win practice for forestry and adaptation to climate change?**

Kalame, F.B., Aidoo, R., Nkem, J., Ajayie, O.C., Kanninen, M., Luukkanen, O., Idinoba, M.  
*Environmental Science and Policy*. 2011. Vol 14, issue 5, 519-530.

The formulation and implementation of an adaptation strategy is of growing concern to governments. The adaptation policy framework (APF) sets out indicative activities and features of an adaptation strategy. Understanding the extent to which existing practices can support adaptation in societies and ecosystems is an important step towards the solution. This study uses vulnerability, policy and financial analyses to investigate the compatibility of the modified taungya system (MTS) (a reforestation programme) in Ghana with the indicative activities of the APF. The findings indicate that MTS takes into consideration most of the activities of an adaptation strategy, is a profitable venture ( $BCR > 1$ ) and has a high potential to reduce vulnerability due to short-term food production and long-term plantation establishment. Resource management in MTS is promising in the short term, but challenges remain to meet livelihood and adaptation needs in the medium and long term. Policy instruments related to MTS align with the forestry, climate change and the development goals of Ghana. We conclude that MTS is a potential win-win practice for forestry and adaptation. The legalization of all contractual arrangements coupled with continuous monitoring, evaluation and improvement may drive MTS to become a lasting activity that will support the long-term horizon of an adaptation strategy.

## **A bioeconomic analysis of the potential of Indonesian agroforests as carbon sinks**

Wise, R.M. & Cacho, O.J.

*Environmental Science and Policy* 2011. Vol. 14, issue 4. 451-461.

Agroforests managed by smallholders have been shown to provide biodiversity, carbon-storage and rural-livelihood services. Consequently, these systems are being promoted as an effective way of rehabilitating millions of hectares of degraded, formerly forested land in many tropical countries. Current conditions at the forest margins in these countries, however, make it easier to clear unprotected forests than restore degraded lands through agroforestry. The result is large-scale deforestation that causes substantial losses of biodiversity and stored soil and biomass carbon. Agroforests will only be an attractive activity if they are financially viable and socially acceptable. In this study we investigate the financial viability of agroforestry systems as carbon sinks when carbon-credit payments are available. A meta-modelling framework is adopted, comprising an econometric-production model of a land parcel in Sumatra, Indonesia. The model is used within a dynamic-programming algorithm to determine optimal management of the system in terms of three decision variables: tree/crop area, tree-rotation length, and wood harvest. Results show the influence of soil-carbon stocks and discount rates on optimal strategies and reveal interesting implications for joint management of agriculture and carbon as well as for the possible restoration of degraded land.

## **Reconstruction and attribution of the carbon sink of European forests between 1950 and 2000**

Valentin Bellassen<sup>1</sup>, Nicolas Viovy, Sebastiaan Luysaert, Gueric Le Maire, Mart-Jan Schelhaas, Philippe Ciais

*Global Change Biology* Volume 17, Issue 11, pages 3274-3292, November 2011

European forests are an important carbon sink; however, the relative contributions to this sink of climate, atmospheric CO<sub>2</sub> concentration ([CO<sub>2</sub>]), nitrogen deposition and forest management are under debate. We attributed the European carbon sink in forests using ORCHIDEE-FM, a process-based vegetation model that differs from earlier versions of ORCHIDEE by its explicit representation of stand growth and idealized forest management. The model was applied on a grid across Europe to simulate changes in the net ecosystem productivity (NEP) of forests with and without changes in climate, [CO<sub>2</sub>] and age structure, the three drivers represented in ORCHIDEE-FM. The model simulates carbon stocks and volume increment that are comparable - root mean square error of 2 m<sup>3</sup> ha<sup>-1</sup> yr<sup>-1</sup> and 1.7 kg C m<sup>-2</sup> respectively - with inventory-derived estimates at country level for 20 European countries. Our simulations estimate a mean European forest NEP of 175 ± 52 g C m<sup>-2</sup> yr<sup>-1</sup> in the 1990s. The model simulation that is most consistent with inventory records provides an upwards trend of forest NEP of 1 ± 0.5 g C m<sup>-2</sup> yr<sup>-2</sup> between 1950 and 2000 across the EU 25. Furthermore, the method used for reconstructing past age structure was found to dominate its contribution to temporal trends in NEP. The potentially large fertilizing effect of nitrogen deposition cannot be told apart, as the model does not explicitly simulate the nitrogen cycle. Among the three drivers that were considered in this study, the fertilizing effect of increasing [CO<sub>2</sub>] explains about 61% of the simulated trend, against 26% to changes in climate and 13% only to changes in forest age structure. The major role of [CO<sub>2</sub>] at the continental scale is due to its homogeneous impact on net primary productivity (NPP). At the local scale, however, changes in climate and forest age structure often dominate trends in NEP by affecting NPP and heterotrophic respiration.

## **How well do tree plantations comply with the twin targets of the Clean Development Mechanism? - The case of tree plantations in Tanzania**

Glomsroed, S., Wei, T., Liu, G., Aune, J.B.

*Ecological Economics* 2011. Vol. 70, issue 6. 1066-1074.

The Clean Development Mechanism (CDM) of the Kyoto Protocol is supposed to provide both carbon mitigation and poverty reduction. This article reports from a model based study of market related carbon leakage and poverty reduction in the wake of a CDM tree-planting project in Tanzania. A tree plantation was incorporated in a computable general equilibrium (CGE) model with income differentiated household segments. The study focused on sensitivity of carbon leakage and income distribution to different project ownerships and carbon premium allocations. It turned out that the project value in terms of carbon premium has clear shortcomings as indicator of induced GDP growth and poverty alleviation. The non-poor rural and urban households benefit considerably more than the poor households. However, rising household income in all domestic project ownership arrangements increases demand for food, raises use of fertilizer and crop yields. A carbon cycle module for agricultural land use was incorporated in the CGE model, showing an increased carbon sequestration in agricultural soil, representing a negative leakage through markets in the range of 60-120% of the certified emissions reductions as registered in the CDM tree plantation project.

## **Reconciling timber provision with carbon sequestration opportunities in the tropical forests of Central America**

Khatun, K.

*Environmental Science and Policy*. 2011. In press, corrected proof.

The Millennium Ecosystem Assessment (MEA, 2005) has classified a number of ecosystems good and services (EGS) provided by tropical forests, namely cultural, provisioning, regulatory and support services. The primary focus of this paper is to carry out an economic assessment by comparing the financial costs and returns of selected EGS, namely carbon and timber in the tropical forests of Central America. Timber is unusual from the other EGS provided by forests in that it competes with the other services, i.e. biodiversity, recreation and water services. Carbon storage is the non-timber value most often included in forest accounts and can be equated directly with timber available in terms of biomass content. The study provides a quantitative appraisal of the carbon and timber stocks and flows of tropical (primary) forests by evaluating them simultaneously using data from a number of sources. The provision of reliable and accurate estimates of the economic value of these services is crucial to plan adequate conservation policies that encourage the protection and sustainable management of tropical forests such as those under REDD+.

## **V. PUBLICATIONS, REPORTS AND OTHER MEDIA**

### **Climate change impacts and adaptation in European forests**

*EFI Policy Brief*

This Policy Brief outlines the status of current knowledge on the climate change impacts and adaptation in European forests, and identifies the challenges that need to be addressed for successful responses in policy and management. It explores several stand-level measures available to adapt to climate change: in forest regeneration; at the tending and thinning stages; and during harvesting. The regional differences in projected climate change impacts, selection of adaptation measures in different bioclimatic regions, and awareness of forest owners and practitioners on the impacts of climate change on forests, are also discussed.

### **Swidden, Rubber and Carbon - Can REDD+ work for people and the environment in Montane Mainland Southeast Asia?**

*CCAFS Working paper*

This paper describe how agricultural policies and institutions have affected land use in the region over the last several decades and the impact these policies have had on the livelihoods of swiddeners and other smallholders. It also explore whether incentivizing transitions away from swiddening to the cultivation of rubber will directly or reliably produce carbon gains. [The working paper.](#)

### **Analysis of the Potential of Sustainable Forest-based Bio energy for Climate Change Mitigation**

*CIFOR*

This working paper presents an improved analysis of the potential of biofuels for climate change mitigation. [More.](#)

## **UN-REDD launches new REDD+ capacity building studies for Asia and Africa**

*UN-REDD*

The studies will be presented at the COP 17 in Durban later this year. The studies are aiming at investigating the steps countries need to take in order to proceed with REDD+. The African studies take place in Democratic Republic of Congo, Ghana, Kenya and Tanzania led by the African Network for Agriculture, Agroforestry and Natural Resources Education (ANAFE) and the Asian studies take place in Cambodia, Indonesia, Philippines and Vietnam led by the Centre for People and Forests (RECOFTC). [More](#).

## **Learning from Norway - A review of lessons learned for REDD+ donors**

*Focali*

The report aims to provide potential REDD+ donors with an analysis of a number of factors to take into account in investment decisions. Focus lies on issues especially relevant for public donors such as governments, and less for private investors. However, hopefully the report can also feed into a general discussion on REDD+ investments and interventions. The lessons are drawn from the Norwegian experience of investing in REDD+ by means of a review of the recently released evaluation of Norway's International Climate and Forest Initiative, presented in a number of reports published by Norad. [The report](#).

## **State of Forest Carbon Markets 2011 - From Canopy to Currency**

*Forest Carbon Portal*

This second annual State of the Forest Carbon Markets tracks, reports, and analyzes trends in global transactions of emissions reductions generated from forest carbon projects. The data and analysis that follow cover forest carbon activity in compliance carbon markets as well as voluntary carbon markets—such as the voluntary Over-the-Counter (OTC) market and the Chicago Climate Exchange (CCX). [The report](#).

## **Letting the market play: corporate lobbying and the financial regulation of EU carbon trading**

*Carbon Trade Watch*

The report presents the changes in the European carbon trading regulations that have been issued lately due to fraud within the carbon trading market involving amongst other changed security parameters and carbon market speculation within the financial sector. [The report](#)

## **Institutions for adaptation - Towards an effective multi-level interplay**

*Germanwatch*

Different institutions play a crucial role in order to promote adaptation to climate change in developing countries. The Cancún Adaptation Framework includes provisions on institutions on the global, regional and national level, with the Adaptation Committee first to operationalize. In order to promote adaptation effectively, the interplay of the institutions on the global, regional and national level is pivotal. As a contribution to the current political debate, in particular in the UNFCCC negotiations, this paper analyses key institutional approaches on the different levels and makes a number of concrete suggestions with a view to optimising the interplay between institutions on the different level.

[The report](#)

## **Benefit sharing to make REDD+ work for communities and forest conservation in Tanzania: The Community Carbon Enterprise (CCE) Model**

*REDD-net*

This case study shares some early experience and lessons from one of the pilot REDD+ projects in Tanzania 'Making REDD+ work for communities and forest conservation in Tanzania'. It outlines the community carbon enterprise model for benefits sharing, which aggregates village level emissions reductions to enable them to be traded on the voluntary market. Carbon revenues are then distributed to individual villages based on their emissions reductions and distributed within villages based on community developed, village by-laws for REDD+.

[The report](#)

## VI. JOBS

### REDD+ Monitoring Reporting and Verification (MRV) Specialists

*Winrock International*

Effective with the release of this announcement, Winrock International is seeking applications from highly qualified professionals for REDD+ Monitoring Reporting and Verification (MRV) Specialists for upcoming projects on building institutional and technical capacity to support the sustainable implementation of REDD+. Position is contingent upon receipt of donor funding. [More](#)

### Senior scientist in climate change and development

*The World Agroforestry Centre (ICRAF)*

ICRAF is seeking a senior scientist in climate change to be part of the leadership on climate change mitigation and adaptation for rural communities using agroforestry bio sequestration. [More](#)

## VII. ANNOUNCEMENTS

### Norway launches energy+ initiative at energy for all conference

*Government of Norway and IEA*

The government of Norway and the International Energy Agency (IEA) organized the “Energy for All: Financing Access for the Poor” conference in Oslo on the 10<sup>th</sup> to the 11<sup>th</sup> of October prior to the International Year of Sustainable Energy for All. Norway is building upon their experiences with REDD+ and the fund is believed to hold over 1 billion USD. [More](#)

### Zoom in on climate and food security research

*CCAFS*

The CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) has in collaboration with CIAT launched a new research platform in order to facilitate the process of knowledge sharing relating to food security and climate changes. The platform is called Climate Change Adaptation and Mitigation Knowledge Network (AMKN) and is an online framework composed of maps bringing together climate data, agriculture data socio-economic data and photos and videos of farmers from different research sites throughout the tropics. [More](#)

### Climate Change Practice Institute

*World Bank*

The World Bank’s Institute for Climate Change Practice has hosted a number of knowledge sharing events between May and September 2011 with relevance for the coming COP 17 in Durban, South Africa later this year. The results from the sessions are now available on the institute’s homepage. [More](#)

### UN-REDD programme approves US\$4 million in critical funding for REDD+ in Nigeria

*UN-REDD*

During its seventh Policy Board meeting 13-14 October 2011, the UN-REDD Programme approved US\$4 million in funding for Nigeria’s National Programme for Reducing Emissions from Deforestation and forest Degradation (REDD+), bringing the total amount of approved funding for UN-REDD National Programmes to US\$59.3 million. [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](mailto:CLIM-FO-Owner@fao.org)

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

We appreciate any comments or feedback.

### **How to subscribe/unsubscribe**

To join the list, please send an e-mail to [CLIM-FO-Owner@fao.org](mailto:CLIM-FO-Owner@fao.org) containing the message "SUBSCRIBE CLIM-FO-L". Leave the subject line blank.

To unsubscribe, please send an e-mail to [mailserv@mailserv.fao.org](mailto:mailserv@mailserv.fao.org), leaving the subject line blank and containing the following message: UNSUBSCRIBE CLIM-FO-L

Your information is secure - we will never sell, give or distribute your address or subscription information to any third party.

### **How to contribute**

We welcome subscribers' contributions of news, articles, publications and announcements of events. Once on the list, to make a contribution please contact the following address: [CLIM-FO-Owner@fao.org](mailto:CLIM-FO-Owner@fao.org)

We thank everyone for their contribution.

### **Disclaimer**

The author does not guarantee the accuracy or quality of the content of the compiled information.

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The mention or omission of specific companies, their products or brand names does not imply any endorsement or judgement by the Food and Agriculture Organization of the United Nations.