



**Wild Chimpanzee Foundation®**

**WCF Siège & Secrétariat**  
69 chemin de Planta,  
1223 Cologny, Switzerland

**WCF Head Office**  
c/o Max Planck Institute for  
Evolutionary Anthropology  
Deutscher Platz 6,  
04103 Leipzig, Germany

**Internet: [www.wildchimps.org](http://www.wildchimps.org)**

**Email: [wcf@wildchimps.org](mailto:wcf@wildchimps.org)**

**WCF West Africa Office**  
23 BP 238,  
Abidjan 23, Côte d'Ivoire

**WCF Guinea Office**  
BP 1487P  
Conakry, Guinea

**WCF Liberia Office**  
Opposite German Embassy,  
Congo Town, Monrovia, Liberia

## **Annual Report 2019**

**Activities of the Wild Chimpanzee Foundation for improved  
conservation of chimpanzees and their habitat in West Africa**



**February 2020**

# Table of contents

---

<b>Strategic Plan of the Wild Chimpanzee Foundation</b>	<b>5</b>
<b>General Conclusions 2019 and Outlook for 2020</b>	<b>6</b>
<b>Executive Summary for the Activities in the Taï-Grebo-Sapo Forest Complex, Liberia and Côte d’Ivoire</b>	<b>7</b>
<b>Executive Summary of the Activities in Guinea</b>	<b>9</b>
<b>1 Activities in the Taï-Grebo-Sapo Forest Complex, Liberia and Côte d’Ivoire</b>	<b>11</b>
1.1 Biomonitoring and law enforcement in Taï-Grebo-Sapo Forest Complex, Liberia and Côte d’Ivoire	11
1.1.1 Biomonitoring in Grebo-Kahn-Sapo corridor and Grebo-Krahn National Park, Liberia	11
1.1.2 Biomonitoring in Taï National Park, Côte d’Ivoire	12
1.1.3 Biomonitoring at priority sites in Taï National Park, Côte d’Ivoire	13
1.1.4 Biomonitoring in Cavally Classified Forest, Côte d’Ivoire	15
1.1.5 Community ecoguard program at Grebo-Krahn National Park, Liberia	16
1.1.6 Community watch teams at Sapo National Park, Liberia	17
1.1.7 Independent forest monitoring and advocacy in Côte d’Ivoire	18
1.2 Awareness raising in the Taï-Grebo-Sapo Forest Complex, Liberia and Côte d’Ivoire	19
1.2.1 Theater around Grebo-Krahn and Sapo National Parks in Liberia	19
1.2.2 Theater around Taï National Park, Côte d’Ivoire	22
1.2.3 Environmental education in Taï, Côte d’Ivoire	23
1.2.4 Proximity awareness in the Taï area, Côte d’Ivoire	23
1.3 Creation of protected areas and corridors in the Taï-Grebo-Sapo Forest Complex	24
1.3.1 Demarcation of Grebo-Krahn National Park, Liberia	24
1.3.2 Feasibility study for Krahn-Bassa Proposed Protected Area, Liberia	24
1.3.3 Transboundary exchange for sharing experience between Côte d’Ivoire and Liberia	26
1.3.4 Transboundary exchange for sharing experience between Côte d’Ivoire and Liberia	27
1.4 Alternative livelihood and capacity building	28
1.4.1 Ecotourism Nature and Culture in Taï National Park	28
1.4.2 Ecotourism: habituation of mangabeys, red colobus and chimpanzees in Taï	28
1.4.3 Ecotourism: habituation of chimpanzees in Djouroutou	29
1.4.4 Promoting ecotourism in Taï National Park	29
1.4.5 Ecotourism initiatives around Taï National Park	30
1.4.6 Alternative livelihood around Grebo-Krahn and Sapo National Parks	32
1.4.7 Alternative livelihood between Taï National Park and Cavally Classified Forest	36
1.4.8 Capacity building and national initiatives	36
<b>2 Activities in Guinea</b>	<b>40</b>
2.1 Cooperation and collaboration among local organizations	40
2.2 Environmental strategy	40
2.2.1 Biomonitoring with innovative methods by camera traps	40
2.2.2 Define the reference state of MBNP land cover (habitats) and monitor its changes	45
2.2.3 Law enforcement in the Moyen-Bafing National Park	46
2.2.4 Reforestation and assisted natural regeneration to restore degraded habitats	47
2.2.5 Restore heads of main rivers	48
2.2.6 Understand the dynamics of bush-fires in the Moyen-Bafing National Park	49
2.3 Social strategy	51
2.3.1 Creation of local governance framework to facilitate community consultations	51
2.3.2 Capacity building of local communities	52
2.3.3 Meetings of stakeholders	53
2.3.4 Cartography mapping to identify the community boundaries	55
2.3.5 Environmental awareness and communication	55
2.3.6 Social and Environmental Impact Assessment study	55
2.4 Problems encountered	56
<b>3 Organisational chart</b>	<b>57</b>
<b>4 Acknowledgements</b>	<b>58</b>

## Acronyms

---

AIP –	Annual Investment Plans
ANAFIC –	Agence Nationale de Financement des Collectivités Locales
CBG –	Compagnie des Bauxites de Guinée (Bauxite Company of Guinea)
CC3 –	3rd Community Consultation Framework
CCF –	Cavally Classified Forest
CCP –	Cadre de Consultation Communautaire de Proximité
CF –	Classified Forest
Club P.A.N. –	Nature Club for People, Animals and Nature
CSO –	Civil Society Organization
CVCD –	Comités Villageois pour la Conservation et le Développement
CWT –	Community Watch Teams
EU –	European Union
ESMP –	Environmental and Social Management Plan
FDA –	Forestry Development Authority
FLEGT –	Forest Law Enforcement, Governance and Trade
FMC F –	Forest Management Contract F
FMNR –	Farmer Management Natural Regeneration
GAC –	Guinea Alumina Corporation
GIZ –	Deutsche Gesellschaft für Internationale Zusammenarbeit
GKNP –	Grebo-Krahn National Park
GRET -	ONG internationale de développement, de droit français, qui agit depuis 1976 pour apporter des réponses durables et innovantes aux défis de la pauvreté et des inégalités
IDEF –	Initiatives pour le Développement Communautaire et la Conservation de la Forêt
IFC –	International Finance Corporation
IFM –	Independent Forest Monitoring
INSUCO –	International Social Science and Engineering Office
IO –	Independent Observation
IUCN –	International Union for the Conservation of Nature
IVS –	Inland Valley Swamp
KFW –	Kreditbank für Wiederaufbau
KBPPA –	Krahn-Bassa Proposed Protected Area
LDP –	Local Development Plans
LSED –	Local Socio-Economic Diagnoses
MAP –	Multi-Agri-Systems Promoters
MINEF –	Ministère des Eaux et Forêt
MBNP –	Moyen-Bafing National Park
NGO –	Non Gouvernemental Organisation
NP –	National Park
NOFNA –	Notre Forêt Notre Avenir
OCA –	Organisation Capacity Assessment
OGPR –	Office Guinéen de Parcs et Réserves
OIPR –	Office Ivoirien des Parcs et Réserves
OPRFT –	Observation pour la Protection et la Reconstitution de la Faune et de la Flore Tropicale
RAP -	Resettlement Action Plan

RNA – Assisted Natural Regeneration  
RNE – Ecological Natural Regeneration  
SCNL – Society for the Conservation of Nature of Liberia  
SECR - Spatially explicit capture-recapture  
SEIA – Social and Environmental Impact Assessment  
SECR – Spatially Explicit Capture-Recapture  
SMART – Spatial Monitoring and Reporting Tool  
SNP – Sapo National Park  
SODEFOR - Société pour le Développement des Forêts  
STBC – Société de Transformation du Bois du Cavally  
SWOT – Strengths Weaknesses Opportunities and Threats  
TBC – The Biodiversity Consultancy  
TCP – Taï Chimpanzees Project  
TLETC – Transboundary Law Enforcement Technical Committee  
TGSFC – Taï-Grebo-Sapo Forest Complex (stretching between Liberia and Côte d'Ivoire)  
TNP – Taï National Park  
UK – United Kingdom  
UNEP – United Nations Environment Program  
UNESCO – United Nations Educational, Scientific and Cultural Organization  
UOF – Universal Outreach Fondation  
USAID – American Agency for International Development  
US – United States of America  
VPA- Voluntary Partnership Agreement  
WABICC – West African Biodiversity and Climate Change  
WCF – Wild Chimpanzee Foundation  
ZIP – Zone Intégralement Protégée (Fully Protected Area)  
WARA Conservation / GALF - WARA Conservation qui signifie « fauve » dans le dialecte malinké, GALF- Guinée-Application de la Loi Faunique

# Strategic Plan of the Wild Chimpanzee Foundation

Goal	Protection of wild chimpanzees and their habitats								
Strategic Objectives	Strengthen support for conservation of chimpanzees and their habitat			Strengthen protection of chimpanzee habitat		Strengthen sustainable management of chimpanzees and habitat			Research
Project Objectives	Raised awareness	Alternative benefits for local communities	Increase environmental interest in policy decisions	Follow wild population trends	Improved park management	Sustainable funding for park management	Sustainable logging practices	Sustainable mining practices	Understand processes affecting population trends
Activities	Environmental education	Alternative sustainable livelihoods	Advocacy	Monitoring	Law enforcement monitoring	Ecotourism	Monitoring logging practices	Monitoring mining practices	Research
	Theatre	Community projects (honey, fishfarm, eco-agriculture)	Lobbying decision makers	Impact of conservation actions	Creation of new protected areas	Entrance fee	Impact of logging practices	Impact of mining practices	Developing new monitoring methods
	Film / Newsletter	Training of locals	Awareness meetings	Impact of logging	Protected area patrols	Animals habituation	Best practices management plan	Mitigation and offset mangement plan	Evaluating impacts
	Club PAN	Local employment (ecoguards, ecoguides, watch teams)	Consultancy to promote environment issues	Impact of bushmeat hunting	Management plan	Nature trails	Mandated independent observation	Capacity building	Chimpanzee mortality study - zoonose
	Discussion rounds	Ecotourism			Law application in courts		FLEGT process	IFC Standards	

# General Conclusions 2019 and Outlook for 2020

---

By the president of the Wild Chimpanzee Foundation, Christophe Boesch

The upgrading of the West African chimpanzees as ‘critically endangered’ by the IUCN in September 2016 was a turning moment in our fight for the conservation of this sub-species, because the international community recognized the dire situation in West Africa. This spurred our motivation and, thanks to increased funding, facilitated efforts to create protected areas for the remaining chimpanzee populations.

After the success of launching two new National Parks in 2018, the year 2019 was a year strongly oriented to reinforce this success by implementing the enlarged program of the eco-guards in Liberia to all these protected areas where the WCF has a major function of protection. WCF employed more community members, including women. New initiatives were installed and enforced by instructing the employees in SMART technologies. At the same time, the WCF continued working with FDA in Liberia to promote the creation of the new protected area in Krahn-Bassa where elephants and chimpanzees are still abundant.

**In 2019**, WCF tested a new approach of biomonitoring in Taiï (Côte d'Ivoire, TNP) and also in Grebo-Krahn (Liberia, GKNP) National Parks. Data collection will continue in 2020. Further, eco-guards pursued data collection in Cavally Classified Forest with an encouraging result: The deforestation rate slowed down this year compared to 2017 and 2018.

In parallel, in Guinea we have included up to 600 members of the communities in an unprecedented effort to manage the bushfire issue. The aim is to have these people work with the WCF for most of the year to protect the High Value Conservation sites and promote natural forest regeneration.

**In 2020**, we will expand the network of collaborators. Local expertise is precious when it comes to sensitize local communities towards nature conservation and regeneration, as well as for introducing sustainable practices for the benefit of nature and people, as has been the case in 2019 in all our three target countries. To that end, WCF will continue developing and supporting new partnerships and their engagement with local communities, wherever WCF engages in establishing protected areas. WCF will lead a large consortium of NGOs in Liberia to improve the fight against illegal wildlife traffic. In Guinea, the WCF has invited some expert organizations to join and implement activities requiring agro-ecological knowhow. In Côte d'Ivoire, WCF will maintain the continuously required efforts to protect the remaining natural habitat with its chimpanzees and other threatened wildlife.

In general, the reputation of the WCF in the West African region as a conservation organization with a solid accounting expertise and strong nature experience has brought different large donor organizations to signal their desire to develop important new projects in the West African region.

# Executive Summary for the Activities in the Tai-Grebo-Sapo Forest Complex, Liberia and Côte d'Ivoire

---

## ***Biomonitoring and law enforcement in the Tai-Grebo-Sapo Forest Complex***

In 2019, a biomonitoring survey focused on the proposed conservation corridor between Grebo-Krahn National Park (GKNP) and Sapo National Park (SNP) and revealed a high hunting pressure and a possible decrease of the chimpanzee population by 22.5%.

In Tai National Park (TNP) and GKNP, **a new approach of biomonitoring** was developed in 2019 and data collection will continue in 2020. This method uses camera traps for TNP, and a combination of line transects and camera traps for GKNP. Preliminary results from TNP identified 71 animal species including 46 mammals. The anti-poaching program in the research and ecotourism area in TNP revealed this year **the lowest encounter rate of illegal activities** (0.47 signs/km) since 2008, after 12 years of data collection.

In 2019, eco-guards pursued data collection in Cavally Classified Forest. **The deforestation rate slowed down this year compared to 2017 and 2018.** This is positive, but not enough to ensure the preservation of the forest. Additional government efforts are required in 2020 to stop deforestation for the sake of cocoa farming.

In 2019, a documentary on WCF's Independent Forest Monitoring (IFM) **on the deforestation issues in the Cavally Classified Forest** has been broadcasted in January 2020. The 8<sup>th</sup> IFM report and analyses of the evolution of the number of offences detected in the Cavally Classified Forest highlight an important decrease in the number of the most frequent offences between 2012 and 2018, demonstrating the importance of independent monitoring. WCF is leading a civil society initiative consisting in developing synergies with actors from the private and public sectors involved in the enforcement of the European Union Timber Regulation (EUTR).

WCF has participated with a local NGO called NOFNA in several surveys on bush-meat, cocoa trafficking, and corruption. **The denunciation of these traffics weakened the illegal activities, because the authorities reacted regularly to these denunciations.**

## ***Awareness raising campaigns in the Tai-Grebo-Sapo Forest Complex***

In 2019, **13,244 persons in Liberia and 18,777 in Côte d'Ivoire** assisted the WCF awareness activities in the **Tai-Grebo-Sapo Forest Complex**, implemented by the eco-guards and Community Watch Teams (CWT). In Côte d'Ivoire, the Tai eco-museum attracted 994 visitors.

**WCF initiated a survey in 15 villages** neighboring TNP to assess the impact of the theater performances in 2019 on the perception of the local population. **607 people** were interviewed and the interviewees who had seen the play said to better understand the role of OIPR and the benefits they have from the park. They were more willing to help protect the park (81.33%), than those who did not see the play (51.65%).

### **Creation of new protected areas and corridors in the Taï-Grebo-Sapo Forest Complex (TGSFC)**

**A feasibility study at Krahn-Bassa Proposed Protected Area (KBPPA) based on a camera trap survey** revealed that, except along two roads, no communities are located inside the major area of KBPPA. Community activities ensuring legal ways of providing livelihoods are largely not overlapping with KBPPA. The major human activity inside KBPPA is bush-meat hunting and WCF recommended the establishment of a national park, covering a maximum area of 235,222 ha, excluding any village along roads and leaving a buffer zone around these communities.

**WCF organized two meetings between Liberia and Côte d'Ivoire to improve the cross-border collaboration** in the TGSFC and brought together 33 members of the Transboundary Law Enforcement Technical Committee (TLETC), representing government institutions in charge of natural resource management. The committee will validate the cross-border plan to improve law enforcement in 2020.

Other actions in 2019 between Côte d'Ivoire and Liberia included a cross-border exchange of eco-guards and local NGOs for sharing experiences.

### **Alternative livelihoods and capacity building in the Taï-Grebo-Sapo Forest Complex**

In 2019, the Taï ecotourism program welcomed **150 persons, a number similar to 2018, bringing in to Gouleako village a benefit of up to 3400€, as well as supporting the employment of 10 persons full time and more than 10 occasional workers.** The habituation of chimpanzees, red colobus and mangabeys to human presence are in progress and allowed tourists to have a nice experience following primates in the park.

**In order to promote ecotourism in Taï National Park in the media and by tourism professionals,** we organized an “Eductour” in partnership with the Ivorian Office of Parks and Reserves (OIPR) and Côte d'Ivoire Tourisme. WCF has produced a flyer with the "Nature & Culture" program and the details of the activities. Thousand copies were distributed, and a bi-monthly ecotourism newsletter created.

WCF supports **alternative livelihoods** for the communities neighbouring TNP, 5 groups processing products derived from raw cocoa (20 women), 1 group producing makoré butter (5 women, 1 man), 4 groups equipped for the production of honey (9 men, 9 women).

**Seven community-based development projects** around TNP were launched in 2018 and 2019: The chicken and pork farms, the frozen food and dry fish project, as well as the Cassava and mill projects generated **12,480,000 FCFA** (19,000 €) to the benefit of more than 119 persons.

# Executive Summary of the Activities in Guinea

---

2019 was dedicated to the consolidation of the steps achieved in 2018, and to support necessary activities with the aim to finalize the **creation of the Moyen-Bafing National Park (MBNP)** in Guinea in 2020.

This park will represent the world's largest protected area to save the critically endangered West African chimpanzee (*Pan troglodytes verus*), with its 6426 km<sup>2</sup> inhabited by about 4300 chimpanzees. The MBNP is an offset site for two mining companies: Compagnie des Bauxites de Guinée (CBG) and Guinea Alumina Corporation (GAC), whose exploitation of bauxite in the Boké region in western Guinea, negatively impacts chimpanzees in that region. Hence the partners are undertaking a unique process of creating a national park and implementing an **offset scheme** in the same area. Based on the theory of change, an **action plan (2018-2020)** was developed for the implementation of priority activities and putting in place key structures and instruments awaiting the presidential decree (expected in 2020) to formally establish the park. Among other actions, this includes a long-lasting **community-consultation process** to obtain the approval of the local population living within the park, as well as to ensure the protection of the park. At the end of 2019, **78% of the results expected in the Action Plan had been reached.**

The exhaustive **biomonitoring study of the entire wildlife in the park**, and especially the chimpanzees, is developing as planned. Our methodology allows us to proceed without delay. We have completed an assessment in the 2 thirds of the park, and a first full inventory will be set up. The **chimpanzee** population is confirmed to be very large and to be present throughout the entire park. The camera-trap network put in place confirmed 44 mammal species to date, with the presence of another threatened species, the **West African lion**. The **hyena** seems present, but the species is very elusive, and we have not yet been able to capture an image, while the detected tracks seem clear.

A key objective of the action plan is to **increase the vegetation cover in the MBNP through restoration of the degraded landscapes**. However, given that there are approximately 36,000 people in this region, whose main source of livelihood is agriculture, it goes without saying that any landscape restoration program under consideration should be adapted to the agricultural practices of the area. Our approach includes the introduction of **Assisted Natural Regeneration (RNA)** in current agricultural systems for their conversion to innovative systems, impacting less the environment. A list of value chains has been identified in order to have a significant impact on the populations and to comply with the conservation objectives of the MBNP. We consolidated the system of farmer-leaders, and they were used as examples for other members of the community in introducing new techniques and management of their farms. They are currently able, together with the WCF officers, to organize training sessions for other interested community members.

We proceeded to re-establish the functioning of the ecosystem in key degraded areas of the MBNP to strengthen the resilience of the animal populations and provide essential ecosystem services needed by the local population: We have up-scaled the **natural regeneration and reforestation project in 2019 by creating three new tree nurseries and worked on 90 ha of degraded land**. The participatory process was time-consuming, as well as the development of the approach. We discussed and formalized the agreements with all village participants. For the

next rainy season in 2020, based on the lesson learned, we expect to work on a minimum of 200 ha of degraded land.

Thanks to the financial support of our donors, we were able to build up on the **community consultations meetings (CC3), the participatory mapping and planning processes with the local communities (CCP1 and CCP2)**, for launching the mechanisms of community structuring and negotiations on the park management. Implementing these activities to create the MBNP by means of participatory process with full support and involvement of all key stakeholders are essential for the park creation and gazettelement. Representative committees at several levels of decision (local, communal, and national) will thus consult the communities in order to be able to support the final agreements on the limits during the CC4 in 2020.

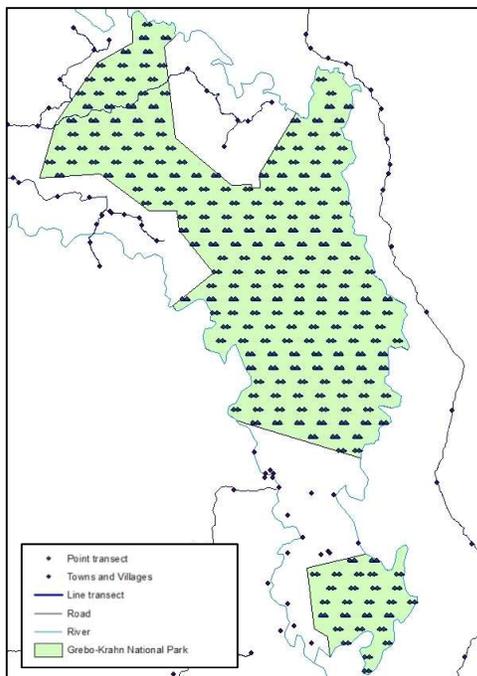
The **participatory mapping studies have shown complex land-use**, dispersed, and with overlaps between villages, where hierarchical relationships and social claims are to be considered. Additional studies on forest cover, habitat connectivity sites, high conservation value sites, and areas heavily impacted by bushfire help us to integrate into our community approach all important elements related to the management of village territories within the park boundaries. These points will be contained in the Land Management Plan of each territory managed by a committee, and followed by the park management team.

# 1 Activities in the Tai-Grebo-Sapo Forest Complex, Liberia and Côte d'Ivoire

## 1.1 Biomonitoring and law enforcement in the Tai-Grebo-Sapo Forest Complex, Liberia and Côte d'Ivoire

### 1.1.1 Biomonitoring in Grebo-Krahn-Sapo corridor and Grebo-Krahn National Park, Liberia

From June to September 2019, a biomonitoring survey focusing on 82 line transects was conducted in the area of the **proposed conservation corridor between Grebo-Krahn National Park (GKNP) and Sapo National Park (SNP)**. Four biomonitoring teams consisting of 16 community members, FDA team leaders, and WCF supervisors underwent training in June 2019 prior to the survey. The total distance covered along the transects during the survey was 145.25 km. Observed signs of the critically endangered western chimpanzees allowed for an estimate of its current population, which was established at 533 individuals with a confidence interval of 248-1147 (CV=40.06%). Compared to a previous survey conducted in the area in 2015, when a population size of 688 individuals was estimated (CI=356-1328; CV=30.69%), the chimpanzee population seems to have decreased, but the confidence intervals are too big to be able to confirm this trend. The estimate considers the number of chimpanzee nests that remain low and irregularly dispersed across the study area. The hunting pressure in the area seems to be very high and especially the western half of the potential corridor, closer to SNP, as well as areas around mining camps, seem to be avoided by or empty of wildlife. However,



*Design for the new biomonitoring program at Grebo-Krahn National Park, covering 250 line transects and 500 camera trap deployments (point transects)*

the preliminary results present a decrease in hunting signs between 2015 and 2020 (1.59 signs/km in FMC F in 2019, instead of 3.08 in 2015, and 1.21 in the community area, instead of 3.54 signs/km in 2015). This decrease is worrying because, as there were no awareness activities in this region so far, it probably reflects an **effective decrease in wildlife**.

Following the new camera-trap methodology developed at Tai National Park (TNP) in close collaboration with the Max-Planck Institute (MPI) for Evolutionary Anthropology, an intense biomonitoring program started at **Grebo-Krahn National Park (GKNP)** in December 2019, using a combination of line transect and camera traps. In early December 2019, an experienced PhD student from the MPI trained 10 teams consisting of 40 community members and 10 team leaders from the FDA, as well as WCF supervisors in the use of the new methodology. We deployed transect surveys and 140 new camera-traps immediately after the training. In total, the survey covers 250 line transects of 1 km length each, as well as 500 camera trap locations (two camera traps systematically deployed in close vicinity

of the transect). The new methodology will help effectively combining information from the two techniques and gathering information on wildlife and illegal human activities. Furthermore, it allows understanding current distribution patterns for key species, as well as providing estimates of population sizes for species with a sufficient number of observations per species during the survey. The survey is supposed to be completed by the beginning of May 2020 and will be followed by the analysis of the camera-trap videos using an online-based analysis software (SAMBA).



*Community members, staff from the Forestry Development Authority and WCF staff being trained in the new biomonitoring methodology in December 2019*

### **1.1.2 Biomonitoring in Taï National Park, Côte d'Ivoire**

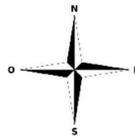
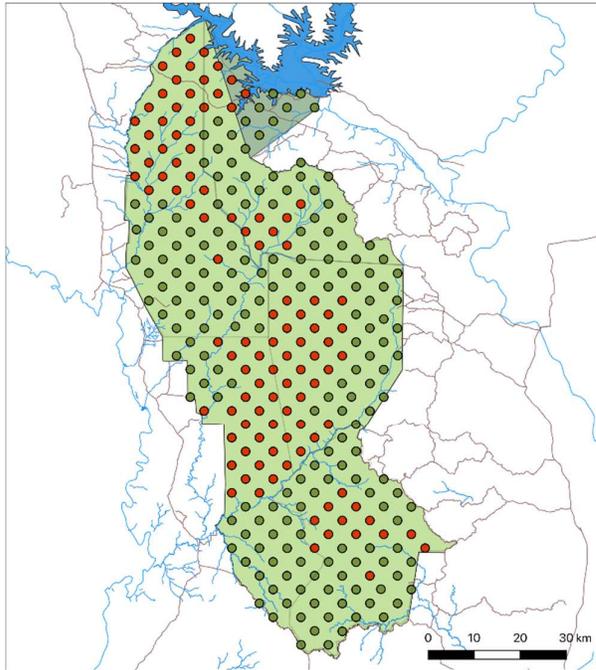
In cooperation with the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany, WCF has developed a new biomonitoring method in Taï National Park (TNP) using camera-traps. Indeed, the line transect method used in biomonitoring data collection may be rather imprecise and limited when direct or indirect observations (nests, dung) are insufficient to confirm precise variations and abundance.

Thus, 291 point transects are planned, distributed over the entire park according to the sampling design. To establish 10 teams for data collection, WCF recruited 10 supervisors including 7 Ivorian students, 3 French volunteers, 20 committee members from villages around the TNP, and rangers from the Ivorian Office of Parks and Reserves (OIPR).

Training on this new method took place between February 27 to March 11 in Soubré and in the TNP. From March to October 2019, the teams placed 236 point transects. Cameras remained on transects for 71 to 135 days.

We recruited and trained six enumerators on thousands of videos in August 2019, and, at the end of the year, the analyses of **31235 videos**, including **5303 empty videos** (17%) of 137 point transects was completed. 71 animal species have been identified, including 46 mammals throughout the whole park. Flagship species such as elephant, pygmy hippopotamus, and chimpanzee are present in the whole park with a larger population in the areas of Taï, Djouroutou and Djapadji compared to the area of ADK and Soubré.

Initially scheduled to end in December 2019, the missions of installation and camera-traps removal are ongoing until March 2020. The analysis will be done in 2020 to determine the densities, abundances of the different animal species and their spatial distribution.



*Sampling design of 291 point transects*

The delay in data collection is linked to several factors, such as the late start of the study (end of March 2019 instead of beginning of January 2019) and non-availability of the OIPR rangers due to their patrolling activities (in April, June, November and December 2019, four patrolling missions lasting several days took place).

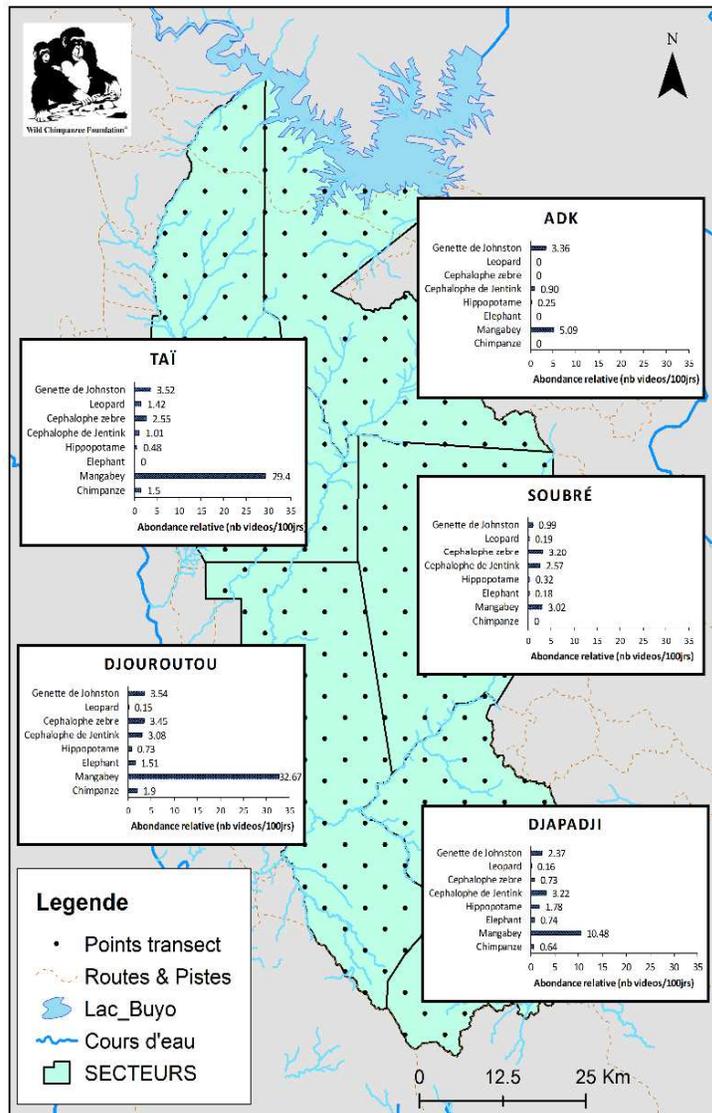
At the end of this pilot study, different constraints encountered will be analysed and recommendations will be provided for a better implementation of camera-traps across the whole TNP in the future.



*Camera-trap installation in Taï National Park*



*Female chimpanzee with her infant in Taï National Park*



*Distribution of flagship species throughout the five areas of the Taï National Park*

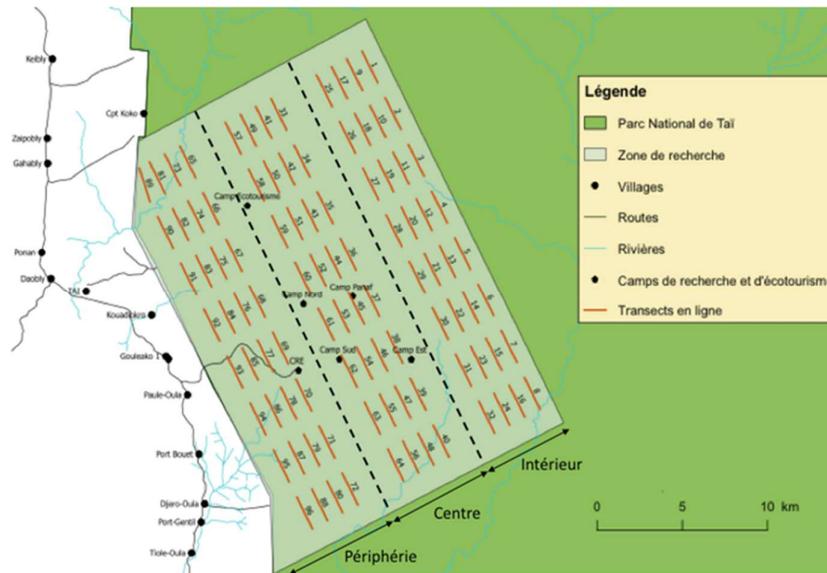
### **1.1.3 Biomonitoring at priority sites in Taï National Park, Côte d'Ivoire**

The "anti-poaching project" in the Taï research and ecotourism area is carried out since 2008. It aims at supporting OIPR to strengthen surveillance in this area and to quantify the effect of this reinforced permanent presence and law enforcement on wildlife population and illegal activities. Started in December 2018, the **12<sup>th</sup> phase of biomonitoring data collection** used the same methodology and design of 96 lines transects as during its 11<sup>th</sup> phase in 2018. It ended in November 2019. Signs of illegal activities, and presence of groups of monkeys were collected. The anti-poaching team comprised one supervisor (Marie HIREL) and four assistants of the Taï Chimpanzee Project.

Results of the 12<sup>th</sup> phase reveal the lowest encounter rate of **illegal activities (0.47 signs/km)** since 2008. They are located mainly at the periphery of the forest (79% of all poaching signs).

Signs of illegal activities decreased by 25% between phase 11 and 12 and by 79% since 2008 which can be considered an excellent result due to support to law enforcement and permanent presence of research and surveys.

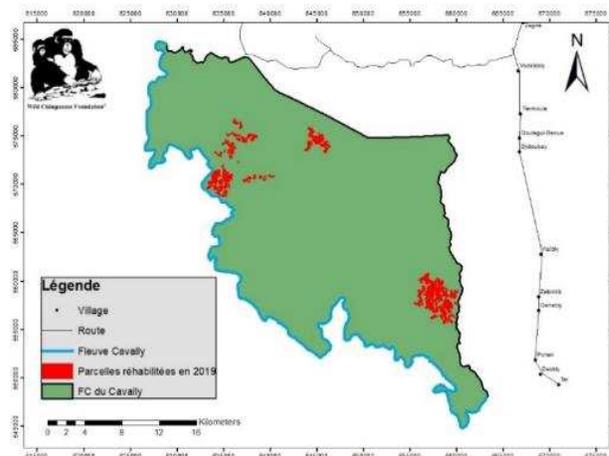
Regarding primates, no significant difference was observed between phase 12 and 11, nor since 2008, meaning that the reduction of illegal activities is still not sufficient or not long enough to allow an increase of the monkey population.



*Sampling design of 96 lines transects*

#### **1.1.4 Biomonitoring in Cavally Classified Forest, Côte d'Ivoire**

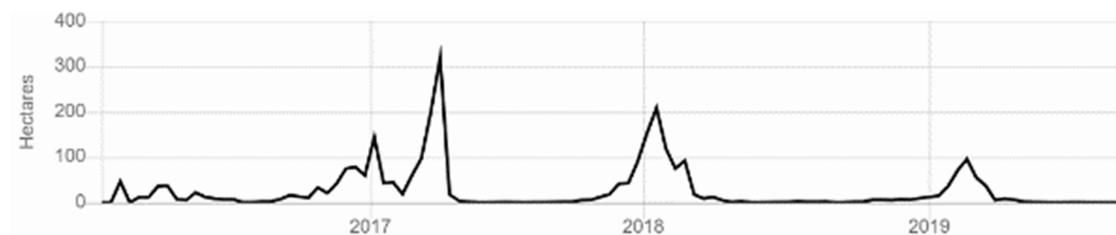
Agriculture remains the main threat to Cavally Classified Forest (CF). The Government has shown its determination to protect the Cavally CF against illegal human activities (agriculture, gold panning, poaching) and declared that no cocoa farm will be tolerated. Therefore, WCF supports the process of rehabilitating Cavally CF and carries out monitoring with the help of trained community ecoguards who monitored that **1454.08 ha** of illegal cocoa plantations were cut by SODEFOR in 2019.



*Map of rehabilitated forest areas in 2019*

Monitoring was done over 1,525 ha and revealed that the abandoned cocoa farms almost tripled from 2017 to 2019. They represent 5.84% of the area monitored. While this rate remains low given the extent of deforestation, the analyses done by Image (Image is an online monitoring platform developed by Vivid Economics in 2016 for the Ivorian Government) revealed that the deforestation rate

slowed down since 2017 (see figure below). In addition, we noted the presence of 8 primate species present in Cavally CF and some species classified as endangered such as chimpanzee, red colobus and the pygmy hippo.



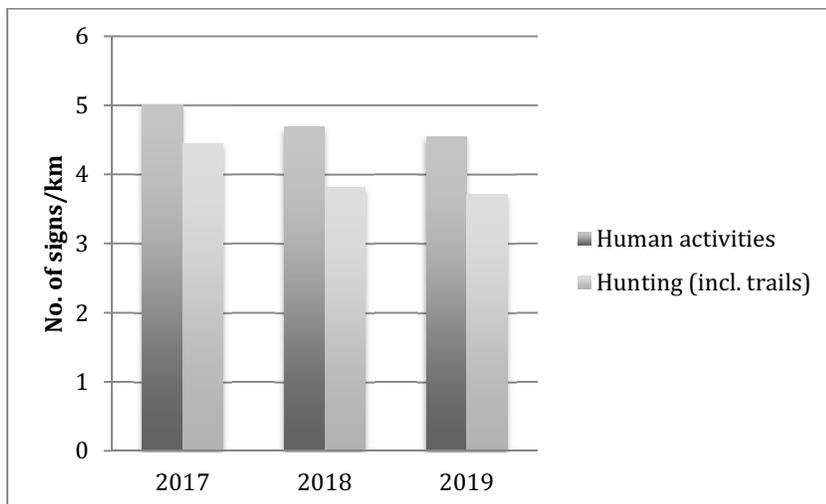
*Loss of forest cover in Cavally Classified Forest: Number of hectares of forest lost registered every 12 days since beginning of 2016 (from the website Image, August 2019).*



*Eco-guards and rangers of SODEFOR*

### **1.1.5 Community ecoguard program at Grebo-Krahn National Park, Liberia**

Since the beginning of 2019, the frequency of forest patrols by the community ecoguards has significantly increased, ensuring an almost permanent presence in Grebo-Krahn National Park (GKNP). **The 7 community ecoguard teams, which consist of 28 community members (including 10 women) and 7 team leaders from the Forestry Development Authority (3 rangers, 4 auxiliaries, the latter including 1 woman) completed 55 patrols in 2019, covering 1,771.14 km in 354 grid cells during 3,248.97 patrol hours.** In total 93 grid cells exist in GKNP, which thus could be visited repeatedly in 2019. During the forest patrols, the 7 teams recorded a total number of 8,056 human activities, including 6,566 observations of hunting. Without the hunting trails observed that possibly might be double-counted, the number of hunting signs drops to 3,440. Other observed human activities inside GKNP were mining, farming, logging and chewing stick extraction. For 2019, the rate of observed human activities is 4.55 signs/km, with a rate of hunting signs of 3.71 signs/per km. Compared to 2018, when the rates of human activities and hunting were established at 4.92 signs/km and 4.44 signs/km, respectively, the level of human activities has reduced by 7.5%, and the level of hunting by 2.6%. Compared to 2017, the decrease of human activities and hunting is 9.2% and 16.4%, respectively. During their patrols, the teams made 1,172 direct and indirect observations of wildlife, including records of key species such as western chimpanzees, forest elephants and pygmy hippos.



*Observed rates of human activities in general and hunting in particular in Grebo-Krahn National Park from 2017 to 2019. From 2017 to 2019, human activities reduced by 9.2%, hunting reduced by 16.4%*

These results are encouraging, especially considering the fact that no ranger patrols are being conducted by the Forestry Development Authority (FDA) at GKNP, due to the lack of a sufficient number of rangers. The community ecoguards do not have any mandate to confiscate or arrest. Nevertheless, over the years, the community ecoguard program has proven to be a successful tool for the effective involvement of local communities in the protection and management of a protected area. Especially since women are part of the community ecoguard teams (first women started with the program in April 2018), the program seems to have a wider impact, creating tangible benefits for GKNP as well as team members, their families and generally the host communities.

Based on the success at GKNP, the FDA has asked WCF to help with introducing the community ecoguard program to all protected and proposed protected areas in Liberia, including the SMART software (Spatial Monitoring and Reporting Tool), that is being used for patrol planning and reporting. The aim is to establish a whole community ecoguard unit at FDA and to ensure that the collected data are centralized in a national database and may be effectively used for the management of protected areas.

### **1.1.6 Community watch teams at Sapo National Park, Liberia**

From January to December 2019, **WCF continued to support 100 community members at Sapo National Park (SNP) through the community watch team (CWT) program.** The 10 CWTs continued to participate in FDA ranger patrols and completed 82 forest and awareness raising patrols in 2019, though the full information for November and December 2019 has not yet been received from the field. Furthermore, they continued to monitor access points around SNP. In 2019, only minor mining activities had been observed inside SNP while by far the largest number of illegal activities were linked to hunting and, to a lesser extent, illegal extraction of Non-Timber-Forest-Products. In December 2019, 20 CWT members participated in the community ecoguard patrols at GKNP, in order to get more familiar with the program. In agreement with FDA, throughout 2020, the CWT program will gradually be transformed into



*WCF staff with FDA supervisors and one of 10 community watch teams at Sapo National Park*

a community ecoguard program that will take over the most qualified members of the CWT, while other CWT members will be engaged in other programs, such as ecotourism, road maintenance etc.

### **1.1.7 Independent forest monitoring and advocacy in Côte d'Ivoire**

Since 2014, WCF has been mandated by the Société de développement des forêts (SODEFOR) to conduct independent forest monitoring (IFM) in three classified forests in Côte d'Ivoire. Independent forest monitoring aims at strengthening law enforcement and sustainability in the forestry sector, as well as improving overall forest governance to ensure the protection of chimpanzee habitat. Pursuant to its mandate, WCF conducts field missions and analyses documents related to forest management and logging activities in the classified forests of Cavally, Yaya and Besso, in order to identify and report any irregularity or offense committed in these forests.

**In 2019, WCF analysed forest management documents and conducted a joint mission in**



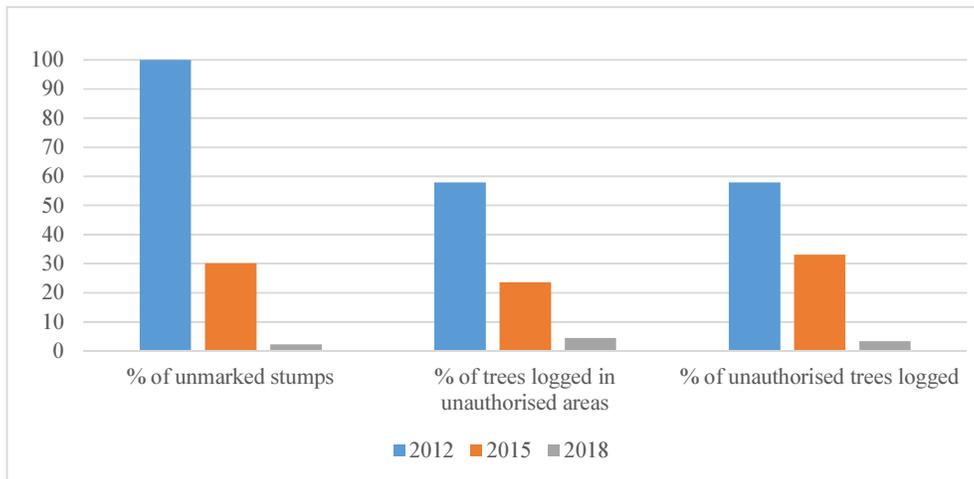
*Team member and SODEFOR agents recording offences committed by the logging company STBC*

**Cavally Classified Forest (CF), together with SODEFOR and the private operator STBC. This resulted in WCF publishing an IFM report on legal compliance of logging activities carried out in Cavally CF in 2018. A documentary on deforestation issues in**

**Cavally CF and WCF's IFM work has been made**

throughout the year and will be broadcasted in January 2020. WCF's IFM mandate reached its term in April, and its renewal was still pending as of December 2019. Discussions with the Ministry of Water and Forests are expected to reach a successful outcome in the coming months.

In order to evaluate the impact of IFM after several years, a study was conducted in 2019 to analyze the number of offenses detected in Cavally CF. The results of this work highlight a huge decrease in the number of most frequent offenses between 2012 and 2018. For example, the number of unmarked stumps compared to the total number of stumps fell from 100 % in 2012 to only 2.4 % in 2018.



*Number of offences detected in the Cavally Classified Forest (2012-2018)*

In view of this success, 17 Ivorian civil society organizations have been trained in IFM and forest management by WCF in 2019, with 7 training sessions taking place throughout the year. This allowed them to assist WCF in its work and to start developing IFM initiatives.

Together with our local NGO partner Notre Forêt, Notre Avenir (NOFNA), WCF is a party in a court case against two prominent members of a criminal network responsible for a large part of the deforestation taking place in Cavally Classified Forest. This network organizes the setting up and trafficking of illegal cocoa plantations on forest grounds and is heavily involved in various corruption scandals revealed by investigations in the last years. As of December 2019, WCF was still waiting for a hearing date to be set by the Daloa Court of Appeal.

WCF participated in various civil society meetings and public consultations on such topics as sustainable forest management, sustainable logging practices, timber traceability and transparency in the forest sector. In total, 16 joint advocacy papers were produced in 2019.

Finally, in the context of the European Union Timber Regulation (EUTR), WCF has participated in the Timber Regulation Enforcement Exchange in London in March 2019 and has, since then, been working on guidelines aimed at assisting European importers of Ivorian timber in carrying out their due diligence obligations.

## **1.2 Awareness raising in the Tai-Grebo-Sapo Forest Complex, Liberia and Côte d’Ivoire**

### **1.2.1 Theater around Grebo-Krahn and Sapo National Parks in Liberia**

In 2019, the awareness raising activities implemented by the community ecoguards and community watch teams reached 1,318 and 607 persons respectively. Moreover, several large theater awareness-raising campaigns were conducted by WCF in collaboration with Eddie Theater Production. In total, **13,244 persons were sensitized by all theater awareness raising activities at SNP, GKNP and in Monrovia and Paynesville.**

At Sapo National Park (SNP), two theater tours showing the play “Let’s find common ground for Sapo National Park” were conducted in collaboration with Eddie Theater Production in Zone 2 and 3 around SNP, in January and in March 2019, respectively. Communities were

delighted the theater play and found it very informative. A post-theater impact survey was conducted in March 2019, comparing community members who had witnessed the play and those who had not, to understand how the theater play influenced their attitude. Results indicate the high educational value of the play, while still providing enjoyable entertainment to the communities. A film produced about the play (<https://www.youtube.com/watch?v=ycV-h-lyOao>) can now be used for additional awareness raising activities. A radio version of the theater play is also available which will be broadcasted regionally and nationally in early 2020.

Around Grebo-Krahn National Park (GKNP), two trainers from Eddie Theater Production trained amateur theater groups comprising 14 community members from communities around GKNP, both in River Gee and Grand Gedeh Counties. After the training, the amateur theater groups performed the play in communities around GKNP as well as in the county headquarters in Fishtown (River Gee County) in March 2019 and in Zwedru (Grand Gedeh County) in April and May 2019, respectively. In total, the amateur theater groups gave 29 performances. In River Gee County, the theater play focused on the benefits brought to communities through the creation of GKNP, for example through the community ecoguard program. In Grand Gedeh, the theater play dealt with the increased influx of foreigners from Côte d'Ivoire, looking for land to establish cocoa plantations – a dangerous development, risking significant loss of forest for local communities.

The success of the Sapo theater play and the awareness about protected species were also reflected in awareness raising activities in Monrovia and Paynesville. The Sapo play was shown at the FDA headquarters in January 2019 as well as at an event in the Paynesville City Hall in May 2019. Short theater plays about the critically endangered West African chimpanzee, other protected species in Liberia and the Wildlife Conservation and Protected Area Management Law were shown in a youth center in Paynesville, as well as during the International Day of Biological Diversity in May 2019, and the World Chimpanzee Day in July 2019.



*Theater performance by Eddie Theater Production around Sapo National Park*

WCF contributed to the celebration of the International Day of Forests in March 2019 in Gbarnga. Together with Fauna & Flora International, WCF supported the painting of a mural to raise awareness about the importance of forests and their biodiversity.



*Mural painted during the International Day of Forests in Gbarnga, to raise awareness about the importance of forest and their biodiversity*

Since August 2019, **wildlife clubs were established at 6 out of 15 schools operating around GKNP**. Each wildlife club so far has 10 members (5 girls and 5 boys). Through the activities with teachers and school children, awareness should especially be raised about protected species, national laws dealing with wildlife and, generally, about conservation and the importance of forest and biodiversity. A newly recruited community engagement assistant is working closely with the FDA and a local partner organization (CENFOR) to develop messages, programs and materials for the school children. Furthermore, the local amateur theater groups established in early 2019 are working with the wildlife club children to develop songs, dances and other pieces that can be performed for the parents and other community members. The schools will also be involved in preparing programs for species events, such as World Wildlife Day, International Day on Biological Diversity and World Chimpanzee Day.



*Members of the newly created wildlife clubs around Grebo-Krahn National Park, here in Bao Town (left) and Tempo (right), both in Grand Gedeh County*

### ***1.2.2 Theater around the Taï National Park in Côte d'Ivoire***

WCF in collaboration with OIPR and "Alma Production", a theater company, have developed a play called "Parc National de Taï: Y'a pas drap? ". The aim of this play was to point out the dangers of poaching and illegal gold panning for the Taï National Park (TNP), the relationship between OIPR and the local population as well as the consequences of mismanagement of the community-based development projects granted to the surroundings populations.

WCF, Alma Production, OIPR and a local NGO NOFNA, went from **March 14 to April 02, 2019, to 15 villages around TNP**. Each performance was followed by a film projection on the chimpanzees of the TNP and explaining WCF conservation activities. A total of **15,983** people attended the different shows, including 74.5% men and 25.5% women,

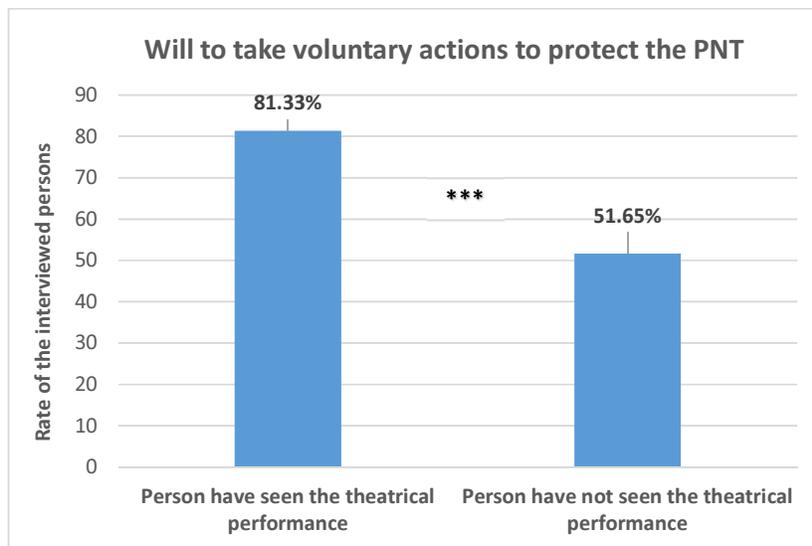


***Theater performances in villages around the Taï National Park***

To assess the impact of the theater tour of 2019 on the perception of local population compared to the conservation of the TNP, WCF initiated a survey study in the 15 villages where the theater performances had taken place. **607 people** were classified according to whether they had seen the theater performance (54.7%) or not (45.3%) and questioned in 3 points: (1) socio-economic aspects of the interviewed persons, (2) their view on advantages and disadvantages linked to the presence and conservation of the TNP, (3) their view on illegal activities and participation in awareness-raising activities.

Over 95.5% of the interviewed persons declared that they benefit from the ecosystem of the park that contributes to their well-being through regular rains, clean water and healthy atmosphere. According to the statements that **the TNP can be a source of development for their village and employment for young people**. Among the people who share this view, **80.72% had followed the theater performance whereas, of those who did not see it, only 60% were of this opinion**.

In addition, **98% of the interviewed persons support preservation of the park**, even though **over 75% deplore the lack of funding for individual or community projects**. The most illegal activity highlighted was gold panning (**85.5% declare that extraction procedures have a negative impact on environment, health, water etc**, whereas 14.5% declare that these procedures have no negative impact). The interviewees who were present during the theater representation **understand better the role of OIPR and the benefice they gain from the TNP. They are also more willing to help protect the park (81.33%) than those who did not see the play (51.65%)**.



*Statement of interviewed persons willing to take voluntary actions to protect the Taï National Park compared to their participation or not in theatrical performances: Fisher's Exact Test  $p < 0.001$ .*

### **1.2.3 Environmental education in Taï, Côte d'Ivoire**

This year, 994 visitors were registered in the Taï eco-museum where awareness activities are offered to the population, especially to pupils, students and high school students of the area. The results of research on Taï chimpanzees, and different nature-documentaries are presented, followed by “question and answer” sessions overseen by a WCF animator. Visitors are invited to a reading session to improve their knowledge on nature. Taï eco-museum registered more than 100 people in February, March, and **994 people in total have participated** in one of the ecomuseum's awareness activities, **45.67% women and 54.32%.**

### **1.2.4 Proximity awareness in the Taï area, Côte d'Ivoire**



*Awareness of different communities at Kouassikro and Keibly*

In 2019, **67 proximity awareness sessions were held in the Taï area**, including 31 villages. Last year, **1,793 persons** (1,429 men, 247 women and 117 children) attended the sessions, compared to 1,042 persons in 2018.

## **1.3 Creation of protected areas and corridors in the Tai-Grebo-Sapo Forest Complex**

### **1.3.1 Demarcation of Grebo-Krahn National Park, Liberia**



*Staff from the FDA GIS department (left) and field supervisor from WCF (right) marking the future location of beacons along the boundary line of Grebo-Krahn National Park*

The boundary demarcation of GKNP was completed in June 2019. Work was conducted in full collaboration with local communities. The demarcation is an important step for an effective management of GKNP. Persons involved in illegal activities may no longer claim that they did not know the limits of the park. The next step will be the planting of beacons and signboards along the boundary of GKNP. This should have been done in 2019 but, due to budget constraints and an extremely long rainy season, it had to be postponed to 2020.

### **1.3.2 Feasibility study for Krahn-Bassa Proposed Protected Area, Liberia**

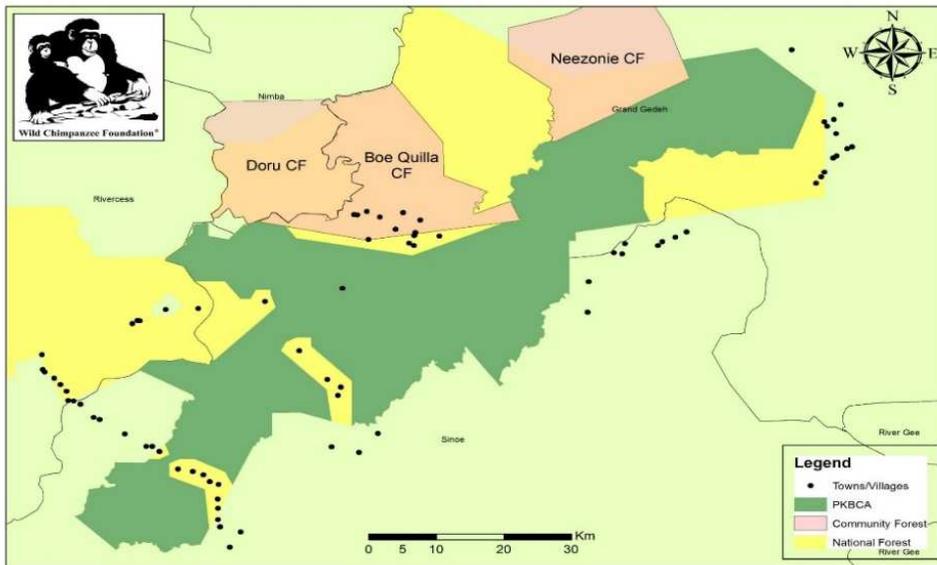
At the beginning of 2019, two last activities were completed for the **feasibility study at Krahn-Bassa Proposed Protected Area (KBPPA): a camera trap survey focusing on key conservation species and a socio-economic survey.**

The synthesis of all surveys, including those conducted at KBPPA prior to 2019, confirmed the outstanding biodiversity value of KBPPA. This result is buttressed by the presence of Liberia's second largest population of the Critically Endangered West African chimpanzee, numerous observations of signs of other threatened species, including camera-trap footage, such as the Critically Endangered slender-snouted crocodile, the Endangered pygmy hippopotamus, Jentink's duiker and Gola Malimbe (revealing the easternmost population of this rare bird ever observed), Vulnerable forest elephants and West African Dwarf crocodile, and at least 4 species of plants (including a new genus) and 2 amphibians new to science. In total, 30 threatened and near threatened species of mammals, birds, amphibians and reptiles were recorded. The beetle and moth collections likely contain hundreds of species being first country records for Liberia or even being new to science, but the complete analyses of the collection may take years.



*Forest elephants recorded during the camera trap survey at Krahn-Bassa Proposed Protected Area*

The demographic study showed that, except along two roads, no communities are located inside the major area of KBPPA. Community activities ensuring legal ways of providing livelihood are largely not overlapping with KBPPA. The major human disturbance inside KBPPA is illegal hunting.



*Currently proposed Krahn-Bassa National Park (in dark green), excluding all legal towns/villages around Krahn-Bassa Proposed Protected Area*

Based on the results of the various surveys, WCF recommended the establishment of a national park, **covering a maximum possible area of 235,222 ha**, which excludes any towns along roads and leaves a buffer zone around these communities. A major problem delaying further pre-gazettement activities was an existing overlap with community forest applications for commercial purposes. However, in December 2019, the board of the FDA decided that the 3 major overlapping community forest applications will be canceled and that the priority shall be given to the establishment of the national park. Furthermore, the FDA board gave the full mandate to FDA and WCF to proceed with the pre-gazettement activities and to ensure the establishment of the national park as soon as possible.

### ***1.3.3 Cross-border exchange for sharing experience between Côte d'Ivoire and Liberia***

During 2019, the Transboundary Law Enforcement Technical Committee (TLETC) focused its activity on the organization of the **second meeting of the committee on March 24 and 25, 2019, in Monrovia-Liberia** and of the **third meeting in Abidjan- Côte d'Ivoire on September 24 to 25, 2019**, but also on missions following up on the implementation of the committee's recommendations. This technical committee aims at developing a plan to improve cross-border collaboration in the domain of law enforcement in the Taï-Grebo-Krahn-Sapo (TGKS) Forest Complex between Liberia and Côte d'Ivoire. The meetings brought together each time the 33 members of the TLETC including 16 Ivorians and 17 Liberians representing government institutions in charge of natural resource management (58%); territorial administrations (12%); the Ministry of Justice (12%); representatives of the populations living around the forest complex (6%), NGOs (12%) and observer members from sub-regional initiatives such as ECOWAS and Mano River Union (MRU) and international organizations.



*The opening ceremony and participants during the third meeting of the Cross-border Law Enforcement Technical Committee*

During these various meetings, several recommendations were made in order to achieve the main objective of the committee which is the effective application of natural resource management laws in order to preserve the TGKS forest complex.

These meetings produced two major results:

- **The drafting of the documents of national procedures on the management of the natural resources of the two countries;**
- **The drafting of a cross-border action plan which will be finalized in 2020 (with the support of two legal consultants recruited from Côte d'Ivoire and Liberia).**

As for the monitoring missions of TLETC activities, they have shown an improvement in the fight against illegal gold mining in the TGKS complex, especially in the department of Tabou, and in the context of awareness-raising through sessions organized in the county of River Gee (Liberia) and in the departments of Tabou and Taï (Côte d'Ivoire).

### ***1.3.4 Cross-border exchange for sharing experience between Côte d'Ivoire and Liberia***



*Left - Liberian and Ivorian participants preparing to collect honey in order to compare the working methods during the workshop dedicated to women taking part in income-generating activities (Sayuo, Liberia); Right - participants of the ecotourism awareness workshop and WCF agents (eco-guides and supervisory staff) entering the Taï National Park. Côte d'Ivoire)*

The participants had the opportunity to visit various projects, such as fish-farming in Sayuo and beekeeping in Garleo, where the Liberian women explained how they are implementing the projects and the financial and social benefits they are receiving from them. In Côte d'Ivoire, they had the opportunity to visit the Fresh Frozen Food project in Zagné, beekeeping in Keibly, cassava farming in Tienkoula. Cocoa products were presented in Taï. Another cross-border exchange workshop organized in April 2019, allowed women from SNP and GKNP to experience the TNP ecotourism project and to discuss with the eco-guides. During this workshop, participants realized that, if Liberia wants to achieve some progress in ecotouristic activities, higher commitment, private investors, and political will would be needed. WCF therefore organized a follow-up workshop on ecotourism in December 2019, which involved Liberian representatives from the FDA, Environmental Protection Agency (EPA), Ministry of Information, Cultural Affairs and Tourism (MICAT) as well as the Liberia National Tourism Association (LINTA). The workshop allowed Liberian participants to meet with the Ivorian Tourism Office, as well as the management of the OIPR.



*Meeting at the headquarters of OIPR and Ivoire Tourism in Abidjan with Liberian delegation and WCF team.*

The meetings fostered stimulating informative discussions, and the MICAT is eager to establish a collaboration with the Ivorian Tourism Office in order to establish a tourism office in Liberia. The workshop participants also had the occasion to visit the TNP ecotourism project, including an overnight stay inside the park, experiencing village life and a cultural performance in Gouléako. They found the workshop very inspiring and expressed high motivation to support and realize ecotourism activities in Liberia.

## **1.4 Alternative livelihood and capacity building**

### **1.4.1 Ecotourism Nature and Culture in Taï National Park**

Two ecotourism sites are open to visit Taï National Park (TNP). One is located next to the city of Taï and the second one, 80 km to the south, near Djouroutou. WCF is developing the first site in collaboration with OIPR and is supporting OIPR to manage the other, notably by habituating chimpanzees to the presence of humans.

The ecotourism community-based project in Taï was marked this year by an important restructuring of the WCF staff in Taï with the arrival of a new coordinator and the replacement of certain eco-guides and assistants. The site offers two types of services to tourists. One is the "Nature" component allowing tourists to observe mangabeys and colobus monkeys in their natural habitat, and to discover the ethno-botanical circuit of large trees. The second is the "Culture" component offering tourists the opportunity to spend a day in Gouléako to discover traditional dances and to sleep in a traditional hut.

In 2019, the project **welcomed 150 people, about as many as in 2018. Among them, 121 were tourists and 29 visitors participating in workshops or the Eductour organized by WCF.**

All visitors were satisfied by their stay in the forest and at Gouléako, but less happy with the accommodation in Taï. The mayor and hotelkeepers of Taï were informed and advised to improve services. Activities, catering and staff met great success with a note of 9/10.

*Tableau: Summary of notes given by tourists after their stay in Taï, average for 2019*

Stay at hotel in Taï	Stay in forest	Stay in Gouléako	Catering in the forest	Activities in the forest	WCF staff
7,0	9,5	9,3	9,3	9,1	9,4

**13 groups of tourists** came to visit the village and to have lunch. In Gouléako, tourists can attend an evening of traditional dance and sleep in huts managed by a group of women. **The results obtained in 2019 are promising, but the self-financing target is not reached yet** (it would need about 500 tourists/year).

### **1.4.2 Ecotourism: habituation of mangabeys, red colobus and chimpanzees in Taï**

The identification of the **mangabey group** (*Cercocebus atys atys*) has been done on **54 individuals**. All individuals are identified and named by now, except the last two new-borns in November and December 2019. The group is daily followed by eco-guides and habituation to human presence is ongoing.

**65 individuals of red colobus** (*Piliocolobus badius badius*) were counted, but identification remains difficult, due to their living high up in the canopy of the emergent trees.

The habituation of **chimpanzees** (*Pan troglodytes verus*) continues but is slow due to the insufficient number of eco-guides.

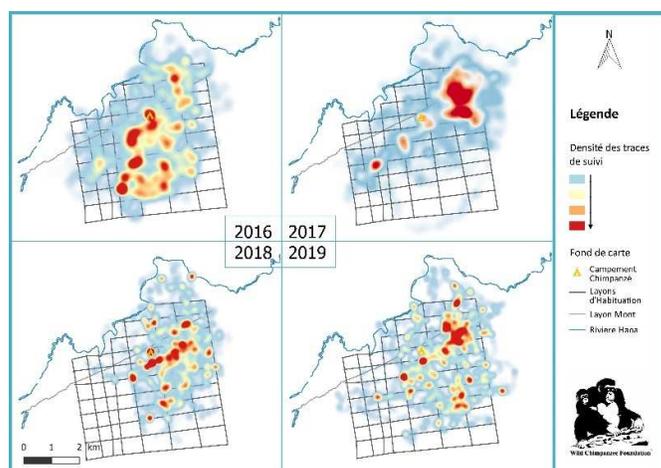
### **1.4.3 Ecotourism: habituation of chimpanzees in Djouroutou**

Since April 2018, the ecotourism site of Djouroutou including the Ecotel Touraco and the chimpanzee camp in the forest was given in concession by the OIPR park manager to a private partner. The habituation of the chimpanzees to human presence is still supervised by WCF and a corresponding convention is actually discussed and should be signed in 2020.

The community of chimpanzees (*Pan troglodytes verus*) followed in Djouroutou shows signs of habituation. Individuals can be approached up to ten meters, making it easier to collect behavioural and demographic data and check their health.

The year 2019 was marked by the absence of WCF supervisors between June and August, and from mid-September to mid-November caused by the flooding of the river Hana that prevented the access to the field site. The community size seems unstable, but this may be due to the lack

of data, it seems to be between **25 and 30 individuals, including 17 well identified chimpanzees**. The north-east quarter of the territory seems to be preferentially used.



*Occupation density of the chimpanzee territory in 2016, 2017, 2018 and 2019*

The transition of the ecotourism management from WCF to a private partner, the Taï Forest Lodges, has been underway since the beginning of the year and encounters constant challenges. WCF is mobilizing its best to support this transition and ensure quality and sustainable monitoring of the chimpanzee community.

### **1.4.4 Promoting ecotourism in Taï National Park**

In order to promote ecotourism in Taï National Park (TNP) in the media and by professional tourism agencies, an **Eductour** was organized from 8 to 12 April 2019 in partnership with the Ivorian Office of Parks and Reserves (OIPR) and Côte d'Ivoire Tourisme (CIT). Two people from CIT, three tour operators and a blogger were invited to discover ecotourism in TNP.

WCF has produced a **flyer with the "Nature & Culture" program**. 1,000 copies were distributed in April 2019 at hotels, cultural places, airline companies, and places dedicated to volunteers. A new edition of the flyer was printed in October and distributed in November.

WCF participated in the **International Tourism Fair of Abidjan (SITA)** in April 2019, thanks to the OIPR, with whom we could share a stand. More than 600 people visited our stand, including political representatives, tourism professionals, journalists and tourists.

At the end of October 2019, we participated in the **7th edition of the French Volunteer Day at the French Institute of Côte d'Ivoire**. More than 400 people assisted to this event and had the opportunity to discover the activities of the WCF and the Taï Ecotourism project.

Since August 2019, we publish a bimonthly **newsletter** dedicated to TNP. It covers various topics, such as the latest news, testimonials, anecdotes about primates, presentation of the Tantie Troti activities or unusual encounters with some animals such as leopard, and hippos. The newsletter is sent to more than 90 recipients, including WCF members, tourists, and partners such as OIPR. A registration form is available on the Ecotourisme Taï website.



*Left - an ambassador visited the stand of OIPR and WCF during the SITA/ Right – the WCF and Ecotourisme Taï stand at the French Volunteer Day*

#### **1.4.5 Ecotourism initiatives around Taï National Park**

In order to promote local products of controlled origin in western Côte d'Ivoire, the WCF supports 10 women and mixed groups in the training, marketing and promotion of the "zero deforestation" products they prepare:

- 5 groups processing products derived from raw cocoa (20 women);
- 1 group producing makoré butter (5 women, 1 man);
- 4 groups equipped for the production of honey (9 women, 9 men).

### Apiculture in Zagné, Kéibly, Djouroutou, Paulé-Oula

- 4 groups, 18 beneficiaries and 20 hives, of which:
  - 6 colonized with rising
  - 3 colonized without rising
  - 11 empty / absconded
- 1 harvest made on 1 hive in May 2019, Kéibly. 8L of honey were harvested, including:
  - 3L offered to partners and authorities
  - 5L sold at 4 000 FCFA/L.

Training began in June 2018 and ended in May 2019 with the first harvest.

Difficulties encountered: humidity, flowering offset by climate change, human nuisance.

New crops are expected for December 2019 / January 2020. Thanks to the work done in 2019 and the knowledge acquired, beekeepers will certainly obtain better results in 2020, allowing commercialization.



*Honey crop at Kéibly, May 2019*

### Makoré in Zaïpobly and cocoa products in Taï, Gouléako 1, Kéibly, Djidoubaye, Zagné

The makoré butter group (6 persons) and the 5 cocoa groups (20 persons) sell their products under the same brand name: Tantie Troti ("Troti" means fruit tree in the guéré language). They all received two accounting and sales strategy trainings and got the opportunity to participate in a national and an international exhibition: "Semaine Internationale de l'Artisanat de Grand Bassam" from 01 to 07 August 2019, with 300,000 FCFA of turnover; and at the "Salon de l'Agriculture et des Ressources Animales" in Abidjan from November 22 to December 02, 2019. They installed a Facebook page and collaborate with a reseller of the Tantie Troti products: la Boutique Paysanne at the Plateau in Abidjan.



**Tantie Troti**



*Products of Tantie Troti*

The makoré project is an initiative coming directly from the Zaïpobly group. The makoré group uses traditional techniques to transform the makoré seed into oil.

The cocoa groups received their first training in artisanal cocoa processing techniques in January 2019 and organized two other formations in February and October 2019.

A training for the good management of a cooperative SCOOPS was given to Zagné in November 2019 by the National Chamber of Agriculture to all 10 groups presented above.

#### ***1.4.6 Alternative livelihoods around Grebo-Krahn and Sapo National Parks***

The livelihood support for community members around GKNP and SNP comprises various activities, from direct support through the payment of monthly stipends to fish-farming, beekeeping, agricultural activities and support of infrastructure.

- **Direct financial support:** Community members serving as community ecoguards (28), community watch team members (100) and biomonitors (16) are receiving regular stipends, either for each mission or on a monthly basis. Especially for the female community ecoguards, this income is life-changing and helps them to experience a new level of independence and pride because they are no longer solely dependent on their husband's income or on selling bush meat. WCF, in collaboration with one of the donors (WA BiCC), published several articles on the support to female community ecoguards:

<https://www.wabicc.org/the-training-of-female-community-ecoguards-boosts-protection-of-liberias-national-parks/>

<https://www.wabicc.org/how-a-community-ecoguard-program-helped-one-woman-go-from-school-dropout-to-breadwinner/>

<https://www.wabicc.org/en/guardians-of-the-forest-2/>



*Women community ecoguards starting their forest patrol in Grebo-Krahn National Park in River Gee County*

- **Aquaculture:** From January to December 2019, the aquaculture project focused on improved sustainability of the project and increased trainings by teaching fish-farmers in catfish breeding in addition to Tilapia breeding. Both species have different breeding requirements, but then can be raised in the same ponds, leading to healthy populations of both species. The fish-farmers are now feeding their fish only with local fish-feed and are taking their daily protein from the fishponds, being no longer dependent on bush meat. Regular harvests are sold, creating a significant income for the fish-farmers, allowing them to construct houses and to pay the

school fees for their children. During the first 6 months of 2019, totally 1,823 kg of fish were harvested in the communities around GKNP, of which 1,222 kg were directly consumed in the communities and 601 kg were sold, generating an income of LD 83,250 (ca. US\$ 520). Unfortunately, due to extremely heavy and long rains the head dyke in one of the project communities (Sayuo) broke and as it could not be fixed before the dry season, no major harvest could be collected in Sayuo during the second half of 2019. In other communities, major harvesting events had to be postponed to January 2020 as well, due to the extremely bad road conditions and persisting rains. The former aquaculture program officer left WCF by the end of 2019, as his contract finished. The role of the aquaculture program officer is now assumed by his assistant from the local NGO Multi-Agrisystems Promoters (MAP) who had been trained for the past 3.5 years, and by WCF's community engagement officer, who has technical knowledge in fish-farming. For most of 2019, the project has worked with interns studying agriculture including aquaculture at local universities and colleges.



*Catfish harvested in fishponds in Sayuo in June 2019*

In order to increase the impact of the aquaculture program and considering the high demand of communities around GKNP to be involved in fish-farming, it was decided to establish a training pond in a central location and to conduct a training of trainers, who then can pass on their knowledge to their home community. The training pond is being constructed in Drouglor (Grand Gedeh County), with locally available material. A group of 9 men is participating in the construction. When the pond is ready to be stocked, women will be involved too. The pond construction will be finalized in February 2020.



*Community members constructing training pond for aquaculture activities in Drouglor, Grand Gedeh County*

- **Bee-keeping:** From January to December 2019, extension officers from WCF’s partner organization Universal Outreach Foundation (UOF) regularly visited the officially trained 223 bee-keepers around GKNP. Throughout 2019, some additional beekeepers and additional communities joined the beekeeping activities on their own initiative. During focus group discussions with the 23 official bee-keeping communities conducted by WCF, some challenges faced by the beekeepers were identified, which largely could be overcome through improved guidance from the extension officers. One issue is that beekeepers are impatient and, instead of waiting for proper harvests, are repeatedly harvesting small quantities of honey (information on these small quantities is not available for WCF’s documentation of the project). With more patience, they could reach much larger harvests and thus generate a higher income. Furthermore, beekeepers are free to sell their honey however they want, and some of them probably sold honey across the border in Côte d’Ivoire. However, the company Liberia Pure Honey that is attached to UOF would buy the honey for a very good price directly through the UOF extension officers. Towards the end of 2019, first larger harvests were recorded and bought through UOF, which hopefully will encourage the beekeepers to better follow the advice of the extension officers.

In order to facilitate improved data collection on the impact of the project, the UOF extension officers have been trained in digital data collection and Monitoring & Evaluation principles by WCF. They now record the information obtained throughout their monthly visits through digital means, saving a lot of time.

Generally, the bee-keeping activities around GKNP have raised a lot of attention and UOF also started being engaged by other conservation partners around SNP. Some publicity about the beekeeping project can be found here: <https://www.wabicc.org/honey-money/>



*First honey harvest in Garleo, Grand Gedeh County in April 2019*

- Infrastructure:** A major concern for communities around GKNP is the precarious infrastructure, for example the lack of water wells for safe drinking water, the lack of medical facilities and schools, as well as broken bridges and bad roads. Currently, no development organization is active in these communities and therefore, they approached WCF repeatedly over the past years, to ask for help, especially with regard to water wells and safe drinking water. Due to the increased mining activities, some of them involving the use of mercury, also the water from surrounding streams is no longer suitable for drinking. Between June and October 2019, WCF, in collaboration with the local NGO CENFOR, supported the construction of 2 hand-pump water wells in Youbor and Salah communities in River Gee County, as well as the repair of 6 hand-pump water wells in Yeoh Town, Bao Town and Garleo in Grand Gedeh County. WCF helped with the rehabilitation of a school building in Clotetee that had been without roof for the past 4 years, and with the rehabilitation of a town hall in Bao Town. WCF also supported some road brushing work with communities in River Gee County. In all cases the community members provided local materials and labor and keenly supported the long-awaited infrastructure projects.



*Hand-pump water well-constructed in Youbor, River Gee County*



*School in Clotetee, Grand Gedeh County, before and after the rehabilitation. The roof was blown off by a storm 2015 and since then the school had been waiting for help*

While such infrastructure activities are not an ordinary task for NGOs involved in conservation, it is important for WCF to show that conservation and development are not exclusive and that basic services for communities, especially safe drinking water, are of concern for WCF. Generally, the lack of these services is the reason why many communities feel forced to engage in logging activities or other exploration of natural resources, as the companies involved are making promises especially with regard to urgently needed infrastructure.

#### **1.4.7 Alternative livelihood support for the communities between Tai National Park and Cavally Classified Forest**

In the framework of the seven community-based development projects in villages between Zagné and Tai, WCF has mandated the local NGO NOFNA to supervise and monitor these projects. This year, two new projects of cassava cultivation and mill management were launched in the villages of Keably and Zaipobly.

The five projects from the past year were monitored all year round: three in Zagné (sale of frozen foods, pig farm, chicken farm), one in Tienkoula (cassava cultivation and management of a mill), and one in Djidoubaye (sale of dry fish).

Since December 2018, the beneficiaries of the chicken project have sold almost 2,000 animals, for a turnover of 5,000,000 FCFA.

Beneficiaries of the pig breeding project sold 36 animals, some individuals are born from sows, and others have been bought. The beneficiaries earned almost 1,700,000 FCFA. Eight sows gave birth to about fifty piglets in October and November 2019.

During this year, the frozen food project generated a turnover of 1,330,000 FCFA, thanks to the sale of juice, yogurts and ice cream. Meat supply has encountered logistical difficulties and will be simplified in order to increase the yield of the project.

The dry fish project of Djidoubaye is continuing and the use of the motor tricycle helped to boost the activity. The turnover amounted to 4,000,000 FCFA.

The Tienkoula project benefits from the daily operation of the mill. **Cassava** started to be harvested in November 2019 and more than **620,000 FCFA** were generated.

The two cassava production and mill management projects in Zaipobly and Keibly started in late March 2019.

Training in the basics of accounting and entrepreneurship was provided by Côte d'Ivoire Business Development in June 2019. It enabled 32 beneficiaries of the seven projects to build their capacities and better structure their activities.



*Women from Keibly collecting Cassava*

#### **1.4.8 Capacity building and national initiatives**

**Training for SODEFOR agents in Côte d'Ivoire:** Following the recommendations of the report Number 8 of the independent observation mandated on the logging in classified forest, WCF financed a reinforcement of SODEFOR ranger capacities on the inventory in natural forests and monitoring logging in classified forests. This training was carried out from 17 to 19 September 2019 in the premises of the Cavally Forest Management Unit with 23 participants including 16 from SODEFOR, 6 from STBC and 1 from WCF.

WCF has led a training for the managers and rangers of SODEFOR in the use of GIS and GPS to better protect Cavally and Goin-Debé Classified Forests. The training took place during five days from July 22 to July 26, 2019 in Guiglo. The training included monitoring missions, data collection and elaboration criteria, introduction and use of GPS and compass, presentation and manipulation of QGIS, creation of a map from the list of trees authorized, download and process patrol data from DNRGPS software and realization of rehabilitated plots during patrol and verification of areas on QGIS.



*Group picture at the end of the training*

For the use of a drone to support the surveillance in Cavally Classified Forest, a training was held from June 24 to July 05, 2019, by Drone Academy of the CIE Electricity Trades Center located in Bingerville. 4 agents participated including 2 SODEFOR and 2 WCF staff.

**Training for the members of the local NGO NOFNA, Côte d’Ivoire:** WCF recruited a volunteer, Estelle Motte-Moitroux, to train the members of the local NGO NOFNA on computer use, reporting, planning, monitoring, and accounting.

**Training of local community members, FDA and partner organizations, such as Multi Agrisystems Promoters (MAP) in Liberia:** in 2019, training sessions focused on the use of computers and the SMART software, as well as on biomonitoring activities. After an Organizational Capacity Assessment had been conducted for MAP, based on the observed capacity gaps, a training plan was developed covering three priority areas: governance, finance and communication. So far, 4 training sessions covering these fields were conducted for MAP. Through WCF’s internship program, 30 internship students from various institutions, especially from the Forestry Training Institute and the University of Liberia, mainly with forestry, agricultural and administrative backgrounds, were trained by WCF from January to December 2019. The internship students are being introduced to all activities and techniques used by WCF and thus are gaining a comprehensive insight into best practices for protected area management, including research, awareness raising, law enforcement and livelihood support. After the completion of a successful internship, which lasts for about 3 months, the internship students are expected to give presentations and write reports about their achievements with WCF.

**National Initiatives in Liberia:** in 2019, several initiatives of WCF and partners were taken to a higher level by being promoted as national initiatives, with some examples of WCF activities serving as best practices.

**Coordination of Biomonitoring and Law Enforcement Sub-Committees of the Liberia National Species Working Group:** WCF is coordinating the Biomonitoring and Law Enforcement Sub-Committees of the Liberia National Species Working Group, hosted by the FDA. Besides the FDA, the two sub-committees comprise all international and national conservation NGOs and other relevant institutions active in the field of biomonitoring and law enforcement. WCF is organizing meetings and supporting the coordination of activities. The

activities of the Law Enforcement Sub-Committee have been boosted by a new project led by WCF, focusing on the involvement of local communities in the management of natural resources, by preventing wildlife and forest crimes, on awareness raising activities and the strengthening of the law enforcement network in Liberia. The project was launched in February 2019, and besides the purchase of equipment, first project activities focused on a bush meat and pet trade survey in Monrovia and Paynesville in order to establish a baseline for the current level of illegal activities, the establishment of protocols for partners in law enforcement, as well as national training in community ecoguard and SMART protocols. WCF is involved in the review and amendment of the Wildlife Conservation and Protected Area Management Law, in order to ensure conformity with international treaties and conventions, in particular CITES.

**National community ecoguard and SMART program:** FDA asked WCF to support the introduction of the community ecoguard program to all protected areas, using the SMART (Spatial Monitoring and Reporting Tool) software. Focal persons for both components have been identified within FDA and after an introductory training in May 2019 a national SMART training was conducted in November 2019, with a trainer from the Zoological Society of London, who developed the SMART software. During the training a national SMART data model was drafted and WCF designed grid systems for all protected areas in Liberia, which will be validated in early 2020. In the future, a national SMART database shall be hosted by FDA and a specific community ecoguard unit will be established.



*Participants of the National SMART training conducted with a trainer from the Zoological Society of London in November 2019*

**Wildlife Crime Task Force:** For the first time in Liberia's history, a Wildlife Crime Task Force (WCTF) has been established, focusing on the improved enforcement of Liberian laws (in line with human rights), in particular the National Wildlife Conservation and Protected Area Management Law. The WCTF is hosted by FDA and involves stakeholders from various sectors, including security forces and wildlife sanctuaries. The existence of the WCTF, whose members received intense training in law, law enforcement techniques, protected species and data collection, as well as the logistic support by conservation partners, has boosted the effective fight against wildlife and forest crime in Liberia. The leading institution, FDA, has increased its collaboration with the Ministry of Justice and the Liberia National Police. Civil society, including international NGOs, such as the WCF, the Society for the Conservation of Nature of

Liberia, Fauna and Flora International, Liberia Chimpanzee Rescue and Protection and the Royal Society for the Protection of Birds, as well as the newly created Wildlife and Conservation Reporters' Network have supported the awareness raising among stakeholders including members of the judiciary. This has led to an effective enforcement of the law. In 2019, 7 individuals were convicted for wildlife crimes in Liberia. The crimes include killing and trading of protected species, such as chimpanzees, forest elephants, duikers and a pygmy hippo. Penalties were imprisonment from 1 month to 1 year, as well as fines between US\$ 100 and 2,500. Furthermore, series of animals and large amounts of bush meat were confiscated. This can be seen as a great success given that, prior to 2019, there was only one case of conviction for wildlife crime in late 2017, for the killing of a sea turtle. Protocols of the WCTF were developed in collaboration with all stakeholders in August 2019 and after a piloting phase are now being fully implemented. Other West African countries are interested in learning more about the Liberian model, which is based on effective cross-sectorial collaboration.



*Participants at a workshop developing the protocols for the newly created Wildlife Crime Task Force in August 2019*

**Wildlife and Conservation Reporters' Network:** Journalists are seen as an important group of stakeholders who can support the awareness raising, for instance regarding the value of Liberian forests and their biodiversity, existing laws and protected species. WCF therefore supported the West Africa Media Network in organizing a workshop on Wildlife Conservation and Protected Areas, specifically targeting journalists and media, to foster their help in promoting conservation work in Liberia and also, to explain the importance of a sustainable management of resources.

<https://frontpageafricaonline.com/news/journalists-are-integral-partners-in-promoting-wildlife-conservation-wild-chimpanzee-foundation-country-director-dr-annika-hillers/>.

Already during the workshop, the journalists organized themselves in order to establish the "Wildlife and Conservation Reporters' Network" which shall work in close collaboration with ongoing conservation initiatives in Liberia.

## 2 Activities in Guinea

---

### **2.1 Cooperation and collaboration among local organizations**

The Ministry of Environment, Water and Forests with its minister officially mandated the WCF in December 2015 to work, together with the Office Guinéen des Parcs et Réserves (OGPR), to create the Moyen-Bafing National Park (MBNP). Our objective covers capacity building and empowerment. Therefore, OGPR is actively involved in all WCF activities in the region. Since 2017 up to 36 officers - staffs from the Ministry and (OGPR) have cooperated with WCF.

Due to the need for WCF to scale up on the results achieved in 2018, several partnerships were developed such as:

- **for environmental issues**, the Max Planck Institute of Evolutionary Anthropology, the Biotope office, and the Royal Botanical Garden Kew with the National Herbarium of Guinea participated in several actions;
- **for social aspects**, the international NGOs World Vision, GRET and INSUCO were involved in the project;
- **to harmonize the interventions in the communities within the park** and to seek co-financing of the actions included in the future land management plans, a partnership with ANAFIC was developed. This National Agency is in charge of the rural development in the communes and the partnership is considered as a standard by OGPR.
- **for communication**, we have reached an agreement with the local radios of Tougué, Dinguiraye, Dabola and Koubia. A partnership is being discussed with RTG and the private group HADAFO Media for a television visibility of our actions and conservation issues.

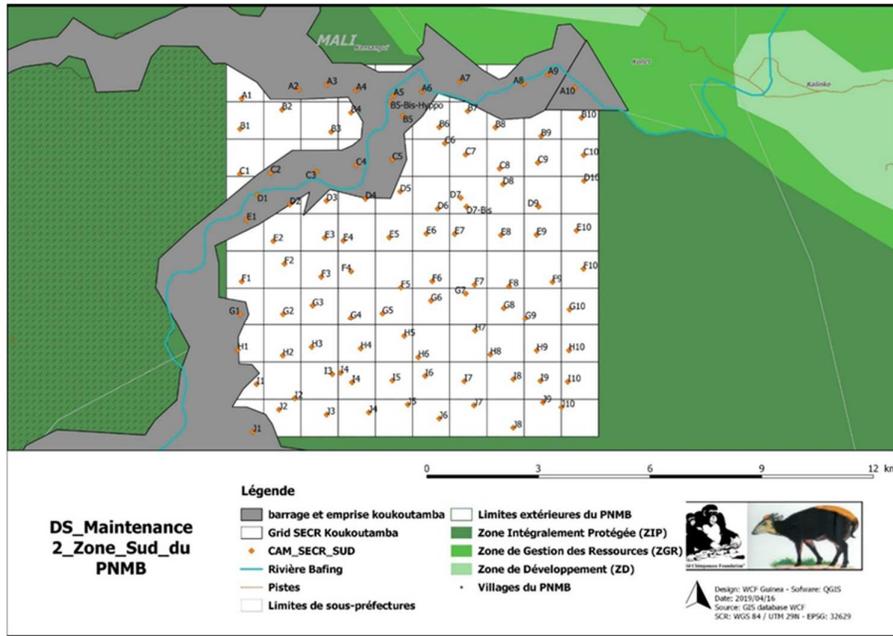
### **2.2 Environmental strategy**

#### **2.2.1 Biomonitoring with innovative methods by camera traps**

We intend to calculate chimpanzee density by using the **innovative capture-recapture (SECR) method**, based on the identification of individuals of a given species, which in theory, allows for a complete survey of the population present in the area. Reliable recognition of individuals is possible only in species presenting sufficiently clear characteristics, which is the case with chimpanzees. Identification is validated when an individual is recognized on two videos belonging to different sequences (videos taken at the same location less than 15 minutes apart). Over the entire data collection period, 2,041 chimpanzee videos were collected. All chimpanzee videos were viewed in detail and 54 adult males were identified.

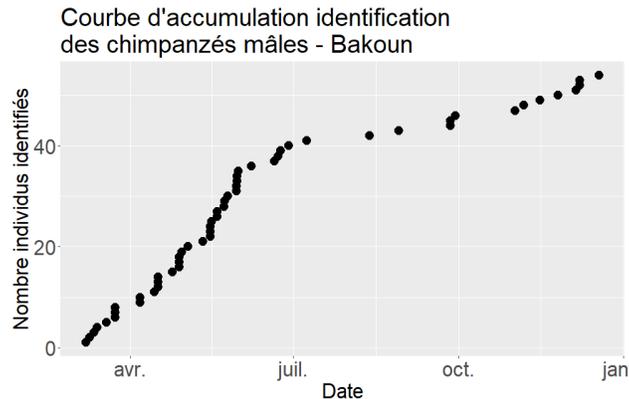
In the Bakoun Classified Forest in the north of the MBNP, a study area of 100 km<sup>2</sup> was delineated for the estimation of chimpanzee numbers by this capture-recapture method. The 100 km<sup>2</sup> area was divided into 1 km<sup>2</sup> cells. In each cell, a camera trap was placed opportunistically, i.e. at locations with increased probability of chimpanzee capture. Cameras remained in place from the end of February 2018 until mid-January 2019, for at least 10 months. Data were downloaded every 4 to 8 weeks, with a total of 85,440 videos being obtained.

For the Koukoutamba zone in the south of the MBNP, the grid was moved in February 2019 to define chimpanzee estimates in the area of the proposed dam construction project. This grid would quantify the impacts on chimpanzees due to the reduction of their territory and the likely displacement of communities.



*Location of the study area for the capture-recapture protocol (SECR) in the Koukoutamba region and the classified forest of Bani in the M'Pongou National Biosphere Reserve with details of the 100 cameras in the 100 cells of 1 km<sup>2</sup>.*

A new species of mammals was captured by the cameras near the Bafing River, the hippopotamus, as well as the armadillo.



*Accumulation curve of the identification of adult males in the SECR zone of Bakoun Classified Forest in the north of the M'Pongou National Biosphere Reserve with the precise date when a new identification was made.*

The accumulation curve of the identified adult males allows to estimate to what extent the number of recognized individuals approaches the total number, the curve should reach a horizontal plateau showing that new individuals are no longer found. From July onwards, the curve becomes less steep, and fewer new individuals are identified after the first five months of data collection. The curve has not yet stabilized at a plateau, since new individuals were still identified in January, i.e. the month of the last data collection. The use of the capture-recapture model will allow us to estimate the number of unidentified chimpanzees present.

For adult females, the same analysis has been done. Currently, 47 adult females have been identified. As above, the slope tends to flatten from July onwards.

For the study of the chimpanzee social structure and population growth, the proportion of

chimpanzees carried by their mothers (number of adult females carrying a baby / total number of adult females) has shown a total of 627 adult female chimpanzees seen on the videos, of which 337 were carrying a child. For the period analysed between the end of February to the end of September 2018, in the SECR protocol area of Bakoun Classified Forest, the proportion of adult females with a small child over the number of adult females thus amounts to 0.54

In order to determine an age-class structure of the population, we have to:

- Analyse the number and composition of the largest "subgroup" recorded by the cameras, considering that two separate videos of less than 15 minutes are part of the same event, and considering only events more than an hour apart, to avoid taking into account the same subgroup returning to the same location).

- Calculate the number of individuals for each age and gender class appearing together in the same event and then compile the maximum number of distinct individuals seen in each category as a proxy of the total group composition.

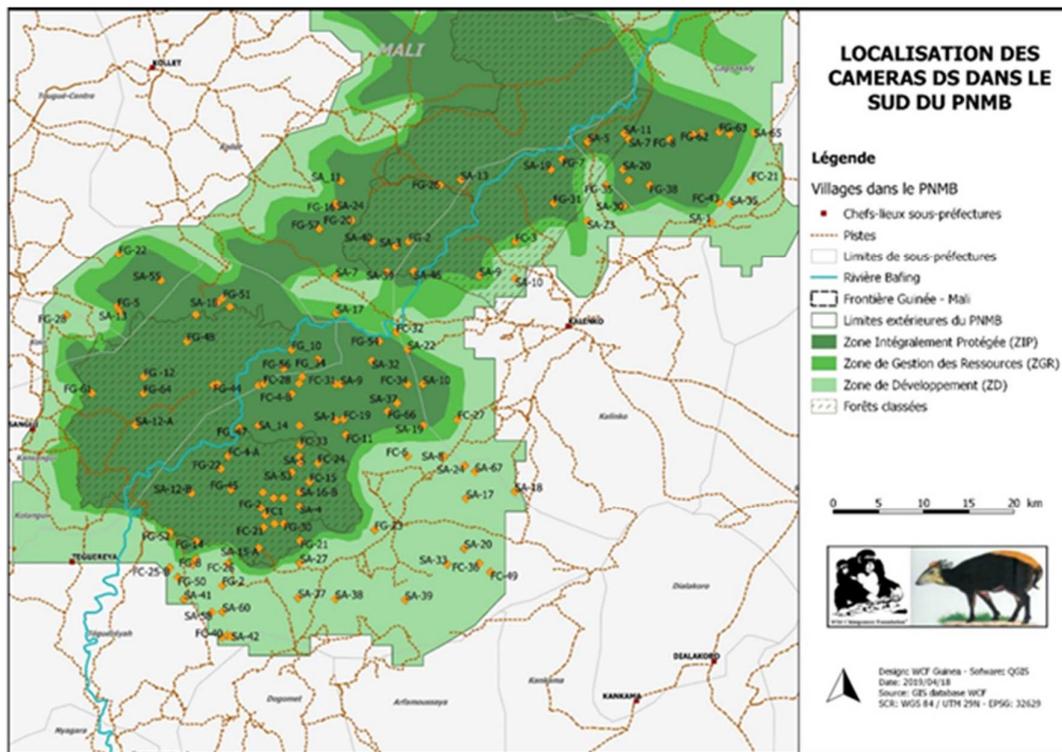
A paper published by McCarthy et al. (2018), showed that the chimpanzee sub-group compositions captured by the cameras were consistent with the age-class proportions of the true group composition in Taï, Côte d'Ivoire.

The chimpanzee community in the Bakoun Classified Forest appears to be composed of approximately two-thirds of sub-adults, juveniles, and infant, with the largest age-class being the juvenile class. One year-old or younger children are mostly carried ventrally by their mothers, which makes them more difficult to detect, and therefore, the class of children may be underestimated.

Regarding the distance sampling method using cameras, the design in the north western part of the MBNP is following the one described in our 2018 annual report. The three installation missions and two maintenance missions resulted in **147,647 videos collected between February 27 and July 11, 2018. Of these videos, only 11,954 are NOT empty, and 8% show an animal.** The species captured most often are baboons (*Papio papio*) and warthogs (*Phacochoerus africanus*) observed throughout the diversity of habitats in the park as also, though in smaller numbers, vervet (*Chlorocebus sabaenus*) and harnessed gib (*Tragelaphus scriptus*). Red-flanked duikers (*Cephalophus rufilatus*) were not captured in grassy savannah, and chimpanzees (*Pan troglodytes verus*) were only rarely captured and exclusively in open forests, gallery forests, shrubby savannah and bamboo forests.

For phase 2, the cameras were moved to the south of the park. The proportion of habitats sampled by the distant sampling protocol depends on the use of these habitats by the target species. Thus, the cameras were again placed systematically, but with stratification by habitat. This stratification favoured forest habitats preferred by chimpanzees and many other species. Stratification ensures that more than 80% of the cameras are located within a forest environment in the southern zone of the park (51% in forest galleries and 31% in open forest). Thus, an estimate of the species of interest for the project will be possible in each habitat. This will secure enough videos of species, in a certain type of habitat that are not the most represented in the park, such as chimpanzees. No cameras have been placed in grassy savannah, as the species using grassy and shrubby savannah are similar. Distance analyses will be conducted separately according to habitat. Viewing of these videos is ongoing. Of the **280,677 videos viewed (from December 2018 to August 2019), more than 40,540 videos were WITH animals (14%).** This represents an improvement in the capture rate compared to the first phase (8% non-empty), with a fully systematic protocol especially for chimpanzees. We thus have 884 independent

chimpanzee videos. Stratification aimed at obtaining more chimpanzee videos proves its value.



Camera locations for the distant sampling method in the southern part of the Moyen-Bafing National Park following a stratification favouring forest habitats preferentially used by chimpanzees.

Extracting distances from phase 1 videos:

For density and abundance calculations of animal species, it is essential to quantify the area surveyed and the distance of the animals between the animal and the detector (Buckland et al. 2011). The extraction of distances for indicator species detected in videos in the north-western part of the park was completed for the period between 27 February and 11 July for 4 out of 6 of our indicator species in the 2018-2020 Action Plan. Thus, a first estimate of the density of harnessed Guibs (*Tragelaphus scriptus*, bushbuck) in Guinea were obtained for an area of 2,000 km<sup>2</sup>. Results indicate a density of 0.78 individuals per km<sup>2</sup>, with a coefficient of variation of 27.7%. For comparison, estimates obtained from the IUCN database indicate that densities of 0.1 individuals per km<sup>2</sup> have been observed, which is substantially lower than the densities being reported here.

**Preliminary abundance estimates for 4 out of 6 of our indicator species for the 2018-2020 Action Plan in the north-western part of the Moyen-Bafing National Park.**

Indicator species	Density (Ind./km <sup>2</sup> )	VC (%)	Confidence interval
<i>Pan troglodytes verus</i> *	0,59	40,6	0,22 – 1,12
<i>Tragelaphus scriptus</i>	0,78	27,7	0,40 – 1,24
<i>Cephalophus rufilatus</i>	0,77	30,2	0,45 – 1,38
<i>Phacochoerus africanus</i>	To do	To do	To do
<i>Papio papio</i>	To do	To do	To do
<i>Chlorocebus sabaeus</i>	2,43	22,0	1,50 – 3,62

\*Cameras located in the north-western section of the MBNP, following the earlier systematic sampling approach, produced low-precision density estimates, with relatively high coefficients of variation (CV) and wide confidence intervals, due to the low number of chimpanzees detected.

For chimpanzees, estimation by the non-stratified design is tricky due to the small number of images obtained, rendering difficult to estimate the availability of chimpanzees to be captured (depending on the active time chimpanzees spend on the ground). However, estimation by the Rowcliffe (1) (2014) method as done for harnessed guibs is based on assumptions based on a 100% terrestrial species that do not apply to a semi-terrestrial species such as chimpanzees. Estimation using the Cappelle method (Cappelle et al. 2019) gives an estimate of chimpanzee activity on the ground in Taï forest corresponding to 40% of the day. For chimpanzees living in a mosaic of habitats, values of about 20% have been proposed at Fongoli in burned areas (2), slightly more than 30% at Mahale for the dry season (3), or 36% at Mount Assirik (4). The results presented here are those based on 40% camera availability. With our new protocol for the southern part of the MBNP, an exact measurement of camera availability will be possible.

Compilation of all the data allows us to establish a first list of mammal species confirmed in the MBNP by the cameras. The development of an automated method of video analysis with the Max Planck Institute for Evolutionary Anthropology and DrivenData ([www.drivendata.org](http://www.drivendata.org)) has made significant progress that now allows us to upload videos to the DrivenData Cloud in large numbers, and to filter empty videos with an accuracy of over 90%. The videos with animals on them will be automatically analysed by the Zamba program (<https://zamba.drivendata.org>) that can classify animals in 18 categories of species with great precision. This new method will be applied to the videos of the southern phase of the MBNP.

For September 2019, the list of species and their capture rate was obtained using the distant sampling design in the north-west, and with the SECR design in Bakoun. Video detection data collected following the DS in the southern sector of the park, and data obtained following the SECR design from the Koukoutamba area are being processed. In October 2019, we were very surprised and pleased to note that, on a picture taken in July 2019 (and later confirmed in November 2019), a young male lion (*Panthera leo*) is roaming in the north of the park, increasing the number of animal species and adding a flagship species for conservation.



*Young male lion and hippos detected by camera traps in the Moyen-Bafing National Park.*

As part of the biomonitoring, the WCF team was involved in the botanical studies in the MBNP. The park harbors at least 281 plant species, including 19 endangered species present in the different types of vegetation.

Moreover, 203 bird species (28% of Guinea's known avifauna) have been recorded in the MBNP. Six of them are fully protected at the national level according to the new Wildlife Code. In addition, some of the species listed are threatened on a global scale, others are found at the edge of their distribution range, are uncommon in West Africa, or endemic to the biogeographical domain.

## 2.2.2 Define the reference state of MBNP land cover (habitats) and monitor its evolution

Previously, we used a semi-automatic classification of habitats on the surface of the MBNP according to 6 classes for the years 2016, 2017, 2018, and 2019. The results of this work provide an overview of the status of habitats in the MBNP. The table below illustrates the important evolution of habitats from one year to the next, due to the dynamics of the vegetation, but also to the margins of error of the semi-automatic classification model.

*Summary of the evolution of habitats in the Moyen-Bafing National Park*

CLASSIFICATION SENTINEL (SIEVE100) FEVRIER 2016 - 2017 - 2018 - 2019 PNMB								
Habitats	Sup km2 2016	% 2016	Sup km2 2017	% 2017	Sup km2 2018	% 2018	Sup km2 2019	% 2019
Forêt dense	217,2	3,4	302,4	4,7	150	2,3	473	7,4
Forêt claire	1462,4	22,8	1252,1	19,5	1117,3	17,4	1340,4	20,9
Savane arbustive	3327,7	51,8	3451,6	53,7	3715,1	57,8	2495,8	38,8
Savane herbeuse	1095,4	17,0	1177,7	18,3	1121,1	17,4	1832,7	28,5
Hydro	26,9	0,4	25,9	0,4	20,2	0,3	17,7	0,3
Zone anthropique	296,6	4,6	216,6	3,4	302,5	4,7	266,6	4,1
TOTAL	6426,2	100,0	6426,3	100,0	6426,2	100	6426,2	100

(Forêt dense: dense forest; Forêt claire: clear forest; Savane arbustive: shrubb savannah; Savanne herbeuse: grass savannah; Hydro: rivers and streams; Zone anthropique: Anthropic zone)

Due to a certain level of imprecision, it is difficult to use these classifications to monitor and analyse the evolution of habitats from one year to the next in a concrete and objective manner. Such imprecision is due to several factors, such as rainfall patterns and varying temperatures from year to year.

For these reasons, some points of the methodology have been simplified:

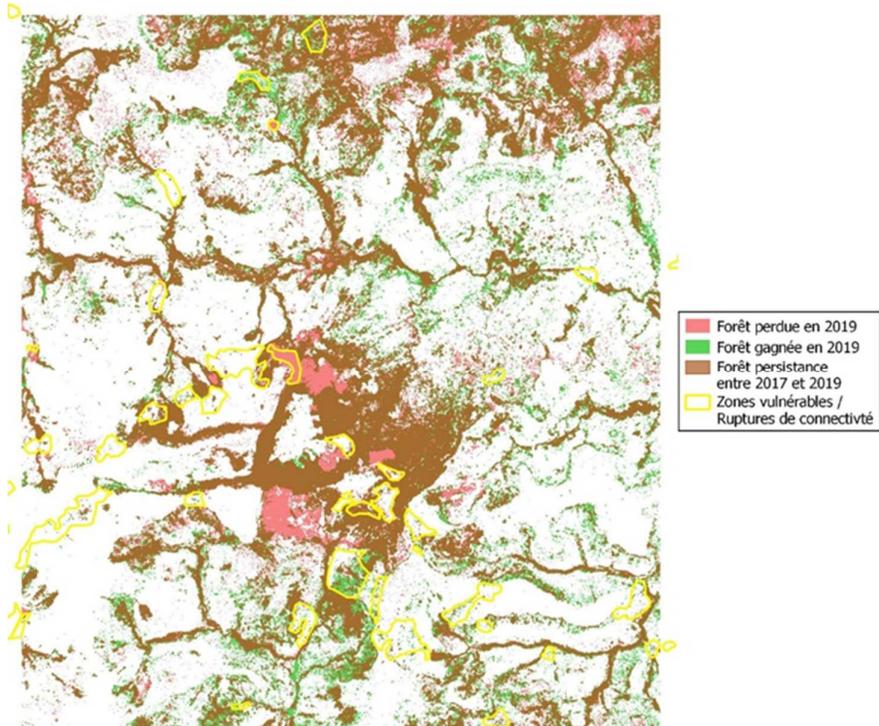
- the size of the study area has been restricted: test area of about 115 km<sup>2</sup> around Laafa Boube;
- the typology has been reduced to 3 classes in order to reduce errors in classifying pixels in the wrong habitat category: Forest (gallery forest + dense forest + open forest) / savannah (shrub savannah + grass savannah) / Anthropic. settlements and fields

As a result, the map below shows the superposition of forest layers in 2017 and 2019 to illustrate the dynamics:

- Brown: forest that did not evolve between 2017 and 2019.
- Red: forest that was present in 2017 but had disappeared in 2019.
- Green: forest which was not present in 2017 and newly appeared in 2019.

This change in forest cover needs to be considered in relation to areas of high conservation value (HCV) and ecological connectivity within the park. The areas of highest conservation value contain cleared as well as areas of regenerated forest. Investigating and mitigating these sources of HCV degradation, usually clear-cutting and/or wild fires, are included amongst the high-priority conservation measures being implemented.

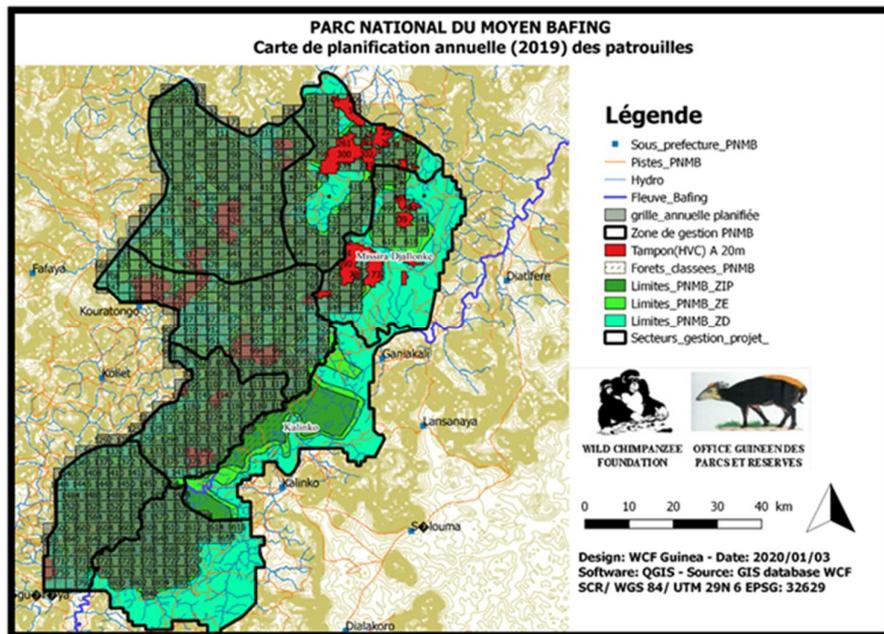
The analysis of the map on forest-cover changes between 2017 and 2019 (see below) shows that areas of forest clearing strongly decrease connectivity, forming important breaks in ecological corridors. As for regeneration areas, they do not seem to work significantly towards increasing connectivity. Indeed, regeneration appears most of the time scattered and residual in the periphery of already existing forest massifs.



*Overlay of identified connectivity breaks and the evolution of forest cover between 2017 and 2019*

### **2.2.3 Law enforcement in the Moyen-Bafing National Park**

A monitoring strategy (involving the communities and their committees) and anti-poaching actions (involving a special mandated unit) are being installed within the services of the OGPR based on international standards (IUCN, IRF, etc.) and Guinean operational procedures, with the support of UNOPS.



*Grid of planned patrols in the management zones of the Moyen-Bafing National Park.*

A collaboration has been signed with the GALF project, implemented by the NGO WARA, to provide support for the training of agents who will be mandated for the MBNP, as well as for the monitoring trafficking of protected species. Two criminal proceedings are underway in Labé and Mamou. Both offenders have been arrested while fencing the skins of protected species.

During 2019, mixed teams (eco-guards and OGPR/MEEF) patrolled 892/1141 grids of 2.5 km squares covering the management zones of Bouroumba, Dara, Laffa Boubhè, Kansangui, Kela, Ndire Yangueya, and Fello Koundoua to monitor and record all observations on fauna, flora, and on illegal activities, and to support the early-fire setting and management teams. A coverage rate of 78.18% was achieved in 12 monitoring missions (24 patrols) in the above-mentioned management zones. Teams travelled a total distance of 4188.47km in the MBNP.

#### 2.2.4 Reforestation and assisted natural regeneration to restore degraded habitats

The principles of **Farmer Managed Natural Regeneration (FMNR)** are being applied to restore forest cover within the **fully protected ZIP area** of the MBNP (ZIP – Zone Intégralement Protégée) and is referred to as **Ecological Natural Regeneration (RNE)**. Before the approach is applied to a site, an elaborate process is undertaken to identify the site to be regenerated, and to protect it from fire. In September 2019, we were able to identify 17 high conservation value areas, 2673 ha of connectivity failures, and 784 km<sup>2</sup> rivers head in 5 MBNP management areas that require conservation interventions, including but not limited to the implementation of the RNE technique.

This first year of the RNE implementation have been highlighted by some achievements:

- 65 ha of degraded habitats were identified in the fully protected area of the MBNP.
- About 5 ha were enrichment with saplings from our tree nursery.
- In addition to the 65 ha from August, additional sites of 30 ha have been identified. In December, all the 95 ha were subject to clean-up, of which 90/95 ha were cleaned up.
- More than 200 people, were involved in the implementation of the RNE work.
- A partnership with other RNA/RNE projects such as World Vision is developed.



*RNE site at Sotire after the clean-up and new signs installed showing details about RNE sites and the park.*

There are four degraded sites which have been identified within the MBNP for application of RNE. These include; i) Bakoun river buffer area in Kouli Fakara (4 ha), Sotire A (61 ha), Sotire B (30 ha), Laffa Wol (3 ha). Implementation of RNE was initiated in August 2018 at Laffa Wol. At both the Sotire A and Kouli Fakara sites, RNE was initiated in August 2019. At the RNE sites, enrichment planting with indigenous species that are favourable to chimpanzees has been carried out: *Azelia africana* (fruits), *Erythrophylum guineensis* (nesting), *Parkia biglobosa* (fruits), *Tamarindus indica* (fruits), and *Cola cordifolia* (fruits and nesting).

Sotire B, is a newly identified site for RNE, where no work has been carried out so far. All the four sites were originally farms, in which unsustainable land management practices, such as the slash and burn method of land preparation, uncontrolled soil erosion, felling of trees to clear land for cultivation, were applied.

Farmer Managed Natural Regeneration (FMNR) and enrichment planting are the key approaches to restore degraded ecosystems within the development zone of the – yet to be declared – MBNP. FMNR is being applied within degraded farms to restore tree cover and land productivity and is termed Assisted Natural Regeneration or RNA. At the village level, FMNR is piloted by farmer leaders selected by the village for that purpose. After having piloted the model successfully, they are expected to train the rest of their village members. Implementation of RNA was initiated at the beginning of 2019.

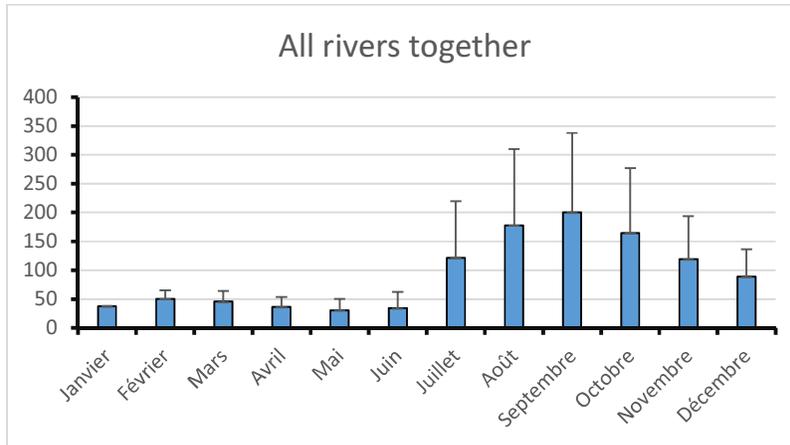
Twelve farmer leaders were identified and chosen by their respective villages in 2019 under guidance of the WCF team. Each of the six pilot villages identified two farmer leaders, who were trained in March 2019, and equipped to pilot RNA fields. The WCF team in charge of the RNA activities remained in touch with them to some extent during implementation of RNA to assure continued technical support. Out of the twelve farmer leaders trained on RNA, nine tried out FMNR on their farms during 2019. Some of the farmer leaders decided to experiment with the two practices; land preparation with fire and without fire. At the time of the farm visits, the experiments were yet to be completed as the farmer leaders had to harvest the crops within the experimental plots. Also, as result of the leaders' meetings held end of 2019, about 40 more leaders pledged to experiment with RNA in 2020. Nevertheless, four pilot villages still have no good RNA pilot (Lallabala, Kouli Fakhara, Kalinko Konkero and Kalinko Missira). Improvement of this situation is planned for 2020. Luckily, two true champions are emerging, namely people convinced by the approach and willing to continue implementing it, and to train others. The two champions are Mamadou Oury Diallo of Sangan village, and Traore Bailo of Fougany village. We plan for 2020 to show farmer leaders some advanced RNA site, and to let them visit Mali to learn about the RNA activities implemented by World Vision Mali.

RNA is well integrated into other sustainable land management activities such as stopping the use of bushfire in land preparation, establishment of contour-stone bunds for control of soil erosion, and crop rotation.

#### **2.2.5 Restore heads of main rivers**

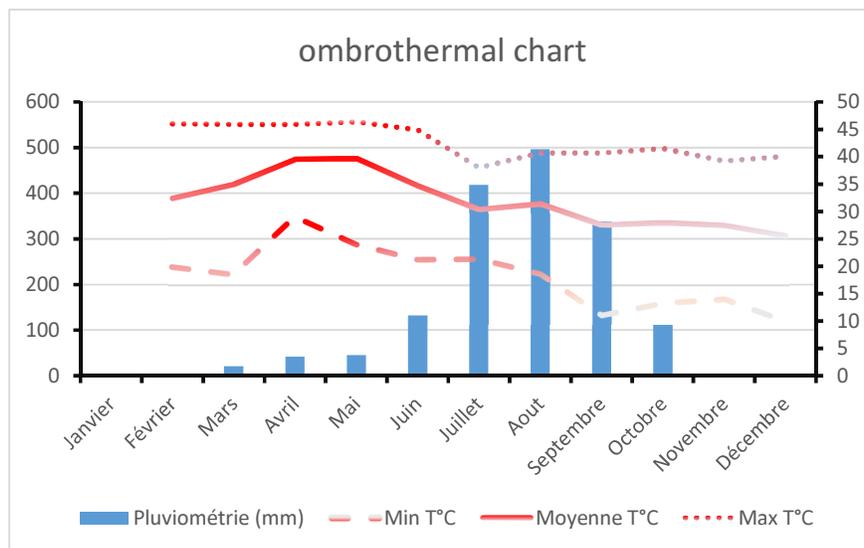
In September 2018, the Laffa tree nursery has been stocked with 1,725 plants, producing 7,500 available plants by June 2019. Because of the dramatic drought destroying the plants, we changed our approach by training 30 local agents in the four meanwhile installed tree nurseries. One WCF supervisor was trained to monitor sapling growth-rate, data entry, team monitoring and management regarding the new tree nurseries. In December 2019, more than 82,000 plants were available.

To monitor the impact of reforestation on local water security, WCF teams were following since February 2018 water level variations of 5 major rivers, and since early 2019, in 17 rivers. The water level data have been collected daily by villagers. In order to improve the quality of the data collected, two training sessions were organized in 2019. The training was given to 108 men. Some of the rivers in the MBNP are completely dry during the dry season, illustrating the extreme challenge that this season represents for the wildlife and the local communities.



*Water level data for 17 rivers monitored in the Moyen-Bafing National Park for the first 6 months of 2019.*

To understand local rainfall variations, important for park management, we collected data on rainfall and temperature in Kalinko Konkero, Lekingbele, Ndire Yangueya, and Kokoun.



*Rain and temperature level data for stations monitored in the Moyen-Bafing National Park.*

### **2.2.6 Understand the dynamics of bush-fires in the Moyen-Bafing National Park**

The process of forest protection and bush-fire monitoring will be supported through the creation of the village committees. A group of community eco-guards has been created and trained for forest protection in April, August, and December 2019. The WCF monitoring of bush-fires made it possible to identify the fire dynamics within the park and to establish a management plan according to the specificities of this area. By including the areas of high conservation value and areas most affected by bush-fires, this study identified the most vulnerable areas where actions should be prioritized.

In order to follow the evolution of the vegetation within MBNP, WCF has been collecting information on burned areas each month from 2014 to 2018, so as to determine the areas within MBNP most susceptible to bushfire.



*Local tradition of slash and burn agriculture in the Moyen-Bafing National Park region*

A strategy for bushfire protection is finalized and validated, and activities have been launched during the last months in order to protect the selected reforestation sites. Such as a mission with WCF, OGUIPAR and “Ministère de l'Environnement, des Eaux et Forêts” (MEEF) was launched in March 2019 to raise awareness at all levels in the prefectures of Tougué and Dabola.

In November and December, WCF launched the first campaign against bush-fires which included the implementation of fire breakers at high conservation value areas, RNE/RNA and heads of main rivers, the training of communities how to build fire breakers and the early burning of the savannah. More than 1000 villagers have been engaged in this campaign, and the controlled firing was realized by our teams in four priority management zones. Thanks to the calculation of the index, it is possible to follow the burned areas in the park. For example, in November 2019, 14% of the park area was burned during the early fire season.



*Newly constructed firewall at RNE site Sotire*

During the first two missions of the WCF fire management team, we recorded 588 controlled fires on 46,152.47 ha within the MBNP. 16,603 ha of high conservation value areas were protected by firewalls each more than 15 m wide. Natural firewalls (hills, rivers and tracks) were also considered as firewalls. 570 persons were involved in this actions. In addition to this, we launched a sociological study on "fire use and perceptions in the MBNP". A report exists based on a survey of 12 villages: Fougani, Kalinko Konkero, Kokoun, Laffa Boubhe, Boussouria, Lallabara, Sangan, Douroun Misside, Dara, Dakacire, Yalagueta and Balabory.

## **2.3 Social strategy**

### **2.3.1 Creation of local governance framework to facilitate community consultations**

During the third round of community consultations, the principles of the different committees have been discussed (consultation and conflict management at the village and community level and general coordination at the national level). The selection of pilot villages has been made according to this third community consultation framework involving representatives of the communities and government bodies. To embrace the whole area of the park in its creation process, each rural commune should have at least one village targeted until the final gazetting of the park (planned by the end of 2020). This strategy will seek to point out with some samples of territories per commune, the advantages of implementing a concerted natural resource-management system as part of the creation of the MBNP. Community-specific support will be channelled through this tool of shared planning and governance.

Since 2018, a methodology for the establishment of village committees was finalized and has been launched. The necessary sensitization and advocacy of the populations and their authorities somewhat retarded the first creations, but they accelerated towards the end of 2019. On several occasions, it was necessary to resume the dialogue with the communities to clear up misunderstandings, rumours, and interpretations. Since June 2018, until beginning of February 2019, the WCF team with the support of INSUCO (International social science and engineering office) have implemented a specific work on the settlement history of the MBNP's populations. It allowed us to understand each lineage from all villages, and a specific identity map of all the community entities has been established allowing to understand the historical relationship between them. We were able to negotiate the establishment of joint committees between related villages.

It is planned that within the same commune, the Village Committees for Conservation and Development (CVCD) will be represented by a Union, which, with the support and supervision of the MBNP Management Unit, will participate in advocacy and negotiations with the mayor of the commune to promote sustainable development of the territories concerned. No hierarchical subordination will be tolerated between the Unions and the CVCDs, and an entity will still be able to function if the other fails. Indeed, organisational development is a long-term process. Each of the five prefects have validated the framework of the relation between the CVCD, Union and Communes through specific communal assemblies that take place at least twice a year. The 15<sup>th</sup> CVCD has been formalized and 635 people have been reached during this process. The aim is to increase the possibilities of seeking funding and multiform supports from these communes, while ensuring that the localities of the park's communes are included in a logic that respects the directives and principles of natural resource management of the MBNP. These communal assemblies will play an important role in communication between the various development initiatives in the communes of the park and the managers of the MBNP.

A higher-level organization representing the various CVCDs and their Unions, "Faitière", will be activated to intervene at the time of the national committee meeting for the management of the park. In these meetings, the park manager will present the state of management of the park, its opportunities and challenges, as well as the latest news to all relevant stakeholders. In December 2019, 22 of the 28 expected CVCDs have been created (in 37 villages due to inter-village committees). Statutes, rules of procedure and minutes of proceedings are available. During the process of creation of the governance structure of involvement of the local communities, we were able to reach numerous stakeholders (1311, of which 507 women).



*Community consultations in the Moyon-Bafing National Park region*

### **2.3.2 Capacity building of local communities**

Capacity building of local communities in the framework of the MBNP project cannot be achieved without structuring committees. Therefore, the project supported the setting up of Village Committees for Conservation and Development (CVCD), as well as Economic Interest Groups (EIG), and General Interest Groups (GIG) that will be important in defining common objectives of conservation and local development. These aspects will be implemented through the validation of the Land Management Plan for each village territory. The strengthening of organizational, technical and operational capacities will consolidate the leadership of the local organizations in the sustainable development of village territories.

In 2019, 30 villagers (15 women) were trained to conduct the tree nurseries, 601 (546 women) were formed and equipped for agro-ecology practices, 169 (with 31 women), and 454 (with 401 women) for market gardening.

The Economic Interest Groups (EIG) and General Interest Groups (GIG) are not yet formalized. During 2019, several missions to elaborate the Land Management Plan were undertaken, informing and sensitizing the populations and authorities in the 7 pilot villages (Foungani, Kalinko Missira, Kalinko Konkero, Lallabara, Koulifakara, Laafa Boubé and Sangan). Training was held following the management guidelines of the MBNP regarding zoning, exchanges on sites/landscape units of importance and conservation and negotiation of rules for sustainable management of natural resources. Participation of the OGPR and local elected officials in the exchanges with the populations have been a key action in order to launch the elaboration of the Management Plan for each village.

Land management plans may serve a double role as development plans for the communities to raise funds from (inter)national funding sources. As the Government of Guinea has a local development strategy, our interest is to elaborate these plans through the framework of recognized channels of support. Thus, a direct link will be made between the priority actions of the Local Development Plans (LDPs) of each commune. Collaborating with ANAFIC, the national agency in charge of rural development, we have been able to collect and use the LDPs of 14 communes. These LDPs are consolidated by the Annual Investment Plans (AIP) and Local Socio-Economic Diagnoses (LSED) of each rural municipality.

The guidelines for the 3 zones of the park are defined by the Arrêté A/2017/5232/MEEF/SGG establishing the process for the park creation. Together with OGPR and other stakeholders, WCF continued defining the guidelines with the communities.

The Land Management Plan process is both expanded with field missions and satellite image analysis to provide a detailed representation of the village territories defining their relation to space, as well as the areas that are social claims. By overlapping this information with environmental analyses of forest cover, watershed conservation, areas of high conservation value, bushfire and so on, this will give important information for the discussion on land-management plans. These exchanges are led by the village committees, organized by a collaborative management team for the pilot villages, and the park teams.

In order to validate the 28 Land Management Plans by 2020, data are already available from 16 participatory maps of Laffa Boubhe, Kalinko Konkero, Kalinko Missira, Founгани, Koulifakara, Lallabara, Sangan, Mareinfaya, Madina 2, Missira Djallonke, Mougne Dow, Bossico Dow, Bossico Ley, Botoko, Balabory and Koukoutamba. The maps show the boundaries, occupation and land use of the different village territories.

### 2.3.3 Meetings of stakeholders

Among the many meetings that have been conducted with various stakeholders in 2019, rounds of meetings were directly linked to the follow-up of the 2018 discussions during the 3rd Community Consultation Framework (CC3, cf. annual report 2018). These exchanges involved a large number of stakeholders, representing the relevant actors of the local society, and included presentations and discussions on the following themes: related laws, MBNP creation process and news, inter-ministerial propositions, bushfires, human-wildlife conflicts, communal assemblies and rural development.

In April 2019, we improved the link between the decentralized services, the local elected representatives and the structures involved in the process of creating the MBNP. Thanks to the CC3 mission the content of the ministerial Arrêté is already known by the participants. They have a good impression of the activities planned and carried out in the MBNP. The elected officials reiterated the need for their involvement in all activities and emphasized the integration of the Land Management Plans into the Annual Investment Plan of the communes.

Within the framework of the 2018-2020 Action Plan, a workshop was organized in Labé to popularize the bushfire management strategy and the complaint and grievance mechanisms in the MBNP. The workshop brought together 13 communal assemblies: Kouratongo, Gagnakaly, Kalinko, Kollet, Kansangui, Gadhawoundou, Fello koundoua, Kollangui, Teguereya, Lansanaya, Diatifere, Koïn and Tougué.

**Most important:** From the discussion, it emerged that the bushfire management strategy must rely on regional collaboration, support from prefectures and communes, and the organization of fire management groups in the village area has to be done according to the following scheme:

- Meso level: involvement of communes in bushfire management, in particular the presence of their elements in the early fire teams in the MBNP.
- Micro level: recruitment of 10 village people for the training of general interest groups for early firefighting and the establishment of firewalls (150 people in Laffa, 80 people in Dara, 110 people in Ndire Yangueya, 40 people in Kansangui, 110 people in Kela, 120 people in Fello Koundoua and 100 people in Bouroumba).

In view of the MBNP creation, important recommendations were elaborated by the inter-ministerial Commission (A/2017/848/MEEF/MMG/MEH/SGG) which includes the authorities in charge of these discussions, the Ministry of Environment, Water and Forests (MEEF), the Ministry of Mines and Geology (MMG), and the Ministry of Energy and Hydraulics (MEH).

Several meetings took place in 2019. In June 2019, a field mission was carried out in the park bringing together all actors involved, namely **the park, the dam, and the mines**, accompanied by various stakeholders including local elected officials, representatives of the Ministries and regional technical services. A meeting held in September 2019 clarified the technical proposals developed during the field mission. The responsibilities of the various actors have been identified and overall recommendations been formulated, the most important being:

- In the spirit of **reconciling the 3 projects**, the commission recommends that the MEEF/CPDM-Ministry of Mines shall provide the necessary elements to clarify the boundaries of the MBNP (geographic coordinates) in order to extend the research permit to the Toubal mining company for carrying out its ESIA. The ESIA's of the three projects will be brought together to compile the sum of the residual impacts and to conduct a common strategic environmental study on a more global scale and taking into consideration other projects in the area as well, such as the UNDP Bafing Faleme project;
- Regarding the Toubal mining company, the disposal of minerals should be analysed by a specific commission including the Ministry of Transport and other infrastructure projects such as the Mali-Mamou railway corridor, the rehabilitation of National 7 and ECOWAS projects such as the bridge over the Bafing. Definition of mitigation measures in favour of the environment, especially bridges allowing the passage of animal species, are essential. The least favourable option for the evacuation of minerals is the railway through Dabola. The best option would be a railway through the west, running outside the MBNP, and an alternative would be to use National 7. It is necessary to conduct a strategic analysis on this issue.

Resolving this issue is critical for the survival of the GAC-CBG Offset.

- In relation to the Koukoutamba dam, considering the studies of the variants previously carried out, it appears essential to define avoidance measures regarding the installation of the quarry and the base life. Mitigation measures will be proposed including the complete and contractual restoration of the quarry, and the impact of the installation of the base life will be analysed. Subsequently, the possibility of relocating the sites of the base life and the quarry may be considered. The corresponding analyses will be sent to the supervisory ministries for decision-making.

The resolution of this issue is critical to the survival of the GAC-CBG Offset.

- Considering the Resettlement Action Plan (RAP), it will be necessary to analyse the conditions for resettlement (World Bank SP 5, 7 and 8). If possible, resettlement outside the MBNP boundaries will be prioritized and no resettlement will be tolerated in the core area of the park. It is also important to analyze the possibility of installing fisheries outside the MBNP.

Again, the resolution of this point is critical for the survival of the GAC-CBG Offset.

- Payments for ecosystem services should be quantified and negotiated with the supervisory departments during the dam operation phase in accordance with the Water and Environment Code;
- The establishment of a joint commission to amend the Koukoutamba Dam's Environmental and Social Management Plan in order to integrate the concerns of the MBNP management measures is in progress.

### 2.3.4 Cartography mapping to identify the community boundaries

From June 2018 till February 2019, WCF with the support of INSUCO (international social science and engineering office) documented the territorial boundaries of 255 communities of MBNP including 232 villages, 16 camps and 7 hamlets. The report on village boundaries is available, but it appeared that many areas are either unclaimed or claimed by one or more villages. Missions and data analysis made it possible to clarify these results, and showed that most of the errors are due to the bias of the guides. 24 cases of overlapping limits and 15 cases of unclaimed areas were targeted for the first participatory verification surveys with the populations between March and September 2019, and the method is used at each participatory mapping mission to clear up the errors.

### 2.3.5 Environmental awareness and communication

Since October 2018, we have developed partnerships **with four rural radios** (Tougué, Koubia, Dinguiraye and Dabola). These radios have been able to broadcast about the park creation process, the environment, and rural development actions. With the television broadcastings, more than 70 awareness events were diffused to the project's stakeholders, at the local to the national levels. In November 2019, we installed 42 awareness-raising and communication panels, they encompass the information about the management of the three park zones.

The 2019 **theatre awareness** tour was a success with 16,583 participants including 4096 men, 5547 women and 6940 children. We have 16 awareness officers that raised awareness about the MBNP creation in more than 50 villages with 4758 people sensitized including 2963 women.



*Theater tour around the Moyen-Bafing National Park, and Club P.A.N. children of Fello-Kollet in their outdoor nature classroom*

**Club P.A.N.** was active for its ninth school year in Guinea (2018/2019) working with 8 schools (Kalinko, Keyla, Gagnakaly, Fello-Kollet, Kounet, Daara, Laffa- Boubé and Kouratongo) in the Moyen-Bafing region with 608 participating children. The parents' day, prepared by the children at the end of the school year reached 3298 villagers. The new **Club P.A.N.** school year 2019/2020 has started with the teacher training workshop at Fello-Kollet in November 2019, and we have increased our environmental education project to 10 schools.

### 2.3.6 Social and Environmental Impact Assessment study

The steps required to validate a Social and Environmental Impact Assessment (SEIA) study in Guinea are complex and described in several rules of procedure and regulations. With the support of INSUCO, a preliminary review of the administrative and legal standards and requirements applicable to the project and the SEIA was conducted. A distinction is made

between the Guinean regulatory framework and international standards (mainly from the International Finance Corporation - IFC). The Guinean laws governing scoping studies are defined in 2014 by decree of the Guinean Bureau of Environmental Studies and Assessment (BGEEE). It is essential to comply with the documents necessary for the launch of the SEIA. The Terms of Reference are defined by two main documents: the stakeholder engagement plan and the scoping report. These two documents are part of the SEIA and are mandatory, both in international standards and in national legislation. The Terms of Reference are discussed and developed with the participation of UCOM (Unité de Communication pour le Moyen Bafing) which are representative of GAC and CBG, and they will be published at the beginning of 2020. The Dutch Commission for Environmental Assessment has proposed to finance for 2020 the accompaniment of a Strategic Environmental Study (SEA) to the MEEF in order to study the cumulative impact of the various projects envisaged in the Bafing area (MBNP, UNDP Bafing Faleme, Koukoutamba Dam and the planned micro-dams, high voltage lines, mines and roads).

## **2.4 Problems encountered**

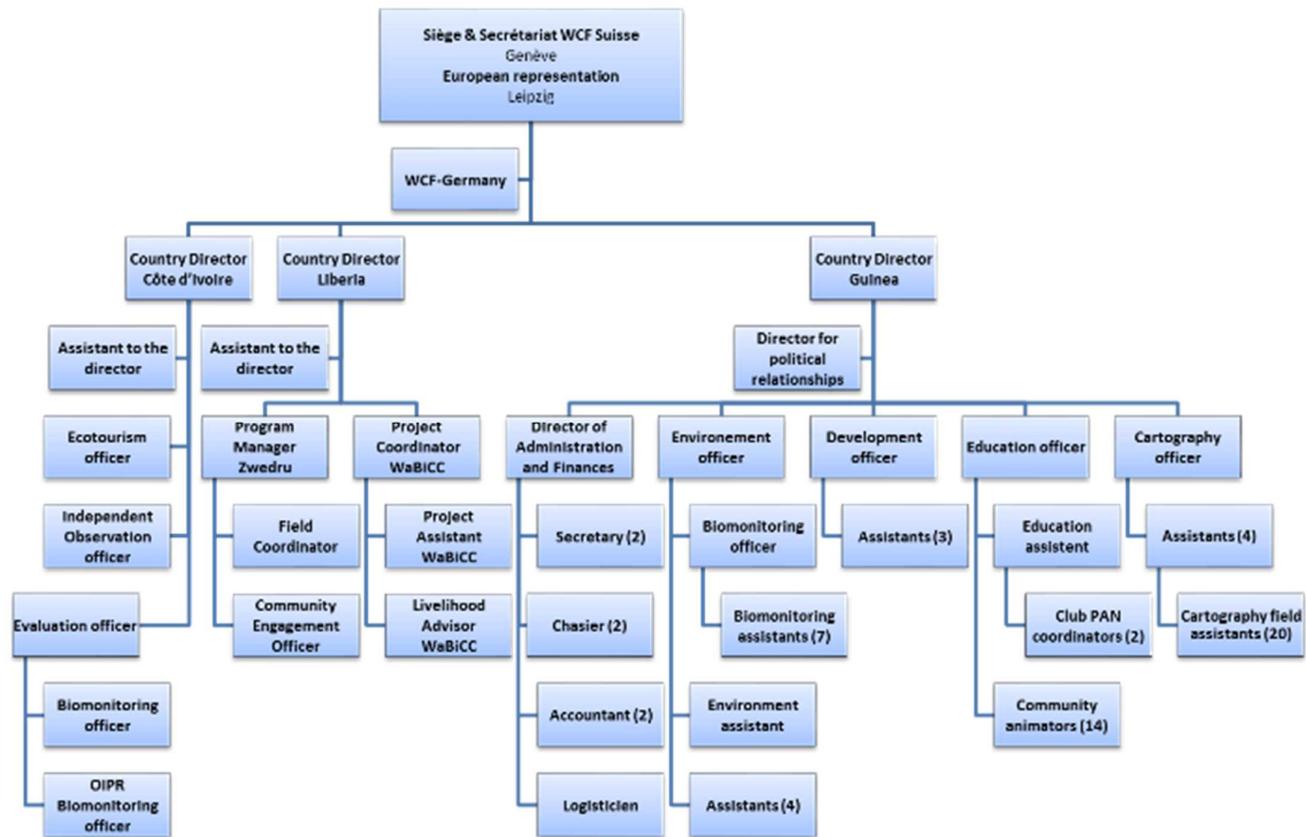
The creation the Moyon-Bafing National Park must be seen in the context of exacerbated social and political tensions in Guinea. In this context of political promises, infrastructure projects, such as dams or national roads, as well as mining projects, have a much greater impact on popular consciousness than the creation of a national park at the first sight. Despite these politic issues, the WCF does all its best to work with the inter-ministerial commission.

In addition to this, there were delays in early 2019 in the financing of the offset, affecting the support for up-scaling actions directly affecting the results of 2019.

The isolation of the site and the general poverty benefit opaque operations in which the technical services were (more or less) involved and corrupted. We had to deal with real threats to the timber and wildlife. Conflicts related to wildlife and populations exacerbate pressures on certain species, such as large carnivores. Given how entrenched in the culture of burning that the communities are, elimination of burning from land-preparation activities seems almost impossible. Hence, among the people who have tried out RNA, the focus on elimination of burning and the possible impacts of this will be increased. The other practices such as regeneration of trees from tree stumps, soil erosion control seem to undergo some drawbacks. There is need to emphasize that all these practices work together to improve land productivity and that elimination of one or several, reduces the achievement of the desired result.

The required change of mentality of all those involved is a true challenge.

## 2 Organisational chart



## 4 Acknowledgements

---

### **WCF is grateful to all the conservation agencies and foundations supporting its conservation activities in 2019:**

Arcus Foundation, Ambassade de Suisse en Côte d'Ivoire, APE TAG, Bengo/WWF/BMZ, Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung, Columbus Zoo and Aquarium, Compagnie des Bauxites de Guinée, Darwin Initiative, Disney Conservation Grant, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Food and Agriculture Organization of the United States (FAO)(EU-FAO FLEGT), Furuvik Zoo (Furuviksparken), Fondation Ensemble, FSPI via Ambassade de France, Guinea Alumina Corporation (GAC), Great Ape Conservation Fund of the U.S. Fish and Wildlife Service, Rettet den Regenwald e.V., Swiss Foundation for Solidarity in Tourism, SOS Endangered Species IUCN, The Biodiversity Company, Tierschutz Zürich, WA BiCC project from USAID, M. Wientjes via WWF, World Wildlife Fund for Nature (WWF), World Bank/OIPR/PARCI, Zoo Leipzig, and Zoo am Meer Bremerhaven.

### **WCF is grateful to all partners supporting its activities in 2019:**

Max Planck Institute for Evolutionary Anthropology, WILD Foundation, World Wildlife Fund, Rainforest Alliance, Fauna & Flora International, Ministères de la République de la Côte d'Ivoire, Ministère de l'Environnement, du Développement Durable, de Salubrité Urbain, des Eaux et Forêts, Ministère de l'Enseignement Supérieur et de la Recherche Scientifique, Ministère du Tourisme, Ministère de l'Education Nationale, Ministère de l'Economie et de Finances, Office Ivoirien des Parcs et Réserves, Ministries of the Republic of Liberia, Ministères de la République de la Guinée, Direction Nationale des Parcs et Réserves, Centre Forestier de N'Zerekore, Forestry Development Authority, Société de Développement des Forêts, Fondation Parcs et Réserves de Côte d'Ivoire, Centre Suisse de Recherches Scientifiques, Université d'Abobo-Adjame et de Cocody Abidjan, Deutsche Gesellschaft für Internationale Zusammenarbeit, KfW: Bankengruppe, Division Agriculture et Ressources Naturelles Afrique sub- Saharienne, Agence Française de Développement, Union Européenne, Eddie Theatre Productions, Alma Production.

**The WCF sincerely thanks the many private donors concerned by the vanishing wild chimpanzee populations for their generous donations towards its projects in 2019.**