## Multiple Benefits of REDD at the Landscape Scale

### REDD+ as a Development Strategy

G. Ken Creighton, Ph.D.
Principal Advisor, Forests and Climate
WWF International, Africa Region (CARPO)
c/o WWF-Belgium
Boulevard Emile Jacquemin 90
1000 Bruxelles, BELGIUM

















### **The Central African Republic**



















# Partners and Collaborators (it takes a village)

- Government of the Central African Republic
  - Ministry of Forestry
  - Ministry of Environment
  - Provincial Government (Bayanga)
- The BaAka and Bantu Peoples
- Development Cooperation Agencies
  - USAID
  - Agence Francaise de Developpement
  - GtZ and KfW (German Cooperation)
  - DGIS (Netherlands)
  - Belgian Cooperation

















### What is REDD-plus?

As defined by the Central African Countries in their 2007 submission to the UNFCCC, REDD+ includes:

- Deforestation
- Forest Degradation
- Conservation of forest carbon stocks
- Sustainable management of forests
- Enhancement of forest carbon sequestration

















### What is a Landscape?

- The Sangha Tri-national Landscape covers 45,200 km2
- The area of Vermont is 24,901 km2
- The Lobeke National Park in Cameroon (2,178 km2), the Dzanga-Ndoki NP (1,443 km2) in CAR, and the Nouabale-Ndoki NP (4,268 km2) in Congo, constitute the core protected area of the landscape.
- Together these Protected Areas encompass 7895 km2 or less than 18% of the landscape











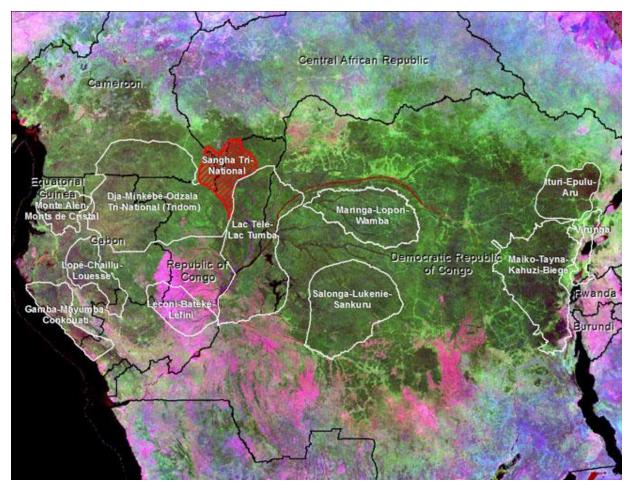






### **Central African Landscapes**

(from USAID CARPE Information Tool)



















### **Premise**

By focusing on the "development opportunities" of REDD+ at a <u>landscape level</u> it may be possible to harness "global resources" to provide durable local benefits in addition to making measurable and sustainable contributions to "global" issues such as climate change and global warming.









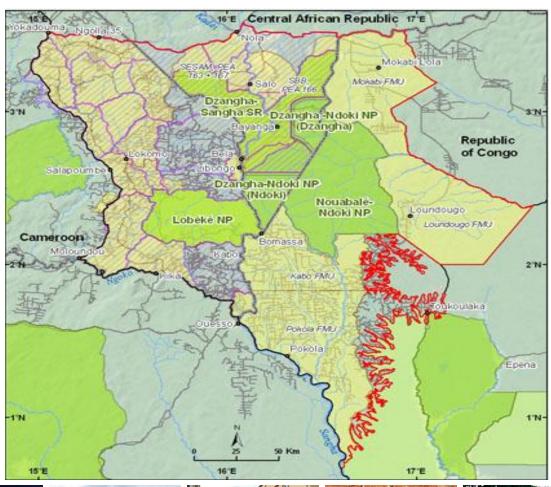








### The Sangha Trinational Landscape as a "Mosaic" of Compatible Land Uses



















### Why are we there?

- Forests cover 95% of the landscape, and extend from semi deciduous forest in the north-west, to swamp forest in the southeast, with natural "clearings or "bais" both inside and outside of protected areas. These include some of the most intact oldgrowth forests found in the Central Africa region.
- The Ba'aka people inhabit the region and rely on forest resources for their livelihood and cultural survival.
- This landscape also supports important populations of large mammals that are globally and regionally threatened and are "keystones" in maintaining the ecological character of the landscape. These include: forest elephants, lowland gorillas, chimpanzees and Bongos.

















#### Who else is there?

During the past three decades forest exploitation companies in the Sangha Tri-national have come and gone and concessions have been reallocated a number of times in SE Cameroon and CAR.

Bayanga (in CAR) has seen a decrease in the human population since the concessionaire left in 2004, abandoning employees, leaving unpaid debts and taxes, and resulting in a plummeting of economic activity in the region.

















### And what do they do?

- The current Sangha Tri-national economy is entirely based on extractive resource exploitation in the formal sector for timber and diamonds and in the informal sector for bush meat, palm wine, fish and other NTFPs. Locally, agricultural production has some importance in Cameroon.
- The way in which this extractive economy impacts socioeconomic sustainability and activities in the administrative centers or the local villages is difficult to define. What we do see is that poverty is rife. Social services, such as schooling and health, benefit little from the revenue generated from the exploitation.

















### **Exploring "new" forest assets**

A Report for WWF and the Government of the Central African Republic

Carbon Project Assessment and Design

Feasibility assessment of a REDD project in the Central African Republic Dzanga – Sangha Reserve

**EcoSecurities Consulting September 2009** 









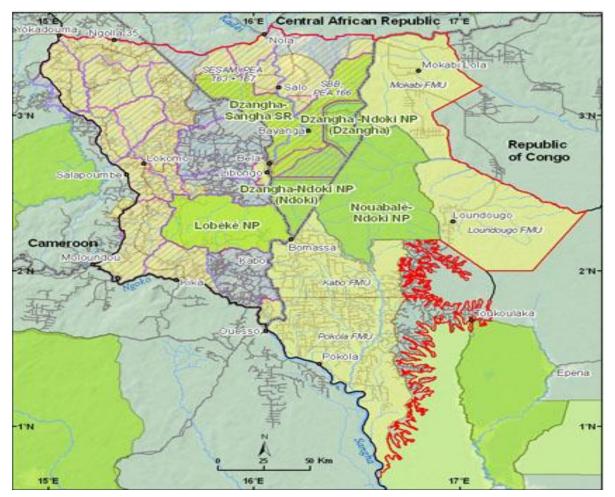








# Land Use Planning in the Sangha Trinational Landscape



















#### What do the numbers show?

After deducting a range of carbon project related transaction costs, the cumulative revenues for the project were calculated to result in the following net cumulative and non-discounted cash flows:

•	<u>Price</u>	<u>10 % </u>	<u>20 %</u>	100 % set-aside
•	US\$ 2	-171,500	186,00	3,600,000
•	US\$ 5	158,600	1,200,000	10,500,000
•	<b>US\$ 10</b>	709,000	2,900,000	21,900,000

















## A simple "taxonomy" of multiple benefits from REDD+

### **Types of Benefits**

**Biodiversity** 

### Strategies and potential for monetorization

- + Ecotourism
- + Sustainable Forest Mgmt.
- ? Bio-prospecting

Cultural survival

### **Environmental Services (Ecosystem Stability)**

- Water resources
- Global Climate mitigation<sub>I</sub>
- Local Climate adaptation

- ? Local-regional markets
- + Carbon ERs & C-SEQ
- + UNFCCC compensation?

















### **Take-home points**

- All of these "co-benefits" and development options depend on the persistence of forest cover in a healthy and sustainable state.
- ➤ The "land use "mosaic" is a set of interdependent activities with "stakeholders" that include forest-dwelling people (the BaAka), people drawn to the area by employment opportunities and wages, foreign owned companies holding concession leases for logging, agriculturalists and industrial agriculture interests, mining interests (artisanal and industrial) –REDD could be a factor in this.
- Future "land use" decisions will depend on the access to capital REDD could be among these sources.

















### Potential REDD "Development" Strategies within the Sangha Trinational Landscape

- Improved Forest Management (Reduced Impact Logging and Certified Forest Management)
- Establishment of trust fund to ensure adequate resources for more effective Protected Area Management
- Limit expansion of slash-and-burn agriculture
- Fuelwood plantations for household energy and fuel efficient cook-stoves for household energy
- Off-grid energy production (co-generation) using solar, possibly micro-hydro and biofuel sources
- Increase livelihood options from ecotourism and added value processing of harvested forest products

















### Multiple (Co-)Benefits of REDD in the Trinational de Sangha Landscape

- Buffering local environmental change
- Contributing to global GHG emissions reduction
- Maintaining environmental services at a landscape and ecosystem level
- Sustainable revenues from managed resource harvesting
- Preserving future development options
- Maintaining globally significant biodiversity
- Providing environmental "services" such as water resources and local climate stabilization to adjacent "production" landscapes
- Maintaining cultural and aesthetic values











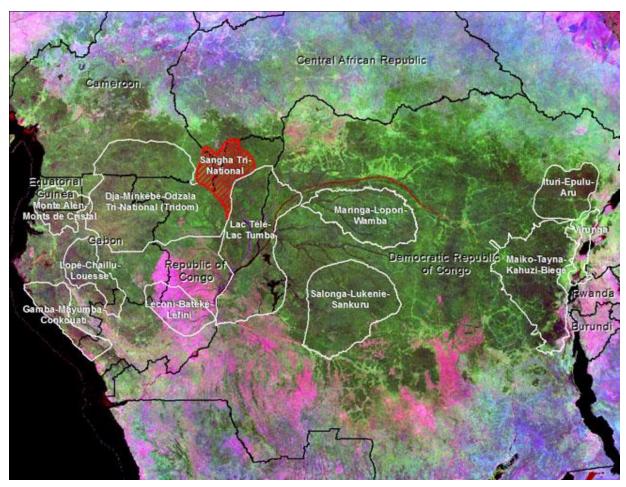






### **Central African Landscapes**

(from USAID CARPE Information Tool)



















### Conclusion

The TNS is but one of 12 "critical" landscapes that are important to maintaining the contributions of the Congo Basin to global climate stabilization.

By focusing on the "development opportunities" of REDD at a landscape level it may be possible to harness "global resources" to provide durable local benefits in addition to making measurable and sustainable contributions to "global" issues such as climate change.

#### Contacts:

Kcreighton@wwfcarpo.org ken.creighton.WWF@gmail.com













