



# CARPE II and III: WWF Landscape Programs



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For additional information, please contact WWF or its partners directly.



# CARPE II Overview

- WWF implemented programs 8 CBFP LS and led CARPE Consortiums in 5 landscapes
- CARPE II Strategic Objective: Reduce the rate of forest degradation and loss of biodiversity through increased local, national and regional natural resource management capacity
- Main conservation targets: Forest and freshwater ecosystems and services, Species (elephants, apes, bushmeat target species)
- Main threats:
  - Unsustainable hunting and fishing for subsistence and commercial bushmeat trade
  - Elephant poaching (illegal hunting)
  - Habitat loss and land conversion from shifting and/or industrial agriculture
  - Wood energy harvesting
  - Unsustainable legal and illegal logging (direct and secondary effects)
  - Legal and illegal non-forest extractive industries and infrastructure (including associated indirect threats)
- Challenges: ambitious objectives in a challenging context (minimal access, insecurity, acute development needs, logistics, high operational costs, etc.), securing political will (including among key government partners), internal and external capacity, etc.

# Scope of WWF activities under CARPE II



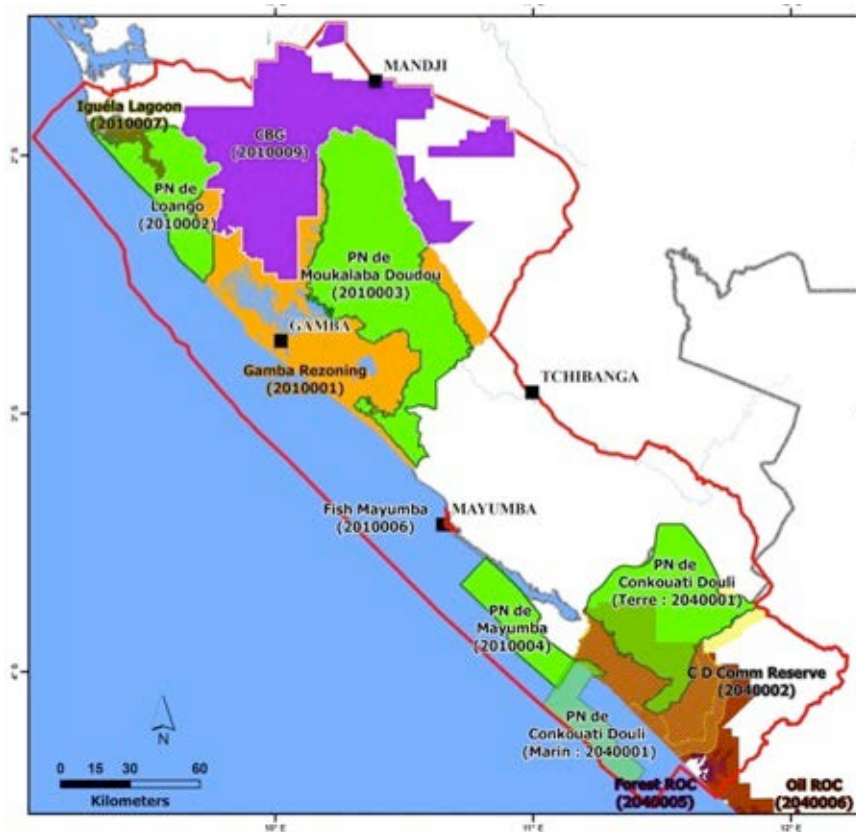
# CARPE II: Common strategies implemented across multiple LS programs

- Improve understanding and data on biological and socio-economic variables to inform LUP and management decisions by implementing standardized ecological survey and bio-monitoring methods and undertaking socio-economic studies (including market chain assessments). Efforts also contributed to building and institutionalizing capacity for monitoring (e.g. SOF).
- Identify and engage stakeholders at local, national and regional level in LUP and NRM. Included engaging on establishing enabling conditions for NRM (policies, etc.).
- Increase capacity (financial, technical and operational) to plan and implement land and resource management activities and address main threats:
  - Strengthen the capacity of PA management authorities to support the development and implementation of PA management plans
  - Encourage and build community capacity to engage in NRM as part of efforts to decrease pressure on NR in and outside PAs
  - Develop and implement strategies with the private sector to decrease impacts of NR exploitation and move towards certification
- Leverage additional support for NRM and build the enabling conditions for sustainable funding of conservation and eco-development in the LS (REDD+, tourism, trust funds, etc.)

# Gamba-Mayumba-Conkouati Forest Landscape



# Gamba-Mayumba-Conkouati Landscape



- **53,290 km<sup>2</sup>**
- CARPE II implementing partners: WWF, WCS, Ibonga- ACPE (*Association pour la Conservation et la Protection de l'Environnement*)
- Other partners: ANPN, MEF, MEFDD, IUCN, RAPAC, other government agencies, international and national NGOs
- CARPE II strategies focused in **5 Protected Areas, 3 CBNRM Areas and 3 Extractive Resource Zones**

## Landscape characteristics:

- i. Transboundary, with marine component
- ii. Wide diversity in habitats, varying from sea and coastal vegetation, to lagoons, wetlands up to the lowland forest-savannah mosaic
- iii. Diversity of land use: PAs, village territories, forestry concessions, oil & mining

# CARPE II: Overview of select results

- Management plan development and implementation. Management plans were developed for all five national parks using USFS guidelines. Government ownership has been a challenge. In May 2011, the management planning process for the entire park network in Gabon was standardized and put under the responsibility of a “Management Planning Taskforce”, led by ANPN, with technical support from USFS, WCS and WWF.
- Capacity building for park management. WWF and WCS played a major role in supporting park management activities:
  - Park surveillance activities were reinforced and resulted in increases in wildlife. In Moukalaba Doudou and Loango approximately 110 surveillance missions were completed per year totalling over five thousand (5000) man/days. In Conkouati, about 140 terrestrial patrols were supported per year, as well as lagoon and marine patrols.
  - Wildlife monitoring within and around national parks was established. WWF and WCS conducted baseline wildlife surveys in Moukalaba Doudou and Loango NPs, as well as in the interzone between the parks. The forestry concessions Bayonne and Mavoungou were also surveyed. WCS conducted annual wildlife surveys in Mayumba) and also conducted wildlife inventories in late 2005, 2008, 2010 and 2013 in Conkouati Douli.
  - Pilot tourism activities developed in Loango, Moukalaba and Conkouati. Support to tourism development was mainly channeled through the local NGOs Ibonga (for Loango), PROGRAM (for Moukalaba) and the communities around the park in Congo (for Conkouati). Community attitudes towards conservation in the Republic of Congo have changed positively with the introduction of tourism and sharing of revenues with the communities.
  - Environmental education programs established.

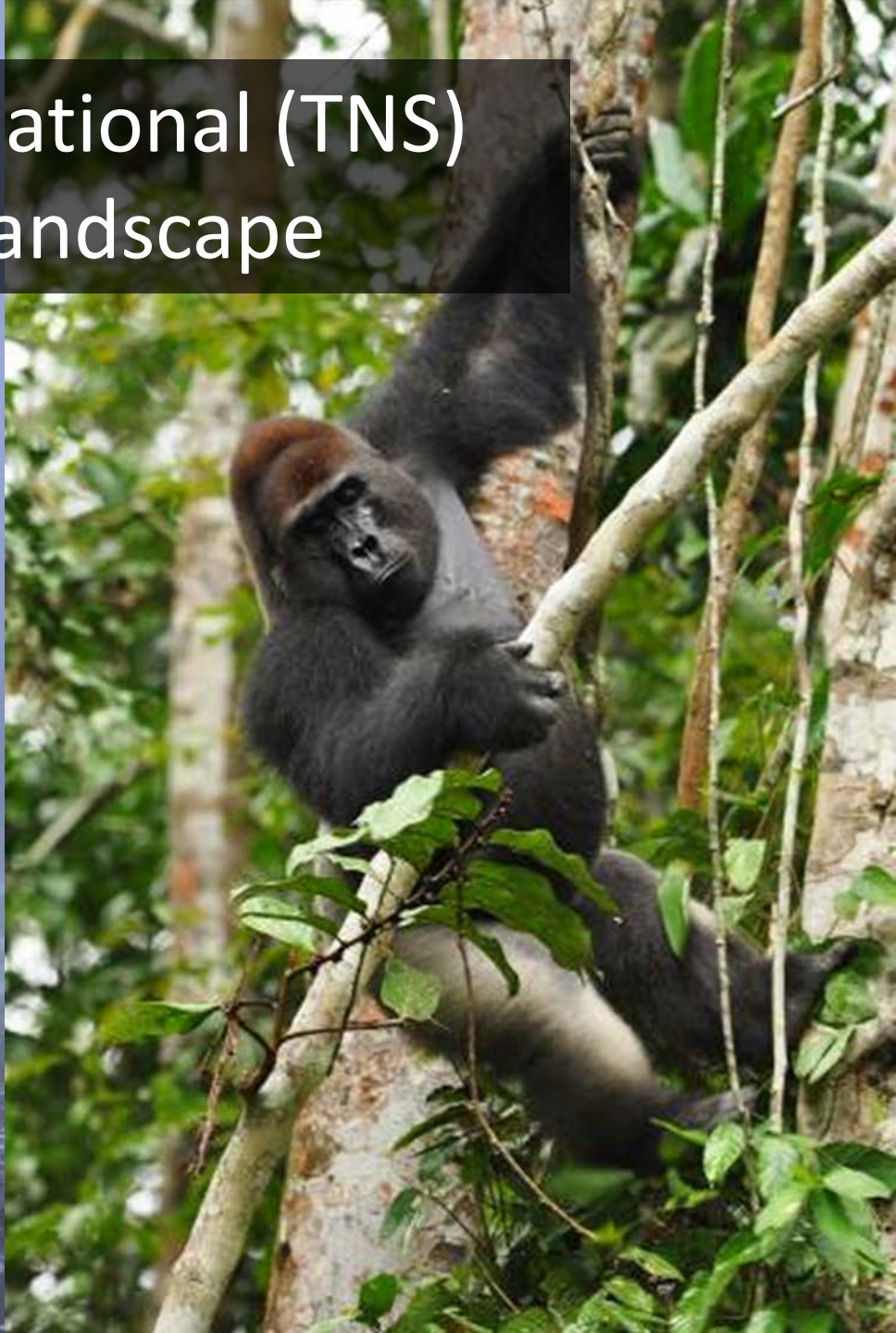
# CARPE II: Overview of select results



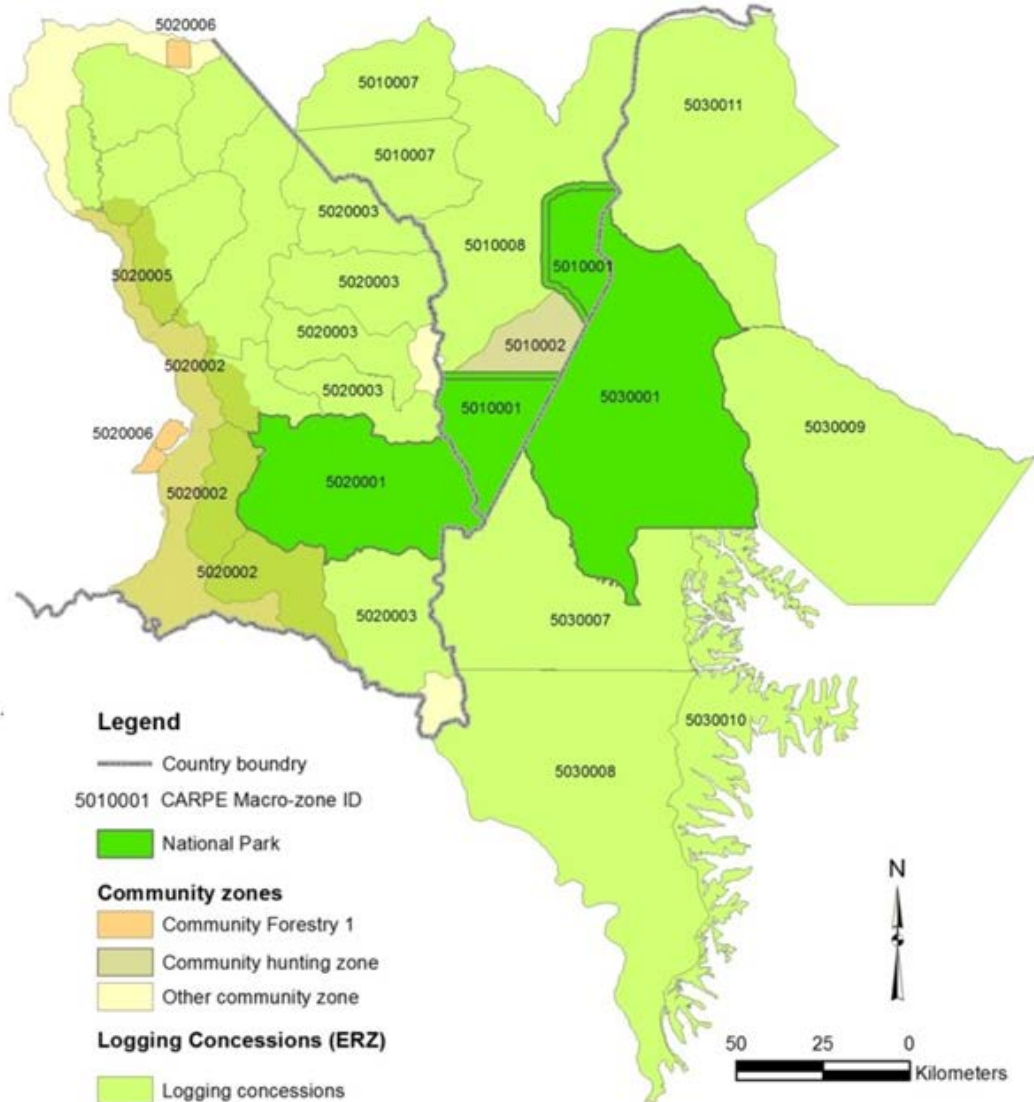
- Transboundary collaboration resulted in the creation of the Mayumba-Conkouati Transboundary Park (PTMC) - officially recognized at the COMIFAC meeting in Kinshasa on November 11, 2010.
- Significant capacity building for NRM through the development of a well-trained and motivated cadre of Gabonese natural resource managers. Mentoring of community-based associations, especially Ibonga and PROGRAM and COGEREN.
- Partnerships with major private sector players throughout the landscape are benefitting conservation (EFC, CBG, Sintoukola Potassium, Maurel and Prom). A wildlife management plan was implemented throughout 600,000 ha of FSC certified forestry concessions.
- Marine and coastal conservation strategies elaborated with stakeholders. Marine surveillance in Mayumba and Conkouati-Douli national parks established. Annual marine turtle monitoring and protection was extended to include the entire beach section of the PAs in the landscape.
- Significant engagement to build community capacity for NRM, included: participatory mapping and developing zonal management plans, updating the socioeconomic baselines, supporting local development projects, supporting the creation of park Local Consultative Management Committees. Significant work also completed on community fishing zones.



# Sangha Tri-national (TNS) Forest Landscape



# TNS Landscape



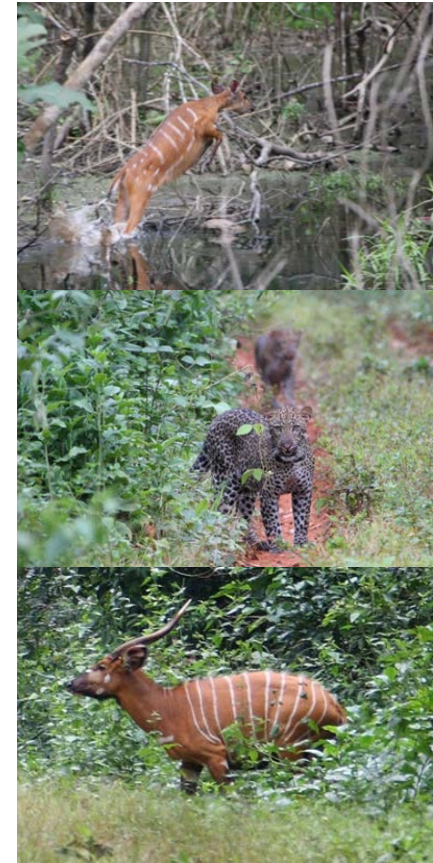
- **45,200 km<sup>2</sup>**
- CARPE II implementing partners: WWF and WCS
- Other partners: MEFCPE, MINFOF, MDDEFE, MDTA, IUCN, GIZ, PACEBCo, the private sector, in particular logging companies, and other national and international organizations.
- **CARPE II strategies focused in 3 Protected Areas, 5 CBNRM Areas and 7 Extractive Resource Zones**
- Landscape characteristics:
  - 3 PA form core
  - Clear management structure

# CARPE II: Overview of select results

- TNS benefits from a set of tri-national agreements and an effective implementation structure, both significantly contributing to joint action and strengthened governance.
- Cooperation Agreement for the creation of the TNS was signed by the three Governments in 2000. This was followed by three other implementation agreements (*Protocole d'Accord*).
- TNS was officially recognized as a tri-national World Heritage Site in 2012.
- The TNS LUP was officially validated in 2010. The LUP provides for different macro-use zones: national parks, Forest Management Units (FMU or *Unité Forestière d'Aménagement - UFA*), hunting concessions and community zones for hunting/agro-forestry.
- Management structure established:
  - The “Comité Tri-National de Supervision et d'Arbitrage (CTSA) » is the highest forum composed of the ministers in charge of forests and wildlife of the three Governments. In 2010 it met to adopt the LUP and a number of other resolutions to boost the implementation of the Cooperation Agreement and its implementing agreements, e.g. the operationalization of the B-LAB TNS.
  - The Tri-National Scientific Committee (CST) is a consultative body for which ToR were developed in 2013.
  - The Tri-national Monitoring Committee “Comité Tri-National de Suivi (CTS)” monitors the implementation of decisions taken by the CTSA and is composed of different political, technical and institutional representatives from all three segments.
  - A Tri-National Planning and Execution Committee (CTPE) meets twice a year on a rotational basis and is composed of representatives from the three protected areas and their NGO and other partners. Throughout CARPE II the CTPE has met regularly to plan and evaluate tri-national activities. It has 4 commissions: institutional, conservation, socio-economic and research and bio-monitoring. In 2013, the CTPE also validated a set of unified objectives for the whole TNS LS.

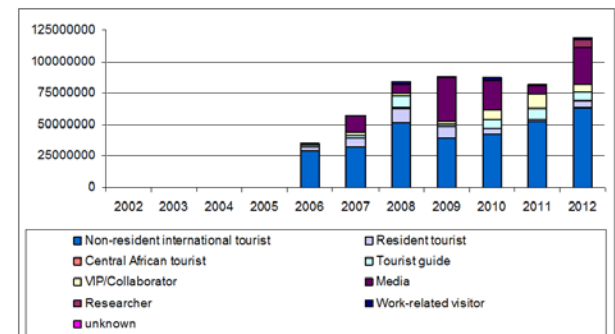
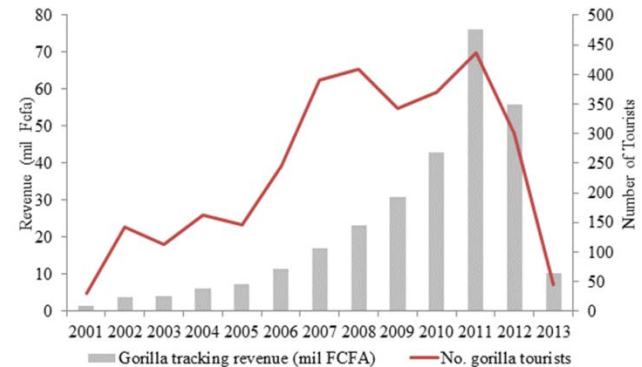
# CARPE II: Overview of select results

- CARPE II funding also played an important role in the design of the Sangha Tri-national Trust Fund (FTNS) - created in 2007 as a private charity registered in England, with its executive headquarters in Cameroon. As one of the first environmental trust funds in the Central Africa region, it has as objective to contribute to the long-term funding of conservation, eco-development and trans-boundary cooperation activities within TNS.
- As of 2012, the FTNS' total endowment amounted to \$32.3 million, including \$28.2 million from KfW and \$ 4.1 million from AFD. Other capital contributions are in process to reach the objective of a \$48 million endowment set by the FTNS. Grants are allocated to the field, based on an Operations Manual including a grant policy ensuring transparent allocation of revenues.
- Management plan development and implementation. MPs developed for PAs, forest concessions and community hunting zones.
- MPs of three CHZ were updated and validated in Cameroon: COVAREF Boumba-Djombi, 2011; COVAREF Ndjombi-Bolo, 2011; COVAREF Salokomo, 2011). The Ministry has formally attributed the CHZ to the CBNRM groups (COVAREF Boumba-Djombi, Ndjombi-Bolo, and Salokomo).
- At the end of 2013, a new partnership accord was signed between WCS and the Government of Congo to establish management unit.



# CARPE II: Overview of select results

- Capacity building for park management. WWF and WCS played a major role in supporting park management activities:
  - Coordinated law enforcement. Regular anti-poaching operations, including bi-and tri-national operations, have been organized. Conservators and partners from all three LS segments meet regularly to plan anti-poaching operations. On November 12, 2009, the three Governments signed a Tri-national Accord for the creation of a TNS Anti-poaching brigade (Brigade de Lutte anti-braconnage du TNS – B-LAB TNS) which was built at Nyangouté on the Sangha River (CAR) and inaugurated in August 2011.
  - Strengthened biodiversity knowledge and joint standardized biodiversity monitoring. A series of intensive landscape wide monitoring programs have been carried out, notably for forest elephants, western lowland gorillas, central chimpanzees as well as abundance measures of hunted species (monkeys, duikers and pigs for bush meat hunting and bongos for trophy hunting). Relatively stable elephant and great ape populations within PAs show the core area is acting as a vital refugee for keystone species. Major decline in elephant populations outside PAs, potential decline of chimpanzees, but stable gorilla populations in the buffer zone also found. Major decline in duiker and pig populations, even in certified logging concessions, emphasize the need for controlling both subsistence and commercial bush meat hunting and providing alternatives.
  - Primate Habituation Programs have been well established with support from USAID and USFWS in CAR and RoC. Both have contributed to increased tourism revenue.



# CARPE II: Overview of select results

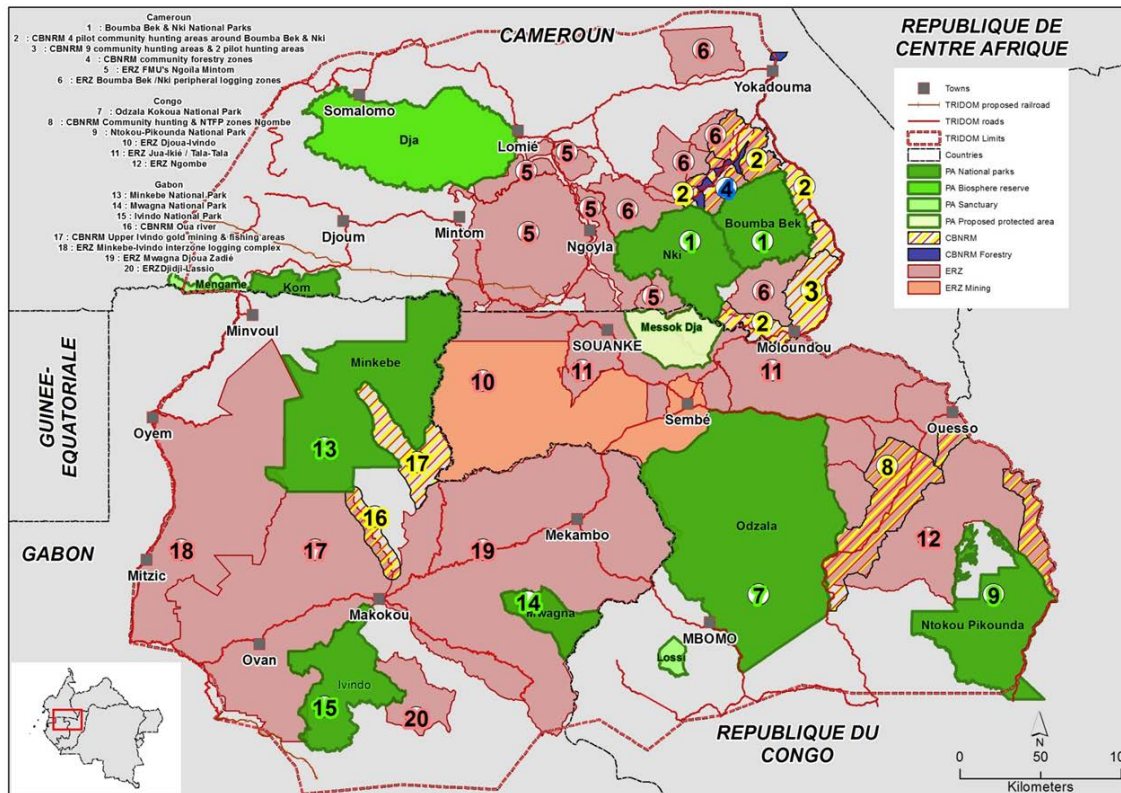
- PROGEPP has contributed to the conservation and the management of logging concessions in RoC and insured the adoption of Management Plans for all FMUs as well as the implementation of their LUPs. The program has improved surveillance through a strategically planned approach with mobile patrols, rapid response patrols and 8 fixed check points on CIB main roads.
- National regulations governing tenure and the use of forest and wildlife royalties in Cameroon has been revised (named as “Arrêté 076”).
- A study on fisheries was undertaken along 400 km of the Sangha River through the TNS (Robichaud, 2011) to assess the feasibility of sustainable fisheries management.
- Tropical Ecology Assessment and Monitoring (TEAM) Network Project established in RoC.
- USFWS support moving forward.

Segment	CARPE Macro-zones ID	Forestry company	Area (km <sup>2</sup> )	Year attributed to current concessionaire	Forest exploited since (year)	Management plan (convene, approved and implement)	Situation regarding certification
<b>Cameroon</b>							
UFA 10-008, 10-010, 10-012	ERZ 5020009	SEFAC	2,243	1997 / 2001	1970	LUP adopted and being implemented (69%)	- FSC certificate (2007-2009); - OLB certificate since 2010 - FSC certificate of Chain of custody since 2009
UFA 10-064		Filière Bois (SEFAC)	1,144	2001	1975	LUP adopted and being implemented (66%)	- OLB certificate since 2010 - FSC certificate of Chain of custody since 2009
UFA 10-009		SEBAC	667	1997 / 2001	1970	LUP adopted and being implemented (no evaluation made)	- OLB certificate since 2010 - OLB certificate of chain of custody since 2010
UFA 10-013		ALPICA M/Habit at 2000	508	2004	1975	LUP adopted and being implemented (69%)	- OLB certificate since 2009 - On the process of FSC certification, with the first audit done
UFA 10-063		ALPICA M	689	2004	1973	LUP adopted and being implemented (73%)	- OLB certificate since 2009 - On the process of FSC certification, with the first audit done
UFA 10-001, 10-002, 10-003, 10-004		Vicwood -Thanry	1,931	1996	1997	LUP adopted and being implemented (no evaluation made)	Chain of custody SGS certificate The Timber Legality & Traceability Verification (TLTV)
UFA 10-007, 10-011		Vicwood -Thanry	1,709	1997	1990	LUP adopted and being implemented (62%)	
UFA 10-005		STBK	893	2001	2002	LUP adopted and being implemented (no evaluation made)	Non-engagé
<b>Congo</b>							
UFA Kabo <sup>3</sup>	ERZ 5030007	CIB	2,870	1997	1968	LUP adopted and being implemented	FSC certificate (06/2006)
UFA Pokola	ERZ 5030008	CIB	4,500	1968	1975	LUP adopted and being implemented	FSC certificate (07/2008)
UFA Loundougu	ERZ 5030009	CIB	4,230	2002	2003	LUP adopted and being implemented	FSC certificate (2011)
UFA Toukoulaka	ERZ 50300010	CIB	2,080	1968	1993	LUP adopted and being implemented	FSC certificate (2011)
UFA Mokabi		Rougier	3,600	1999	1999	LUP adopted and being implemented	-----



**Tri-national Dja-Minkebe-Odzala  
Forest Landscape  
TRIDOM**

# TRIDOM Landscape



- **186 500 km<sup>2</sup>**: Cameroon (56,730km<sup>2</sup>), Gabon (66,130 km<sup>2</sup>) and Republic of Congo (63,720 km<sup>2</sup>)
- CARPE II implementing partners: WWF and WCS
- Other partners: three Ministries in charge of Forests, UNOPS, the private sector, in particular logging companies, and other national and international organizations.

## Landscape characteristics:

- A complex of 9 protected areas (PA), linked by a vast interzone
- Low population density, low but growing road density, few easily navigable rivers
- Globally important populations of large mammals (elephant, gorilla, chimpanzee, leopard, giant pangolin and others)
- An emerging iron ore province with 8 iron ore exploration sites



# CARPE II: Overview of select results

- TRIDOM became recognized by the three governments, through the signature of the TRIDOM collaboration agreement in 2005. A first intergovernmental planning meeting on TRIDOM was held in 2006 in Libreville and resulted in a first landscape level workplan.
- CARPE II strategies focused on 21 macro-zones covering 75% of the landscape area: six PA (35,280 km<sup>2</sup>), six CBNRM Areas (8,664 km<sup>2</sup>) and nine ERZ complexes (95,115 km<sup>2</sup>).
- New programs developed during CARPE II, such as the Souanke Panhandle in the TRIDOM Congo interzone.

CARPE Macro-Zones in TRIDOM (75% of TRIDOM)			
Country/Zone	Type of zone	Area (ha)	Main land use type/attribution
<b>Cameroon</b>			
Boumba Bek & Nki National Parks	PA	547 620	Conservation, protected area
4 pilot community hunting areas around Boumba Bek and Nki	CBNRM	258 000	Community management, hunting
9 Community hunting areas and 2 pilot hunting areas	CBNRM	135 000	Community management, hunting
Community forestry zone	CBNRM	53 000	Community management & community forestry
Ngoïla Mintom	ERZ	890 000	Logging concessions (49%) and conservation concessions (51%)
Boumba Bek / Nki peripheral logging zones	ERZ	1 360 000	Logging concessions
<b>Congo</b>			
Odzala Kokoua NP	PA	1 350 000	Conservation, protected area
Community hunting and NTFP zones Ngombe	CBNRM	197 356	Community hunting
Ntokou-Pikounda NP	PA	457 200	Conservation, protected area
Djoua Ivindo	ERZ	943 200	Mining, conservation and eco-development
Jua-Ikié / Tala Tala	ERZ	1 292 486	Logging, but also proposed PA covering 11% of area
Ngombe	ERZ	1 300 000	Logging
<b>Gabon</b>			
Minkebe NP	PA	756 700	Conservation, protected area
Mwagna NP	PA	116 500	Conservation, protected area
Ivindo NP	PA	300 000	Conservation, protected area
Oua River	CBNRM	67 100	Community fishing and bushmeat hunting
Upper Ivindo Gold mining and fishing areas	CBNRM	156 000	Community gold mining and fishing
Minkebe-Ivindo interzone logging complex	ERZ	831 300	Logging
Okano Valley logging complex	ERZ	948 600	Logging
Mwagna Djoua Zadie	ERZ	1 812 500	Logging, Mining, some conservation
Djidji-Lassio	ERZ	133 478	Logging
<b>TOTAL AREA</b>		<b>13 906 040 ha</b>	

# CARPE II: Overview of select results

- Improved understanding and data on biological and socio-economic variables. NGO partners collected a large quantity of data (from wildlife inventories, reconnaissance surveys, socio-economic inventories).
- Consulted and worked with all stakeholders (from Government agencies, to private sector companies, to local communities and authorities), developed and drafted policy guidelines, management plans and zoning and regulation.
- Carried out training of government staff and local communities, and offered very considerable implementation support, in particular to Government agencies in charge of combating poaching.
- Increased awareness of TRIDOM achieved among Governments, COMIFAC, ECCAS, mining companies, research institutions (such as CIRAD) and donor agencies, in particular as an area where to focus anti-poaching support and develop innovative schemes in relation with the mining and infrastructure sector.



# CARPE II: Overview of select results

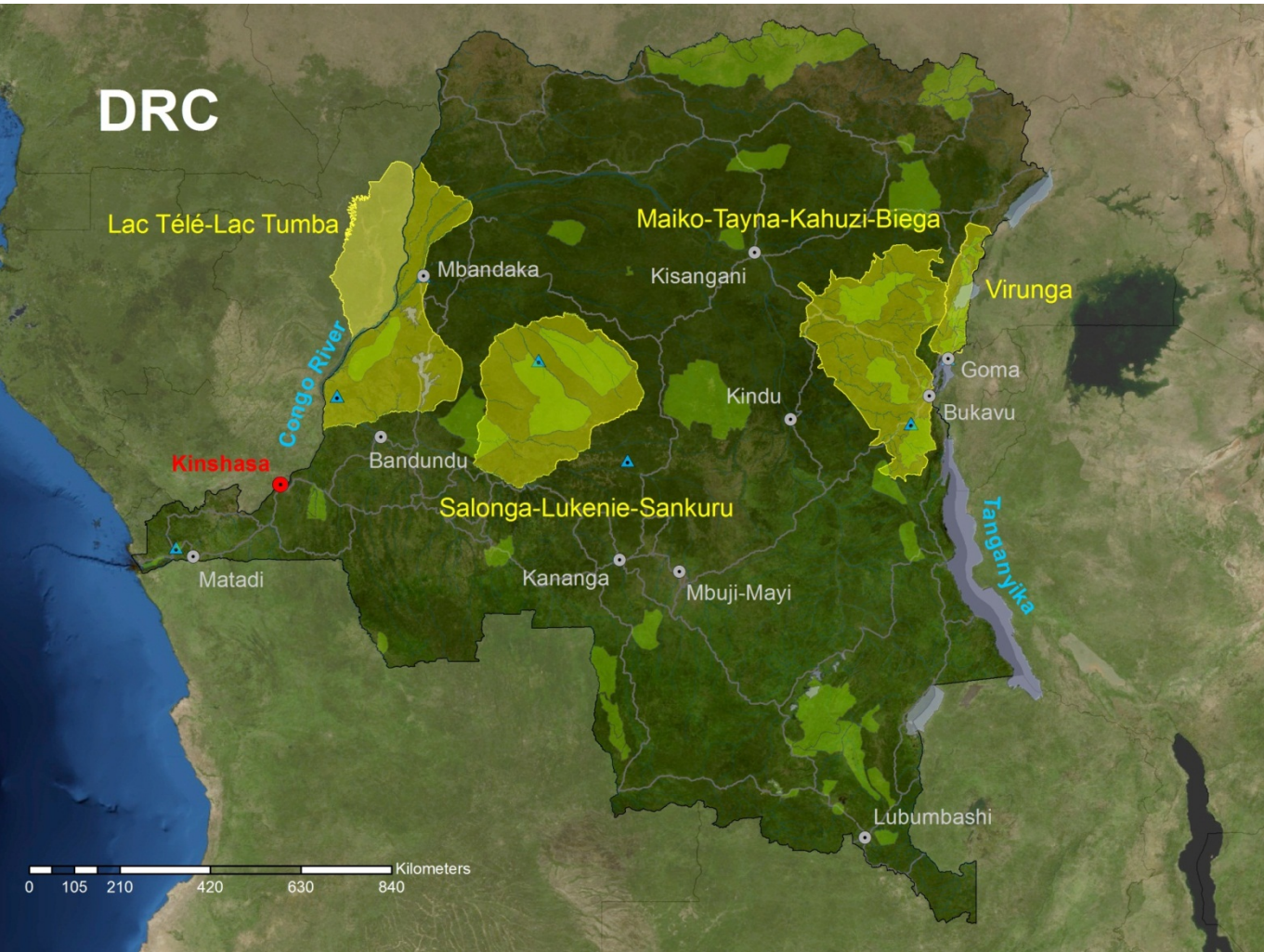
- Management plans for Boumba Bek and Nki national parks have been finalized and were validated in a participatory process in 2012. The Boumba-Bek MP has been signed by the Prime Minister in 2012, and signature for the Nki MP is expected soon.
- Building on results of a WCS survey covering 47,444km<sup>2</sup> a presidential decree establishing Ntokou Pikounda NP was signed March 4th, 2013.
- In a process facilitated by UNOPS, a tri-national anti-poaching agreement was finalized in December 2012. The agreement defines (i) a TRIDOM park wardens' coordination and planning platform, (ii) the creation of a new TRIDOM tri-national anti-poaching brigade and (iii) the formalization of border (anti-poaching) control posts. The agreement also regulates the operations of joint bi-national or tri-national anti-poaching units. Throughout the project WWF provided extensive support to the Gabonese Government (Ministry of Water and Forests, ANPN) for anti-poaching in TRIDOM Gabon.



# CARPE II: Overview of select results

- Conservation base established in Sembe (beginning of 2008) to cover both the Jua Ikié Tala Tala ERZ and the Djoua Ivindo ERZ. The base is run by a Government coordinator supported by a WWF technical assistant, with 16 trained guards, an expat law enforcement advisor, and long term consultants (large mammal inventories, socio-economics).
- WWF carried out large mammal surveys in 9,420 km<sup>2</sup> of the Ngoïla Mintom Forest, first in 2008, then in 2011, undertook extensive consultation with local communities and advocated at the institutional level to promote sustainable management of the Ngoïla-Mintom forest block.
- In TRIDOM Gabon WWF's efforts were concentrated on three logging concessions, two CBNRM Areas, Minkebe NP and Mwagna NP. WCS concentrated on Ivindo NP and neighboring logging concessions.
- Partners provided extensive support to the Gabonese Government (Ministry of Water and Forests, ANPN) for anti-poaching. As of 2012 MIST monitoring (and now SMART) is operational in Minkebe, Mwagna and Ivindo national parks. WWF and WCS have MIST officers in Makokou and Oyem and reporting is consolidated at the national level on a monthly basis by a WCS expert.
- WWF, together with UNOPS TRIDOM, advocated for recognition of Messok Dja as a proposed PA, and for the Djoua Ivindo forest to be reserved for mining, conservation and eco-development (no industrial agriculture, no logging). In 2010, an interministerial committee on the zoning of TRIDOM Congo was created by the Minister of Forest Economy. a revised and refined TRIDOM component of the "National Land Management Strategy" for TRIDOM-Congo (plan particulier d'aménagement du territoire renforcé pour la TRIDOM Congo).
- PROGEP-PNOK established and aimed to protect the eastern side of PNOK from negative impacts caused by the industrial logging activities (Ngombe FMU) and illegal wildlife activities, and work with local communities to achieve sustainable management of natural resources. The program has increased the overall level of surveillance effort in the Ngombe FMU. Human impacts continue to evolve (road rehabilitation, oil palm plantation, etc. ).

# WWF programs continuing under CARPE III



- Four landscapes, two as consortium lead, each with their own set of strategies based on targets and threats.
- Four national level programs: protected areas, green economy, wildlife and forests assist in implementation of CAFEC cross-cutting strategies.



An aerial photograph showing a vast, dense green forest on the left side, which meets a dark blue body of water on the right. The sky is filled with white and grey clouds. A black rectangular box is overlaid on the top center of the image, containing white text.

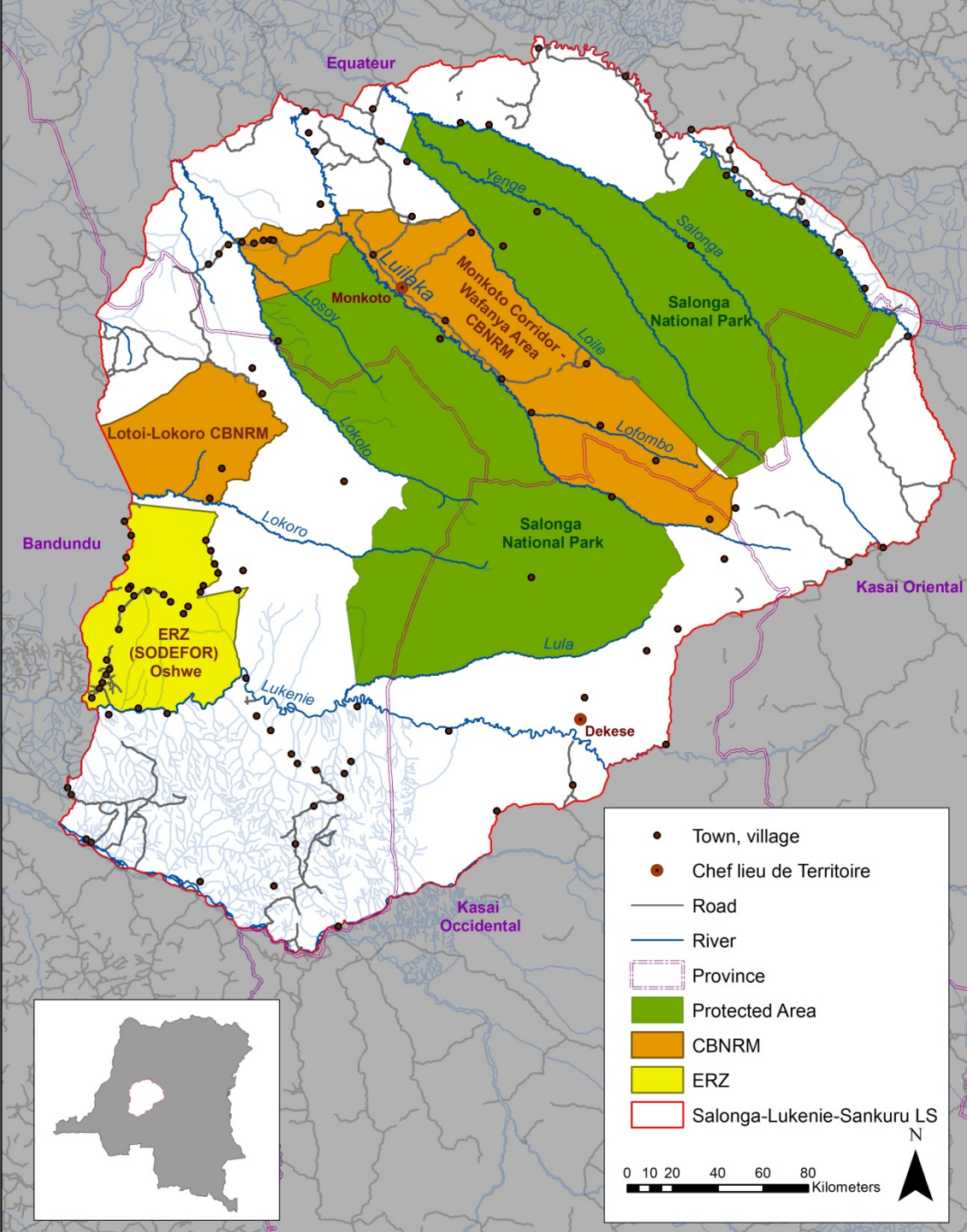
# Salonga-Lukenie-Sankuru Forest Landscape

# SLS Landscape

- **104,144 km<sup>2</sup>**
- CAFEC implementing partners: WWF, WCS, Pact, ZSM, WRI
- Other partners: ICCN, RAPAC, other government agencies, international (Max Planck) and national NGOs, Sodefor
- **CAFEC strategies focused in 1 Protected Area, 2 CBNRM Areas and 1 Extractive Resource Zone**

## Landscape characteristics:

- Low population density
- Limited accessibility
- Minimal market access
- Second largest humid forest PA in the world
- Relatively low deforestation rates



# CARPE II: Overview of select results

- Successful facilitation of land use plans for all the areas of intervention, including Salonga National Park. Process was guided and informed by the findings of landscape-wide biological and socio-economic studies that were conducted with funding from USAID, USFWS and partners, which provided a significantly improved understanding of resource use in this LS, revealing agriculture and the collection of NTFPs to be the principal subsistence activities, with hunting and fishing also increasingly important sources of income.
- LUP process evolved from broad-scale macro-zoning to a more targeted focus on micro-zoning in high priority areas. The experience gained in macro and micro zoning in the SLS LS has been used to promote more coordinated LUP within the forest sector through the Comité National de Pilotage du Zonage Forestier (CNPZ). WWF is using its experiences to inform the development of a guide to microzoning in collaboration with DIAF, the USFS and the FAO.
- The consortium partners have also worked within the SNP to build the park management capacity of ICCN. As part of both the law enforcement capacity building teams and the bio-monitoring teams, they were responsible for facilitating the creation of the PA management plan, training ICCN's park guards, and facilitating the participatory delimitation and demarcation of the park's boundaries with local communities, which has helped to improve the management and integrity of the park. Specific areas of high activity by the consortium include the Monkoto sector, the Monjoku sector, and the Watsi-Kengo sector of the SNP. Through not formally a microzone, the consortium also worked directly with communities bordering the Watsi-Kengo area in natural resource management capacity building projects.



# CARPE II: Overview of select results

- In the Monkoto corridor, cooperative and community-based microzoning has been completed. Communities in the Monkoto and Luilaka River macrozones have benefitted from livelihood improvement projects to promote improved seeds, agricultural techniques and animal husbandry methods via the World Bank PFCN project.
- Baselines for improved fisheries management have been established through a partnership with the World Fish Centre; public health projects undertaken; women's livelihoods projects implemented (in cooperation with AASD, INADES, and INCEF); and educational outreach conducted on the drawbacks of slash and burn/swidden agriculture through both the PFCN project and INCEF.
- In the Lotoi-Lokoto region, consortium partners supported the participatory microzoning of the CBNRM, and community-driven LUPs were created and implemented for 30 villages, covering some 98 community forests.
- In the Oshwe ERZ, CARPE partners worked directly with Congolese state actors, local communities, and the private sector entity SODEFOR on land use planning in order to support the process of obtaining Forest Stewardship Council (FSC) certification for the logging concession and improve participation in natural resource management for adjacent communities.

# SLS Landscape revisited

## Primary targets:

- Forest habitat
- Riverine systems
- Forest elephant
- Great Apes
- Other bushmeat species

## Main threats:

- Unsustainable hunting and fishing for subsistence and commercial bushmeat trade
- Elephant poaching (illegal hunting)
- Habitat loss and land conversion from shifting agriculture
- Wood energy harvesting
- Legal and illegal forest extractive industries/logging (direct and secondary effects)
- Legal and illegal non-forest extractive industries and infrastructure (including associated indirect threats)

## Future pressures and drivers that may increase impacts of threats:

- Population growth and immigration
- Development of transportation infrastructure such as roads and rail service



# CARPE III: Overview of strategies

**Strategy 1:** Reinforce management of Salonga National Park by partnering with ICCN to build capacity in all aspects of PA management, including: establishing operational and technical capacity; implementation and monitoring of adaptive management plan, including microzoning; LE planning, implementation and monitoring; community engagement; developing mechanisms for monitoring status of PA objectives and management effectiveness; boundary demarcation; public and private partner engagement and coordination; financial sustainability.

**Threat:** all key direct threats

**Root Cause (s):** weak technical and operational capacity and will, inefficient and inconsistent partner relationships with ICCN, insufficient financial capacity for management

# CARPE III: Overview of strategies

**Strategy 2:** Support local governance and participatory approach to natural resource planning, management and sustainable use in HCV areas (Monkoto, Lotoi Lokoro, within ERZ zones) that emphasizes the strengthening of rights, responsibilities and returns at household, group and community levels. This includes a whole suite of more specific sub-strategies, including:

- Strengthening the link between rights and responsibilities as well as development interventions and conservation outcomes
- Focusing efforts in HCV sites where resources are of sufficient quality and quantity to stimulate local management actions
- Strengthening local-level institutions at the lowest level that links management authority with the area and resource (e.g. CLDCs), and strengthen the integration and linkages between CLDCs with other governmental bodies
- Expanding participatory mapping and micro zoning
- Investing in detailed analyses of potential value chains for potential natural resource products, identifying ways to add value to natural resources as a means to increase local incentives for long term management and investing in opportunities for transformation and processing and the development of business plans together with community members
- Supporting additional research on the appropriate scale necessary to achieve sustainability
- Designing and expanding measures to pilot, test and profile community based natural resource management approaches.
- Supporting moves at the national level to engage in policy level discussions on strengthened rights and responsibilities of local communities and indigenous peoples over natural resources.
- Broadening representation of marginalised groups within existing CLDCs (including women and indigenous peoples)
- Development of community capacity (including minorities, women, user and interest groups), CLDCs, facilitators (civil society) and local, provincial and national authorities
- Developing partnerships with organisations with expertise in economic development and marketing
- The development and implementation of tools and frameworks for community-based monitoring

**Threat:** unsustainable hunting and fishing for subsistence and commercial bushmeat trade, habitat loss and land conversion from shifting agriculture

**Root Cause (s):** poverty, lack of preconditions for CBNRM (absence of an enabling legal and regulatory environment that promotes sharing and rights to management of natural resources & guarantee that potential revenue opportunities from sustainable natural resource management exist); limited market access

# CARPE III: Overview of strategies

**Strategy 3:** Support sustainable management of forests by providing technical support to enterprises for forest certification (particularly social aspects), advocating for sustainable forest management policy, linking with the Global Forest Trade Network, FLETG process, building capacity of stakeholders, and facilitating collaborative/participatory management of forest resources (opportunities to build public-private partnership under REDD+).

**Threat:** logging (direct and secondary effects)

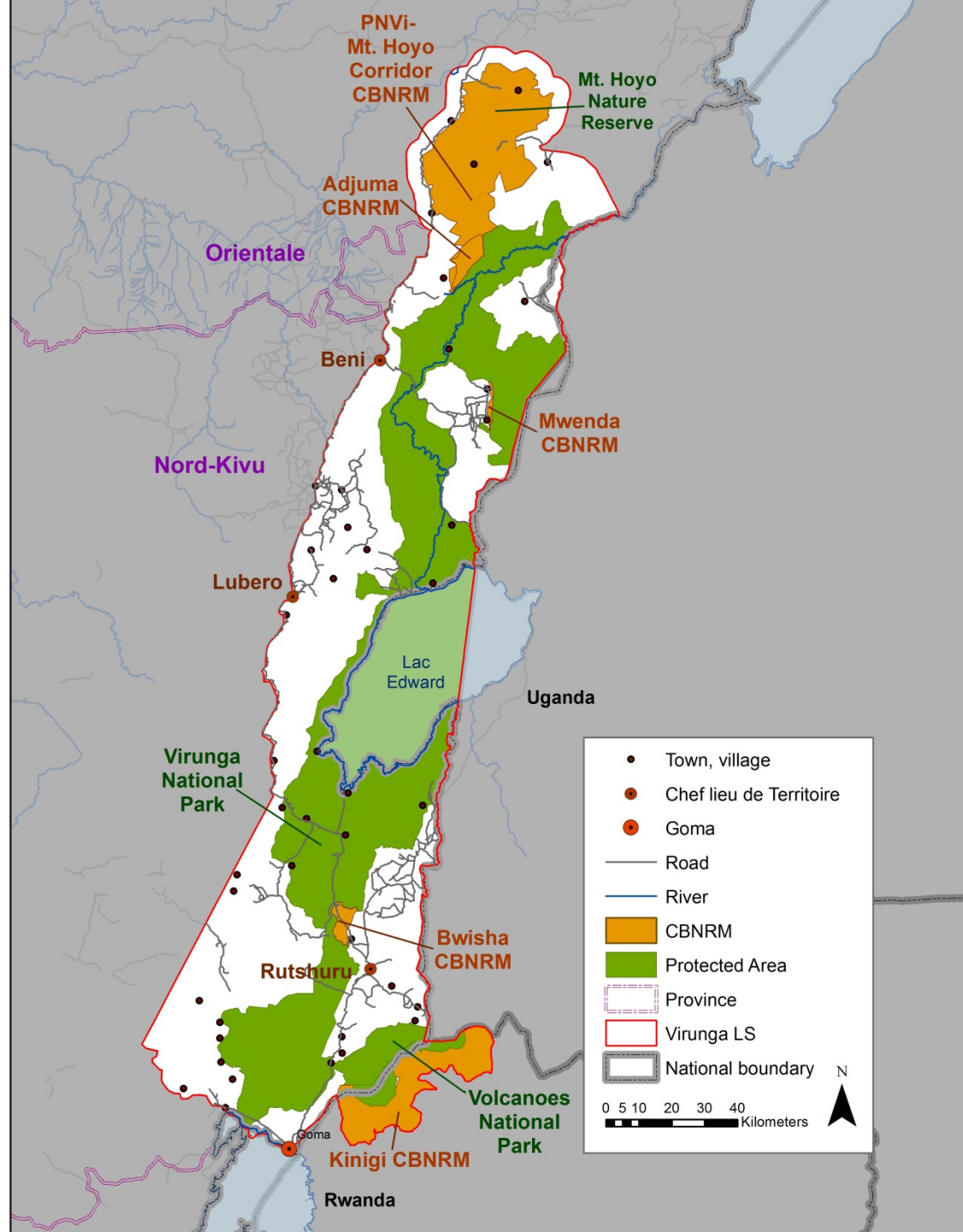
**Root Cause (s):** weak standards, weak enforcement

# Virunga Forest Landscape

- **19,398 km<sup>2</sup>**
- CAFEC implementing partners: WWF, WCS, WRI and IGCP
- Other partners: ICCN/ACF, RDB, other government agencies, international and national NGOs
- **CAFEC strategies focused in 2 protected areas and 5 CBNRM areas (one in Rwanda)**

## Landscape characteristics:

- Most bio-diverse PA on the African continent
- High population density
- Insecurity and mass movements of people
- Active formal and informal extractive activities



# CARPE II: Overview of select results

- The program worked to:
  - improve data on biological and socio-economic variables to inform LUP and management decisions, including to identify priority areas for intervention;
  - increase institutional capacity to plan and implement land and resource management activities
  - encourage and build community capacity to engage in natural resource management, as part of efforts to decrease pressure on natural resources (NR) in and outside protected areas (PA)
  - strengthen ICCN management capacity and support the development of a General Management Plan (GMP) for PNVi
  - develop and implement a strategy for tackling the fuelwood crisis, which is one of the biggest threats to the habitats within PNVi.
- Under Carpe II, work was undertaken to support community management of natural resources and improved sustainable livelihoods in CBRNM zones in both DRC (3) and Rwanda (1). A strategic document to guide community conservation was also developed in partnership with ICCN at PNVi and other conservation NGOs (WCS, IGCP, ZSL, ACF, GO) working in the Virunga Landscape.

# CARPE II: Overview of select results

- A General Management Plan (GMP) for Virunga National Park has been finalized and is currently awaiting validation from ICCN headquarters.
- To sustain the implementation of the plan, support was provided to ICCN for law enforcement operations, including field rations for ranger patrols and camping equipment to be used by rangers during monitoring activities. Consortium partners have also supported large mammal monitoring and the analysis of data collected. In 2011, ICCN signed a 10-year Public Private Partnership agreement with the Africa Conservation Fund (ACF) to strengthen the capacity of rangers in law enforcement and ensure park management in PNVi. The partners continue to work with both ICCN and ACF to assure prioritization and coordination of activities.
- Given the acute threat to habitats within PNVi from encroachment, significant support was provided to demarcate the Park's boundaries. A total of 214 km were demarcated from 2006 to 2013, with the documentation of an additional 90 km of boundary in progress,.
- Emergency assistance was also provided to ICCN operations in the Mikeno and Nyamulagita sectors to address acute threats. Support was provided to upgrade the Mikeno rock wall over 15 km to reduce human-wildlife conflicts, specifically the depredation of agriculture by gorillas from the Park. Emergency provisioning of wood and improved stoves to Internally Displaced Persons (IDP) camps was undertaken, and rehabilitation of 3 local primary schools was completed.
- The process to prepare a complimentary management plan for Lake Edward has been initiated and is ongoing.



# CARPE II: Overview of select results

- Reforestation and distribution/commercialization of improved stoves was undertaken. Over 120 ha were planted and maintained by local associations in the buffer zone around PNVi.
- With matching funds (EU), the EcoMakala project from 2008 to early 2013 established plantations of fast growing species through grant agreements with private planters. Plantations once harvested will provide raw material for legal charcoal production outside of PNVi, and include a pilot component focused on REDD. Thirty-nine associations have been involved in establishing nurseries and planting, and were recipients of technical and operational capacity building. A total of 5,571 ha of fast-growing trees were planted through the start of 2013 in the VFA Landscape. Additional support is needed to advance the commercialization process. This project is ongoing with support from the EU and the CBFF.
- To reduce demand for firewood and charcoal in households around PNVi, WWF is promoting the use of improved stoves. From 2009 to 2013 more than 48,000 stoves were produced; 25,000 stoves were sold in the area of Goma, Beni, Bwisha and Adjuma. In Rwanda, twenty people were trained in techniques to produce improved stoves made from volcanic rock. The ultimate aim of these interventions is to reduce firewood energy consumption and reduce encroachment pressures on protected areas for fuel wood collection.
- The formation of women's groups - Réseaux des femmes pour la protection de l'environnement autour des Virunga (RFPEVi) - has been supported by CARPE in the CBNRM zones. These associations play a major role in the production and promotion of improved cook stoves among households around PNVi. Impact on income has been mainly in the form of reduced consumption of household fuels, which has a direct effect on family budgets.

# Virunga Forest Landscape revisited

## Primary targets:

- Albertine Rift assemblage of habitats
- Great Apes (Mountain Gorillas, Eastern Lowland Gorillas and Eastern Chimpanzees)
- Elephant, hippo, okapi, other unique biodiversity, including over 700 species of birds and 200 species of mammals

## Main threats:

- Unsustainable hunting and fishing (Lake Kivu) for subsistence and commercial bushmeat trade
- Poaching (elephant, hippo)
- Live animal trade
- Habitat loss and land conversion from shifting agriculture (including encroachment of PA)
- Wood energy harvesting
- Illegal forest extractive industries/logging (direct and secondary effects)
- Legal and illegal non-forest extractive industries and infrastructure (including associated indirect threats), including increasing oil exploration



WORLD  
RESOURCES  
INSTITUTE

# CARPE III: Overview of strategies

**Strategy 1:** *Reinforce management of protected areas* by supporting ICCN (and its partners – ACF) to build capacity in aspects of PA management, including: delineation of PA boundaries; assuring legal framework; building ICCN operational and technical capacity; development, implementation and monitoring of adaptive management plans, including microzoning; strengthening the community participatory resource management approach; LE planning, implementation and monitoring; increasing understanding and planning for climate adaptation; developing mechanisms for monitoring status of PA objectives and management effectiveness; supporting capacity building for public and private partner engagement and coordination; financial sustainability.

**Threat:** all key direct threats

**Root Cause (s):** weak technical and operational capacity and will, inefficient and inconsistent partner relationships with ICCN, insufficient financial capacity for management

**Strategy 2:** *Apply integrated Wood Energy Solutions* that reduce deforestation of priority forests (including encroachment into PAs) by working at both ends of the charcoal and wood energy supply chains: agroforestry/charcoal production; market incentives for sustainable charcoal; promotion of alternative energies.

**Threat:** habitat loss and land conversion (including encroachment in protected areas), wood energy harvesting

**Root Cause (s):** dependence of local people on natural resources, substitution and alternative strategies are necessary because of the lack of suitable pre-conditions for effective CBNRM

# CARPE III: Overview of strategies

**Strategy 3:** *Support local governance and a participatory approach to natural resource planning, management and sustainable use in HCV areas* that emphasises the strengthening of rights, responsibilities and returns at household, group and community levels.

*Sub-strategies are similar to those under similar strategy in Salonga.*

**Threat:** unsustainable hunting and fishing for subsistence and commercial bushmeat trade, habitat loss and land conversion from shifting agriculture

**Root Cause (s):** poverty, lack of preconditions for CBNRM (absence of an enabling legal and regulatory environment that promotes sharing and rights to management of natural resources & guarantee that potential revenue opportunities from sustainable natural resource management exist); limited market access

**Strategy 4:** *Mitigate the impacts of key non-timber extractive industries* (e.g. mining, oil & gas) by supporting the development, implementation and monitoring of appropriate standards and/or best practices and application measures, and advocate for effective application of the law.

**Threat:** Legal and illegal non-forest extractive industries and infrastructure (including associated indirect threats), including increasing oil exploration

**Root Cause (s):** lack of coordinated LUP framework at national level, weak governance, corruption, lack of clear standards

# CARPE III: Overview of cross-cutting strategies

**Strategy 1: Advance sustainable and innovative financing for priority areas**

through piloting of financial mechanisms with greatest promise at the national and landscape levels. This includes:

- Supporting development and capitalization of PA trust fund; supporting establishment of appropriate legal, policy, and institutional frameworks at national and regional levels; support enhanced / innovative revenue generation, management, and the piloting of disbursement mechanisms; supporting business planning and demonstrating implementation of cost-effective management tools.
- Supporting the climate negotiation process for the DRC, development of national strategy, and advancement of Early Action Projects to promote design and implementation of REDD+ and subsequent forest carbon payments.
- Establishing community-based ecotourism

**Strategy 2: Mitigate impacts of large-scale commercial hunting and wildlife**

trade by engaging national government, law enforcement agencies and civil societies in control and monitoring of wildlife by developing multi-scale strategies.

# CARPE III: Overview of cross-cutting strategies

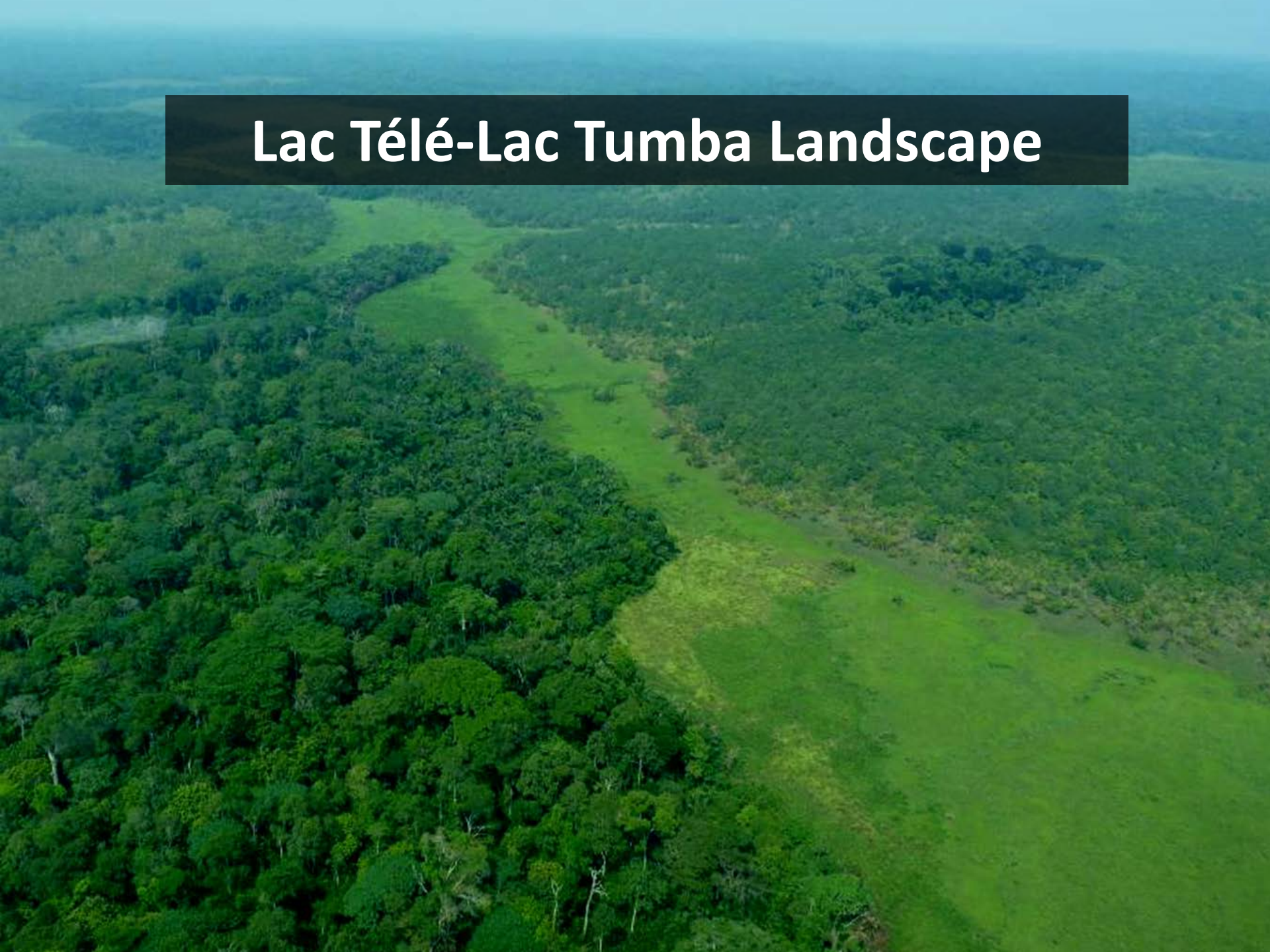
**Strategy 3:** *Promote integrated land use planning and management* to promote environmental conservation and economic development, applying lessons learned through landscape macro and micro zoning

- Support participatory designation and demarcation of land use zones
- Support participatory development of adaptive management plans at macro and micro zone level
- Support coordinated LUP through national (CNPZ) and decentralized administrations and promote recognition of customary rights and land tenure clarification (territory administration) for public participation in forest zoning and management .

**Strategy 4:** *Empower and broaden participation of marginalized groups* across strategic interventions to help ensure that projects are addressing the most relevant gaps (ex: gender integration; IP, etc.) and opportunities in landscape and cross-cutting programs.

**Strategy 5:** *Strengthening local governance and empowering civil society* and community based organizations with emphasis on family planning.

# Lac Télé-Lac Tumba Landscape

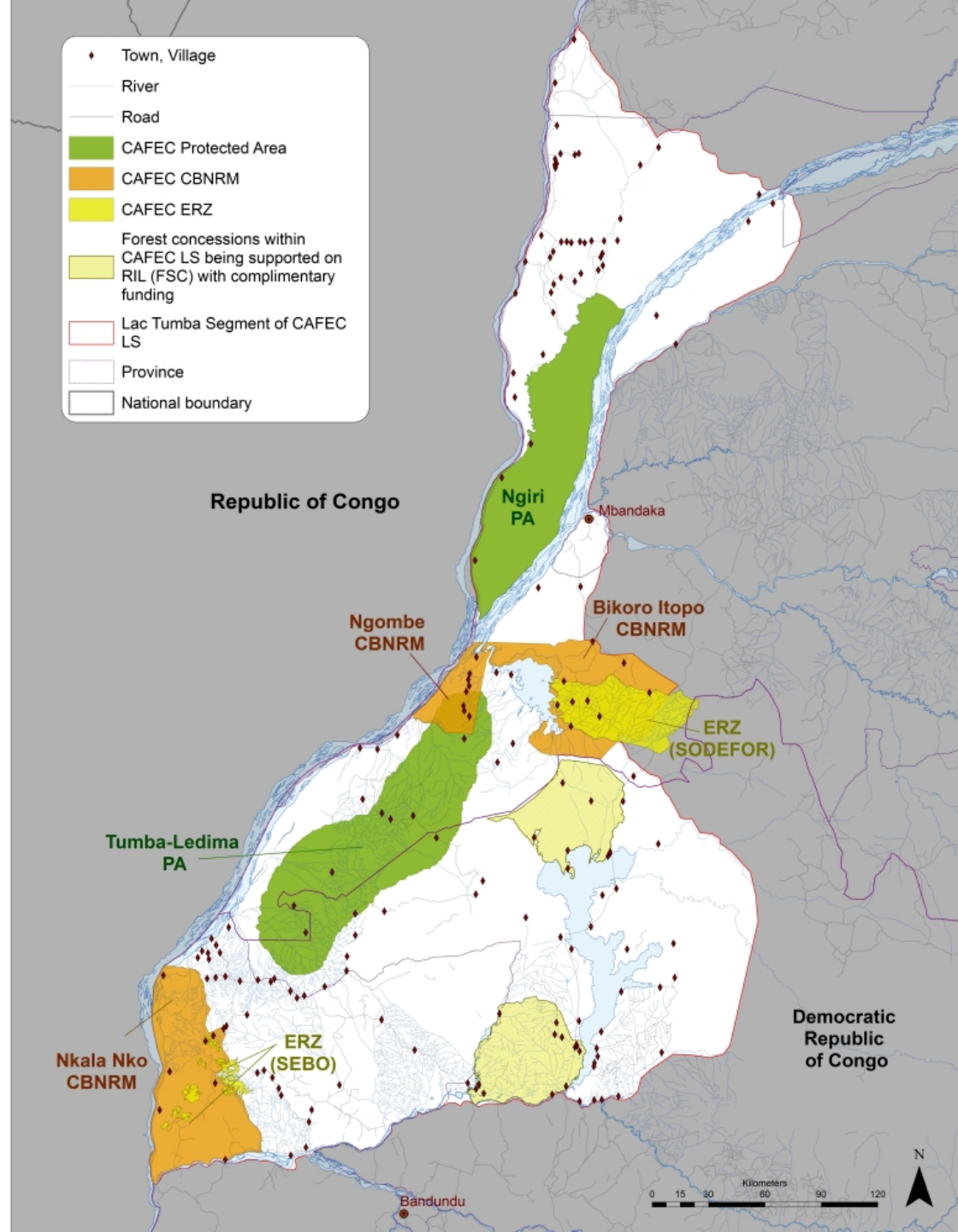


# Lac Tumba segment of LTLT

- Main partners: WWF, BRGDRN and ICCN
- Other partners: ICCN, other government agencies, WWC, Sogenac, Sodefor, Novacel, Mbomontour, and national NGOs
- **CAFEC strategies focused in 2 Protected Areas, 3 CBNRM Areas and 2 Extractive Resource Zones**

## Landscape characteristics:

- i. Important Riverine/wetland/lake systems
- ii. Minimal market access
- iii. High levels of deforestation in some areas
- iv. Overlaps with pilot Mai Ndombe jurisdictional REDD+ program





# Lac Tumba segment of LTLT revisited

## **Primary targets:**

- Forest habitat
- Riverine/wetland/lake systems
- Forest elephant
- Apes
- Other bushmeat species

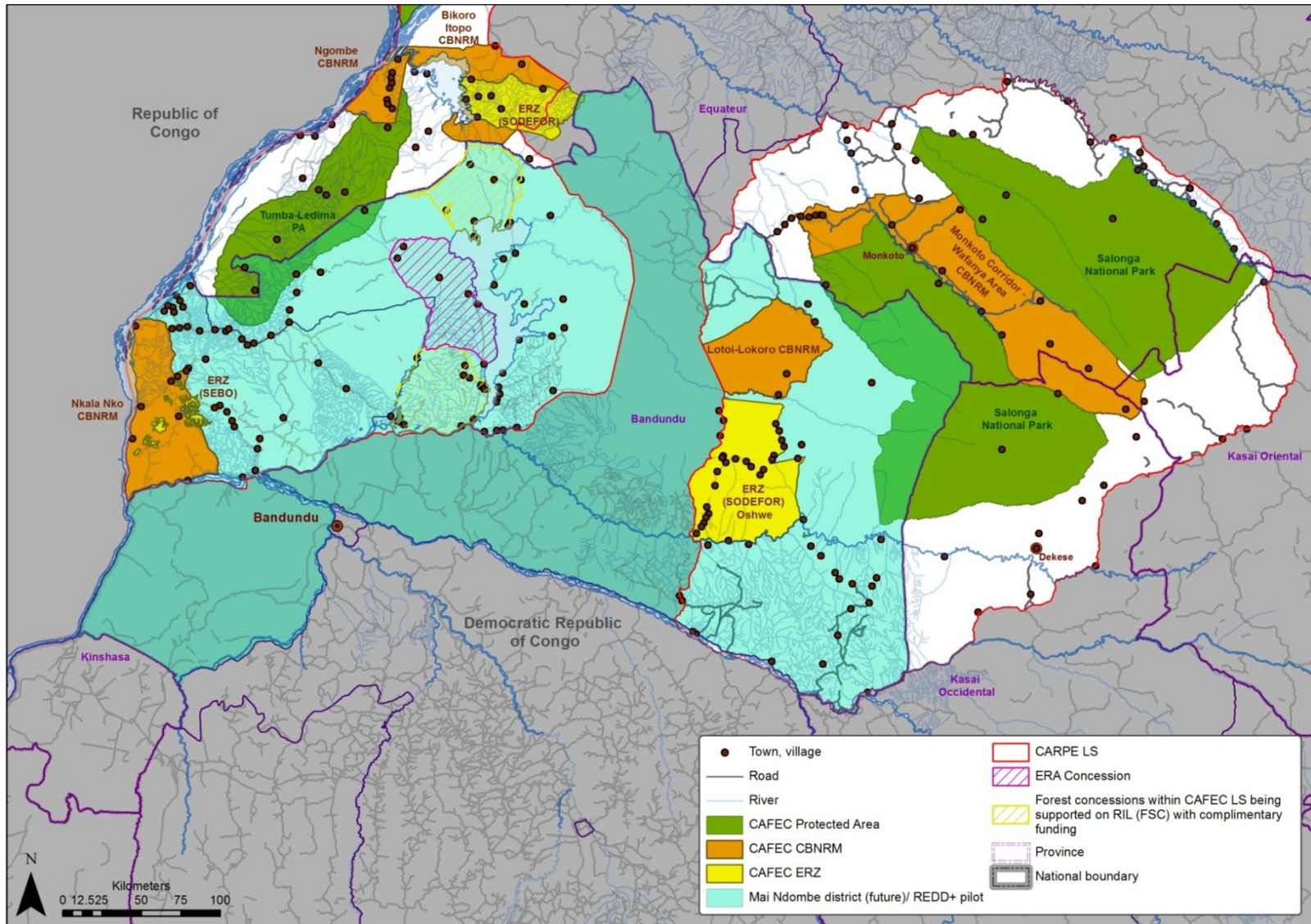
## **Main threats:**

- Unsustainable hunting and fishing for subsistence and commercial bushmeat trade
- Elephant poaching (illegal hunting)
- Habitat loss and land conversion from shifting agriculture
- Wood energy harvesting
- Legal and illegal forest extractive industries/logging (direct and secondary effects)
- Legal and illegal non-forest extractive industries and infrastructure (including associated indirect threats)

Future pressures and drivers that may increase impacts of threats (especially given proximity and accessibility to large urban centers like Kinshasa):

- Population growth and immigration
- Development of transportation infrastructure such as roads and rail service

# Overlap of CAFEC LS programs and Mai Ndombe REDD+ program



# CARPE III: Overview of strategies

**Strategy 1:** *Reinforce management of protected areas* by supporting with ICCN to build capacity in aspects of PA management, including: delineation of PA boundaries; assuring legal framework; building ICCN operational and technical capacity; development, implementation and monitoring of adaptive management plans, including microzoning; strengthening the community participatory resource management approach; LE planning, implementation and monitoring; increasing understanding and planning for climate adaptation; developing mechanisms for monitoring status of PA objectives and management effectiveness; supporting capacity building for public and private partner engagement and coordination; financial sustainability.

**Threat:** all key direct threats

**Root Cause (s):** land use conflicts due to lack of coordinated LUP framework, absence of an enabling legal and regulatory environment that promotes sharing and rights to management of natural resources (community co-management), weak technical and operational capacity and will, insufficient financial capacity for management

# CARPE III: Overview of strategies

**Strategy 2:** Support local governance and a participatory approach to natural resource planning, management and sustainable use in HCV areas (Monkoto, Lotoi Lokoro, within ERZ zones) that emphasises the strengthening of rights, responsibilities and returns at household, group and community levels. Sub-strategies are similar to those under similar strategy in Salonga.

**Threat:** unsustainable hunting and fishing for subsistence and commercial bushmeat trade, habitat loss and land conversion from shifting agriculture

**Root Cause (s):** poverty, lack of preconditions for CBNRM (absence of an enabling legal and regulatory environment that promotes sharing and rights to management of natural resources & guarantee that potential revenue opportunities from sustainable natural resource management exist); limited market access

**Strategy 3:** Support sustainable management of forests by providing technical support to enterprises for forest certification, advocating for sustainable forest management policy, linking with the Global Forest Trade Network, building capacity of stakeholders, and facilitating collaborative/participatory management of forest resources.

**Threat:** logging (direct and secondary effects)

# CARPE III: Overview of strategies

**Strategy 4:** Apply integrated Wood Energy Solutions that reduce deforestation of priority forests by working at both ends of the charcoal and wood energy supply chains: agroforestry/charcoal production; market incentives for sustainable charcoal; promotion of alternative energies.

**Threat:** habitat loss and land conversion (including encroachment in protected areas), wood energy harvesting

**Root Cause (s):** dependence of local people on natural resources, substitution and alternative strategies are necessary because of the lack of suitable pre-conditions for effective CBNRM

**Strategy 5:** Foster a participatory community-based resource management approach to protect bonobo populations, including habituation of bonobos and development of economic incentives via ecotourism

**Threat:** unsustainable hunting and fishing for subsistence and commercial bushmeat trade, habitat loss and land conversion from shifting agriculture

**Root Cause (s):** resource conflicts, poverty

**Strategy 6:** Support implementation of pilot project in Mai Ndombe to promote standards in forest carbon planning, management and MRV in alignment with the DRC National REDD+ Framework Strategy, and to promote effective stakeholder participation and social safeguards. Sub-strategies under this strategy include sub-strategies also captured under strategies for community management of resources, wood energy solutions and sustainable forest management, as well as additional partnerships with private sector (e.g. SEBO, large-scale ag enterprise initiatives)