



Potential contributions of the forests of Central Africa to combat Climate change

Mitigation, adaptation and synergies

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The forests of central Africa

- Livelihoods and life support system for about 60 million people
- 1,707,185 km² (170,718,500 ha) of dense humid forest
- Represent 10 to 20% of the world carbon stocks (about 46 millions of metric tons according to Nasi *et al.* (2009))
- Other benefits from forest than carbon:
 - ✓ Timber sector represent up to 6% of the GDP in some countries of Central Africa
 - ✓ Substantial contribution of non timber forest products to daily substance (food and nutrition, medicine, arts and culture...)
 - ✓ Other regulatory functions
 - ✓ Habitat for wildlife



Climate change mitigation potentials

Sustainable forest management (SFM)

- Generalized implementation of forest management plans would reduce emissions 35 million tCO_{2eq} over a period of 25 years
- reduction related to the implementation of RIL might be estimated around 1.3 million tCO_{2eq} on the annual basis

REDD+ in central Africa

Three groups of countries

- priority countries for the international community (R-PP developed)
- countries that are less endowed with forest potential, but also engaged in the REDD+ process
- Countries that lean towards renunciation

Most (if not all) are locked in the first phase)

- DRC most advanced



Lessons from early mitigation initiatives

Lessons from SFM implementation

- Political will of governments of COMIFAC member countries
- Engagement of private sector (forest certification)
- Involvement of the donor community (World bank in support of policy reform, French AFD...)

Lessons from early REDD+ initiatives

- Disadvantageous economics of REDD+
- REDD+ contributes to the green economy and low emissions development (LED) options
- Being able to reliably measure and monitor the extent of forests, of deforestation and of forest degradation and estimate carbon stocks is a key prerequisite to enable payments for results (MRV).
- Establishing Forest Reference Emission Levels
- Targeting the drivers
- Data needs
- Capacity gaps
- Benefit-sharing mechanisms
- Safeguards



Challenges and the way ahead

- REDD+ will not be able to exist in a 'bubble of transparency and good governance' if all other policy sectors around it are under-performing on these accounts.
- REDD+ will only remain a viable option for these countries if they manage to do three things:
 - i. They need to embed REDD+ in the broader context of development policies.
 - ii. They need to develop other, non-market based mechanisms that reduce pressure on forests and forest resources.
 - iii. they need to engage in broad policy reform in all sectors, introducing rule of law, good governance and transparency, and solving pending legal impasses

Adaptation to climate change: Vulnerability

Agriculture

- Different between zones and crops
- Droughts in north and south of the basin, floods in center. Drier north could increase productivity
- Cassava and yam more resistant. banana, maize and beans suitable area decrease

Hydropower and energy

- Increases in flow variability
- Power plants could benefit from increased power
- But need to be more resistant to shocks

Health

- direct (insufficient access to safe water and improved sanitation, food insecurity) and indirect (limited access to health care and education) (IPCC 2014)
 - Changes in temperature and precipitation: malnutrition, diarrheal diseases, and malaria and other vector-borne diseases

Urbanization

Increased rural-urban migration
Changes in food systems, that will need to be adapted
Bad urban planning could increase risk to climate disasters (e.g. floods)

Policies and initiatives

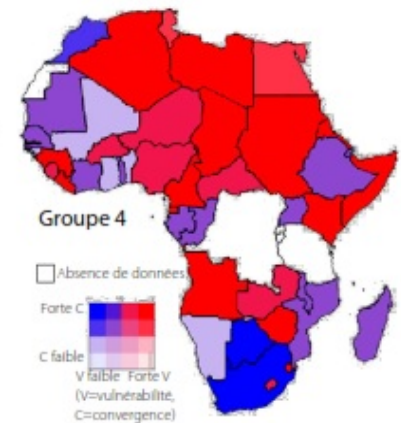
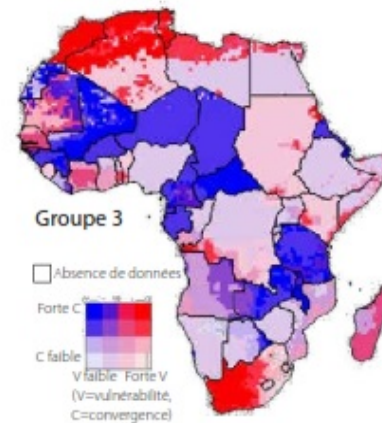
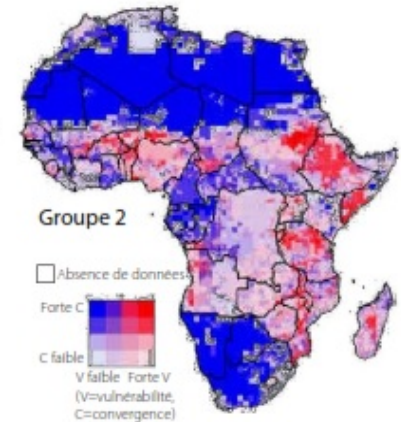
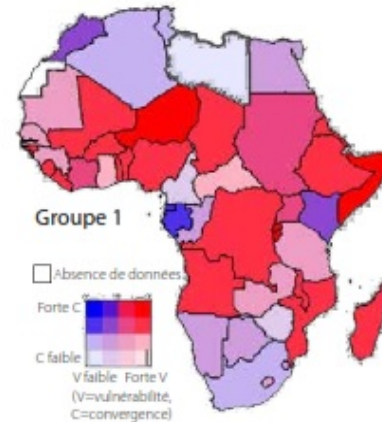
- Twofold: political and technical measures. Ideally adaptation should be mainstreamed into forest and development policies
- All countries parties to UNFCCC.
- Scarce although existing funds, but countries need to make an effort (see examples in table 2 in chapter 4)

Countries	1 st NCs	2 nd NCs	NAPAs	INDCs
Burundi	2001	2010	2007	-
Cameroon	2005	-	-	-
CAR	2003	2015	2008	-
Chad	2001	2013	2010	-
Congo-Brazzaville	2001	2009	-	-
DRC	2000	2009	2006	-
Equatorial Guinea	-	-	2013	-
Gabon	2004	2011	-	2015
Rwanda	2005	2012	2007	-

Only 9% of submitted projects explicitly consider adaptation of forest. Ecosystem-based adaptation could be a viable alternative.

Lessons and challenges

- Indicators exist but mostly for vulnerability. Very disparate assessments depending on focus. Assessments should better be done **Sub-regionally** (key **recommendation for IPCC**)
- Adaptation is not rigid, should be flexible in time, context specific, involve different stakeholders and combined with mitigation
- **Sub-Regional structures** in Africa should play a bigger role (COMIFAC and other), specially for transboundary forest ecosystems
- Needs for more meteorological information infrastructures and better capacities for institutions



Linking mitigation and adaptation

- There is urgency for both mitigation and adaptation in the forest sector in Central Africa
- In the land use and forestry sectors, mitigation and adaptation efforts might demand and compete for the same type of land use activities, institutional and governance arrangements and other inputs
- Looking at opportunities for mitigation and adaptation to work together is critical for the region, by planning to design and use the same strategy and policy package for positive mitigation and adaptation outcomes.
- Integrated activities are likely certain to avoid duplication and waste of financial, technical and material resources, and limited transaction cost in the design and implementation of adaptation and mitigation



CONT.....

- International policy frameworks have provisions for exploring the synergy between adaptation and mitigation e.g. obliging projects under the CDM and adaptation funds to produce both adaptation and mitigation benefits
- National policies, both climatic (e.g. CDMs, NAPAs and Adaptation Fund projects promoting M+A outcomes) and non-climatic (governance, land tenure and rights) can facilitate the integration of mitigation and adaptation
- At the project level, carbon sequestration and conservation activities have potentials to produce adaptation benefits, and adaptation activities also have potentials to sequester and guarantee the sustainability of forest carbon activities
- Ecosystem based Adaptation (EbA) e.g. sustainable management, conservation and restoration of forest ecosystems will help people adapt to both current and future climate variability and change and enhance forests carbon stocks



Synergies opportunities and Challenges

- Emerging opportunities for Central Africa to promote mitigation and adaptation synergies within the UNFCCC include the Non-Carbon Benefits and the Joint Adaptation and Mitigation Mechanism for the Integral and Sustainable Management of Forest
- In the two options both mitigation and adaptation are planned and taken into consideration at the level of project and program conception, design and implementation.
- There is need to speed-up efforts in terms of governance, methodological and technical issues, to fill the gap of the current lack of experience on integrated mitigation and adaptation activities
- Sourcing finance and funding holistic and sustainable pilot initiatives in the region may be useful to experience and generate lessons learned.





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