

Welcome to the DAAD Workshop

**“Forests in climate change research and policy:
The role of forest management and conservation in
an complex international setting”**

Dubai, UAE, and Doha, Qatar

28.11.- 02.12. December 2012

Christoph Kleinn, Lutz Fehrmann, Sabine Schreiner

Forests in climate change research and policy: The role of forest management and conservation in an complex international setting”

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28.11.2012

10:00 – Registration

10:30 – Workshop opening

(Dr. Joachim Kolb, DAAD office UAE)

– Welcome address

**(Mr. Klaus Ranner, General Consul of the
Federal Republic of Germany)**

**– Workshop introduction and overview paper
(Christoph Kleinn)**

Introduction

1. General observations on our workshop
2. General background
3. Some issues in forest monitoring related to the policy processes
4. ... back to the objectives of the workshop

1. Brief history of our workshop

- The policy processes around climate change are getting more and more complex.
- It is very difficult to follow the discussions and negotiations.
- There are many national interests, personal views, scientific evidences ... while climate change is proceeding.
- In 2010 we submitted a workshop proposal to DAAD to bring together students and lecturers to raise interest (and reduce frustration!), to improve knowledge and to discuss issues on forests and climate change.
- That workshop to be linked to the “Forest Day”, a one day forestry conference along the COP to the UN-FCCC
- DAAD was eventually excited about that idea →
 - 2010: Cancún COP16 → FD4
 - 2011: Durban COP17 → FD5
 - 2012: Dubai / Doha COP18 → FD6 (in Doha)

Workshop Programme, Dubai

- Wednesday: Opening and Presentations
- Thursday: Presentations
- Friday: Field trip
- Saturday: Working groups, (guided) preparation of papers and minutes; preparation for „Forest Day 6“

2. General background

- There is scientific evidence that a human induced change of the global climate is currently taking place.
- It is a global and urgent issue and time is running.

- The global science and policy community are pursuing two pathways to cope with that development:
 - mitigating of climate change
 - adapting to climate change

- When attempting to mitigate / slow down / halt human induced climate change
 - greenhouse gas (GHG) emissions need to be controlled

General background I

(Based on Schlamadinger et al. 2007)

- The ultimate objective of the UN-FCCC (UN Framework Convention on Climate Change): “**Avoiding dangerous interference with the global climate system**” requires policies that “cover all relevant sources, sinks and reservoirs of GHG (greenhouse gases)” (UNFCCC 1992).
- The UNFCCC initially dealt with 5 economic sectors:
 - Energy
 - Industrial processes
 - Waste
 - Agriculture
 - LULUCF **L**and **U**se, **L**and **U**se **C**hange and **F**orestry
- All sectors – **except LULUCF** – deal with **emissions** only; only in LULUCF there is also **removal!**

(In the IPCC inventory guidelines 2006, the latter two categories are merged to **AFOLU** =Agriculture, Forestry and Land Use)

General background II

(Based largely on Schlamadinger et al. 2007)

LULUCF (i.e. also forestry!) **is distinct from the other sectors**

I Removals are possible along at least 5 avenues

- (1) provision of renewable energy
- (2) Substitution for more fossil carbon-intensive products
- (3) Reduction of emissions of non-CO₂ gases (e.g. from agriculture)
- (4) Sequestration of carbon through enhancement of terrestrial C stocks; and
- (5) Conservation of existing C stocks (e.g. through reduced deforestation, devegetation, forest degradation, and land degradation).

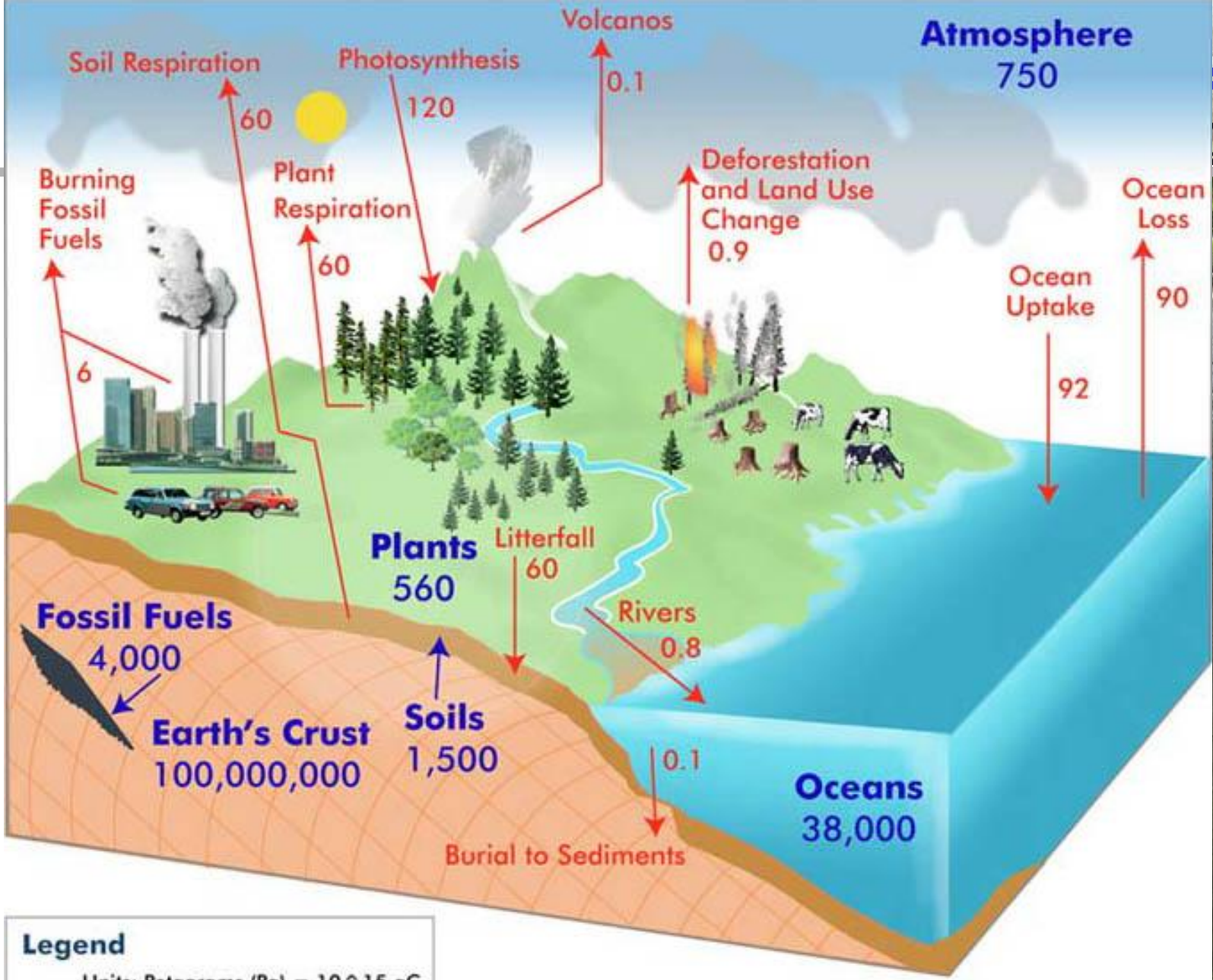
II Terrestrial ecosystems bring manifold positive “side-products” in addition to C, including food, fuel, shelter, and biodiversity, water and soil protection, ...

General background III

The diversity

- of forests / terrestrial ecosystems within countries and between countries and regions; and
- of the historical forest development (forest transition curves), and
- of potential human interventions, including management approaches, and
- of interests (forest as a resource vs. forest as an ecosystem) ,
- ...

.... illustrate that dealing with LULUCF and in particular with forests is complex – scientifically and politically.

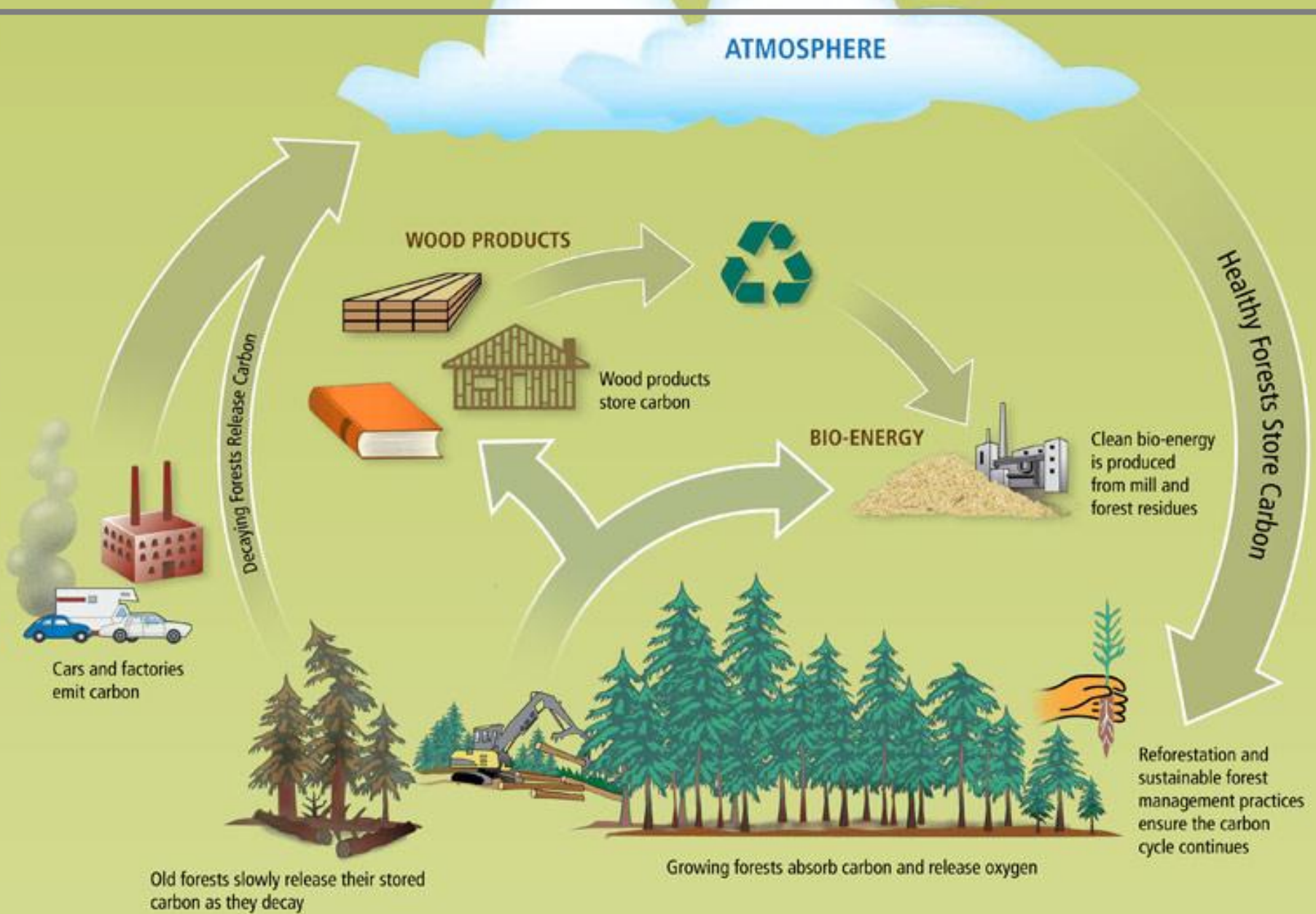


Legend

Units: Petagrams (Pg) = 10^{15} gC

- Pools: Pg
- Fluxes: Pg/year

Forest related carbon pools and fluxes



The terrestrial carbon balance is difficult – and forests are part of it

„The term in the global carbon budget with the least agreement among estimates is the net terrestrial balance.“ (Houghton 2007)

„The mechanisms responsible for carbon sinks on land are not as clear as they are for the oceans, or, perhaps, terrestrial ecologists are not as unified as oceanographers.“ (Houghton 2007)

Forests are part of the terrestrial carbon balance

... and they could be enhanced as carbon sink and thus contribute to reducing the CO₂ concentration in the atmosphere

1. immediately
2. at relatively low cost
3. with a number of positive side effects

Of course, this potential role of forests has long been discussed.

When, on COP7 in 2001, devising the CMD (Marrakesh Accords), only **reforestation** and **afforestation** were admitted as admissible forestry projects (http://unfccc.int/cop7/documents/accords_draft.pdf).

Emission reduction through „avoided deforestation“ was considered too complex and not „monitorable“ .

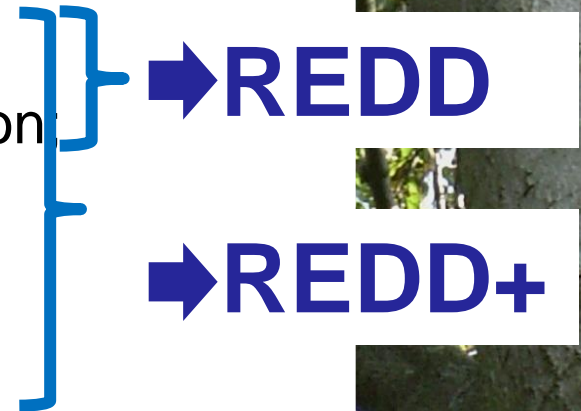
Gibbs et al. 2007 :

‘Avoided deforestation’ projects were excluded from the 2008-2012 commitment period of the Kyoto Protocol because of concerns of diluting fossil fuel reductions, sovereignty and methods to measure emission reductions”

From the Cancún Agreements (COP16, 2010)

70. Encourages developing country Parties to contribute to mitigation actions in the forest sector by undertaking the following activities, as deemed appropriate by each Party and in accordance with their respective capabilities and national circumstances:

- (a) Reducing emissions from deforestation;
- (b) Reducing emissions from forest degradation;
- (c) Conservation of forest carbon stocks;
- (d) Sustainable management of forests;
- (e) Enhancement of forest carbon stocks;



...
Establishing national forest monitoring systems was explicitly addressed as a prerequisite for forest related mitigation mechanisms

Durban

On **forest reference levels**, COP 17 invites countries to submit reference levels and explain how they calculated them. The text agrees to a step-wise approach, because many countries “don’t have good deforestation data”... and deforestation may locally be very different : Reference levels can be sub-national (temporarily),

Text on **measuring, reporting and verifying** and **forest monitoring systems**, was included in drafts in Durban, but negotiators could not agree in time and the text was removed from the final version.

MRV and forest monitoring systems – At its meeting in Bonn in May 2012, SBSTA produced a draft text (with many square brackets) on modalities for national forest monitoring systems and for measuring, reporting and verifying. **The text will be negotiated further in Doha.**

What is required ?

5 carbon pools: wherever changes through human activities take place, they need to be reported

- above ground biomass
- dead wood
- litter
- below ground biomass
- soil organic carbon,

... broken down into **6 land use categories:**

- **forested land**
- cropland
- grassland
- wetland
- settled land
- other land

3. Example: monitoring in REDD+

Goals → high expectations towards generating a reliable basis for sound decision making

- *Scientific:* produce as sound estimates as possible
- *Political:* help defining and justify climate policies
- *Economical:* generate credibility and trust between partners at the carbon market

The specialized discipline of „forest monitoring“ illustrates:

- We are working at the complex science-policy interface;
- Need for capacity building, experience building + exchange
- There are *many technical challenges*, but
 - But let´s not lose the overarching goal out of sight !
(„not seeing the forest for the trees ...“)
 - Let´s not use them as pretext to slow down the process
(„paralization by information“)

4. Our workshop ...

- Given the diversity and complexity of the science of climate change and of the related policy processes, it is hardly possible to follow the scientific developments and the political negotiations – and to understand them entirely
- That is also why we have this workshop ...

Objectives

- Get a feeling for the complexity of the issue and strengthen the motivation to follow the complex discussions and negotiations – without frustration.
- Sharing and discussing your own experiences and participate critically in the discussions.
- Establish / strengthen your international networks.
- Train “presentation” and “scientific discussion” and “scientific writing”.
- Develop ideas for further collaboration and networking, for your professional future, for ...

An aerial photograph of a dense, green forest. A wide, light-colored river or stream winds through the forest, creating a meandering path. The forest appears to be a mix of different tree species, with varying shades of green. The river is a prominent feature, cutting through the forest canopy.

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Great thanks to DAAD

**Together, let´s make it again a both
successful and enjoyable workshop !**



CIA Closes Its Climate Change Office - The Central Intelligence Agency has disbanded its Center on Climate Change and National Security, the New York Times has reported. The center is a unit formed in 2009 to monitor the interplay between a warming planet and intelligence and security challenges. The NYT reported the creation of the office drew fire at the time from some Republicans, who said it was an unnecessary expense and a distraction from the agency's focus on terrorism and other more immediate threats. The agency did not say whether the closing was related to budget constraints or other political pressures. (<http://tinyurl.com/fiucia>)

Climate Change Report Warns of Dramatically Warmer World This Century - A new World Bank-commissioned report warns the world is on track to a "4°C world" marked by extreme heat-waves and life-threatening sea level rise. The report notes adverse effects of global warming are "tilted against many of the world's poorest regions" and likely to undermine development efforts and goals. As a result, the Bank is studying increased support for adaptation, mitigation, inclusive green growth and climate-smart development. <http://tinyurl.com/fiuworldbank>)

Carbon Projects Cancel Emission Credits for Doha Climate Talks - Emission-reduction projects have proposed to voluntarily cancel 25,000 metric tons of carbon credits to offset greenhouse gases from this month's United Nations climate talks and to highlight plunging prices, Bloomberg has reported. The Project Developer Forum, a London-based lobby group for companies that cut heat-trapping gases in emerging nations, will send the credits to the Clean Development Mechanism registry's voluntary cancellation account to offset estimated emissions from travel and accommodation of 10,000 participants at the talks in Doha, Qatar. (<http://tinyurl.com/fiudohaha>)