

CHINKO CONSERVATION AREA REDD+ PROJECT, CENTRAL AFRICAN REPUBLIC



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Project Location	In the prefectures of Mbomou, Haute-Kotto and Haut-Mbomou of the CAR
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GHG Accounting/Crediting Period	15 September 2016 – 14 April 2045, 28 years and 7 months
Monitoring Period of this Report	15 September 2016 – 31 December 2020
History of CCB Status	Not applicable, applying for joint Verified Carbon Standard (VCS) and Climate, Community & Biodiversity (CCB) Standards validation and verification
Gold Level Criteria	The project has applied for Gold Level criteria in the Biodiversity and Climate. A brief description of the activities implemented, and results achieved, is provided below. Benefits on Biodiversity The project has already achieved important results during the first monitoring period; protecting the natural ecosystems against the negative impacts caused by the agents of deforestation has resulted in an increase in important fauna species in the area. A steady increase in wildlife has been observed throughout the monitoring period. An increase of key wildlife including the eastern giant eland (also known as the Lord Derby eland), bongo and the giant forest hog have been reported compared with studies conducted in 2014. Additionally, increasing signs of lions, hyaenas, wild dogs and even elephants with calves were documented, as well as a marked increase in the number of hippopotamus sightings, indicates the increased health of river systems.
	The project has also recorded the presence of eight critically endangered, 10 endangered and 21 vulnerable fauna species. There has been continuous monitoring of the size of these populations with research focusing on the following species: <i>Pan troglodytes schweinfurthii</i>, <i>Lycaon pictus</i>, <i>Panthera leo leo</i> and <i>Loxodonta cyclotis</i>. African Parks (AP) has also carried out the first vegetation inventory in the area, which showed the presence of certain typical rain forest species like the endangered Wenge tree (<i>Millettia laurentii</i>) and true African ebony (<i>Diospyros crassiflora</i>). These species are heavily exploited all over their range and the Chinko Conservation Area (CCA) is a valuable stronghold and might be crucial for the long-term preservation of a diverse gene pool for this economically important tree species. During this monitoring period, the project activities have contributed to the conservation of these species through the protection of their natural habitats. The aims are to continue with this protection and increase the protected area, which will improve the connectivity between the area

and its surroundings and reduce human pressure on biodiversity in the CCA.

Benefits on Climate

The Central African Republic's (CAR) vulnerability to climate change and limited ability to adapt to its adverse impacts represent serious threats to the management of ecosystems and other agricultural and renewable natural resources, social cohesion, stability and sustainable development.

The implementation of the project has created and will continue to create positive net climate change impacts. The sequestration of carbon in living biomass and the avoided deforestation of natural covers, which act as CO₂ sinks and contribute to the reduction of greenhouse gas (GHG) emissions. Measures to help communities and biodiversity adapt to the likely impacts of climate change have been designed to prevent the loss of forest cover by fighting the main drivers of deforestation.

The main activities in relation to this are seasonal sensitisation of pastoralists to promote sustainable use of natural resources in line with the land-use plan and initial plans and pilots to establish sustainable transhumant pastoralism corridors. In addition, the project proponent has been continuously working to establish a good relationship with the local communities and enhance local skills training. The proponent has also focused on sensitising communities to promote the sustainable use of natural resources, conducting consultations to elaborate a land-use plan and identifying key income-generating opportunities.

These goals are being addressed through the development of a land-use plan that includes all required wildlife corridors and exclusion zones. It will be agreed upon and communicated to all relevant communities.

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1 SUMMARY OF PROJECT BENEFITS

1.1 Unique Project Benefits

Outcome or Impact	Achievements During the Monitoring Period	Section Reference	Achievements During the Project Lifetime
Overall impact: To have a restored, well-functioning and sustainably managed protected area that serves as anchor point and contributes to the security of the larger landscape and the planning, execution and long-term management of natural resource use around the protected area.	All adjacent communities have benefitted from improved safety and security as a result of the project's law enforcement activities.	4.1	All adjacent communities have benefitted from improved safety and security as a result of the project's law enforcement activities.
Outcome 1: Improved transhumance management and resource use through conflict mitigation, sensitization and better land use planning	Community members in nearby villages (approximately 2,000 people) have directly benefitted from reduced conflict because of project activities.	4.1	Community members in nearby villages (approximately 2,000 people) have directly benefitted from reduced conflict because of project activities.
Outcome 2: Promotion on sustainable and controlled natural resource use through ownership, training and monitoring of co-management zones with communities	Improved livelihoods for all adjacent communities to the project area ¹	4.1	Improved livelihoods for all adjacent communities to the project area.
	Community members in nearby villages (approximately 2,000 people) ² have benefitted from educational programmes and courses in ecology, conservation, economics and other subjects.	4.1 and 4.3	Community members in nearby villages (approximately 2,000 people) have benefitted from educational programmes and courses in ecology, conservation,

¹ This is a result of improved security, the preservation of wildlife that serve as an important source of nutrition for local communities and diverse ecosystem services such as a constant supply of freshwater, protection from erosion and high air quality, among others.

² This is the estimated number of people living in the communities surrounding the borders according to local experts working in African Parks.

			economics and other subjects.
Outcome 3: Increased natural capital through the restoration of resilient and productive ecosystems. The project aims to restore species rich and productive woodland and grassland savannas, tropical forests and productive freshwater systems. This will result in higher wildlife densities, restoration of threatened species and reintroduction of locally extinct species.	Approximately 24,300 km ² of productive ecosystems are now effectively managed by the project. This makes up part of the largest functional tropical wilderness in Africa.	5.1	Approximately 24,300 km ² of productive ecosystems are now effectively managed by the project. This makes up part of the largest functional tropical wilderness in Africa.

1.2 Standardized Benefit Metrics

Category	Metric	Achievements During Monitoring Period	Section Reference	Achievements During the Project Lifetime
GHG emission reductions (ERs) and removals	Net estimated emission removals in the project area, measured against the without-project scenario	Not applicable	N/A	Not applicable
	Net estimated ERs in the project area, measured against the without-project scenario	1,438,468 tCO ₂ e	3.2	1,438,468 tCO ₂ e ³
Forest ⁴ cover	For REDD ⁵ projects: the number of hectares of reduced forest loss in the project area measured against the without-project scenario	Data not available: the baseline emissions models predict cumulative emissions over time rather than a rate of ecosystem conversion in hectares per year.	N/A	Data not available: the baseline emissions models predict cumulative emissions over time rather than a rate of ecosystem conversion in hectares per year.
	For ARR ⁶ projects: the number of hectares of forest cover increased in the project area measured against the without-project scenario	Not applicable	N/A	Not applicable
Improved land management	Number of hectares of existing production forest land in which improved forest management (IFM) ⁷ practices have been introduced as a result of the project's activities,	Not applicable	N/A	Not applicable

³ 14,283,082 expected by the end of 2026.

⁴ Land with woody vegetation that meets an internationally accepted definition (e.g. UNFCCC, FAO or IPCC) of what constitutes a forest, which includes threshold parameters, such as minimum forest area, tree height and level of crown cover, and may include mature, secondary, degraded and wetland forests (*VCS Program Definitions*).

⁵ Reduced emissions from deforestation and forest degradation (REDD): activities that reduce GHG emissions by slowing or stopping the conversion of forests to non-forest land and/or reduce the degradation of forest land where forest biomass is lost (*VCS Program Definitions*).

⁶ Afforestation, reforestation and revegetation (ARR): activities that increase carbon stocks in woody biomass (and in some cases soils) by establishing, increasing and/or restoring vegetative cover through the planting, sowing and/or human-assisted natural regeneration of woody vegetation (*VCS Program Definitions*).

⁷ IFM activities are those that make forest management practices more sustainable and increase carbon stock on forest lands managed for wood products such as saw timber, pulpwood and fuelwood (*VCS Program Definitions*).

Category	Metric	Achievements During Monitoring Period	Section Reference	Achievements During the Project Lifetime
	measured against the without-project scenario			
	Number of hectares of non-forest land in which improved land management has occurred as a result of the project's activities, measured against the without-project scenario	Not applicable	N/A	Not applicable
Training	Total number of community members who have improved skills and/or knowledge resulting from training provided as part of the project activities	Around 400 employees and frequent exchanges with about 35 different communities and roughly 2,000 individuals	4.3	Around 400 employees and frequent exchanges with about 35 different communities and roughly 2,000 individuals
	Number of female community members who have improved skills and/or knowledge resulting from training provided as part of project activities of the project activities	Approximately 500 women from the 35 communities living outside the project area have benefitted from improved skills and knowledge which is significant given the heavily male-dominated nature of certain activities such as hunting, mining and pastoralism in the area. The project also employs 9 female staff members who receive regular training.	4.3	Approximately, 500 women from the 35 communities living outside the project area have benefitted from improved skills and knowledge which is significant given the heavily male-dominated nature of certain activities such as hunting, mining and pastoralism in the area. The project also employs 9 female staff members who receive regular training.

Category	Metric	Achievements During Monitoring Period	Section Reference	Achievements During the Project Lifetime
Employment	Total number of people employed in project activities ⁸ , expressed as the number of full-time employees ⁹	Around 400 employees including 45 non-armed echo-monitors, 45 non-armed echo-transhumant officers (TANGO) and about 25 rangers.	4.3	Around 400 employees including 45 non-armed echo-monitors, 45 non-armed echo-transhumant officers (TANGO) and about 25 rangers.
	Number of women employed in project activities, expressed as the number of full-time employees	9 women, given the nature of the work and the difficult circumstances	4.3	9 women, given the nature of the work and the difficult circumstances
Livelihoods	Total number of people with improved livelihoods ¹⁰ or income generated as a result of the project activities	Data not available. All adjacent communities will benefit from the Chinko Conservation Area (CCA).	4.1	Data not available. All adjacent communities will benefit from the Chinko Conservation Area (CCA).
	Number of women with improved livelihoods or income generated as a result of project activities	Data not available. It is expected that around 50% of the adjacent communities are woman.	4.1	Data not available. It is expected that around 50% of the adjacent communities are woman.
Health	Total number of people for whom health services were improved as a result of project activities, measured against the without-project scenario	Around 400 (all employees)	4.3	Around 400 (all employees)

⁸ Employed in project activities means people directly working on project activities in return for compensation (financial or otherwise), including employees, contracted workers, sub-contracted workers and community members that are paid to carry out project-related work.

⁹ Full-time equivalency is calculated as the total number of hours worked (by full-time, part-time, temporary and/or seasonal staff) divided by the average number of hours worked in full-time jobs within the country, region or economic territory (adapted from UN System of National Accounts (1993) paragraphs 17.14[15.102];[17.28]).

¹⁰ Livelihoods are the capabilities, assets (including material and social resources) and activities required for a means of living (Krantz, Lasse, 2001. *The Sustainable Livelihood Approach to Poverty Reduction*. SIDA). Livelihood benefits may include benefits reported in the employment metrics of this table.

Category	Metric	Achievements During Monitoring Period	Section Reference	Achievements During the Project Lifetime
	Number of women for whom health services were improved as a result of project activities, measured against the without-project scenario	Around 9 (employees)	4.3	Around 9 (employees)
Education	Total number of people for whom access to, or quality of, education was improved as a result of project activities, measured against the without-project scenario	All local employees (around 400) and community members in 35 villages (around 2,000 people) ¹¹	4.1	All local employees (around 400) and community members in 35 villages (around 2,000 people)
	Number of women and girls for whom access to, or quality of, education was improved as a result of the project activities, measured against the without-project scenario	9 employees and approximately 500 community members	4.1	9 employees and approximately 500 community members
Water	Total number of people who are expected to experience increased water quality and/or improved access to drinking water as a result of project activities, measured against the without-project scenario	Data not available. ¹²	4.1	Data not available.
	Number of women who experienced increased water quality and/or improved access to drinking water as a result of the project activities, measured against the without-project scenario	Data not available.	4.1	Data not available.

¹¹ AP is not an expert in education. However, sensitisation programmes for all local employees (around 400) and community members in 35 villages (around 2,000 people) benefit from many educational programmes and courses in ecology, conservation, economics and other subjects. AP also works closely with students at the University of Bangui and the technical school of Mbaiki.

¹² All adjacent communities benefit from ecosystem services provided by the CCA. A constant supply of freshwater (even during the dry season) is supplied by major rivers like Mbari, Chinko and Mbomou which are morphologically and ecologically in a pristine stage.

Category	Metric	Achievements During Monitoring Period	Section Reference	Achievements During the Project Lifetime
Well-being	Total number of community members whose well-being ¹³ was improved as a result of the project activities	Around 35 local communities have benefitted and about 2,000 individuals ¹⁴	4.1	Around 35 local communities have benefitted and about 2,000 individuals
	Number of women whose well-being was improved as a result of the project activities	Approximately 500	4.1	Approximately 500
Biodiversity conservation	Change in the number of hectares with significantly improved biodiversity conservation management due to the project ¹⁵ , measured against the without-project scenario	Approximately 24,300 km ²	5.1	Approximately 24,300 km ²
	Number of globally Critically Endangered or Endangered species ¹⁶ benefitting from reduced threats as a result of the project activities, ¹⁷ measured against the without-project scenario	At least eight Critically Endangered and 10 Endangered species	5.4	At least eight Critically Endangered and 10 Endangered species

¹³ Well-being is people's experience of the quality of their lives. Well-being benefits may include those reported in other metrics of this table (e.g. training, employment, health, education, water, etc.), but could also include other benefits such as the empowerment of community groups, strengthened legal rights to resources, conservation of access to areas of cultural significance, etc.

¹⁴ Most benefits have come from education and training in the sustainable use of natural resources and responsible exploitation of minerals.

¹⁵ Biodiversity conservation in this context means areas where specific management measures are being implemented as a part of project activities to enhance biodiversity conservation.

¹⁶ Per IUCN's Red List of Threatened Species.

¹⁷ In the absence of direct population or occupancy measures, the measurement of reduced threats may be used as evidence of the benefits provided.

2 GENERAL

2.1 Project Description

2.1.1 Implementation Description

During the monitoring period under review (15 September 2016 – 31 December 2020) the project has successfully expanded the core protected area from about 20,000 km² to about 24,300 km². The project has also recruited, trained and equipped at least 25 armed rangers, 45 unarmed echo-monitors, 45 unarmed echo-transhumant officers and 10 control room operators to secure the CCA. This has resulted in the effective management of the project area, most of the area has been kept cattle free during the monitoring period.

The project has also implemented activities focused on the restoration and maintenance of ecosystems and enhancing the status of endangered species, as well as increasing the wildlife population. Buffer areas have been established for sustainable fishing, hunting and the use of non-timber products for local communities and a comprehensive land-use plan that will establish pastoralism corridors for the herders to utilise in the long term is being finalised, during this monitoring period African Parks succeeded to actively involve all major communities in the periphery of Chinko to contribute to the land use plan to establish long-term strategies to use natural resources sustainably.

Finally, extensive engagement and sensitisation activities have been carried out with all local communities and transhumant pastoralists in the area (check section 2.2.1 for more details of the activities done so far). These sensitisations focused on ensuring community members and transhumant pastoralists understand the benefits of wildlife and habitat conservation, mitigating any perceived negative impacts of the management of the protected area and improving livelihoods through the sustainable use of natural resources.

Leakage and non-permanence risks are monitored and managed by the echo-monitors and echo-transhumant officers. These staff members are trained and equipped to effectively engage with transhumant pastoralists and local communities. They have direct interactions focusing on sensitisation and education around the sustainable use of natural resources and the benefits of protected area management. The echo-monitors and echo-transhumant officers are also responsible for monitoring leakage and non-permanence risk factors. They observe and note any illegal human activity and all wildlife movements throughout the reserve and on the boundaries of the CCA. It is important to note that the entire CCA will continue to be monitored and managed regardless of the delineation of project accounting areas and that activity-shifting leakage areas will continue to be monitored regardless of the exclusion of certain forest classes in the eligible area of the PAAs.

Overall, as a result of the different activities carried out during this monitoring period, it has been possible to reduce deforestation in the project area compared with the baseline scenario, resulting in the generation of 1,438,468 (tCO₂e) net emissions reduction for the 2016 – 2020 period, according to the Non-Permanence Risk assessment the buffer discount obtained was 6.5% but the minimum assumed is 10%, therefore, after applying the buffer the amount of tradable VCUs in the period is 1,294,618.

2.1.2 Project Category and Activity Type

The project falls under scope 14 'Agriculture, Forestry and Other Land Use' (AFOLU) in the category of 'REDD Avoided Unplanned Deforestation and Degradation'. It is a grouped project that aims to protect areas covered with natural vegetation in the eastern part of the country that are expected to be converted, degraded or deforested in the absence of the project.

2.1.3 Project Proponent(s)

Organisation Name	African Parks RCA
Contact Person	Jean-Baptiste Mamang-Kanga
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2.1.4 Other Entities Involved in the Project

Organisation Name	African Parks Network
Role in the Project	Overseeing the management of the project
Contact Person	Matthias De Beenhouwer
Title	Nature-based solutions manager
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Organisation Name	South Pole Carbon Asset Management Ltd.
Role in the Project	Planning and overseeing the development of appropriate project design and monitoring techniques in line with VCS and CCBS guidelines
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2.1.5 Project Start Date (G1.9)

The project start date is 15 September 2016. Although the first agreement with the government was signed back in June 2014, no project activities that led to the generation of GHG emissions reductions were implemented in the field and only in September 2016 Chinko started the first campaign with sensitisation officers in the field informing the transhumance pastoralists of the importance of the project area and the necessity to avoid using the area as a route. This activity led to the successful management of cattle inside the project area during the 2016-2017 dry season.

2.1.6 Project Crediting Period (G1.9)

The crediting period runs from 15 September 2016 to 14 April 2045. The length of the crediting period is 28 years and 7 months.

2.1.7 Project Location

Figure 1, below, presents the project location, within the larger region of Eastern Central African Republic. Inside the project area, the current project accounting areas.¹⁸ It is expected that in the future new instances are added in some sectors of the geographical expansion area as part of a larger land-use planning that is being conducted by African Parks in conjunction with relevant stakeholders.

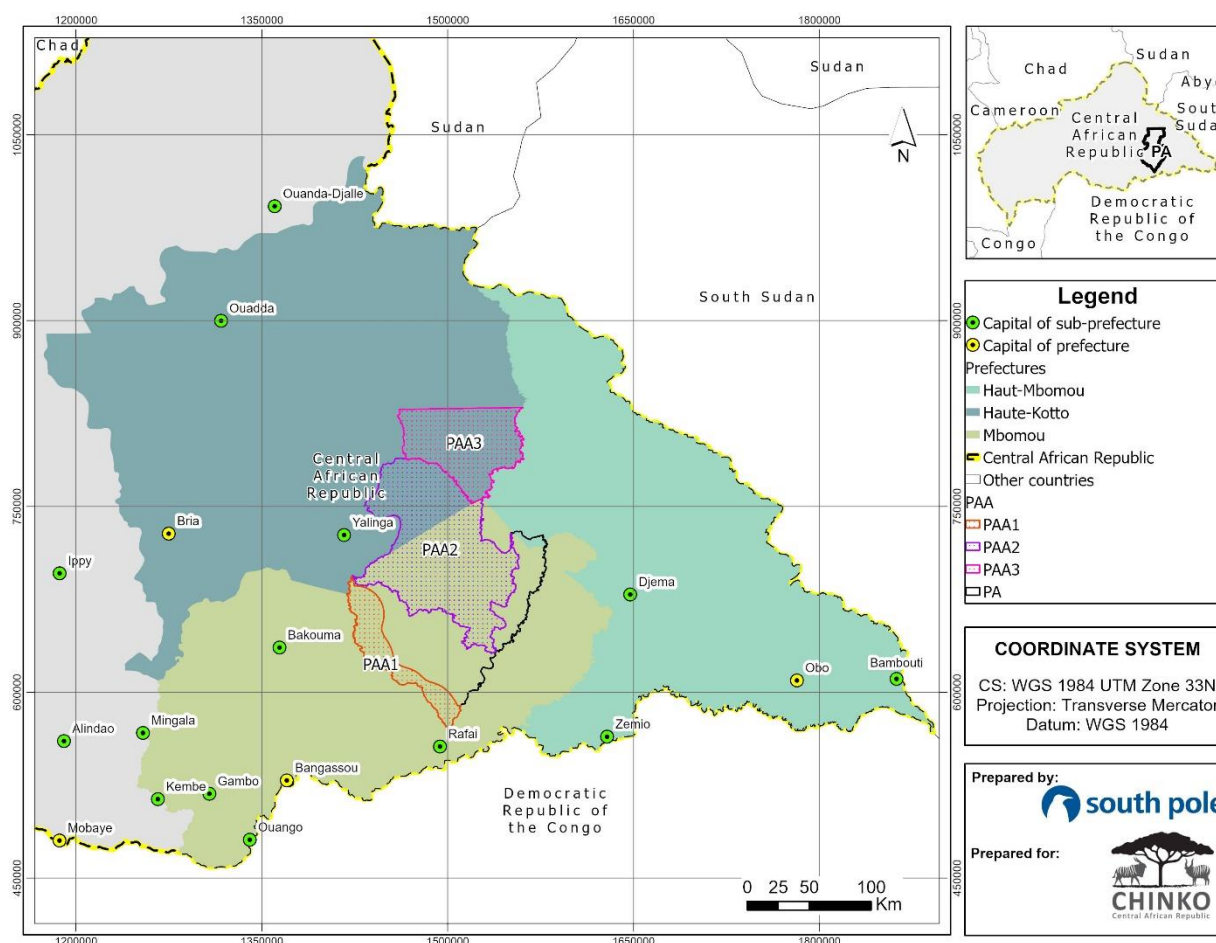


Figure 1: Project location¹⁹

(Source: South Pole, 2023)

¹⁸ Coordinates are contained in a KML file in the supporting documentation.

¹⁹ A full-size map is also available in the supporting documentation.

2.1.8 Title and Reference of Methodology

Methodology applied:

- VM0009 Methodology for Avoided Ecosystem Conversion, v 3.0

Tools applied:

- VT0001 Tool for the Demonstration and Assessment of Additionality in VCS AFOLU Project Activities, v 3.0
- VCS AFOLU Non-Permanence Risk Tool, v 4.0

2.1.9 Other Programs (G5.9)

The project has not been registered nor is it seeking registration under any other GHG programme.

2.1.10 Sustainable Development

According to the information provided by the Sustainable Development Report 2020²⁰, the CAR is the world's lowest-ranked country with an overall score of 38.54 out of 100. This score measures a country's total progress towards achieving all 17 Sustainable Development Goals (SDGs) and can be interpreted as the percentage of achievement.

The country has only achieved two out of 17 SDGs (Climate Action and Life on Land) and it is not possible to rank it in one: Life below Water. For the remaining 14 SDGs, there are major challenges are to achieving them (see Figure 2). The trends show that the two achieved SDGs have been maintained, two of the 14 SDGs have not been achieved but are on track, six are stagnating or increasing at less than 50% of the required rate, three are decreasing and three more have no trend data available (see Figure 3).

As the data shows, it is a major challenge for the country to be on track to achieve the SDGs. The project intends to contribute to maintaining the achieved SDGs (13 and 15) and also aims to improve the current assessment of at least three more (see Table 1).



Figure 2: Current assessment – SDG achievement

Source: SDG dashboard

²⁰ Available at: <https://dashboards.sdgindex.org/static/countries/profiles/Central%20African%20Republic.pdf>

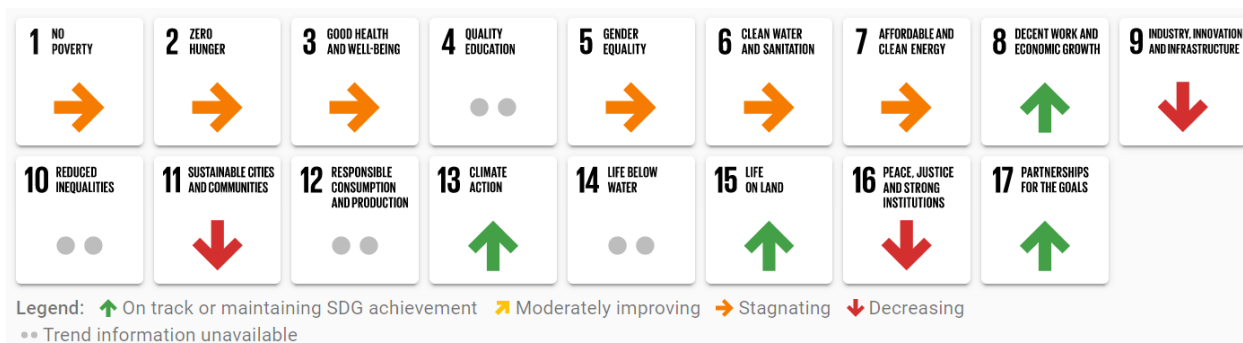


Figure 3: Trends on SDG achievements

Source: SDG dashboard

Table 1: The project's contribution to the SDGs

SDG	Contribution Description	Monitoring Description	Results
SDG 1: No poverty	In a country with high levels of poverty, African Parks as a project proponent is supporting in decreasing the poverty level by being the largest employer in the region.	Number of people employed Percentage of employees earning a salary above the poverty headcount ratio at USD 1.90/day (%) Percentage of employees earning a salary above the poverty headcount ratio at USD 3.20/day (%)	Approximately 400 employees with 45 non-armed echo-monitors, 45 non-armed echo-transhumant officers and about 25 rangers 100% of Chinko employees earn a salary above the poverty ratio of USD 1.90/day. 100% of Chinko employees earn a salary above the poverty ratio of USD 3.20/day.
SDG 8: Decent work and economic growth	In a country where unemployment and informal employment prevails, African Parks as a project proponent is providing decent work and contributing to economic growth in the region (not only by providing income opportunities but also by paying government taxes). Currently, the project proponent is the largest employer in the region and	Percentage and number of employees earning a monthly salary above the national average Frequency rates of fatal and non-fatal occupational injuries	100% of Chinko employees earn a salary higher than the CAR's national average. There are at least two cases of non-fatal occupational injuries every month. However, during the monitoring period, there was only one fatal occupational incident in the organisation (three staff

SDG	Contribution Description	Monitoring Description	Results
	aims to protect labour rights and promote safe and secure working environments for all workers.		members passed away in a helicopter crash).
SDG 10: Reduced inequalities	In a country where unemployment and informal employment prevails, African Parks as a project proponent is helping to reduce inequalities in the region by being an equal opportunity employer that aims to eliminate all forms of unfair discrimination such as race, ethnicity or gender in the recruitment and selection of staff.	Proportion and number of employees earning below 50% of the median income	No employees earn below 50% of the median income.
SDG 13: Climate action	With the successful implementation of the project African Parks intends to demonstrate to governmental officers that it is possible to integrate climate action measures into strategies and planning.	Net estimated ERs in the project area, measured against the baseline scenario	1,438,468 tCO ₂ e
SDG 15: Life on land	With the successful implementation of the project African Parks intends plans to progressively increase the protected area and promote the implementation of sustainable management, halt deforestation and help to restore degraded forests.	Chinko forest protected area (ha)	Approximately 2,168,000 ha of forest protected

2.2 Project Implementation Status

2.2.1 Implementation Schedule (G1.9)

Date ²¹	Milestone(s) in the Project's Development and Implementation
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²¹ Please note that some milestone does not have a corresponding date but rather a period of time or a specific month.

13 June 2014	Chinko project and the government of the CAR sign an agreement for the management of the hunting zones N° 39, 40, 41 and 48.
December 2014	Chinko became the eighth protected area in AP's portfolio.
December 2014	Strategic relationships were developed with conflict research groups and regional military task forces based in the area to improve governance in the Eastern CAR region and overall stability.
January – December 2015	Management and infrastructure: construction of the headquarters, securing a core protection zone within the park
15 September 2016	Project start date: sensitisation meetings with transhumance herders regarding Chinko's boundaries
2016-2017 dry season	Community development: focus on sensitisation and relationship building with local leaders and community members
March 2017 – April 2018	Humanitarian assistance: Chinko's staff provided safety and security to around 380 internally displaced people (IDP) who have fled the violence in neighbouring towns held by rebels. The refugees remained for several months until the ethnic violence subsided and they were able to safely relocate back to their villages. Some of them have been hired as transhumance sensitisation officers to help their community and reduce the threats that arise from armed cattle herders.
July 2017	Upon the arrival of the transhumance herders from the north, sensitisation teams were deployed to speak with the herders and raise awareness about Chinko and its borders. They were able to direct the herders around the protected area.
November – December 2017	All the rangers completed refresher training and advanced tactical training.
4 December 2017	Park management and infrastructure development: CCA organised a conference focused on 'Exploring the intersection between conservation and peacebuilding in Central Africa', and targeted key stakeholders including donors, conservationists and institutions.
2017-2018 dry season	Sensitisation teams continue to be deployed in the field on the known cattle roads to divert groups around the park.
Second semester 2018	Law enforcement: Chinko also recruited, trained and deployed 32 transhumance sensitisation officers to monitor and educate transhumant herders coming into the CAR from Sudan, one of the major threats in the area.
17 September 2018	Community development: community sensitisation meeting held in Bangassou saw significant results. Through direct communication with the community, the meeting opened the door to future socio-economic development opportunities.
November 2018	30 transhumance sensitisation officers were recruited and went through an extensive training programme, learning how to navigate with locus software and use satellite devices.
2018-2019 dry season	Multiple teams of rangers, transhumance sensitisation officers and echo-monitors were deployed. This not only helps secure the CCA but also contacts numerous herders from Sudan and has a significant impact on directing the grazing of these

	people and reducing the risk of conflict. The CCA remained cattle-free for most of the season.
January-February 2019	Biodiversity conservation: through the Chinko and Vovodo River expedition, 200 km of the Chinko River and 15 km of the Vovodo River were surveyed.
March 2019 – July 2020	Community development: local stakeholder consultation and discussions about a comprehensive land-use plan for the periphery of the CCA. The meetings covered all communities (permanent settlements) in the west, south and east of the CCA.
July 2019	Biodiversity conservation: the first standardised aerial minimum count along major floodplains was executed. The observation of a herd of 52 eastern giant elands, six independent groups of 75 eastern buffalo and 11 events of 32 defassa waterbucks, as well as the sighting of an adult roan male antelope along the 580 km transect, indicate that larger herbivores are widely distributed across the CCA and continue to recover.
26-27 th September 2019	Community development: the CCA was pleased to host various dignitaries, ambassadors and ministers including the CAR's United States (US) ambassador, USAID director and the Minister of Water, Forestry, Hunting and Fishing.
Nov 2019 – Jan 2020	Law enforcement: training was carried out for the entire ranger unit.
2019 – 2020 dry season	Unarmed monitors and transhumance teams in the field, working to sensitise the local communities in the periphery of the park. The CCA remained free of cattle.
February 2020	Community development: a presentation of the Chinko project was made at the US ambassador's residence to key stakeholders in the region. Attendees included representatives from the World Bank, Chinese Embassy, French Embassy, AFD (French Development Agency), Head of UN Office for the Coordination of Humanitarian Affairs (OCHA), US Embassy, Office of U.S. Foreign Disaster Assistance, National Assembly and Minister of Water and Forestry. It was followed by a similar presentation held at OCHA during inter-cluster meetings with all UN bodies and international non-governmental organisations.
15 April 2020	An agreement to expand the protected area to 5.5 million ha was signed, with a start date for PAA 3.
October 2020 – early 2021	Community development: local stakeholder consultation and discussions about a comprehensive land-use plan for the periphery of the CCA.
26 November 2020	The last illegal mine within Chinko's borders was peacefully closed on 26 November.
November 2020	The forest monitoring process started.

Complementing the summary presented in the table above, below is a longer description of the activities carried out for the transhumance pastoralism situation.²²

²² Each of the activities described here can be confirmed either in the monthly, annual or the donor reports submitted as supporting documentation

As described in the PDD, transhumance pastoralism is the main direct driver of deforestation and degradation of woodland savannas in the region and was already affecting the project area before the implementation of the project activities.

The pastoralists exploit natural resources in the region as they move. This includes poaching of large game, poisoning large carnivores that pose a threat to their cattle as well as cutting down trees for fodder, honey, medicine, fuel wood and other non-timber forest products. Furthermore, because the forested areas restrict the movement of the pastoralists, they commonly cut down the understory as they move through and then burn it to create large corridors to improve access the following year.

September 2016 – September 2017

During the first year of implementing the project, African Parks put in place a number of activities for controlling the project area, including:

- mounting more than 5,000 signs along the northern boundary (which is where the majority of the cattle herds came from), erecting large signs in villages and towns neighboring the reserve to inform communities about the boundaries.
- training and recruiting 17 new rangers and 3 additional control room operators; refresher training for existing rangers.
- strengthening outreach to local communities (including judicial officials, mayors, prefecture and subprefecture leaders and local village chief).
- employing a former cattle herder and local Mbororo to work on the community program. Chinko's community program also had multiple meetings with leaders of the local herders, to sensitize them on the borders of the Chinko area, ecological interactions, conservation goals and sustainable land use approaches.
- working in close collaboration with local governance institutions (including the Gendarmerie, Police, FACA, traditional tribal leaders, transhumance leaders) and surrounding communities.
- determining that the transhumance situation should be looked at on a regional and national scale, MINUSCA²³ agreed to set up a study group – which includes Chinko staff members – to find solutions to the transhumance to help bring about regional peace and stability.

October 2017 – September 2018

During the second year, efforts to sensitize herders started to produce positive results, including:

- continuous sensitization throughout the dry season. Chinko's community development program held multiple meetings with leaders of the local herders in order to sensitize them about the boundaries of the Chinko area, ecological interactions, conservation goals and sustainable land use approaches. Thanks to this, nomadic cattle herders remained largely outside of the protected area and followed designated transhumance corridors to the eastern and western boundaries of the park.
- the signs mounted along the northern Chinko border in Year 1 remained intact and proved to be effective, this activity continued in Year 2 with an additional 5,000 signs being raised.

²³ United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic

- during the 2017-2018 dry season the Chinko herder sensitization teams were positioned along the western and eastern border of the conservation area and were effective in guiding the way for the groups of herders.
- Chinko began working towards a sound, participative land use plan that integrates a transhumance strategy and is approved by the Government as well as by the communities.
- Chinko hosted a visit of representatives of the US Embassy during late January 2018. It was the first time in quite a while that they were allowed to go on a field visit outside of the capital. They saw the transhumance strategies at the height of the dry season.
- in combination with the law enforcement and transhumance strategy, Chinko prioritized work with local communities and partners to economically develop the surrounding region to establish a greater sense of stability.

Figure 4 below shows fire data (obtained from Global Forest Watch Fires) in and around Chinko between 2012 and the dry season of 2017/18. As shown, significant progress was made toward keeping Chinko free of cattle and resulted in a positive conservation outcome thanks to the reduction of human made fires.

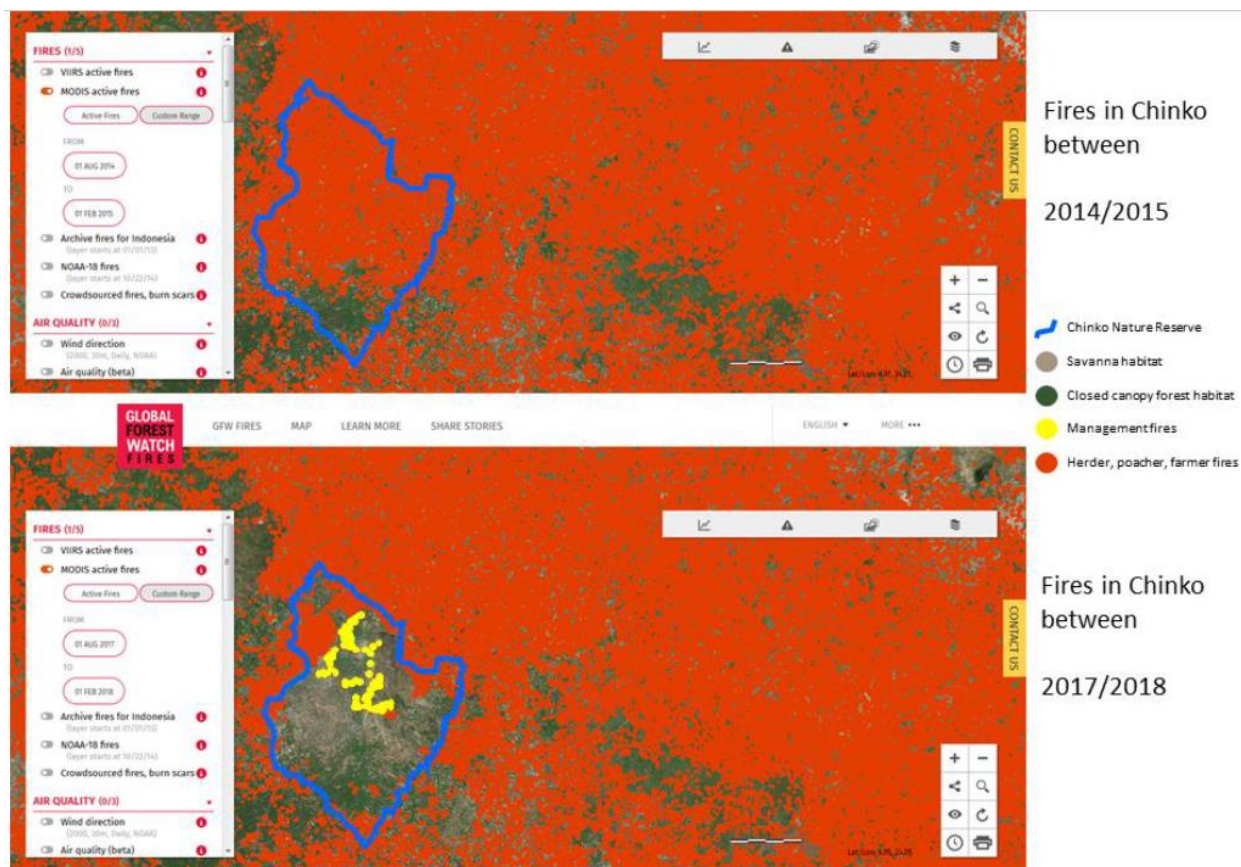


Figure 4: Fires activity

October 2018 – September 2019

During the second year of operation (October 2017 – September 2018), it was clear that Chinko cannot be sustainable without taking the entire landscape into consideration. A good working relationship with communities, as well as with government authorities, is vital in order to establish a trusting and mutually

strengthening relationship to allow both the long-term future of Chinko but also to try and develop the region through partnerships. A key to achieve this is the implementation of a land use plan inclusive of a transhumance strategy that will be beneficial to the communities and will pave the way for peace and governance in eastern CAR.

Throughout 2019 Chinko started working towards the development of a participative land use plan including proposed transhumance corridors, designated pasture lands around markets in eastern CAR and will have to be integrated in a more comprehensive formalized and regulated strategy, approved by all stakeholders on the local and the national level.

The Conservation Manager has been key in the development of a participative land use plan that will include transhumance corridors, regulated hunting areas, grazing areas and dedicated areas for agricultural activities. The development of this plan requires the full participation of a number of stakeholders and continuous communication with community leaders as well as with the regions representatives to ensure that all interests are aligned.

Figure below shows the beginnings of a land use plan proposal for the region. The land-use plan with designated pastureland, corridors and access to key markets by respecting agricultural zones and communal hunting blocks could allow a pacific coexistence of pastoralists and farmers.

Designated and enforced transhumance corridors through the Eastern CAR Wilderness would connect Sahelian rainy season pasturelands with key markets in eastern CAR. The aim would be to minimize negative impacts of transhumant pastoralism on the Eastern CAR Wilderness by taking in mind the carrying capacity of the land and guarding large wilderness blocks as big as possible and allowing local farmers to benefit directly and indirectly from the presence of transhumance pastoralists.

Areas for agriculture, grazing, pastoralism and hunting are designated and the map will be further refined in the coming years, through participative mapping and sensitization sessions in the communities as well as consultations on the regional and national level.

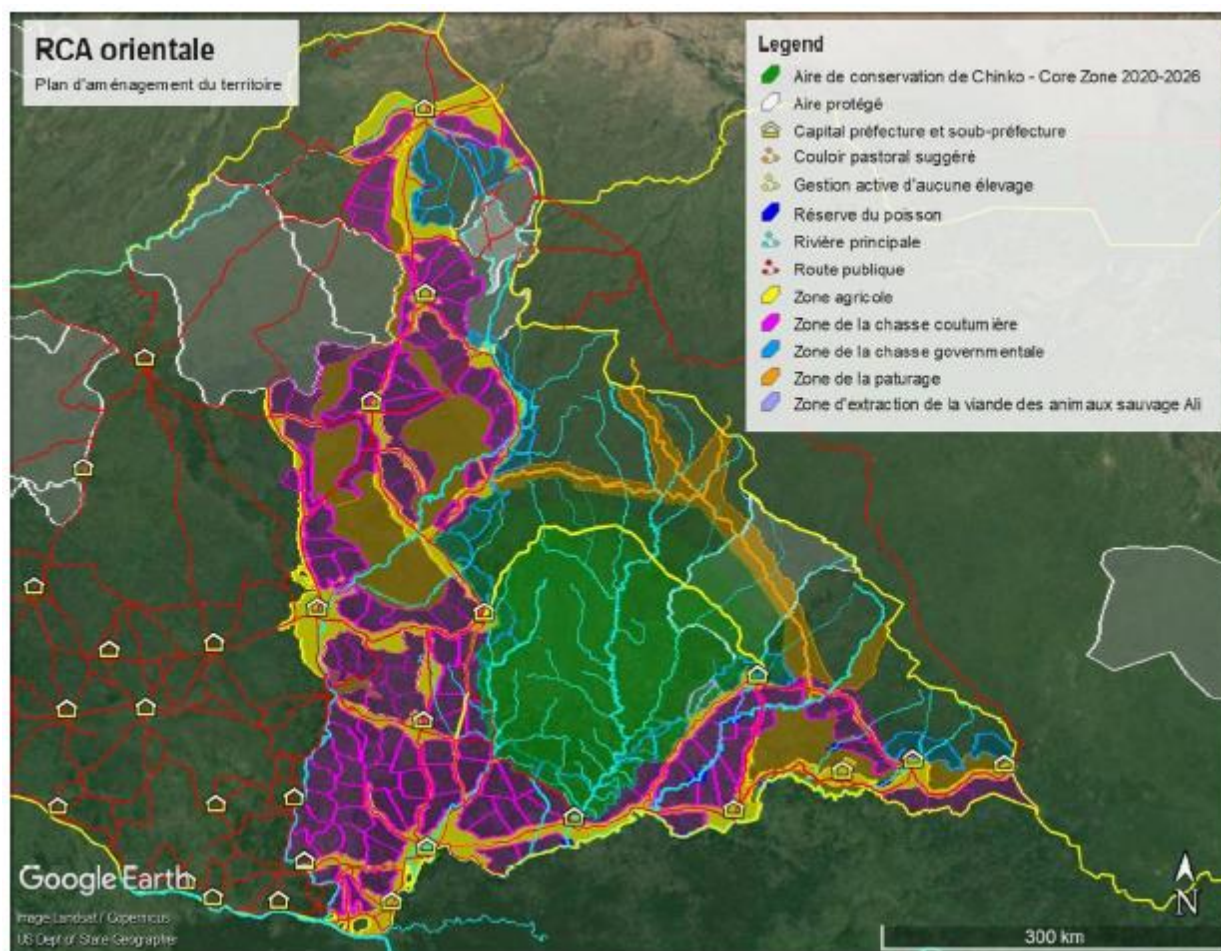


Figure 5: Initial proposal of Land Use plan in eastern CAR

During this year, Chinko moved into a consolidation phase whereby proven successful strategies are formalized to create long-term conservation sustainability. Emphasis was put on the establishment of a land use plan inclusive of a transhumance strategy, which is a long-term undertaking and necessitates the participation of a number of stakeholders. Several community meetings as well as meetings in the wider landscape were organized with the aim to ensure, not only the coexistence of herders and farmers but also of humans and wildlife (large herbivores).

During this third year of operations, the signs mounted along the northern Chinko border in previous years remain intact and have proved to be effective. Herder sensitization continued its implementation during the dry season (from November 2018 - April 2019) and the combination of sensitization, aerial surveillance and, where necessary, law enforcement, proved to be a great success. Mainly during the dry season, Chinko's sensitization teams had regular meetings with transhumance cattle herders to learn more about their practices and owners of the cattle. Chinko set up a free phone number, which can be used to call the Chinko HQ. From the 2018 dry season onwards African Parks started implementing a GIS monitoring process of the eco-transhumance officers and their interaction with pastoralists.²⁴

11 sensitization teams, with four people each, were deployed for seven months (November 2018 to May/June 2019). The approaching cattle herders were identified through aerial surveillance and fire monitoring. This information was used to deploy the teams by helicopter close to the location of the herder

²⁴ Tango efforts documents presented as supporting evidence

camps. The teams operated in the buffer zone of 20-30 km outside the Chinko Protected Area, where they made contact with the approaching cattle herders to sensitize them about Chinko, its borders and its conservation efforts.

The benefits of working with herders from Nzako as part of the transhumance sensitization teams were clear. These people know the land well, have a detailed knowledge of the culture, the habits and the movements of the transhumant herders and can proactively sensitize the incoming herders about Chinko and guide them.

A renewed emphasis was put on community sensitization activities in the reserve's periphery. Contacts were made with the local authorities and meetings were held with local stakeholder groups regarding micro-projects as well as the development of a participative land use plan inclusive of a transhumance strategy. Chinko prioritized work with local communities and partners to economically develop the surrounding region to establish a greater sense of stability.

October 2019 – September 2020

The team worked on keeping a coherent articulation of thematic activities with the ongoing Land Use Planning process. As such, discussions were held with parliamentarians of Eastern CAR constituencies (on the 25th and then the 28th of November) and then, with the Office Director of the Minister in charge of Livestock and Animal Health (on the 29th of November). Once reluctant to admit the principle of a formalized transhumance involving herders from bordering countries, those political authorities finally acknowledged the economic and nutritional benefits that bovine cattle could bring to local communities, and the assets an agreed corridor could provide to mitigate the conflicts today encountered locally. Therefore, they gave their support to enact a formal, consistent, and well documented transhumance corridor.

On April 15, 2020, African Parks signed a new Public and Private Partnership for the management of Chinko Conservation Area, extending the Chinko protected zone to more than 24,300 Km² and the full area of Influence covering over 80,000km². This shows the trust between the involved partners and builds a solid legal base to establish a sophisticated land-use that can help to reduce conflicts and find strategies to use natural resources in a sustainable way and the peaceful coexistence of different cultures.

A newly established *Comité des Aires Protégées et de leurs Périphéries*- Committee of Protected Areas and their Peripheries (CAPEP) enacted on February 10th by the Prime Minister at the central level and on July 14th at the regional level. The announcement of a national Steering Committee (CAPEP) featuring many ministries and key stakeholders in Bangui was a big step forward in bringing the CAR government as African Parks' most important partner, into the decision-making process at a more regular level.

In June 2020 African Parks succeeded to actively involve all major communities in the periphery Chinko to contribute to a new land use plan to establish long-term strategies to use natural resources sustainably.²⁵

During the fourth year of operation, special sensitization meetings took place in communities as Sam-Oundja, Ounda-Djallé, Zémio, and Mboki. The prepared material for the meetings were mostly dedicated to sketch the proposed vision (Figure 6) for a better articulation between agricultural lands and pastures, and to raise the awareness of all involved local stakeholders in the region, whether involved in the transhumance, or affected by uncontrolled movement of herders.²⁶

As such, illustrations of the proposed zoning have been presented, as well as insights of what an integrated livestock management including standardized pasture plots with periodic rotations could look like.²⁷ Nomadic herders from Darfur widely accepted the boundaries of Chinko.

²⁵ Check the report of the information events and workshop exchanges with communities shared as supporting documentation

²⁶ Pastoralism presentations available as supporting evidence

²⁷ Sustainable grazing proposal with the literature and technical background added as supporting documentation

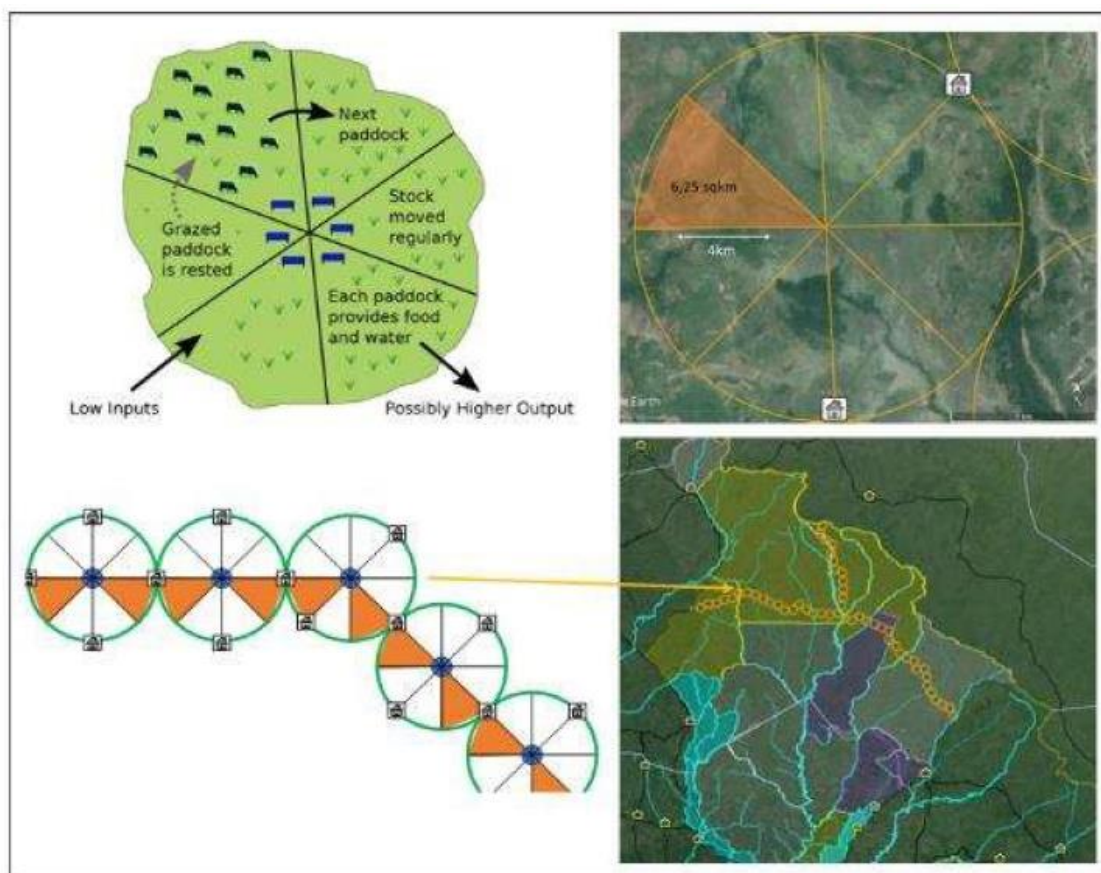


Figure 6: Insight of an integrated livestock management²⁸

Chinko is strengthening its Transhumance strategy; monitoring and controlling pastoralism dynamics is of prime importance for Chinko daily activity. Transhumance officers contributed significantly to the protection strategy. They approach pastoralists arriving in the area with their cattle, sensitize them on Chinko's activities and boundaries, and guide them.

It should be made clear that the sensitization of herders alone is insufficient. Long term conflicts between the herders and local communities run deep, requiring that negotiation with communities to allow for the elaboration and legalization of a Transhumance Pastoralism Corridor. The Transhumance Pastoralism Corridor is a fundamental part of the land-use plan given the regional dimension as well as the economic, environmental, security and cultural aspects. Therefore, it is mentioned in every Land Use Plan meeting, most exchanges with the government and during the CAPEP.

October 2020 – December 2020

The beginning of the fifth year of operation saw an extension of the Central Africa Forest Ecosystems Conservation (CAFEF) project funded by USAID. This project was originally expected to cover five years (October 2016 – September 2021) but was extended for three additional years (now ending in September 2024); this shows a clear example of the work African Parks is doing being recognized by institutional supporters.

²⁸ In the proposed corridor, 52 pasture units well managed could offer good grazing condition to 10,400 to 20,800 heads of cattle

For the beginning of the dry season African Parks hired an additional 15 transhumance officers bringing the total to 60 or 15 teams. Training on sensitization, data collection was completed. The Mbororo movement started 3-weeks earlier than usual. However, the teams were on the ground in time for sensitization.

A new Monitoring and Evaluation (M&E) assistant was hired to improve data collection and analysis, and during the first months in charge the M&E assistant created multiple template sheets that are now being used through the dry season.²⁹

African Parks shows in Chinko that it is possible to actively preserve wildlife and bring security to one of the most remote places in Africa by a strong partnership with the government, local authorities and the communities as well as the nonviolent negotiation with all stakeholders and proposition of long-term solutions with the option to react quickly to a dynamic environment.

2.2.2 Methodology Deviations

Increase in the Number of Carbon Plots in the Project Accounting Areas and Proxy Areas

As per a monitoring requirement (MR 98), all plots should be measured for the first verification, and this project applies for a methodology deviation in this requirement. Considering that one of the main characteristics of a grouped project is the inclusion of new instances during the crediting period, at this moment there are areas within the limits of the geographical expansion that are not managed by African Parks. Therefore, the project proponent proposes a deviation that relates only to the criteria for monitoring or measurement and does not relate to any other part of the methodology.

The initial delimitation of the carbon plots will not take into consideration areas outside the current project area, however, once new project instances are included, new carbon plots are projected to be located in those areas to have a better coverage of the biomass characteristics. This deviation will not negatively impact the conservativeness of the quantification of GHG emission reductions or removals, on the opposite, adding new plots during the inclusion of new instances will be beneficial for the accuracy of the emission reduction calculations since there will be data available in those sectors.

Fire management and biomass emissions

As explained in section 3.1.6 of the PDD, as part of the fire management strategy the project has a methodology deviation in terms of the accountability of the project emissions due to burning, the deviation relates to procedures for measurement. There is a project activity that leads to GHG emissions, however, as the activity is performed in order to avoid uncontrolled larger fires, the GHG emissions are actually lower than in a baseline scenario without the project, therefore, the deviation does not negatively impact the conservativeness of the quantification of GHG emission reductions or removals, on the opposite, the assumption is conservative since we are not claiming the net gain in biomass obtained due to the fire management activities.

As shown in Figure 7 the difference in the events of fires prior and during the project implementation inside the project area are clearly seen at a continental level. To further elaborate on the topic, Figure 8 also shows that in a regional perspective it is possible to see that CCA is one of the only areas with no fire activity during Dec 2020 – Jan 2021 in the Sahel region. Similar results are displayed in Figure 4, in that case fire data (obtained from Global Forest Watch Fires) in and around the CCA between 2012 and the dry season of 2017/18. The figure shows that significant progress was made toward keeping the CCA free of

²⁹ Templates added as supporting documentation.

late wildfires that are human induced. This is a positive conservation outcome thanks to the reduction of pastoralism activities inside the CCA.

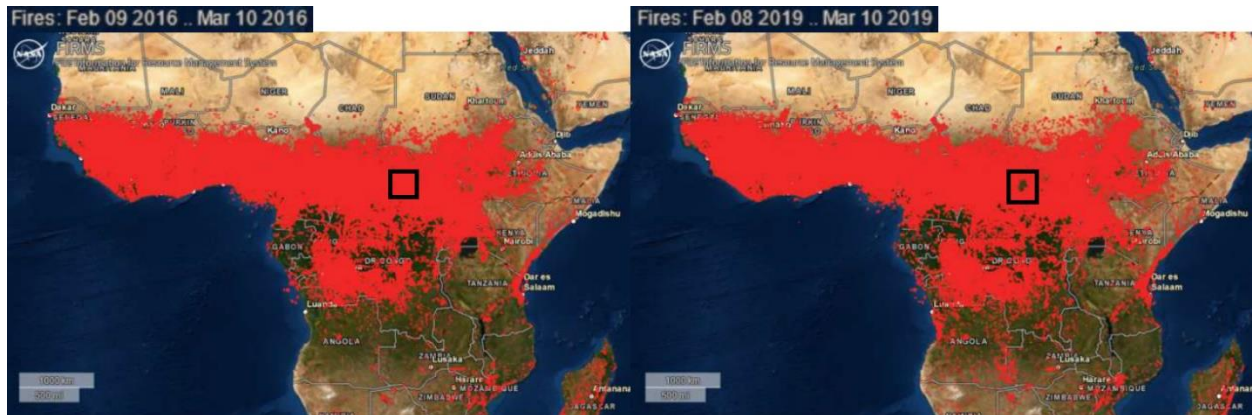


Figure 7: NASA FIRMS data of fire activity prior (Feb-Mar 2016) and during the project implementation (Feb-Mar 2019), the CCA is located within the black box.



Figure 8: NASA FIRMS data of fire activity during the project implementation (Dec 2020-Jan 2021), the project area is seen as the only spot without fire data in the Sahel.

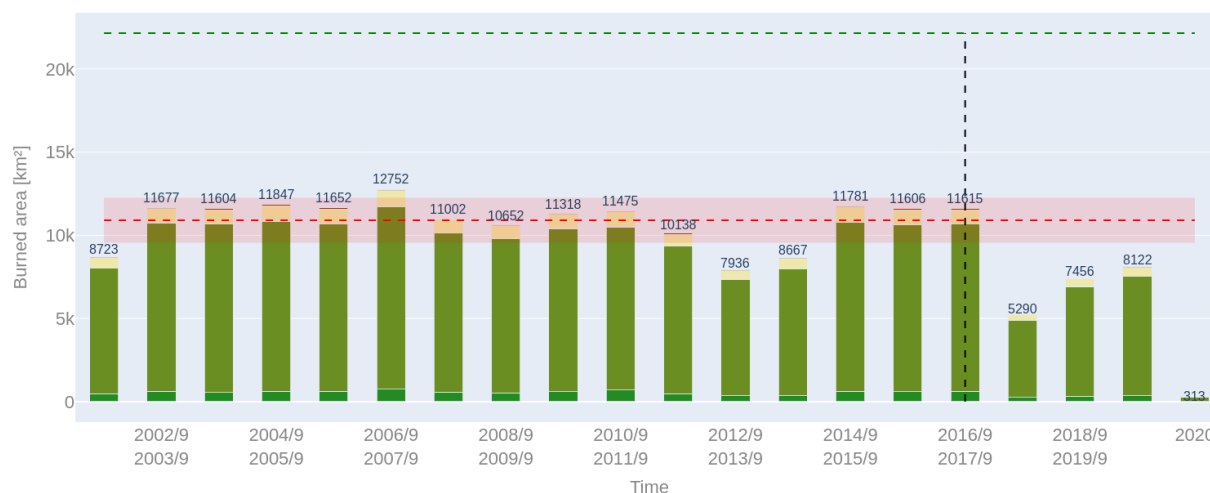
Finally, to demonstrate the effectiveness in reducing fire emissions due to the project implementation different time periods associated with each fire season were evaluated. The evaluation consisted of quantifying the area burned (in hectares) based on the date of burning. For each burned pixel, the type of cover was identified based on the dataset MODIS Fire_cci Burned Area pixel product version 5.1 (FireCCI51).³⁰

FireCCI51 is a monthly global ~250m spatial resolution dataset containing information on burned area as well as ancillary data. It is based on surface reflectance in the Near Infrared (NIR) band from the MODIS instrument onboard the Terra satellite, as well as active fire information from the same sensor of the Terra and Aqua satellites.

The burned area algorithm uses a two-phase hybrid approach. In a first step pixels with a high probability of being burned (called "seeds") are detected based on the active fires. In a second one, a contextual growing is applied to completely detect the fire patch. This growing phase is controlled by an adaptive thresholding, where thresholds are computed based on the specific characteristics of the area surrounding each seed. The variable used to guide the whole detection process is the NIR drop between pre- and post-fire images.

The dataset includes for each pixel the estimated day of the first detection of the fire, the confidence level of that detection (the analysis was done with a threshold of 95% fire confidence), and the land cover that has been burned (extracted from the ESA CCI Land Cover dataset v2.0.7). In addition, an observation flag is provided to identify the pixels that were not processed due to the lack of valid observations or because they belong to a non-burnable land cover.

The results, available in Figure 9, show that since the project starting date in September 2016 the annual historical burned area inside the PAAs 1 and 2 has had a decrease compared with the mean burned area from 2001 – 2016 period.



³⁰ FireCCI51 was developed as part of the ESA Climate Change Initiative (CCI) Programme, and it is also part of the Copernicus Climate Change Service (C3S).

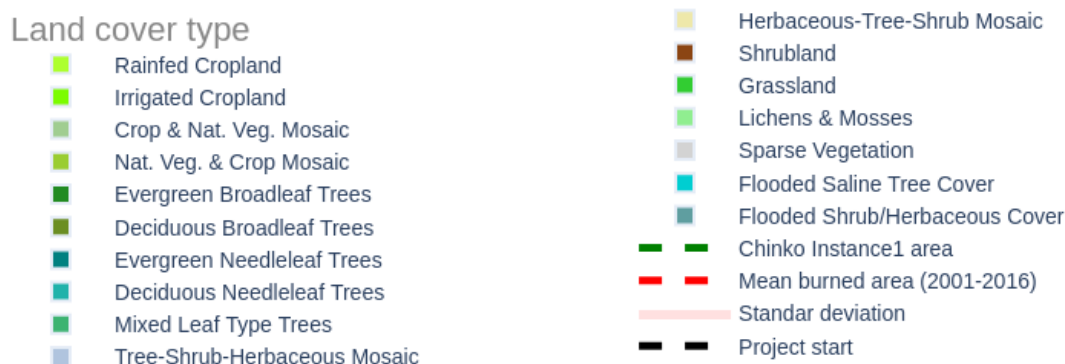


Figure 9: Historical burned areas, in km2, within the PAAs 1 and 2 (hunting zones 39, 40, 41 and 48). The values are presented by annual periods starting from September, the mean burned area and the standard deviation from 2001 – 2016 is included as a visual representation to demonstrate the reduction in the burned area after the project implementation (2016 onwards).

(Source: Elaborated by South Pole in 2023 using data from MODIS FireCCI51, 2020)

Activity-shifting leakage areas

PDR 109 in the methodology requires results of a spatial analysis to demonstrate the activity-shifting leakage area is no larger than the project accounting area, however, this is not the case for the ASLAs selected in the project. Given the characteristics of the transhumance pastoralism the project proponent decided to delineate ASLAs bigger than the PAAs, the idea of such delineation was to cover the areas more likely of displacement by the agents based on the monitoring of their movements. Subsection 'Delineating the activity-shifting leakage areas', within Section 3.2.3 of the PD, presents more details.

On the other hand, considering the accuracy review process carried out by Verra during the registration and verification approval request, the multiple updates that were required for the baseline and project emissions and the complexity involved in performing on the ground sampling methods, it was not possible to perform the assessment of proportion of degradation set out in section B.2.8 of the methodology in all the sectors included as ASLAs. Therefore, the project proponent decided to perform a remote sensing monitoring process in which any deforestation occurring within the ASLAs in the first monitoring period will be included as part of the leakage emissions and deducted for the net GHG emission reductions. It is imperative that once the project proponent secures funding from carbon credits the monitoring process of the leakage areas will involve a combination of on the ground sampling and remote sensing techniques.

To conclude, as stated in VCS Standard documentation, projects may deviate from the procedures set out in methodologies in certain cases, where alternative methods may be more efficient for project-specific circumstances, and where the deviation will achieve the same level of accuracy or is more conservative than what is set out in the methodology. The deviations set for the activity-shifting delineation and its monitoring were included considering the context of the agents and the project. The deviations relate to criteria and procedures for monitoring and do not negatively impact the conservativeness of the quantification of GHG emission reductions. In fact, having a bigger area to monitor and using remote sensing processes for evaluating the deforestation occurring within the ASLAs is more conservative.

2.2.3 Minor Changes to Project Description (Rules 3.5.6)

There are no minor changes to project design that occurred during the monitoring period compared with the validated project description.

2.2.4 Project Description Deviations (*Rules 3.5.7 – 3.5.10*)

There are no changes to the project description that occurred during the monitoring period compared with the validated project description.

2.2.5 Grouped Projects

The project instances and project accounting areas are the same ones explained in the PDD. No areas have been added or removed.

2.2.6 Risks to the Project (*G1.10*)

Table 2: Project risks

Identified Risk	Potential Impact of Risk on Climate, Community and/or Biodiversity Benefits	Actions Implemented to Mitigate the Risk
Political risk: weak governance ratings	The CAR is one of the least developed and poorest countries in the world and scores low across all World Bank governance indicators (average score of -1.55 for the period 2015-2019). ³¹ This could put project activities at risk if government decisions make the incentives for avoiding deforestation less attractive and/or important.	AP has signed an agreement with the national government to take responsibility for the management and financing of the project area. The project continues to maintain a healthy relationship with various government ministries, particularly the Ministry of Water, Forests, Hunting and Fisheries. In addition to the agreement and relationship with the government, the following actions taken can serve as evidence of efforts to mitigate political risk to the expected climate, community and biodiversity benefits: - Since 2014, repeated government changes didn't affect the PPP nor the partnership with government or communities. On the contrary, the PPP has been modified over time to grow with longer-term agreements as well as additional areas around the initial CCA. - AP strives to collaborate with multiple government ministries/agencies, both local and national, and is thus well embedded and recognized within the political landscape. Good examples of that are illustrated

³¹ Supporting Information: [NPRT\2. External Risks\Political Risk]

Identified Risk	Potential Impact of Risk on Climate, Community and/or Biodiversity Benefits	Actions Implemented to Mitigate the Risk
		during the yearly CAPEP workshop organized by AP in the provincial capital of Bangassou (see more details in section 2.3.10). - AP further respects the local institutions with several backstopping mechanisms allowing for good governance and local ownership among government and other partners. The Land-use planning currently underway is a good example of the multitude of local stakeholders, with representation of legal, political or religious leadership roles. - Several government officers are seconded to Chinko (Water & Forest / Defense Ministries). - In the past, political instability, including civil wars and rebel armies, didn't affect the main laws regarding environment, and water & forest sectors. Indeed, the presence of AP allowed for relative stability in the CCA compared to other parts of the country. - The community has become the strongest supporter of the project because of the regional stability and opportunities it has brought. - Private philanthropic and international institutions have continued supporting project activities throughout, a direct testimony of the stability of the project proponent in the area.
Political, environmental and social risk: political instability and conflict in neighbouring countries	The political and social instability in neighbouring countries such as the Republic of South Sudan could result in the displacement of people in the region. This may result in an influx of people in the project area, including herders, poachers, armed groups and foreign fighters.	The project proponent has been actively engaging with transhumant pastoralists and has developed high levels of trust with these herders over the past few years. A number of corridors have been identified with the pastoralists in which environmental degradation can be minimised.

Identified Risk	Potential Impact of Risk on Climate, Community and/or Biodiversity Benefits	Actions Implemented to Mitigate the Risk
	Environmental degradation in these countries could further increase this influx of foreign herders into the project area in search of fodder for their cattle.	Keeping large, contiguous areas of undisturbed habitat will also contribute to halting further desertification.
Political and social risk: security and the proximity of the project area to the territories of known rebel groups.	Various rebel groups are active in the region where the project area is located. This could result in violence towards staff, local communities and put project activities at risk.	The project takes security in the region seriously and has hired, trained and equipped a sufficient number of rangers to protect the project area and unarmed teams to engage with local communities. In fact, local communities attribute the relative high security in recent years directly to the project. African Parks also engages regularly with government and other groups (including ex-members of rebel groups) to continue improving security in the region.
Community risk: reliance on natural resources	The communities living on the periphery of the project area are reliant on natural resources for their livelihoods, particularly on bushmeat for subsistence. This may result in conflicts with law enforcement in the project area.	The project is in constant contact with all communities living on the periphery of the CCA. The active management of the CCA and the buffer zones allows hunters and fishermen to find more and higher quality hunting game in close proximity to their villages for an efficient, more sustainable harvest.
Natural risk: fire	Fires are common during the dry season in the savanna. These fires could pose a risk to the carbon stock in the project area.	The project proponent is currently developing a comprehensive fire management plan that it regularly implements. ³² These controlled fires ensure that larger, uncontrolled fires later in the season are less likely to occur. ³³

³² Fire management plan available in the NPR Report supporting information.

³³ The establishment and maintenance of effective fire breaks on a large scale is a time and resource-intensive task. The nature of the wildfires means that the results are either a 100% success (the fire breaks hold) or 0% (fires crossed the breaks), despite the effort, spend or strategy behind it. This makes the documentation and measurement of fire management very difficult and can hide gradual improvements over time.

2.2.7 Benefit Permanence (G1.11)

The recruitment and training³⁴ of well-equipped rangers, echo-monitors and echo-transhumant officers play a key role in ensuring benefit permanence.³⁵ This staff and the activities that they are responsible for implementing ensure that relationships and trust are established between AP, the transhumant pastoralists and the local communities living on the periphery of the project area. Local communities and transhumant pastoralists are engaged in sensitisation activities and are educated on the sustainable use of natural resources. These activities also mitigate the perceived negative impacts of protected area management and help build a constituency for conservation among local community members.

The project also intends to create long-term benefits maintained beyond the project lifetime. One of the main reasons to believe so is the land-use plan currently being developed considering the inputs received from the different communities in Eastern CAR during the consultation process. The land-use plan wants to achieve more sustainable land use in the area that considers its important biodiversity. The activities will have a positive impact on community well-being and biodiversity conservation.

The project is also in the process of finalising a long-term sustainability strategy focused on ecological, social and financial sustainability. This strategy will ensure that climate, community and biodiversity benefits are maintained well beyond the project's lifetime.

2.3 Stakeholder Engagement

2.3.1 Stakeholder Access to Project Documents (G3.1)

As mentioned in section 2.1.8 of the PD, the stakeholders are: African Parks employees, local communities, transhumant pastoralists, governmental institutions and private philanthropic and international institutions. Below is a description of how full project documentation has been and will be made accessible.

For the employees, physical copies of the final documents were made available at the parks' offices, all the employees were told about the location of such copies. In addition, during frequent verbal exchanges between managers and employees the results of the project activities are presented and discussed.

For local communities one way to share information is that the documentation is translated into French and distributed (physically and by sharing the files using USBs in direct meetings) amongst their representatives and local government structures. A second strategy that is used due to the high levels of illiteracy amongst local community members but also for the transhumant pastoralists is the dissemination of the project information through local staff such as community liaisons and sensitisation team (presentation materials are used wherever possible during workshops). These employees have experience and training in engaging with local communities around the project area, as well as the transhumant pastoralists that enter the CAR from neighbouring countries.

Effective and timely consultations are conducted with all relevant stakeholders and participation is ensured, as appropriate, among those that were involved from September 2016 to December 2020. More than 40

³⁴ For more details of the recruitment and training of armed rangers, unarmed echo-monitors and transhumant officers refer to Chinko monthly reports.

³⁵ For details on the training process refer to the Supporting Documents [2.General/APN Law Enforcement SOP Manual]

meetings have been held, ranging from discussions with authorities to workshops, recruitments and training processes (see Annex 1: Chinko timeline).

For other stakeholders with more technical background, such as governmental institutions and private and philanthropic financial donors, African Parks is providing them access to project documentation and delivering frequent reports of the project activities either by sharing the files using USBs (in direct meetings) or by mail.

It is expected that once the project is validated, and the first monitoring report is verified, meetings will be held with the different stakeholders to share the final PD and monitoring report. This process will be repeated after each monitoring period. Also, as requested by the standard, and in order to ensure transparency of the project, the project design and monitoring documents will be made available to the general public through VERRA website.

2.3.2 Dissemination of Summary Project Documents (G3.1)

Summary project documentation has been actively distributed to communities living on the periphery of the project area and other relevant stakeholders. After finishing the PDD documentation, a summary was prepared following the CCB requirements, translated into French and distributed to the main stakeholders. The summary documentation included information on the project description, project goals, design and long-term objectives. Again, due to the low levels of literacy in the region, the summarised information has also been presented to local community members by AP.

Community engagement is key to the long-term success of the project activities and the ecosystem resilience and to establish a good relationship with the communities to enhance local skills training, welfare development and self-sustaining business development. AP has carried out sensitisation meetings with all the communities living around the project.

As stated in the PDD, the relevant documentation about the results of the Monitoring Reporting and Verification (MRV) process of this project will be published in the VERRA platform every monitoring period. Printed copies of the PDD and first monitoring report have been distributed among communities, local government structures and other stakeholders.

Project activities and their results will also be discussed at regular community consultation meetings held by the echo-monitor team, which is continuously visiting communities around the park. This will ensure that, even with the high levels of illiteracy in the region, monitoring information will be made publicly available to all local communities living on the periphery of the park. AP annual reports, which are publicly available on their website, also include summaries of the project results. AP has also been using its social media to publish relevant information about the project.

A summary of the initial monitoring report will also be provided to local communities (translated into French and presented orally through community meetings). This report will include information on monitoring results that show that the project has delivered net positive climate, community and biodiversity benefits. During the lifetime of the project, all results will continue to be shared among community members through workshops, meetings and printed materials.

2.3.3 Informational Meetings with Stakeholders (G3.1)

Since 2016, project activities with local communities and transhumant pastoralists are fulfilling the plan of establishing a good relationship and enhancing local skills training, welfare development and self-sustaining business development.

Local leaders have an important role in the project since they have the support of local communities to govern and protect the interests of the people. Formal meetings had important results that impact the conservation efforts and the need for communities and park management to work together in protecting wildlife. In 2018, local leaders of Bangassou, Bakouma and Rafai met in Bangassou with AP to promote a better understanding of the protected area and open the door to future socio-economic development opportunities for locals. That same year, in the village of Nzacko, there was a mission where AP recruited the majority of its transhumance sensitisation officers. The visit helped to better explain the objectives of Chinko. Rafai is also a key village for community relations since it has a large fishing community that often fish and poach on the Chinko river, inside the protected area. Sustainable fishing methods are being promoted with these communities.

In 2019 and 2020, the team carried out multiple meetings at schools and colleges. Presentations at Bangassou school and high school about Chinko and the economic potential of the sustainable use of natural resources were conducted to sensitise the local authorities, teachers and group leaders, fishermen and hunters, and students. Lectures, information events and discussions about natural resources, ecosystem functioning and nature conservation were also held at the University of Bangui, and the technical *Institut Supérieur de Développement Rural* in the city of Mbaiki.

In 2019, a presentation was organised at the Ministry of Water and Forestry in Bangui to present the results of anti-poaching efforts and provide for how to prevent future poaching in the reserve and help wildlife recover. Furthermore, sustainable hunting and fishing were discussed as well as a sophisticated and participative land-use plan for Eastern CAR. That same year, the Rafai Focal Point Officer continued his work with sensitisation sessions, reaching inhabitants of the villages of Mogba, Gangakourou, Louetté, Mesquine, Goula, Sangouguia and Oumar, between 6 km and 18 km from Rafai on the eastern road.

In September 2019, the US Ambassador and USAID Director visited Chinko with the Minister of Water, Forestry, Hunting and Fishing to keep strengthening coordination with the local and national government and civilian agencies/committees. A meeting was held in Djema, with the support of the Deputy, to provide general information about the land-use plan and discuss the sustainable use of natural resources with a focus on hunting and fishing. About 200 people attended over two days. In the same month, a meeting with herders to introduce the transhumance corridor and the land-use planning was carried out in Zemio-Mboki. A meeting was also held in Bakouma to present Chinko project concerns to representatives of groups in Nzako, in the presence of the administrative authorities of Mbomou.

Echo-monitors sensitised dozens of local hunters, fishermen, miners, loggers and local communities and authorities to promote the sustainable use of natural resources in line with the land-use plan operating in the far south at the periphery of the reserve near the city of Rafai. Park boundaries, rules and sustainable fishing and hunting methods were explained and discussed in the field. Approximately 432 people were sensitised, of which 190 were women, during the sensitisation meetings and community micro-project meetings held in 13 villages. In 2020, Chinko had 21 sensitisation teams (nine echo-monitors, 12 echo-transhumant officers) of around five people each patrolling the strategic regions of the CCA. They are also

among the first people to observe and note illegal human activity and wildlife movements throughout the reserve.

In October 2020, the first high-level mission to Bria was held with very positive outcomes; it successfully introduced Chinko activities and made contact for the first time with authorities, leaders and the population of Haute-Kotto. In December, meetings in Bria and Yalinga continued with an AP Pastoralism Expert, who met with different actors in the region and pursued arrangements for additional missions further north, including in Birao. The potential for making contact with leaders in Sudan, who manage a complex network of pastoralists and workers in the transhumance value chain, was also discussed.

2.3.4 Community Costs, Risks and Benefits (G3.2)

Communities and pastoralists

As described in the Project Document, African Parks has a strict policy that ensures that relevant and adequate information about potential costs, risks and benefits to communities are provided to communities³⁶.

Even though the project area is uninhabited, it is necessary for the long-term success of the project that communities and other stakeholders are involved in the project through full and effective participation.

During this monitoring period, the African Parks team has had numerous consultations with community members. During these meetings with the community, project activities, risks and benefits are always clearly explained.³⁷ The community has time for questions where they can express their concerns. It is also explained to the participants how the project supports and promotes the following safeguards:

- actions complement or are consistent with the objectives of national forest programmes and relevant international conventions and agreements
- respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws
- the full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities
- actions are consistent with the conservation of natural forests and biological diversity, ensuring that the project actions are not used for the conversion of natural forests, but are instead used to incentivise the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits.

Finally, African Parks also used these community meetings to express its commitment to the principles of doing good and do not harm.

Potential costs, risks and benefits of the project have also been communicated to local communities during this monitoring period during ongoing engagement by project staff including the armed rangers, unarmed echo-monitors and transhumant officers and through other project activities such as school visits. Project

³⁶ For more details of its policies please refer to: Supporting Information: [2. General\ APN Human Rights Statement of Principles

³⁷ For more details of the stakeholder engagement process refer to: Supporting Information: [2. General\ 2.3 Stakeholder engagement]

staff members are in regular contact with local communities and transhumant pastoralists to ensure they are updated on the project's cost, risk and benefits.

Regular monitoring of the project's impacts on local communities has been, and will continue to be, conducted throughout the project's lifetime. AP has enough well-trained staff that engage regularly with all local communities living on the periphery of the CCA. This regular engagement will ensure that all project impacts on communities are effectively and accurately monitored. The long-term success of the project relies heavily on building a strong constituency for conservation among the local communities living on the periphery of the CCA. Activities have been developed to build this constituency for conservation through ensuring that community members understand the benefits of wildlife and habitat conservation, mitigating any perceived negative impacts of the management of the protected area and improving livelihoods through the sustainable use of natural resources and skills development. All the indicators are designed to evaluate whether the project activities are contributing towards meeting these objectives. This structure of ongoing consultation, feedback and adaptive management will enable the will allow AP to improve and adapt the project implementation according to the circumstances on the ground.

Workers

When a new employee is hired, they are communicated of the costs risks they may face in their daily job³⁸ and the actions needed for mitigating the risk (more details in section 2.3.17 of the PD). As a way to mitigate such risks all project employees are required to undergo training before they take up their roles in the project. The training is designed to inform workers of any potential risks they might face, and how to reduce them. For example, all rangers receive extensive training on the use of firearms to ensure that risks are minimised. African Parks has a strict HR policy that covers workers' safety and meets international best standards. All these procedures are followed in the context of this project.

But workers are also aware of the benefits³⁹ provided by African Parks in the implementation of project activities, they understand that African is providing decent work and contributing to economic growth in the region (The project proponent is the largest employer in the region and that has a positive impact in the surrounding communities). The employees also feel proud of working with African Parks and they feel that their work has a significant contribution to the country and to protecting the natural resource of the country.

2.3.5 Information to Stakeholder on Verification Process (G3.3)

The measures taken for informing communities and other stakeholders of the process for CCB validation and verification is that during the local consultation meetings, sensitization processes and other workshops done by African Parks during their operations the participants of such events (e.g. African Park workers, transhumant pastoralist, local communities and government and institutional representatives) are informed and/or reminded about the REDD+ project and the required registration process (including the validation and verification), noting that an external auditor (from a validation and verification body) at some point in the future will visit the area to carry out this process.

Because of the high levels of illiteracy within local communities, the communication methods used for informing the stakeholders of the validation and verification process is doing explanations orally during the workshops and engagement sessions. For the first audit, once the dates for the audit were decided, African Parks team was in charge of carrying out the informational process as described in the section below.

³⁸ Note that according to the CCB Standards v3.1 the phrase 'costs and risks' equates with negative impacts.

³⁹ Note that according to the CCB Standards v3.1 the term 'benefits' refers to positive impacts.

2.3.6 Site Visit Information and Opportunities to Communicate with Auditor (G3.3)

Once the dates for the audit were decided, African Parks workers, pastoralists, community representatives and government officials were informed in advance of the visit from the auditor through the following measures and communication methods⁴⁰:

- Inform the workers in Bangui office and in Kocho (Chinko's headquarters), via group meetings and discussions, of the auditors site visit and their opportunity to interact with them in an independent and freely manner during the auditors' stay in Chinko office and headquarters. In addition, the dates of the audit were added in the bulletin board in Chinko headquarters so all employees could see it.
- Inform the participants of the 2022 *Comité de pilotage des Aires protégées et ses périphéries* (CAPEP) workshop, through the terms of reference of the workshop, of the auditors site visit and their opportunity to interact with them in an independent and freely manner during one day of the workshop.
- Engage with transhumant pastoralists in the northern part of the country and inform them, via direct interaction with African Parks workers and representatives, of the auditors site visit and their opportunity to interact with them in an independent and freely manner during the auditors' visit to Sam-Oundja.
- Engage with local herders in Rafaï and inform them, via direct interaction with African Parks workers and representatives, of the auditors site visit and their opportunity to interact with them in an independent and freely manner during the auditors' visit to Rafaï.
- Invite representatives from nearby communities to go to Kocho and brief them, via direct interaction with African Parks workers and representatives, of the auditors site visit and their opportunity to interact with them in an independent and freely manner during the auditors' stay in Kocho.

The purpose of the auditor visit was made clear and dates of the visit were communicated. It was explained that during the visit, they will have the opportunity to communicate with them in an independent and freely manner, even in the absence of the project proponent considering the availability of local interpreters.

2.3.7 Stakeholder Consultation (G3.4)

It was clear from the consultation process⁴¹ that local communities and other stakeholders are supportive of the project and its activities and goals. For example, the consultation process (See Figure 10) allowed all stakeholders to agree on where the most suitable corridors for transhumant pastoralists will be established. The location of these corridors was discussed in depth during meetings with pastoralists, government officials and ex-rebel leaders familiar with the project area.

⁴⁰ Evidence available at: [2. General\ 2.3 Stakeholder engagement\ Audit communication]

⁴¹ For more details of the consultation process refer to: Supporting Information: [2. General\ 2.3 Stakeholder engagement]



Figure 10: Meetings with transhumant pastoralists: Bangassou (June 2020) and Rafaï (October 2020)

Similarly, local communities engaged in illegal mining activities in the project area have been involved in all processes related to closing illegal mines (see Figure 11). This has helped further improve the management of the territory and the health of nearby rivers. In addition, they have participated in developing the strategy for opening new mines in the transition zone and applying and enforcing responsible mining techniques that have minimal impact on surrounding vegetation and hydrological systems.



Figure 11: Discussion with miners in Fode (June and November 2020)

From the beginning, AP has focused on first protecting biodiversity through law enforcement and then on understanding the needs of local communities and helping them implement various techniques that promote sustainable development in the project area while improving their quality of life.

2.3.8 Continued Consultation and Adaptive Management (G3.4)

Communication and consultation have taken place and will continue to take place on an ongoing basis between African Parks staff and local communities and other stakeholders surrounding the project area (see Annex 1 for more details of the communication and consultation exchanges).

The project proponent acknowledges that long-term success of the project relies heavily on building a strong constituency for conservation among the local communities living on the periphery of the CCA, therefore the stakeholders' ideas and inputs for project activities must be heard.

Employees such as community liaisons, eco-monitors and rangers engage with local communities and transhumant pastoralists on a regular basis to ensure they are updated on the project activities and their impacts. These staff members are the main point of contact for local communities and transhumant pastoralists to notify AP on any potential conflicts, grievances or input ideas for the development of project activities. This structure of ongoing consultation, feedback and adaptive allow the project to improve and adapt the implementation continuously according to the changing circumstances on the ground.

The eco-monitors and rangers work with local communities on the periphery on the project throughout the year and therefore, are a continuous, ongoing mechanism for communication and consultation between the local communities living in the area and African Parks. The transhumant monitors, on the other hand, are deployed annually (during the dry season) to engage with the transhumant pastoralists when they enter the CAR from the north. This will ensure that there is also effective communication and consultation with these groups and African parks.

Clear results of stakeholders being heard is the development of the land use plan for eastern CAR, by June 2020 African Parks succeeded to actively involve all major communities in the periphery Chinko to contribute to establish long-term strategies to use natural resources sustainably in which, transhumance corridors, regulated hunting areas, grazing areas and dedicated areas for agricultural activities are being delineated by the different stakeholders (see section 2.1.1 for more details).

2.3.9 Stakeholder Consultation Channels (G3.5)

African Parks management team performs periodical meetings with the employees of their team to inform them about the results of relevant activities as well as to plan the correct development of the future ones, employees are heard, and suggestions are considered.

In regard to local communities and pastoralists, African Parks has community liaisons and sensitisation teams in the region to engage with them on a regular basis throughout the year, these stakeholders are aware of the liaisons and sensitisation teams and engage with them for consultations and information when needed. This provides an effective communication channel that allows efficient and constant communication between stakeholders and the project team.

In addition to this, African Parks is actively performing meetings and workshops where the community can participate.⁴² Due to logistics constraints, and respecting the local hierarchy conditions, the representatives of groups (such as representative of woman, youth, fishermen, hunters, pastoralists, among others) are invited to a common previously defined area rather than having workshops in each town. At each meeting, the contact numbers of the project proponent are shared so that people interested in the project could be involved and engaged throughout the life of the project. This consultation process, where relevant, is then documented and potential next steps identified by the community management team.

2.3.10 Stakeholder Participation in Decision-Making and Implementation (G3.6)

Since the beginning, project decision-making has taken into account the local context and community needs. AP's objective is to establish a good relationship with the communities to enhance local skills training, welfare development and self-sustaining business development.

⁴² Supporting documentation: [2_General\2.3 Stakeholder engagement]

Extensive engagement has taken place between African Parks and local communities living around the CCA. The REDD+ project has been communicated to all stakeholders. Women are actively encouraged to participate during the community engagement and the attendance registers from these meetings demonstrate that women are well represented in these consultation sessions.⁴³

This extensive engagement has ensured that African Parks understands the local culture and encourages effective participation. The project can only succeed in the long-term with sufficient community buy-in, and African Parks has been actively working to build a local constituency for conservation among local communities. Armed rangers unarmed eco-monitors and unarmed transhumant officers are all hired from within the local communities to ensure cultural sensitivity is maximised.

In 2018, the Program Manager and Assistant Manager spent two weeks in the village of Rafaï to perform a baseline survey and identify future community projects.

The project has developed a plan and strategy for Greater Chinko to contribute to regional stability and ensure long-term habitat protection for wildlife. The Department of Monitoring, Maintenance and Sensitisation organised a number of sensitisation events to inform the local communities about the reserve and discuss a participative land-use plan for Eastern CAR with local authorities. A large meeting with the prefect and regional directors of *Eaux et Forêt*, 'Mines' and 'Communication' from Bangassou and a delegation from 24 different villages of the western part of Chinko was organised in Bakouma. After this major event, many meetings were held with various delegations from villages on the periphery of the CCA to discuss land-use plans in more detail.

In June 2020, AP succeeded in actively involving all major communities in the periphery of the project area to contribute to a new land-use plan that will establish long-term strategies for using natural resources sustainably. As part of the joint mission with the Conservation and Land-use planning team, sensitisations were held in Madabazouma, Dembia and Derbissaka. That same year the first regional meeting of CAPEP (Committee on Protected Areas and their Peripheries – Regional Consultation committee under ECOFAC VI) took place in Bangassou. Following the first CAPEP, several meetings were held in the communities during July to sensitise herder groups on the proposed transhumance corridor. These meetings brought together local authorities and representatives for the Central African Mbororo herders to discuss challenges and strategies related to livestock management.

In September 2020, a meeting to validate the methodology for the elaboration of the master plan for land-use planning was held with around 40 governmental actors from different ministries, including Environment, Water and Forestry, and Economy.

In November 2020, a mission was conducted to Bakouma and Bangassou to discuss agricultural practices with many of the authorities and groups in the region. These discussions focused on the manioc disease crisis and the upcoming planting season, vocational training needed in the area, the start-up of a beekeeping project and various micro-projects.

It is also important to mention that AP is transparent with regard to all disputes that have been raised in the project area and has measures in place to ensure that they resolved in a manner that benefits all parties. AP has established a grievance mechanism to allow for the reporting of and response to accusations of human rights abuses related to park management activities.

Affected communities and other interested stakeholders may raise grievances at any time. The park management is responsible for informing affected stakeholders about the existence and function of the

⁴³ For more details of attendance lists refer to: Supporting Information: [2. General\ 2.3 Stakeholder engagement]

grievance redress mechanism. Contact information for reporting to the mechanism must be made publicly available.

2.3.11 Anti-Discrimination Assurance (G3.7)

AP has an excellent reputation and does not participate in, and is not complicit in, any form of discrimination or sexual harassment. It has policies in place to provide a workplace free of sexual harassment and where employees respect one another's integrity, dignity, privacy and equity. These policies are discussed in more detail below. As mentioned in the previous section, AP has established a grievance redress mechanism to allow for the reporting of and response to accusations of human rights abuses related to park management activities.

This mechanism is designed to:

- address potential breaches or violations of AP's human rights policies and procedures, including all law enforcement activities;
- ensure compliance with the AP human rights standards set forth in its Code of Conduct and Statement of Principles;
- be accessible to all stakeholders;
- keep complainants well-informed on the progress of cases brought forward; and
- maintain records on all cases and issues brought forward for review.

AP created its Sexual Harassment Policy⁴⁴ with the objective of eliminating all forms of sexual harassment and providing appropriate procedures to deal with any problems and prevent their recurrence. The policy aims to ensure that its workplace is free of sexual harassment and creates an environment where employees respect one another's integrity, dignity, privacy and equity.

The participation of the community in the project has been inclusive with respect to individual and gender-independent capacities, cultural identity and religion. AP has a strict human resources (HR) policy that follows both domestic labour laws and international standards. All recruitment processes are transparent, and the procedures are non-discriminatory and based on merit.

2.3.12 Grievances (G3.8)

As mentioned in the PDD, the channels for receiving complaints are:

1. Suggestion boxes:

They are set up in large cities around the CCA. These boxes are locked and only AP personnel have the keys. These boxes are installed in a secure location.

AP personnel collect the letters in the presence of at least two community leaders with whom they draw up and sign a receipt report that specifies the number of letters collected and forward them to the human rights focal point, who follows up.

2. Directly during engagement meetings

Discussion groups and focus groups (men, women, community leaders, administrative and local authorities) are organized during missions to the communities bordering the protected area. Also, as far as possible and depending on logistics, there are missions to transhumant communities in order to meet with the leaders of these groups who cannot access the channels installed in the villages.

During those meetings these actions are taken:

⁴⁴ APN Human Resources SOP Manual V1.1.1_2020

- Inform the community and/or transhumance pastoralists about Chinko's complaint management mechanism and the functioning of the channels set up,
- To collect their concerns, complaints or grievances,
- Reinforce the awareness of the communities or transhumance pastoralists on their rights and duties towards the protected area.
- Communicate the status of grievances to complainants.

3. Green Line

A free telephone line is available and managed by an operator whose identity is confidential. The operator registers complaints and collects as much information as possible via a form made available to him.

4. Local Development Consultation Committees

Recently, the sustainable development department has set up local development consultation committees (GCDL) in villages surrounding the park. Since these committees are located in the communities, represent the communities, and meet twice a month to discuss various issues related to community concerns, they will also be used as a channel for complaints.

It is important to highlight that due to high illiteracy levels in local communities, continued and regular sensitization work is still needed and will continue to be provided by African Parks to ensure that the different stakeholders understand the purpose and functioning of the grievance mechanism developed for Chinko context as well as their options for submitting complaints.

Due to the nature of the project and the complex security settings in the past, non-sensitive complaints were managed in an ad-hoc manner appropriate for the context of operations during the first monitoring period. Considering the high illiteracy levels in the local communities, complaints were received orally by AP's personnel during community engagement activities. As such, there were no written formal submissions of non-sensitive complaints by the communities. When possible, complaints were discussed and resolved immediately by the staff present. In cases where the complaint required further review and investigation AP personnel sought guidance from the relevant departments within AP and followed up with the relevant community members at subsequent meetings. As security improved and the project was able to professionalize also the community engagements, this was rectified to the current structure.

For sensitive ones, the mechanism was followed, and written records were kept. The sensitive complaints handled during the monitoring period were:⁴⁵

- The request for elections of worker representatives: the complaint was accepted and addressed through the election of worker representatives for better communication and interaction between the management team and the workers. This system continues to be in place and has resulted in no further grievances in this regard.
- A complaint from rangers on current compensation package: this was a grievance addressed through a delegation of external stakeholders (the prefect of Mbomou, the Public Prosecutor of the Bangassou High Court, the colonel chief of the Mbomou military region and the commander of the Bangassou Gendarmerie). The complaint was addressed with the publication of a new salary grid and staff classification, copies describing the new system and the accompanying conditions were distributed to all participants. The staff delegates got the time to make technical corrections, comments and questions, the questions were discussed and answered. After the discussions, the salary grid and employee classification were accepted.

⁴⁵ For more details of the cases documented refer to: Supporting Information: [2. General\ 2.3.12 Grievances]

2.3.13 Worker Training (G3.9)

AP has two major training dimensions. One of them is oriented to employees and the second to community development. In the first, the objective is to recruit and train a sufficient number of Chinko rangers, echo-monitors, echo-transhumant officers and control room operators, other employees with tasks not as related with the implementation of project activities on the ground such as welders, tailors or carpenters have also trainings for their daily operations considering that they have an important role in keeping the logistics and operations in order. In the second, the plan is to establish a good relationship with the communities to enhance local skills training, welfare development and self-sustaining business development. It is important to highlight that most of the employees of Chinko are community members from the peripheries.

Local communities are receiving orientation and training, enhancing local skills, welfare development, and self-sustaining business development. Eco-monitors sensitised dozens of local hunters, fishermen, miners, loggers and local communities and authorities to promote sustainable use of natural resources in line with the land-use plan.

With regard to workers, in 2016, the law enforcement pillar was strengthened by a selection of potential rangers that receive Basic Field Ranger (BFR) training. In 2017, a training camp was built⁴⁶ following the completion of the headquarters and its associated infrastructure. This headquarters is the base for all operations carried out in the CCA. That same year the 'Advanced Ranger' training and leadership training programmes were developed. To ensure the effective coordination of management activities in the area in 2018, the control room team received three-day training sessions on the use of radios. Ranger training throughout the year also focused on 'Rapid Response Training' and, notably, on 'Medic Training', which provided them with lifesaving skills that are vital when operating in an extremely remote area.

During the year, the capacities of the new community trainer were strengthened by providing him with participative training tools; rangers took part in a 'Refresher' training course designed to improve their technical knowledge and handling of firearms. In addition, 28 local staff participated in an introductory course to conservation, and ongoing classes in French, English and mathematics were held for 39 participants (French and English classes are based on improving reading, vocabulary and grammar skills).

In 2020, a week-long training was given to the community liaison officer (focal point) at the Chinko site on conservation, key legal frameworks and the handling of community issues. That same year, new staff was hired and trained for the TANGO team of transhumant officers. These new hires were trained on reporting, sensitisation, and how to operate in the terrain and use the equipment provided.⁴⁷

In regard to not losing local capacity, when a management employee leaves, they do a handover session with the new one taking the role. This ensures that the capacity and flow of the activities are not lost during staff turnover. It is important for them to review the status of the activities that the leaving employee was performing, the location of documents, if applicable, and the expected/planned next steps for continuing the activities with the minimum impact because of the person change. For managers and high-level employees, considering the nature of the normal operations within Chinko, it is also normal that other members of the team are aware of the activities required so there are no operational delays and/or problems during the employee holidays.

⁴⁶ Construction on the training camp commenced in July 2017 and was completed in August 2017. Please refer to the monthly reports from these months provided in Supporting information: APN Monthly Reports

⁴⁷ Rangers trainings documentation available in Supporting information

2.3.14 Community Employment Opportunities (G3.10)

The project ensures that all individuals are given an equal opportunity to fill any employment positions (including management) if the job requirements are met, and that any project benefits reach women and the most vulnerable and/or marginalised people in the community without any discrimination related to age, sex, marital status, ethnicity, social status, religious convictions, political ideas and/or sexual orientation. As previously mentioned, most of the employees of Chinko are members of peripheral communities.

The plan to recruit and train a sufficient number of Chinko rangers, echo-monitors, echo-transhumant officers and control room operators has seen good results, and there are currently more than 100 employees in these positions. This number will increase as the protected area increases.

In 2019, the plan of sensitisation to hunters, fishermen, miners, loggers and local communities and authorities to promote the sustainable use of natural resources in line with the land-use plan resulted in the recruitment and training of 32 Mbororo cattle herders to monitor and educate transhumant herders coming from Sudan. Not only does this help to secure the park but it also makes contact with numerous herders from Sudan and has a significant impact on directing the grazing of these people and reducing the risk of conflict. All of the Mbororo herders were displaced from the town of Nzako. Chinko has successfully interfaced with Nzako such that 32 people now have a regular salary and are acquiring valuable skills. That same year, 10 local fishermen, hunters and cultivators were recruited to form a river-sensitisation team to sensitise fishermen and hunters in surrounding villages and along the main rivers in and around Chinko. In November, the soapmaking project was completed with the active participation of 27 people including 26 women, who were trained on group structure, finance/logistics and soapmaking using several methods. Soapmaking started with the completion of several lots of soap already produced.

2.3.15 Relevant Laws and Regulations Related to Worker's Rights (G3.11)

According to Article 9 of the CAR's Constitution:

"All workers participate to determine working conditions through their representatives. Laws establish mandatory assistance and protection to workers who suffer from health problems due to their working conditions."

Moreover, according to Article 9:

"The Republic guarantees all citizens the right to work in a healthy environment, rest and satisfaction of their needs (...). It guarantees citizens conditions favourable to their personal development, through an efficient employment policy. All citizens of the country shall be equal before the law. No one may be prejudiced in his/her employment based on his/her origin, gender, opinion or belief. Laws establish assistance and protection conditions granted to workers, especially the younger, older, disabled and those who have health problems due to their working conditions."

The main regulations protecting workers rights in the CAR are as follows:

- Law No. 09-004 of January 29, 2009 establishing the Labour Code of the CAR;
- Law No. 06.035 of December 28, 2006 on the Social Security Code;
- Decree No. 09-116 of April 27, 2009 fixing the methods of application of Law No. 06-035 on the Social Security Code; and
- Order No. 005 / MFPTSSFP / CAF / DGTEFP of July 11, 1994, establishing the Health and Safety Committees in the CAR.

The project meets all the relevant laws and regulations covering workers' rights in the CAR. AP has a strict HR Policy and Standard Operating Procedure that meet international best practice and standards, and apply to all employees. AP has further developed an HR Policy aligned for the CCA, which ensures that the project aligns with local laws and operational needs. All workers are informed of their rights and responsibilities during their training sessions.

Each employee should act with integrity and apply the Code of Conduct. This requires, among other things, being forthright, non-discriminatory, honest, candid and accountable. AP employees are committed to treating everybody with dignity and respect regardless of level or circumstance. AP is committed to providing equal employment and advancement opportunities for all individuals without discrimination based upon an individual's race, colour, gender, religion or any other characteristic protected by law. Employees are annually evaluated on merit and on the basis of their performance and will be provided with honest and fair feedback in this regard.

The project also has an onboarding procedure that is used to inform workers about their rights; at the signing of their contract, the new employee is informed of all these rights and duties. Once a new hire has been selected, there are onboarding and induction programmes that must be completed during a probationary period before joining the organisation full time (subject to a final probation review).

In addition, when new rules or procedures are implemented, the staff representative informs the workers of any changes. The staff delegation holds weekly meetings with the staff via a delegation. In June 2018, the Workers Agreement was signed, which allows for a better understanding of internal policies and a more effective employer/employee relationship. All rules and regulations are clearly stipulated in the agreement.

2.3.16 Occupational Safety Assessment (G3.12)

Below is a list of the substantial risks to worker safety that could arise due to project implementation:

- Injuries related to transport/logistics. All transports with vehicles, airplanes or helicopters bare a risk of accidents, injuries and fatalities. APN tries to minimize risk by applying Standard Operating Procedures (SOP's), employee training and professional maintenance of equipment.
- Field injuries. Active work in the field is always associated with a risk on injuries and health. AP tries to minimize risks by applying SOP's, providing health and life insurance, employee training and the provision of professional working equipment. However, a minimum risk of injuries and health problems remain given the nature of physical work in remote areas.
- Human-wildlife conflict. Incidents where staff are confronted with wildlife are rather rare in Eastern CAR. The main threat for AP employees remains pathogens like *Plasmodium falciparum*, *Salmonella sp.* And their vectors (Anopheles mosquitos, Tse-tse flies, jigger fleas, etc). Venomous animals such as snakes, scorpions and various stinging insects are common in the region, but rarely cause life-threatening situations for staff. A solution is being worked on to import a broad-spectrum antivenom for snakes to Central Africa. There are still problems regarding the permits to import of such antivenoms into the Central African Republic.
- Risk of confrontation with armed groups. During field patrols, one of the main objectives is to ensure the area remains free of poachers and pastoralist. This means they are regularly exposed to armed poachers or armed pastoralists. However, it is important to note that despite all the challenges in the past, there have been zero collisions and none of the staff has ever been injured this way.

African Parks recognizes that many of its employees work in challenging and often dangerous conditions and is committed to mitigating these risks. Potential risks to project employees are minimized through

extensive training⁴⁸. All project employees are required to receive training before they take up their roles in the project. The training is designed to inform workers of any potential risks they might face and how to reduce them. AP also has a strict HR Policy that covers workers' safety and meets international best practice and standards. All these procedures have been followed in this project.

To mitigate the risk of confrontation with armed groups, AP has developed a very elaborate and field-tested "Tiered Deterrence Approach" (Figure 12). This sets out in detail a series of steps that are followed consistently by all staff. In addition, all rangers receive extensive training on the use of firearms to ensure that risks are minimised. As a result, since the start of project implementation not a single worker has suffered from any injury in this regard. This is a remarkable achievement and shows that the occupational safety is taken very seriously by AP.



Figure 12: Chinko's tiered deterrence approach to mitigate pastoralism poaching risks

All members of AP and their project management units are covered with Group Life Insurance, irrespective of any local insurance policy cover, for up to a maximum of six times their annual earnings for death or total

⁴⁸ For details on the training refer to the Supporting Documents [2. General/APN Law Enforcement SOP Manual]

permanent disability in the event of an accident or death from natural causes, subject to the conditions of the policy. Premiums are paid by African Parks at no cost to the employee.

Project employees who are local and not part of the project management unit, are covered by group personal accident insurance at no cost to the employee. Staff is also covered for emergency evacuation and hospital insurance.

The occupational safety procedure for workers is in place and stipulates, among other things, a few simple rules below:

- all workers must wear safety equipment related to their work in the workplace;
- all incidents in the workplace must be reported to the supervisor who will report the information to HR for documentation; and
- no worker is allowed to work beyond normal working hours unless authorized to do so by their supervisor.

2.4 Management Capacity

2.4.1 Required Technical Skills (G4.2)

As previously explained in the PDD, between AP, the project partners and their advisors, the project team possesses the following skills:

South Pole has a technical and professional team that combines extensive knowledge in GHG ER certification for forestry and land-use projects and VMR systems, enabling them to comprehensively address all aspects of the project. More information on South Pole can be found at <https://www.southpole.com>.

South Pole bring experience in:

Carbon Accounting:

- Excellent knowledge of carbon accounting and carbon markets
- Strong knowledge of REDD+ projects.
- Ability to manage the geographical information system and databases to generate all required cartographic analysis
- Ability to train plot samplers
- Experience in the VCS and CCB standards

African Parks RCA bring experience in:

Community and Biodiversity:

- Understanding of Monitoring, Reporting, and Verification (MRV) requirements.
- Background in monitoring and research.
- Knowledge in sampling methods of wildlife and ecosystem assessment using quality indicators.
- Knowledge in anti-poaching control and sustainable agriculture activities.
- Experience in working with the community and environmental education.

Project Management:

- Experience in sustainable practices for local and rural development, conservation and management of biodiversity and ecosystem services.
- Experience of African conservation projects.
- Knowledge in planning, execution and control of administrative and financial resources.

- Experience and skills in managing resources from donors or co-operators.
- Good leadership skills

More information on of the management team of Chinko and its supporting documentation can be in the NPR Report.

2.4.2 Management Team Experience (G4.2)

AP pioneered the public-private partnership model for protected area management, whereby it maintains the full responsibility and execution of all management functions. This is achieved through three approaches: long-term agreements, putting in place funding solutions, and establishing good governance and management by creating separate legal entities registered in the country, with a Board representing key stakeholders.

The project is managed and operated from the project headquarters, which has been given the mandate by the project proponent (AP) to administer carbon proceeds and develop management strategies, collaborate with the operation partners on the ground and oversee the general implementation of project activities and operations on behalf of the project partners.

The management team ensures that land management and carbon activities are implemented. The main responsibilities of the management team are to:

- ensure the principles of good governance;
- coordinate contact with partners;
- monitor the implementation of activities at different scales in the field;
- monitor the personnel file;
- produce annual reports;
- organise meetings with the organisation and village communities; and
- ensure activities for anti-poaching control and sustainable agriculture.

Chinko's management team includes:

- A Park Manager with more than 25 years of experience in conservation and management of protected areas.
- A Field Operations Manager with more than 10 years of work experience in supply chain, engineering, maintenance and project, with experience based in remote and volatile contexts
- A Conservation Manager with 10 years of expertise of the local context in the area
- A Law Enforcement Manager with more than 10 years of Law Enforcement experience working both as a private security specialist and as anti-poaching instructor in different national parks and protected areas in Africa
- A Community Development Manager with more than three years of professional experience.
- A Human Resources Manager who has worked in the field of administration and human resources for a number of humanitarian aid organisations in the Central African Republic

More information of the management team of Chinko available in African Parks webpage.⁴⁹

⁴⁹ <https://www.africanparks.org/about-us/our-people/park-management/chinko>

2.4.2.1 Other Entities Involved in the Project

South Pole Carbon Asset Management Ltd. (South Pole) has a long and successful track record of working on forestry-based carbon projects, including the first forestry VCS project that issued credits in Latin America and the largest REDD+ project in Zimbabwe.

South Pole contributed throughout to the PDD and supports the monitoring and verification processes of the climate, community and biodiversity benefits. South Pole will document any complaints and claims through the mechanism defined by the project participants. In addition, South Pole is supporting validation and verification under the VCS and CCB Standard by meeting with the auditor, responding to corrective actions, and performing project registration and any clarifications requested by controls.

South Pole is a global sustainability service provider dedicated to working with clients in the public and private sectors to deliver solutions that help create more sustainable societies and economies. Its vision is to positively impact the climate and ecosystems and communities around the globe. South Pole's team of over 1000 experts across 20+ offices around the world focuses on key sustainability issues such as climate change, renewable energy, forestry and land use, water, and sustainable cities and buildings.

Over 16 years, South Pole has, together with its clients, achieved the following results:

- prevented 170 million tonnes of CO₂ emissions;
- developed more than 700 projects across the renewable energy, forestry, agricultural, industrial, household and public sectors;
- protected or restored more than 2 million ha of land; and
- created 100,000 jobs in developing countries.

South Pole has a technical and professional team that combines extensive knowledge in GHG ER certification for forestry and land-use projects and VMR systems, enabling them to comprehensively address all aspects of the project. More information on South Pole can be found at <https://www.southpole.com>.

2.4.3 Project Management Partnerships/Team Development (G4.2)

The project team is suitably qualified for the project implementation. See section 2.4.2, above, for more details.

2.4.4 Financial Health of Implementing Organization(s) (G4.3)

The financial factor and the project autonomy to get its own resources is one of the most significant challenges for the project development. However, AP has adopted financial mechanisms to provide an adequate actual and projected cashflow for project implementation in order to achieve the objectives. During the project's initial years, Chinko covered its expenditures using the revenue from the activities and funds obtained from donor organisations and used an endowment fund to cover the rest. Currently, the project has only 27% of the funds required without the projected revenues from selling verified carbon units.⁵⁰ It is expected that the carbon credits would provide significant resources to continue the development of the project activities.

⁵⁰ For more details please refer to the NPR report and the Cash Flow elaborated as supporting documentation

One of the strategies to ensure adequate financial support over the project lifetime is the signing of ER purchase agreements with buyers willing to obtain credits from the project for various years, in order to guarantee an income for the implementation of the activities. Considering that this is a grouped project, AP has planned to gradually the protected area – the financial information has taken this into account.

2.4.5 Avoidance of Corruption and Other Unethical Behavior (G4.3)

AP has a strict Code of Conduct that the organisation and its employees are obliged to follow. The Code of Conduct forms part of AP's HR Policy and Standard Operating Procedure. All employees must comply with all applicable laws and regulations that relate to activities for and on behalf of AP and must not seek to gain an advantage through illegal or unethical business practices.

The Code of Conduct covers:

- human rights;
- fair dealing;
- conflict of interests;
- gifts, payments and commissions;
- public disclosures;
- the protection and proper use of AP assets;
- relationships with clients, customers and/or visitors; and
- fraud and corruption.

All employees are required to respect, protect and uphold the human rights of all persons with whom they come into contact in their professional capacity as a representative of the CCA and AP. Specifically, all law enforcement personnel must ensure that they protect the human rights and well-being of suspects in custody, observe best practices in law enforcement techniques for suspect interviewing and facilitate best-practice judicial processes.

Any material transaction or relationship that could reasonably be viewed to give rise, or potentially give rise, to a conflict of interest must be discussed with an immediate supervisor or manager before the transaction proceeds to the point that a conflict of interest may be inferred.

The Code of Conduct defines fraud and corruption as “the acceptance of bribes, receiving of money, goods or services which are not disclosed to the organisation and through which one person gains a dishonest advantage over another”. AP consider these to be serious offences that can result in criminal proceedings.

Fraud and corruption, or attempted fraud and corruption, are breaches of the acceptable standards of conduct required of employees and will not be condoned by the project. Disciplinary action will be taken against offenders, whether or not a loss has been suffered by the organisation. Employees found guilty of fraud and corruption will be dismissed and may be reported to the police, should the evidence justify such action.

South Pole, as the supporting organisation, is also committed to preventing these harmful practices. The company has several policies in place such as an anti-corruption policy, an ethics policy and process, and a code of conduct (also for third parties), among others. These documents show South Pole's commitment to conducting business with full integrity.

2.4.6 Commercially Sensitive Information (Rules 3.5.13 – 3.5.14)

No commercially sensitive information has been excluded from the public version of the monitoring report, annexes will be upload as required by the standard, for providing other supporting information the project

proponent should be approached by the interested party and an internal assessment will be done to determine whether the information could be shared or not.

2.5 Legal Status and Property Rights

2.5.1 Recognition of Property Rights (G5.1)

At present, the project area is uninhabited and only has limited road access. There are, however, local communities living in the surrounding area that rely on the natural resources within the protected area for their livelihoods. Protected areas in the CAR are the property of the state. AP has signed an agreement to manage the project area under a public-private partnership with the national government.⁵¹

2.5.2 Free, Prior and Informed Consent (G5.2)

The project has not encroached on private, community or government property.

The project area is considered to be uninhabited, but the project has conducted stakeholder engagement sessions with local communities living on the periphery of the project (see section 2.3.7) to inform them about the project and explain that the project will not encroach on private or community property.⁵²

AP subscribes to the guiding principles for Free, Prior and Informed Consent⁵³. It has a strict policy with decision-making processes in place to ensure that the project:

- is free from coercion, intimidation or manipulation;
- prior to the allocation of land for particular uses or approval of specific projects, the lead time should reflect time requirements for indigenous consultation/consensus processes;
- informed at a minimum, and based on full available information, about the nature and scope of any proposed project or activity, including:
 - areas that will be affected;
 - potential economic, social, cultural and environmental risks and benefits;
 - type of law enforcement work and possible impact; and
 - the timeframe of the proposed project and the organisations/actors likely to be involved.

Information should be in a language easily understood by the affected people, delivered in a culturally appropriate way and available from independent sources. Communities may also require capacity building on unfamiliar issues.

Consent requires time and an effective system for communicating among all affected community members and taking decisions through customary or other community-defined decision-making processes. It requires that affected people are able to say yes or no at each stage of the project. Consent is to be given or withheld by the community as a whole: no single individual or representative can make the decision. Consent should

⁵¹ For more details of the support to demonstrate the property rights refer to supporting information: [2. General\ 2.5.1 Recognition of property rights]

⁵² For more details of the consultation process refer to supporting information: [2. General\ 2.3 Stakeholder engagement]

⁵³ For more details of its policies please refer to supporting information: [2. General\ APN Human Rights Statement of Principles]

result in equitable agreements and should be part of ongoing processes of communication and negotiation, rather than a one-off action.

2.5.3 Property Right Protection (G5.3)

Project activities have not at any time lead to the involuntary removal or relocation of land ownership rights and do not oblige communities to relocate any activities that are important to their culture or livelihood. The project area is completely uninhabited.

As described in section 2.5.9 of the PDD, the land in the project area belongs to the CAR Government. Under the national laws of the CAR, all protected areas are the property of the state. African Parks has signed an agreement to manage the project area under a public-private partnership. This gives AP the rights to fully manage and control of the current project accounting areas and the legal right to operate all project activities as well as enforce the law of CAR with regards to the protected area. Because the CCA is recognised as a protected area and there are no communities living in the project accounting area and no project activities have led to involuntary removal or relocation of property rights holders from their lands or territories, and has not forced rights holders to relocate activities important to their culture or livelihood.

2.5.4 Identification of Illegal Activity (G5.4)

The region in which the project area is located is characterised by instability caused by the activities of foreign armed groups and illicit cross-border movements.

The main illegal activities that have been recognised, and could affect the project's activities, are poaching and the illegal wildlife trade. In Chinko, poachers have been identified as originating from Bakouma and Rafaï. Non-local poachers also come from Bangassou, Bria and Gambo. Poaching is an important source of income for all communities living around the reserve, and most offtake is sold to local buyers. Most of this poaching takes place on a relatively small scale. Large-scale commercial poaching, however, is often carried out by armed groups and is highly organised. These groups engage in poaching for purely economic purposes. Poaching in the region has sometimes been shown to have been facilitated by the administrative authorities in the region. Local leaders and chiefs have been implicated in the internal, but not cross-border, trafficking of high-value products⁵⁴.

Transhumant pastoralists have also been identified as posing a serious poaching problem in the project area not only in regard to conversion of natural cover but for the fauna. While they sell meat locally, high-value products such as ivory, skins and other trophies are transported to larger towns and cities. The transhumant pastoralists are also actively involved in the trafficking of wildlife, ivory and leopard skins in particular. Armed groups operating in the region (e.g., the Seleka) have been recognised as actively supplying firearms and using their vehicles to transport large quantities of bushmeat to neighbouring towns and cities, such as Bria and Yalinga, northwest of Chinko⁵⁵.

In addition to bushmeat, traders sell ivory and the skins, fat, teeth and claws of big cats. In the CAR, the first points of sale for illegally procured wildlife products are the towns of Rafaï and Zemio. Zemio, which is home to 2,400 Congolese refugees who fled the atrocities of the Lord's Resistance Army in the Democratic

⁵⁴ Ondoua Ondoua, G., Beodo Moundjim, E., Mambo Marindo, J.C., Jiagho, R., Usongo, L. & Williamson, E. A. (2017). An Assessment of Poaching and Wildlife Trafficking in the Garamba-Bili-Chinko Transboundary Landscape

⁵⁵ Ondoua Ondoua, G., Beodo Moundjim, E., Mambo Marindo, J.C., Jiagho, R., Usongo, L. & Williamson, E. A. (2017). An Assessment of Poaching and Wildlife Trafficking in the Garamba-Bili-Chinko Transboundary Landscape

Republic of Congo in 2009, is seemingly the largest trading centre for wildlife products in the southeast CAR, notably for elephant meat and orphaned chimpanzees ⁵⁶.

Now in terms of the measures taken for these illegal activities (poaching, wildlife trade and unsustainable pastoralism), the project has a number of law enforcement initiatives designed to prevent illegal activities in the project accounting area, such as ranger patrolling, which in Chinko is critical for the habitat security. The team does confiscations, sensitization and if necessary, send the captured to the relevant authorities to be apprehended. Safety and security for people and wildlife, and effective procedure with local authorities/ethnic groups and institutions are also carried out when special cases demand it. In addition, while the role of eco-monitor team key focus is to monitoring camera traps to document wildlife within the core area, the eco-monitor teams work to ensure the park's boundaries are respected, as well as tracking human activity within CCA to protect the habitat. They are often first responders and able to call for prompt intervention as needed.

Illegal mining within the project accounting area was also a topic of relevance, since 2014, there have been three main regions where illegal gold and diamond mines have been established. Because mining is illegal in the project accounting area under the CAR law, two out of the three were closed between 2015-2016. The last illegal mining region was in the southwestern part of the project accounting area, however, was socio-economically much more important for the local communities. As a result, the project proponent was hesitant to shut down the illegal mines without a new opportunity for the community. The project proponent engaged with affected communities, miners, and government representatives over a two-year period, in order to establish the best way to relocate these mines and create responsibly managed official mines in the buffer zones that were established. The process was successful, and the last illegal mine in the project area was peacefully closed on 26 November 2020.

It is worth noting that besides the law enforcement mitigation activities, there steps for reducing the reliance of local communities on illegal activities, such as the identification and implementation of alternative income-generating activities, as explained sections 2.1.11 and 2.1.19 of the project description, these other measures to be implemented by the project are focused on targeting the main agents and drivers of deforestation and conversion, to give new opportunities that create change in the agents' behaviour. These activities include sensitisation of the local communities and transhumance pastoralists, the establishment of more sustainable practices, increase of employment opportunities, continuation of biodiversity monitoring and protection of natural areas among others. The success in the implementation of these activities is expected not only to generate greenhouse gases (GHG) emissions reductions but to create a change in the agents' behaviour which will help to prevent that the illegal activities mentioned earlier continue in the future.

2.5.5 Ongoing Disputes (G5.5)

A number of disputes have been identified that have been resolved or are in the process of being resolved. AP is transparent with regard to all disputes that have been raised and has measures in place to ensure all disputes are resolved in a manner that benefits all parties.

The most recent dispute resolved was related to the closure of illegal mines in the southwestern part of the project area. Since 2014, there have been three main regions where illegal gold and diamond mines have been established. Because mining is illegal in the project area under the CAR law, two out of the three were closed between 2015-2016. The last illegal mining region in the southwestern part of the project area, however, was socio-economically much more important for the local communities. As a result, the project

⁵⁶ Ibid

was hesitant to shut down mines without new economic opportunities for the community. The project engaged with affected communities, miners and government representatives over a two-year period to establish the best way to relocate these mines and create responsibly managed official mines in the buffer zones that were established. The process was successful and the last illegal mine in the project area was peacefully closed on 26 November 2020.

Another dispute took place along the north-western boundary of the CCA. The reserve was initially established with four hunting zones. When AP took over management of the CCA, they started to manage the road network and campsites that had been established and used by a hunting company called CAWA from 2006 to 2014. An area on the western side of the Mbari River had been used by CAWA for official and legal trophy hunting but was actually outside the Mbari-39 hunting zone and officially in the community zone of Yalinga. AP managed this area from 2015-2020 as protected land, as there was a 10 km² area of forest that served as important habitat for the last remaining elephants in the Eastern CAR.

In 2020, the project invited a delegation from Yalinga village (which was previously inaccessible due to security issues in the rebel-controlled zone) to Bangassou to resolve the dispute. A strategy was developed to create an official buffer zone between Yalinga and the project area that gives the community access to natural resources. AP will assist the community in managing the zone and using the resources sustainably. The goal is to create two different sectors: Sector I will be for sustainable hunting, fishing and responsible mining while Sector II is for strict protection. In the future, Sector II could become an eco-tourist destination or trophy hunting zone, with the revenue going to the community of Yalinga.

The final dispute was around the Dembia-49 hunting zone, which was assigned to the management of AP after the agreement with the CAR government was signed on 15 April 2020. This hunting zone includes villages and is close to a public road. The goal is to ultimately split the hunting zone into two sectors: one strictly protected and fully managed by AP, and a second defined as a buffer zone managed by the local communities with assistance from the project and the government. This process is ongoing, and the first meetings with the affected communities have been held.

It should also be noted that there are often minor disputes between local communities and the project's law enforcement team around the issue of poaching in the project area. Communities around the project area are, however, supportive of the project, with most agreeing that the stability in the region is a direct result of the project's activities. One of them is to improve communities' access to natural resources. In the mid-to long-term, the active management of the project area, and the buffer zones in particular, should allow hunters and fishermen to find more and higher-quality resources in closer proximity to their villages. The project is finalising a comprehensive land-use plan with the participation of local communities that will propose the new zonation of the area and will be officially submitted to the government.

2.5.6 National and Local Laws (G5.6)

There are some national and local laws that are relevant to project activities. These are described in detail below and cover the climate, land, water, forest and minerals sectors. The project is in compliance with all the laws described below and aligns with all national climate strategy documents.

The CCA is uninhabited and classified as a protected area. AP has signed an agreement with the government to take responsibility for managing the protected area and assisting in enforcing national laws relevant to the protected area. To achieve success in this regard, AP has recruited, trained and equipped a sufficient number of rangers, echo-monitors and echo-transhumant officers to effectively manage the CCA and enforce the national laws in the area.

Communities on the periphery of the project area that have access rights to the natural resources in the CCA will in no way be prevented from accessing these natural resources. An important component of the

project is to ensure that local communities have access to the natural resources on which they rely. The project has, and will continue to, establish buffer zones that are managed together with communities. The sustainable use of natural resources is allowed (and encouraged) in these buffer zones.

Climate

In response to climate change, the CAR ratified the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol in 1995 and 2008 respectively. The country has also developed a number of documents that provide strategic policy guidance on the implementation of the Convention. These include:

- the National Adaptation Programme of Action (NAPA) in 2007;
- the first- and second-generation Poverty Reduction Strategy (PRSP I and 2) for the period 2007-2011 and 2012-2016 respectively;
- the Environmental Code in 2007;
- the national programme to combat desertification and land resource degradation in 2009;
- the Environmental Policy in 2011;
- the preparatory document for the REDD+ strategy and its implementation through the Monitoring, Reporting, and Verification (MRV) project;
- the second national communication in 2013 on the assessment of emissions by sector; and
- the Intended Nationally Determined Contribution in September 2015, which includes an adaptation component.

The CAR has neither developed its National Adaptation strategy nor its Nationally Appropriate Mitigation Actions (NAMAs). It is expected that the NAMA agenda will be developed with funding from the African Climate Change Fund and its national adaptation strategy will be developed with financing from the World Bank.⁵⁷

Land

The 2004 Constitution of the CAR states that all persons have a right to property and that the state and citizens have an obligation to protect those rights. The CAR's Law No. 63 of 1964 is the primary formal law governing land rights in the country. Law No. 63 recognises customary law but limits customary land tenure to use rights.⁵⁸

Several land tenure types exist in the CAR, including private ownership, concessions and customary tenure. These are discussed in more detail in the following paragraphs.

Under the CAR's formal law, an individual or entity can obtain ownership rights to land through registration of their interest as private property. Occupants of land can apply for ownership rights under the principle of *mise en valeur*, which awards ownership rights to those who develop their land intensively (e.g. by means of intensive or permanent agriculture). Ownership rights may be transferred by purchase, inheritance or lease. Less than 0.1% of land in the CAR is registered.

⁵⁷ <https://www.greenclimate.fund/sites/default/files/document/readiness-proposals-central-african-republic-undp-nda-strengthening-and-country-programming.pdf>

⁵⁸ <https://land-links.org/country-profile/central-african-republic/#summary>

Individuals, groups and entities can lease land from the state or private parties under both formal and customary law. Land leases within the state's public domain are granted for definite periods, generally not exceeding 20 years, and no lease can extend beyond 50 years.

The state can also grant concessions of land to individuals and entities as concessions. The concessionaire must develop the land in accordance with the terms of the concession within two years for urban land and within five years for rural land. Concessionaires who have developed the land in accordance with the agreement and obtained the approval of the local government may apply for private ownership rights to the land.

The state's recognition of occupancy rights to certain land has continued despite the absence of formal law providing for rights of habitation. Upon application, the state issues a habitation permit that allows the applicant to occupy the land and erect any non-permanent structure, including huts of organic materials. In some areas, the permits are free and easily obtained. In peri-urban areas, permits are difficult to obtain and often require large payments and the permission of multiple officials. The length of time for which habitation permits are granted is unknown.

Law No. 63 of 1964 recognises use rights to land based on principles of customary law. Customary law is a localised and evolving system, and no comprehensive studies have been published detailing the nature of the system as it is operating in the CAR. Some general principles of customary law that are common to the Central African region are thought to apply in the CAR, such as land being held collectively through lineage and the right of a first clearer of land to use the land. As the commercial value of land has increased, customary landholdings have become increasingly individualised and passed by inheritance within families.⁵⁹

Water

The Ministry of Water, Forestry, Hunting and Fisheries has authority over the country's water resources. The Ministry of Agriculture and Livestock has authority over irrigation water and systems, and the Ministry of Public Works is responsible for urban water supplies and systems.⁶⁰

The CAR's 2006 Water Code states that all of the country's surface and subterranean water is in the public domain. No one can prevent the free movement of the country's surface and groundwater, and any use of the water must be authorised by the government. The Water Code does not expressly recognise customary water rights⁶¹; however, it does recognise the existence of 'sacred waters' and gives community leaders the authority to ensure their protection.⁶²

Forests

The Ministry of Water, Forests, Hunting and Fisheries is responsible for the management of the country's forests. The CAR has several laws and regulations pertaining to forest management, wood harvesting, processing and trade.

The Central African Forest Code was passed in October 2008 (Law No 08.022) and is the main legal text governing the country's forest sector. The Forest Code provides for state ownership of the country's forests

⁵⁹ Ibid.

⁶⁰ USAID, 2010. Property Rights and Resource Governance Country Profile: Central African Republic.

⁶¹ Ibid.

⁶² <https://land-links.org/country-profile/central-african-republic/#summary>

and divides them into permanent forest domain and non-permanent forest domain. The country's permanent forests are located in Bangassou and in the eastern and southwest regions of the country. Non-permanent forests are those created by local governments, individuals and groups through arboriculture and forest restoration activities.⁶³ The Forest Code also provides the authority for the licensing of traditional timber production and community forests, and requires concessionaires to hold a Forest Management Permit (Article 32, Forest Code). The Code also recognises customary rights to forest resources, granting local communities use rights to forest land and forest products. All use rights recognised by the formal law are subject to state definition and control.⁶⁴

The Yaoundé Declaration of 1999, which was signed by the CAR, Cameroon, Chad, the Democratic Republic of Congo, Republic of Congo, Equatorial Guinea and Gabon, established an international framework for collaboration on cross-border forest issues, the creation of protected areas, and the development and implementation of coordinated sustainable forest management. The declaration also created a governance structure, the Central African Forests Commission, which has the authority to direct, coordinate and monitor forest and environmental activities in the region.⁶⁵

Minerals

The Ministry of Mining and Energy is responsible for the mineral sector. The production of diamonds and gold is overseen by the Bureau of the Evaluation and Control of Diamonds and Gold (*Bureau d'Evaluation et de Control de Diamant et d'Or*), which maintains a database of production.⁶⁶

The 2009 Mining Code governs all mining activities in the CAR. Article 6 of this code provides that all mineral resources are the property of the state. Entities and individuals can obtain rights to the CAR's minerals, and rights to minerals are separate and distinct from rights to land. The Mining Code recognises customary property rights and requires license holders to compensate holders of customary rights for damage to land or the loss of land use resulting from mining operations.⁶⁷

3 CLIMATE

3.1 Monitoring GHG Emission Reductions and Removals

3.1.1 Data and Parameters Available at Validation

Data / Parameter	α
Data unit	Unitless
Description	Combined effects of β and θ at the start of the historic reference period
Equations	[F.3], [F.5], [F.6], [F.8]

⁶³ USAID, 2010. Property Rights and Resource Governance Country Profile: Central African Republic

⁶⁴ Ibid.

⁶⁵ Usongo and Nagahuedi, 2008. Participatory land-use planning for priority landscapes of the Congo Basin.

⁶⁶ Bermudez-Lugo, 2006. The Mineral Industries of Central African Republic, Côte d'Ivoire, and Togo.

⁶⁷ USAID, 2010. Property Rights and Resource Governance Country Profile: Central African Republic.

Source of data	Reference area and historic reference period				
Value applied	<table> <tr> <td>RA 1</td><td>-4.436</td></tr> <tr> <td>RA 2</td><td>-4.841</td></tr> </table>	RA 1	-4.436	RA 2	-4.841
RA 1	-4.436				
RA 2	-4.841				
Justification of choice of data or description of measurement methods and procedures applied	Time and place in which the logistic model is fit				
Purpose of Data	Not applicable				
Comments	Parameter not used in the baseline types identified				

Data / Parameter	β				
Data unit	Unitless				
Description	Effect of time on the cumulative proportion of conversion over time				
Equations	[F.2], [F.3], [F.4], [F.5], [F.6], [F.7], [F.8]				
Source of data	Reference area and historic reference period				
Value applied	<table> <tr> <td>RA 1</td><td>2.48800E-04</td></tr> <tr> <td>RA 2</td><td>1.18000E-04</td></tr> </table>	RA 1	2.48800E-04	RA 2	1.18000E-04
RA 1	2.48800E-04				
RA 2	1.18000E-04				
Justification of choice of data or description of measurement methods and procedures applied	Time and place in which the logistic model is fit				
Purpose of Data	Calculation of baseline emissions				
Comments					

Data / Parameter	γ
Data unit	Days
Description	Time shift from beginning of historic reference period to project start date
Equations	[F.3], [F.6]
Source of data	Historic reference period

Value applied	Not applicable
Justification of choice of data or description of measurement methods and procedures applied	Time in which the logistic model is fit
Purpose of Data	Not applicable
Comments	Parameter not used

Data / Parameter	θ
Data unit	Unitless
Description	Effect of certain covariates on the cumulative proportion of conversion over time
Equations	[F.2], [F.3], [F.4], [F.5], [F.6], [F.7], [F.8]
Source of data	Reference area and historic reference period
Value applied	Not applicable
Justification of choice of data or description of measurement methods and procedures applied	Time and place in which the logistic model is fit
Purpose of Data	Calculation of baseline emissions
Comments	Parameter not used

Data / Parameter	λ_{SOC}
Data unit	Proportion (unitless)
Description	Exponential soil carbon decay parameter
Equations	[F.9], [F.33]
Source of data	Default values from VCS methodology VM0009, derived from E. Davidson & Ackerman (1993)
Value applied	Not applied
Justification of choice of data or description of measurement methods and procedures applied	Default values from VCS methodology VM0009, derived from E. Davidson & Ackerman (1993)

Purpose of Data	Calculation of baseline emissions
Comments	Parameter not used

Data / Parameter	$\hat{\sigma}_{EM}$		
Data unit	Standard deviation (unitless)		
Description	The estimated standard deviation of the state observations used to fit the logistic function for the BEM		
Equations	[F.12], [F.14], [B.31]		
Source of data	Remote sensing image interpretation		
Value applied	RA 1	0.09938	
	RA 2	0.08182	
Justification of choice of data or description of measurement methods and procedures applied	Not applicable		
Purpose of Data	Calculation of confidence deduction		
Comments			

Data / Parameter	$\mathcal{B}$		
Data unit	Set		
Description	The set of all selected carbon pools in biomass. Is a subset of $\mathcal{C}$		
Equations	[F.17], [F.18], [F.23], [F.50]		
Source of data	PDD		
Value applied	Not applicable		
Justification of choice of data or description of measurement methods and procedures applied	See section 3.1.3 of the PDD		
Purpose of Data	• Calculation of baseline emissions • Calculation of project emissions • Calculation of leakage		
Comments			

Data / Parameter	<i>c</i>
Data unit	Set
Description	The set of all selected carbon pools
Equations	Not applicable
Source of data	Monitoring records
Value applied	Not applicable
Justification of choice of data or description of measurement methods and procedures applied	See section 3.1.3 of the PDD
Purpose of Data	• Calculation of baseline emissions • Calculation of project emissions • Calculation of leakage
Comments	

Data / Parameter	<i>j</i>
Data unit	Set
Description	The set of all observations of conversion. When superscripted with a monitoring period, the conversion observations are taken for leakage analysis
Equations	[F.13]
Source of data	Remote sensing image interpretation or field observations in the leakage area
Value applied	Not applicable
Justification of choice of data or description of measurement methods and procedures applied	Not applicable
Purpose of Data	Calculation of confidence deduction
Comments	

Data / Parameter	<i>M</i>
Data unit	Set

Description	The set of all monitoring periods
Equations	[F.32], [F.33], [F.36], [F.54], [F.56]
Source of data	Monitoring records
Value applied	Not applicable
Justification of choice of data or description of measurement methods and procedures applied	Not applicable
Purpose of Data	Not applicable
Comments	

Data / Parameter	T
Data unit	Set
Description	The set of all species/categories of livestock
Equations	[F.43]
Source of data	Monitoring records
Value applied	Not applicable
Justification of choice of data or description of measurement methods and procedures applied	Type of livestock herded in the area
Purpose of Data	Calculation of project emissions
Comments	

Data / Parameter	A_{PAA}		
Data unit	ha		
Description	Area of Project Accounting Areas		
Equations	[F.2], [F.3], [F.4], [F.5], [F.6], [F.7], [F.8], [F.41], [F.52], [F.57]		
Source of data	GIS analysis prior to sampling		
Value applied		PAA	
	1	148,395.64	

	<table> <tr> <td>2</td><td>713,408.61</td></tr> <tr> <td>3</td><td>363,225.39</td></tr> <tr> <td>Total</td><td>1,225,029.64</td></tr> </table>	2	713,408.61	3	363,225.39	Total	1,225,029.64
2	713,408.61						
3	363,225.39						
Total	1,225,029.64						
Justification of choice of data or description of measurement methods and procedures applied	Areas under control of African Parks with eligible cover						
Purpose of Data	• Calculation of baseline emissions • Calculation of project emissions						
Comments							

Data / Parameter	A_{PX}				
Data unit	ha				
Description	Area of proxy area for the Project Accounting Areas				
Equations	[F.57]				
Source of data	GIS analysis prior to sampling				
Value applied	<table> <tr> <td>Proxy 1</td><td>79.2</td></tr> <tr> <td>Proxy 2</td><td>404.4</td></tr> </table>	Proxy 1	79.2	Proxy 2	404.4
Proxy 1	79.2				
Proxy 2	404.4				
Justification of choice of data or description of measurement methods and procedures applied	See section 3.1.4 of the PDD				
Purpose of Data	• Calculation of baseline emissions • Calculation of project emissions				
Comments	Area 1: Agriculture, Area 2: Overgrazed				

Data / Parameter	C_{Lp}
Data unit	t CO ₂ e / ha
Description	Carbon stocks in project leakage area
Equations	[F.50]

Source of data	Leakage area sampling
Value applied	Not applicable
Justification of choice of data or description of measurement methods and procedures applied	Considering the deforestation/conversion agents present in the area, emissions from market leakage will not be accounted for and the cumulative emissions from market leakage for every monitoring period will be zero.
Purpose of Data	Not applicable
Comments	Parameter not used

Data / Parameter	f_{LS}^i
Data unit	kg CH ₄ head ⁻¹ yr ⁻¹
Description	Emission factor for the defined livestock population, i
Equations	[F.43]
Source of data	IPCC default values
Value applied	48
Justification of choice of data or description of measurement methods and procedures applied	Obtained directly from IPCC default values, Volume 4 Agriculture, Forestry and Other Land Use, Chapter 10 Emissions from livestock and manure management, Table 10.11 – African cattle low productivity systems
Purpose of Data	Calculation of project emissions
Comments	Considering the migratory characteristics of the pastoralists, the livestock, when illegally entering the project boundaries, is not roaming during the full year but only during the beginning of the dry season, therefore, when applying the equation [F.43] a minor adjustment is applied: the emission factor defined for the livestock population (f_{LSi}) is multiplied by a factor of the number of months in the year in which the livestock grazed during the year (3 months, therefore a 0.25 factor).

Data / Parameter	m
Data unit	t CO ₂ e / yr
Description	Average carbon in merchantable trees cut each year as a result of legally sanctioned commercial logging
Equations	[F.2]

Source of data	Timber harvest plans or measurement of carbon stocks in merchantable trees in the project accounting area
Value applied	Not applicable
Justification of choice of data or description of measurement methods and procedures applied	Not applicable
Purpose of Data	Not applicable
Comments	Parameter not used

Data / Parameter	n_d				
Data unit	Not applicable				
Description	Number of spatial points in the reference area				
Equations	[F.14]				
Source of data	Remote sensing image interpretation				
Value applied	<table border="1"> <tr> <td>RA 1</td><td>1,654</td></tr> <tr> <td>RA 2</td><td>2,566</td></tr> </table>	RA 1	1,654	RA 2	2,566
RA 1	1,654				
RA 2	2,566				
Justification of choice of data or description of measurement methods and procedures applied	Not applicable				
Purpose of Data	Calculation of confidence deduction				
Comments	Each point assessed in seven periods				

Data / Parameter	o_i
Data unit	Binary
Description	State observation for the i^{th} sample point in the reference area
Equations	[F.13]
Source of data	Remote sensing image interpretation
Value applied	Various

Justification of choice of data or description of measurement methods and procedures applied	Not applicable
Purpose of Data	Calculation of confidence deduction
Comments	

Data / Parameter	P_{LME}
Data unit	Unitless
Description	Portion of leakage related to market
Equations	[F.51]
Source of data	8.3.3
Value applied	Not applicable
Justification of choice of data or description of measurement methods and procedures applied	Considering the deforestation/conversion agents present in the area, emissions from market leakage will not be accounted for and the cumulative emissions from market leakage for every monitoring period will be zero.
Purpose of Data	Not applicable
Comments	Parameter not used

Data / Parameter	q
Data unit	Days
Description	Lag between start of degradation and conversion
Equations	[F.3], [F.4], [F.5]
Source of data	Default value
Value applied	0
Justification of choice of data or description of measurement methods and procedures applied	It is always conservative to set this parameter equal to zero and any other value must be justified
Purpose of Data	Calculation of baseline emissions
Comments	

Data / Parameter	$r_{CF\ b}$
Data unit	Unitless
Description	Carbon fraction of biomass for burned wood or herbaceous material b
Equations	[F.42]
Source of data	Literature estimates or direct measurement
Value applied	Not applicable
Justification of choice of data or description of measurement methods and procedures applied	Not applicable
Purpose of Data	Not applicable
Comments	

Data / Parameter	r_{RS}
Data unit	Unitless
Description	Expansion factor for above-ground biomass to below-ground biomass (root/shoot ratio)
Equations	[F.30]
Source of data	Reviewed literature, allometry, or IPCC default values
Value applied	0.232
Justification of choice of data or description of measurement methods and procedures applied	IPCC 2019 Refinement, Chapter 4, Table 4.4
Purpose of Data	Calculation of project emissions
Comments	

Data / Parameter	r_U
Data unit	Unitless
Description	Onset proportion of conversion immediately adjacent to project area

Equations	[F.4]			
Source of data	GIS analysis and image interpretation			
Value applied		PAA 1	3.1242	
		PAA 2	5.5914	
		PAA 3	1.8925	
Justification of choice of data or description of measurement methods and procedures applied	Positions the baseline emissions models relative to the instantaneous rate of conversion			
Purpose of Data	Calculation of baseline emissions			
Comments				

Data / Parameter	t
Data unit	Days
Description	Time since project start date
Equations	[F.2], [F.3], [F.4], [F.5], [F.6], [F.7], [F.8], [F.10]
Source of data	Monitoring records
Value applied	Various
Justification of choice of data or description of measurement methods and procedures applied	Not applicable
Purpose of Data	Calculation of baseline emissions
Comments	

Data / Parameter	t_i
Data unit	Days
Description	The point in time of the observation made at point i
Equations	[F.11], [A.6]
Source of data	Remote sensing image interpretation
Value applied	Various

Justification of choice of data or description of measurement methods and procedures applied	Not applicable
Purpose of Data	Calculation of confidence deduction
Comments	

Data / Parameter	t_{PA}
Data unit	Days
Description	Time prior to the project start date when the primary agent began commercial logging in the project accounting area
Equations	[F.1], [F.2], [F.3], [F.6]
Source of data	Harvest plans prepared for the project accounting area, or by public record
Value applied	Not applicable
Justification of choice of data or description of measurement methods and procedures applied	Not applicable
Purpose of Data	Not applicable
Comments	Parameter not used

Data / Parameter	t_m
Data unit	Days
Description	Length of project or logging in baseline scenario
Equations	[F.1]
Source of data	PD
Value applied	Not applicable
Justification of choice of data or description of measurement methods and procedures applied	Not applicable
Purpose of Data	Not applicable

Comments	Parameter not used
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Data / Parameter	t_{PL}
Data unit	Days
Description	Length of project crediting period
Equations	[F.5]
Source of data	See section 3.1.3 of the PDD
Value applied	10,438
Justification of choice of data or description of measurement methods and procedures applied	See section 2.1.14 of the PDD
Purpose of Data	• Calculation of baseline emissions • Calculation of project emissions
Comments	

Data / Parameter	t_{PAI}								
Data unit	Days								
Description	Number of days after the project start date for the start of a project activity instance in a grouped project								
Equations	[F.2], [F.3], [F.4], [F.5], [F.6], [F.7], [F.8]								
Source of data	See section 3.1.3 of the PDD								
Value applied	<table border="1"> <thead> <tr> <th>PAA</th><th>Value</th></tr> </thead> <tbody> <tr> <td>1</td><td>0</td></tr> <tr> <td>2</td><td>0</td></tr> <tr> <td>3</td><td>1,308</td></tr> </tbody> </table>	PAA	Value	1	0	2	0	3	1,308
PAA	Value								
1	0								
2	0								
3	1,308								
Justification of choice of data or description of measurement methods and procedures applied	See section 2.1.13 of the PDD								
Purpose of Data	Calculation of baseline emissions								
Comments									

Data / Parameter	t_{SA}
Data unit	Days
Description	Arrival time of secondary agents after start of commercial logging
Equations	[F.2]
Source of data	Participatory rural appraisal, or expert knowledge
Value applied	Not applicable
Justification of choice of data or description of measurement methods and procedures applied	Not applicable
Purpose of Data	Not applicable
Comments	Parameter not used

Data / Parameter	w_i
Data unit	Unitless
Description	Weight applied to the i^{th} sample point in the Project Accounting Areas reference area
Equations	[A.6], [F.13]
Source of data	Remote sensing image interpretation
Value applied	Various
Justification of choice of data or description of measurement methods and procedures applied	Not applicable
Purpose of Data	Calculation of confidence deduction
Comments	

Data / Parameter	x
Data unit	Unitless
Description	Covariate values
Equations	[F.2], [F.3], [F.4], [F.5], [F.6], [F.7], [F.8]

Source of data	Participatory Rural Appraisal, analysis of public records, and/or expert interpretation of inventory data or remotely sensed imagery
Value applied	Not applicable
Justification of choice of data or description of measurement methods and procedures applied	Not applicable
Purpose of Data	Not applicable
Comments	Parameter not used

Data / Parameter	x_i
Data unit	Geographic coordinates
Description	Latitude of the i^{th} sample point in the Project Accounting Areas reference area
Equations	[F.11], [A.6]
Source of data	Remote sensing image interpretation
Value applied	Various
Justification of choice of data or description of measurement methods and procedures applied	Not applicable
Purpose of Data	Calculation of confidence deduction
Comments	

Data / Parameter	x_0
Data unit	Unitless
Description	Covariate values as of the project start date
Equations	[F.4], [F.5], [F.6], [F.7], [F.8]
Source of data	Participatory Rural Appraisal, analysis of public records, and/or expert interpretation of inventory data or remotely sensed imagery
Value applied	Not applicable

Justification of choice of data or description of measurement methods and procedures applied	Not applicable
Purpose of Data	Not applicable
Comments	Parameter not used

Data / Parameter	x_{SA}
Data unit	Unitless
Description	Covariate values as of the arrival of the secondary agents
Equations	[F.2]
Source of data	Participatory Rural Appraisal, analysis of public records, and/or expert interpretation of inventory data or remotely sensed imagery
Value applied	Not applicable
Justification of choice of data or description of measurement methods and procedures applied	Not applicable
Purpose of Data	Not applicable
Comments	Parameter not used

Data / Parameter	y_i
Data unit	Geographic coordinates
Description	Longitude of the i^{th} sample point in the Project Accounting Areas reference area
Equations	[F.11], [A.6]
Source of data	Remote sensing image interpretation
Value applied	Various
Justification of choice of data or description of measurement methods and procedures applied	Not applicable
Purpose of Data	Calculation of confidence deduction

Comments	
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3.1.2 Data and Parameters Monitored

Data / Parameter	$w^{[m]}$
Data unit	Set
Description	The set of all burned wood or herbaceous material
Equations	[F.42]
Source of data	Monitoring records
Description of measurement methods and procedures to be applied	Not applicable
Frequency of monitoring/recording	Every monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Calculation of project emissions
Calculation method	Not applicable
Comments	

Data / Parameter	$A_{B \Delta PAA}^{[m]}$
Data unit	ha
Description	Area of avoided conversion
Equations	[F.52]
Source of data	Generated from equation
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Section 8.3.3.4

Frequency monitoring/recording of	Every monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Not applicable
Calculation method	Not applicable
Comments	Parameter not used

Data / Parameter	$A_{P\ 1}^{[m=0]}$			
Data unit	ha			
Description	Area of Project Accounting Areas stratum 1 prior to first verification event			
Equations	[F.24]			
Source of data	GIS analysis prior to sampling			
Description of measurement methods and procedures to be applied	GIS analysis of best available data			
Frequency of monitoring/recording	First monitoring period			
Value applied		PAA	Value	
		1	148,395.64	
		2	713,408.61	
		3	363,225.39	
Monitoring equipment	Remote Sensing data GIS Software			
QA/QC procedures to be applied	Annex 4 of the PD			
Purpose of data	Calculation of baseline emissions			
Calculation method	Eligible area			
Comments	Stratum 1 in PAA 1 is CCF, Stratum 1 in PAAs 2 and 3 is OWS			

Data / Parameter	$A_{p2}^{[m=0]}$
Data unit	ha
Description	Area of Project Accounting Areas stratum 2 prior to first verification event
Equations	[F.24]
Source of data	GIS analysis prior to sampling
Description of measurement methods and procedures to be applied	GIS analysis of best available data
Frequency of monitoring/recording	First monitoring period
Value applied	N/A
Monitoring equipment	Remote Sensing data GIS Software
QA/QC procedures to be applied	Annex 4 of the PD
Purpose of data	Calculation of baseline emissions
Calculation method	Eligible area
Comments	There is no second stratum in PAAs

Data / Parameter	$B_b^{[m]}$
Data unit	Tonnes
Description	Biomass in burned wood or herbaceous material <i>b</i>
Equations	[F.42]
Source of data	Measurements of biomass
Description of measurement methods and procedures to be applied	Not applicable
Frequency of monitoring/recording	Not applicable

Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Not applicable
Purpose of data	Not applicable
Calculation method	Not applicable
Comments	

Data / Parameter	$C_B^{[m]}$								
Data unit	tCO ₂ e / ha								
Description	Baseline carbon stocks at the end of the current monitoring period for the Project Accounting Areas								
Equations	[F.2], [F.3], [F.4], [F.5], [F.6], [F.7], [F.57]								
Source of data	Proxy area sampling								
Description of measurement methods and procedures to be applied	Carbon plots sampling								
Frequency of monitoring/recording	Every time measured (≤ 5 yrs)								
Value applied	<table border="1"> <thead> <tr> <th>PAA</th><th>Value</th></tr> </thead> <tbody> <tr> <td>1</td><td>195.55</td></tr> <tr> <td>2</td><td>42.83</td></tr> <tr> <td>3</td><td>42.83</td></tr> </tbody> </table>	PAA	Value	1	195.55	2	42.83	3	42.83
PAA	Value								
1	195.55								
2	42.83								
3	42.83								
Monitoring equipment	See annex 3 of the PD								
QA/QC procedures to be applied	See annex 3 of the PD								
Purpose of data	- Calculation of baseline emissions - Calculation of confidence deduction								
Calculation method	Equation [B.33]								

Comments	
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Data / Parameter	$C_{B\ BGB}^{[m]}$		
Data unit	tCO ₂ e		
Description	Carbon not decayed in BGB at the end of the current monitoring period for the Project Accounting Areas		
Equations	[F.16]		
Source of data	Proxy area sampling		
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Section 8.1.4		
Frequency of monitoring/recording	Every monitoring period		
Value applied	PAA	Value	
	1	161,890.3	
	2	176,387.4	
	3	34,759.4	
Monitoring equipment	Not applicable		
QA/QC procedures to be applied	Review of emissions reductions calculations		
Purpose of data	Calculation of baseline emissions		
Calculation method	Equations [F.10] and [F.32]		
Comments	Per PAA, value for 31/12/2020		

Data / Parameter	$C_{B\ DW}^{[m]}$		
Data unit	tCO ₂ e		
Description	Carbon not decayed in DW at the end of the current monitoring period		
Equations	[F.16]		
Source of data	Proxy area sampling		

Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Section 8.1.3
Frequency of monitoring/recording	Every monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Not applicable
Calculation method	Not applicable
Comments	Parameter not used

Data / Parameter	$C_{B\ SOC}^{[m]}$
Data unit	tCO2e
Description	Carbon not decayed in SOC at the end of the current monitoring period for the Project Accounting Areas
Equations	[F.16]
Source of data	Proxy area sampling
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Section 8.1.5
Frequency of monitoring/recording	Every monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of emissions reductions calculations
Purpose of data	Calculation of baseline emissions
Calculation method	Equations [F.9] and [F.33]
Comments	Parameter not used

Data / Parameter	$C_{B\ WP}^{[m]}$
Data unit	tCO ₂ e
Description	Carbon not decayed in WP at the end of the current monitoring period
Equations	[F.16]
Source of data	Proxy area sampling
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix C
Frequency of monitoring/recording	Every monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Not applicable
Calculation method	Not applicable
Comments	Parameter not used

Data / Parameter	$C_{B\ AGMT}^{[m]}$
Data unit	tCO ₂ e / ha
Description	Baseline carbon stocks in above-ground merchantable trees at the end of the current monitoring period
Equations	[F.37], [F.38], [F.39], [F.40]
Source of data	Proxy area sampling
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix B.2.1
Frequency of monitoring/recording	Every time measured (≤ 5 yrs)

Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Not applicable
Calculation method	Not applicable
Comments	Parameter not used

Data / Parameter	$C_B^{[m]}_{BGMT}$
Data unit	tCO ₂ e / ha
Description	Baseline carbon stocks in below-ground merchantable trees at the end of the current monitoring period
Equations	[F.37], [F.38], [F.39], [F.40]
Source of data	Proxy area sampling
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix B.2.1
Frequency of monitoring/recording	Every time measured (≤ 5 yrs)
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Not applicable
Calculation method	Not applicable
Comments	Parameter not used

Data / Parameter	$C_p^{[m=0]}_{AGMT}$
Data unit	tCO ₂ e
Description	Project carbon stocks in above-ground merchantable trees at project start

Equations	[F.1]
Source of data	Project accounting area sampling
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix B.2.1
Frequency of monitoring/recording	First monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Not applicable
Calculation method	Not applicable
Comments	Parameter not used

Data / Parameter	$C_p^{[m=0]}_{BGMT}$
Data unit	tCO2e
Description	Project carbon stocks in below-ground merchantable trees at project start
Equations	[F.1]
Source of data	Project accounting area sampling
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix B.2.3
Frequency of monitoring/recording	First monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Not applicable

Calculation method	Not applicable
Comments	Parameter not used

Data / Parameter	$c_{B\ b}^{[m]}$			
Data unit	tCO2e / ha			
Description	Baseline scenario average carbon stock in selected carbon pools for the Project Accounting Areas			
Equations	[F.18] [F.24]			
Source of data	Proxy area sampling			
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix B.2			
Frequency of monitoring/recording	Every time measured (≤ 5 yrs)			
Value applied		PAA	Value	
		1	195.55	
		2	42.83	
		3	42.83	
Monitoring equipment	See annex 3 of the PD			
QA/QC procedures to be applied	Review of monitoring records			
Purpose of data	Calculation of baseline emissions			
Calculation method	Equation [B.33]			
Comments				

Data / Parameter	$c_{B\ BM}^{[m]}$		
Data unit	tCO ₂ e / ha		
Description	Baseline carbon stocks in biomass at the end of the current monitoring period for the Project Accounting Areas		
Equations	[F.19], [F.20], [F.21], [F.24], [F.52]		
Source of data	Proxy area sampling		

Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix B.2		
Frequency of monitoring/recording	Every time measured (≤ 5 yrs)		
Value applied	PAA	Value	
	1	195.55	
	2	42.83	
	3	42.83	
Monitoring equipment	See annex 3 of the PD		
QA/QC procedures to be applied	Review of monitoring records		
Purpose of data	Calculation of baseline emissions		
Calculation method	Equation [F.18]		
Comments			

Data / Parameter	$C_B^{[m]} SOC$
Data unit	tCO ₂ e / ha
Description	Baseline soil carbon stocks at the end of the current monitoring period for the Project Accounting Areas
Equations	[F.25], [F.27], [F.28]
Source of data	Proxy area sampling
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix B.2.6
Frequency of monitoring/recording	Every time measured (≤ 5 yrs)
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records

Purpose of data	Calculations of baseline emissions
Calculation method	Equation [F.33]
Comments	Parameter not used

Data / Parameter	$c_p^{[m]}$								
Data unit	tCO ₂ e / ha								
Description	Project carbon stocks at the end of the current monitoring period for the Project Accounting Areas								
Equations	[F.41], [F.57]								
Source of data	Project accounting area sampling								
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix B.1.5								
Frequency of monitoring/recording	Every time measured (≤ 5 yrs)								
Value applied	<table border="1"> <thead> <tr> <th>PAA</th><th>Value</th></tr> </thead> <tbody> <tr> <td>1</td><td>652.7</td></tr> <tr> <td>2</td><td>179.98</td></tr> <tr> <td>3</td><td>179.98</td></tr> </tbody> </table>	PAA	Value	1	652.7	2	179.98	3	179.98
PAA	Value								
1	652.7								
2	179.98								
3	179.98								
Monitoring equipment	See annex 3 of the PD								
QA/QC procedures to be applied	Review of monitoring records								
Purpose of data	• Calculation of baseline emissions • Calculation of project emissions								
Calculation method	Equation [B.33]								
Comments									

Data / Parameter	$c_p^{[m-1]}$
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Data unit	tCO ₂ e / ha
Description	Project carbon stocks at the beginning of the current monitoring period for the Project Accounting Areas
Equations	[F.41]
Source of data	Project accounting area sampling
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix B.1.5
Frequency of monitoring/recording	Prior monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Already reviewed
Purpose of data	• Calculation of baseline emissions • Calculation of project emissions
Calculation method	Equation [B.33]
Comments	

Data / Parameter	$c_p^{[m=0]}$
Data unit	tCO ₂ e / ha
Description	Project carbon stocks prior to first verification event for the Project Accounting Areas
Equations	[F.7]
Source of data	Project accounting area sampling
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix B.1.5
Frequency of monitoring/recording	First monitoring period

Value applied		PAA	Value	
		1	652.7	
		2	179.98	
		3	179.98	
Monitoring equipment	See annex 3 of the PD			
QA/QC procedures to be applied	Review of monitoring records			
Purpose of data	• Calculation of baseline emissions • Calculation of project emissions			
Calculation method	Equation [B.33]			
Comments				

Data / Parameter	$C_{p\ 1\ BM}^{[m=0]}$			
Data unit	tCO2e / ha			
Description	Project carbon stocks in biomass in stratum 1 prior to first verification event for the Project Accounting Areas			
Equations	[F.24]			
Source of data	Project accounting area sampling			
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix B.2			
Frequency of monitoring/recording	First monitoring period			
Value applied		PAA	Value	
		1	652.7	
		2	179.98	
		3	179.98	
Monitoring equipment	See annex 3 of the PD			
QA/QC procedures to be applied	Review of monitoring records			
Purpose of data	Calculation of baseline emissions			

Calculation method	Average of plot measurements
Comments	Stratum 1 in PAA 1 is CCF, Stratum 1 in PAAs 2 and 3 is OWS

Data / Parameter	$C_p^{[m=0]}_{2\ BM}$
Data unit	tCO ₂ e / ha
Description	Project carbon stocks in biomass in stratum 2 prior to first verification event for the Project Accounting Areas
Equations	[F.24]
Source of data	Project accounting area sampling
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix B.2
Frequency of monitoring/recording	First monitoring period
Value applied	N/A
Monitoring equipment	See annex 3 of the PD
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Calculation of baseline emissions
Calculation method	Average of plot measurements
Comments	There is no second stratum in the PAAs

Data / Parameter	$C_p^{[m=0]}_{AGMT}$
Data unit	tCO ₂ e / ha
Description	Project carbon stocks in above-ground merchantable trees prior to first verification event
Equations	[F.37], [F.38], [F.39], [F.40]
Source of data	Project accounting area sampling

Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix B.2.1
Frequency of monitoring/recording	First monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Not applicable
Calculation method	Not applicable
Comments	Parameter not used

Data / Parameter	$C_p^{[m=0]}_{BM}$		
Data unit	tCO ₂ e		
Description	Project carbon stocks in biomass prior to first verification event for the Project Accounting Areas		
Equations	[F.19], [F.20], [F.21], [F.52]		
Source of data	Project accounting area sampling		
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix B.2		
Frequency of monitoring/recording	First monitoring period		
Value applied	PAA	Value	
	1	96,858,220	
	2	128,399,813	
	3	65,373,577	
Monitoring equipment	See annex 3 of the PD		
QA/QC procedures to be applied	Review of monitoring records		

Purpose of data	Calculation of baseline emissions
Calculation method	Equation [F.17]
Comments	

Data / Parameter	$C_p^{[m]} b$		
Data unit	tCO ₂ e / ha		
Description	Average carbon in biomass in the Project Accounting Areas		
Equations	[F.17]		
Source of data	Project accounting area sampling		
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix B.2		
Frequency of monitoring/recording	Every time measured (≤ 5 yrs)		
Value applied	PAA	Value	
	1	652.7	
	2	179.98	
	3	179.98	
Monitoring equipment	See annex 3 of the PD		
QA/QC procedures to be applied	Review of monitoring records		
Purpose of data	Calculation of baseline emissions		
Calculation method	Equation [B.33]		
Comments	The value for PAA 1 is based on the stock of CCF cover, the value for PAAs 2 and 3 is based on the weighted value of the stock of OWS and CCF cover		

Data / Parameter	$C_p^{[m]} b$
Data unit	tCO ₂ e / ha

Description	Average carbon in biomass for Project Accounting Areas, stratum 1		
Equations	[F.23]		
Source of data	Project accounting area sampling		
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix B.2		
Frequency of monitoring/recording	Every time measured (≤ 5 yrs)		
Value applied	PAA	Value	
	1	652.7	
	2	179.98	
	3	179.98	
Monitoring equipment	See annex 3 of the PD		
QA/QC procedures to be applied	Review of monitoring records		
Purpose of data	Calculation of baseline emissions		
Calculation method	Average carbon in the plots		
Comments	Stratum 1 in PAA 1 is CCF, Stratum 1 in PAAs 2 and 3 is OWS		

Data / Parameter	$c_{p\ 2\ b}^{[m]}$
Data unit	tCO ₂ e / ha
Description	Average carbon in biomass for Project Accounting Areas, stratum 2
Equations	[F.23]
Source of data	Project accounting area sampling
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix B.2
Frequency of monitoring/recording	Every time measured (≤ 5 yrs)

Value applied	
Monitoring equipment	See annex 3 of the PD
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Calculation of baseline emissions
Calculation method	Average carbon in the plots
Comments	There is no second stratum in the PAAs

Data / Parameter	$C_p^{[m=0]} SOC$
Data unit	tCO ₂ e / ha
Description	Project soil carbon stocks prior to first verification event in the Project Accounting Areas
Equations	[F.25], [F.27], [F.28]
Source of data	Project accounting area sampling
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix B.2.6
Frequency of monitoring/recording	First monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Calculation of baseline emissions
Calculation method	Average carbon in the plots
Comments	Parameter not used

Data / Parameter	$C_p^{[m]} \Delta SWP$
Data unit	tCO ₂ e
Description	Project carbon stocks in wood products at the end of the current monitoring period

Equations	[F.41]
Source of data	Project accounting area sampling
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix C
Frequency of monitoring/recording	Every monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Not applicable
Calculation method	Not applicable
Comments	Parameter not used

Data / Parameter	$E_{\Delta GER}^{[m]}$												
Data unit	tCO2e												
Description	GERs for the current monitoring period												
Equations	[F.55], [F.57]												
Source of data	Area measurements												
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.4.1												
Frequency of monitoring/recording	Every monitoring period												
Value applied		<table><tr><th colspan="2">PAA</th></tr><tr><td>1</td><td>608,902</td></tr><tr><td>2</td><td>805,618</td></tr><tr><td>3</td><td>23,948</td></tr><tr><td>Total</td><td>1,438,468</td></tr></table>	PAA		1	608,902	2	805,618	3	23,948	Total	1,438,468	
PAA													
1	608,902												
2	805,618												
3	23,948												
Total	1,438,468												
Monitoring equipment	Not applicable												

QA/QC procedures to be applied	Review of GER calculations
Purpose of data	Quantification of Gross Emissions Reduction
Calculation method	Equation [F.53]
Comments	Per Project Accounting Area, value for 31/12/2020

Data / Parameter	$E_{\Delta GER}^{[i]}$			
Data unit	tCO2e			
Description	GERs for monitoring period i			
Equations	[F.54]			
Source of data	Area measurements			
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.4.1			
Frequency of monitoring/recording	Prior monitoring period			
Value applied		PAA		
		1	608,902	
		2	805,618	
		3	23,948	
		Total	1,438,468	
Monitoring equipment	Not applicable			
QA/QC procedures to be applied	Review of GER calculations			
Purpose of data	Quantification of Gross Emissions Reduction			
Calculation method	Equation [F.53]			
Comments	Per Project Accounting Area, value for 31/12/2020			

Data / Parameter	$E_{\Delta NER}^{[i]}$
Data unit	tCO ₂ e

Description	NERs for monitoring period i			
Equations	[F.56]			
Source of data	Area measurements			
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.4.3			
Frequency of monitoring/recording	Prior monitoring period			
Value applied		PAA		
		1	548,010	
		2	725,055	
		3	21,553	
		Total	1,294,618	
Monitoring equipment	Not applicable			
QA/QC procedures to be applied	Review of NER calculations			
Purpose of data	Quantification of Net Emissions Reduction			
Calculation method	Equation [F.55]			
Comments	Per Project Accounting Area, summed to determine the total NERs, value for 31/12/2020			

Data / Parameter	$E_B^{[m]}$
Data unit	tCO ₂ e
Description	Cumulative baseline emissions at the end of the current monitoring period
Equations	[F.15]
Source of data	Proxy area measurements
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.1

Frequency monitoring/recording of	Every monitoring period		
Value applied		PAA	
		1	789,131.2
		2	859,327.7
		3	152,202.7
Monitoring equipment	Not applicable		
QA/QC procedures to be applied	Review of monitoring records		
Purpose of data	Calculation of baseline emissions		
Calculation method	Equation [F.16]		
Comments	Per Project Accounting Area, value for 31/12/2020		

Data / Parameter	$E_B^{[m-1]}$		
Data unit	tCO ₂ e		
Description	Cumulative baseline emissions at the beginning of the current monitoring period		
Equations	[F.15]		
Source of data	Proxy area measurements		
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.1		
Frequency monitoring/recording of	Prior monitoring period		
Value applied	0		
Monitoring equipment	Not applicable		
QA/QC procedures to be applied	Review of monitoring records		
Purpose of data	Calculation of baseline emissions		
Calculation method	Equation [F.16]		
Comments	Per Project Accounting Area		

Data / Parameter	$E_{B \Delta}^{[m]}$								
Data unit	tCO ₂ e								
Description	Change in baseline emissions								
Equations	[F.9], [F.10], [F.14], [F.53], [F.57]								
Source of data	Proxy area measurements								
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.1								
Frequency of monitoring/recording	Every monitoring period								
Value applied	<table border="1"> <thead> <tr> <th colspan="2">PAA</th></tr> </thead> <tbody> <tr> <td>1</td><td>789,131.2</td></tr> <tr> <td>2</td><td>859,327.7</td></tr> <tr> <td>3</td><td>152,202.7</td></tr> </tbody> </table>	PAA		1	789,131.2	2	859,327.7	3	152,202.7
PAA									
1	789,131.2								
2	859,327.7								
3	152,202.7								
Monitoring equipment	Not applicable								
QA/QC procedures to be applied	Review of monitoring records								
Purpose of data	Calculation of baseline emissions								
Calculation method	Equation [F.15]								
Comments	Per Project Accounting Area, value for 31/12/2020								

Data / Parameter	$E_{B \Delta BGB}^{[i]}$
Data unit	tCO ₂ e
Description	Change in baseline emissions from below-ground biomass during monitoring period i
Equations	[F.32]
Source of data	Monitoring the proxy area

Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix B.2.3								
Frequency of monitoring/recording	Prior monitoring period								
Value applied	<table border="1"> <thead> <tr> <th colspan="2">PAA</th></tr> </thead> <tbody> <tr> <td>1</td><td>47,829.7</td></tr> <tr> <td>2</td><td>48,558.9</td></tr> <tr> <td>3</td><td>6,285.2</td></tr> </tbody> </table>	PAA		1	47,829.7	2	48,558.9	3	6,285.2
PAA									
1	47,829.7								
2	48,558.9								
3	6,285.2								
Monitoring equipment	Not applicable								
QA/QC procedures to be applied	Review of monitoring records								
Purpose of data	Calculation of baseline emissions								
Calculation method	Equation [F.31]								
Comments	Per Project Accounting Area, value for 31/12/2020								

Data / Parameter	$E_{B \Delta DW}^{[i]}$
Data unit	tCO ₂ e
Description	Baseline emissions from dead wood in monitoring period i
Equations	[F.36]
Source of data	Measurements in the proxy area
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, Appendix B.2.4 and B.2.5
Frequency of monitoring/recording	Prior monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records

Purpose of data	Not applicable
Calculation method	Not applicable
Comments	Parameter not used

Data / Parameter	$E_{B \Delta SOC}^{[m]}$
Data unit	tCO ₂ e
Description	Baseline change in emissions from soil carbon
Equations	[F.15], [F.33]
Source of data	Measurements in the proxy area
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, sections 8.1.2.1, 8.1.2.2, 8.1.2.3, Appendix B.2.6
Frequency of monitoring/recording	Every monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Calculation of baseline emissions
Calculation method	Equation [F.26]
Comments	Parameter not used

Data / Parameter	$E_{B \Delta SOC}^{[i]}$
Data unit	tCO ₂ e
Description	Baseline emissions from soil carbon in monitoring period i
Equations	[F.33]
Source of data	Measurements in the proxy area
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, sections 8.1.2.1, 8.1.2.2, 8.1.2.3 and Appendix B.2.6

Frequency of monitoring/recording	Prior monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Calculation of baseline emissions
Calculation method	Equation [F.26]
Comments	Parameter not used

Data / Parameter	$E_{B\ AGMT}^{[m]}$
Data unit	tCO ₂ e
Description	Cumulative baseline emissions from above-ground commercial trees at the end of the current monitoring period
Equations	[F.34], [F.51]
Source of data	Measurements in the proxy area
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, sections 8.1.6.1, 8.1.6.2 and 8.1.6.3
Frequency of monitoring/recording	Every monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Not applicable
Calculation method	Not applicable
Comments	Parameter not used

Data / Parameter	$E_{B\ BGB}^{[m]}$
Data unit	tCO ₂ e

Description	Cumulative baseline emissions from below-ground biomass at the end of the current monitoring period								
Equations	[F.31]								
Source of data	Measurements in the proxy area								
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.1.4								
Frequency of monitoring/recording	Every monitoring period								
Value applied	<table border="1"> <thead> <tr> <th colspan="2">PAA</th></tr> </thead> <tbody> <tr> <td>1</td><td>179,088.5</td></tr> <tr> <td>2</td><td>195,037.3</td></tr> <tr> <td>3</td><td>35,207.1</td></tr> </tbody> </table>	PAA		1	179,088.5	2	195,037.3	3	35,207.1
PAA									
1	179,088.5								
2	195,037.3								
3	35,207.1								
Monitoring equipment	Not applicable								
QA/QC procedures to be applied	Review of monitoring records								
Purpose of data	Calculation of baseline emissions								
Calculation method	Equation [F.30]								
Comments	Per Project Accounting Area, value for 31/12/2020								

Data / Parameter	$E_{B\ BGB}^{[m-1]}$
Data unit	tCO ₂ e
Description	Cumulative baseline emissions from below-ground biomass at the beginning of the current monitoring period
Equations	[F.31]
Source of data	Measurements in the proxy area
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.1.4

Frequency monitoring/recording of	Prior monitoring period
Value applied	0
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Not applicable
Purpose of data	Calculation of baseline emissions
Calculation method	Equation [F.30]
Comments	Per Project Accounting Area, value for 31/12/2020

Data / Parameter	$E_{B\ BM}^{[m]}$								
Data unit	tCO2e								
Description	Cumulative baseline emissions from biomass at the end of the current monitoring period								
Equations	[F.16], [F.30], [F.52]								
Source of data	Measurements in the proxy area								
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, sections 8.1.1 and 8.1.1.5.1								
Frequency monitoring/recording of	Every monitoring period								
Value applied	<table border="1"> <thead> <tr> <th colspan="2">PAA</th></tr> </thead> <tbody> <tr> <td>1</td><td>951,021.5</td></tr> <tr> <td>2</td><td>1,035,715.1</td></tr> <tr> <td>3</td><td>186,962.1</td></tr> </tbody> </table>	PAA		1	951,021.5	2	1,035,715.1	3	186,962.1
PAA									
1	951,021.5								
2	1,035,715.1								
3	186,962.1								
Monitoring equipment	Not applicable								
QA/QC procedures to be applied	Review of monitoring records								
Purpose of data	Calculation of baseline emissions								
Calculation method	Equation [F.21]								

Comments	Per Project Accounting Area, value for 31/12/2020
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Data / Parameter	$E_{B\ DW}^{[m]}$
Data unit	tCO2e
Description	Cumulative baseline emissions from dead wood at the end of the current monitoring period
Equations	[F.35]
Source of data	Measurements in the proxy area
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.1.3
Frequency of monitoring/recording	Every monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Not applicable
Calculation method	Not applicable
Comments	Parameter not used

Data / Parameter	$E_{B\ DW}^{[m-1]}$
Data unit	tCO2e
Description	Cumulative baseline emissions from dead wood at the beginning of the current monitoring period
Equations	[F.35]
Source of data	Measurements in the proxy area
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.1.3

Frequency of monitoring/recording	Prior monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Not applicable
Purpose of data	Not applicable
Calculation method	Not applicable
Comments	Parameter not used

Data / Parameter	$E_{B\ SOC}^{[m]}$
Data unit	tCO2e
Description	Cumulative baseline emissions from soil carbon at the end of the current monitoring period
Equations	[F.16], [F.26]
Source of data	Measurements in the proxy area
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, sections 8.1.2.1, 8.1.2.2 and 8.1.2.3
Frequency of monitoring/recording	Every monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Calculation of baseline emissions
Calculation method	Equation [F.28]
Comments	Parameter not used

Data / Parameter	$E_{B\ SOC}^{[m-1]}$
Data unit	tCO2e

Description	Cumulative baseline emissions from soil carbon at the beginning of the current monitoring period
Equations	[F.26]
Source of data	Measurements in the proxy area
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, sections 8.1.2.1, 8.1.2.2 and 8.1.2.3
Frequency of monitoring/recording	Prior monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Not applicable
Purpose of data	Calculation of baseline emissions
Calculation method	Equation [F.28]
Comments	Parameter not used

Data / Parameter	$E_{BA}^{[m]}$
Data unit	tCO ₂ e
Description	Cumulative emissions allocated to the buffer account at the end of the current monitoring period
Equations	[F.55]
Source of data	Not applicable
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.4.4
Frequency of monitoring/recording	Every monitoring period
Value applied	143,850
Monitoring equipment	Not applicable

QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Quantification of Gross Emissions Reductions
Calculation method	Multiplication
Comments	

Data / Parameter	$E_L^{[m]}$										
Data unit	tCO2e										
Description	Cumulative emissions from leakage at the end of the current monitoring period										
Equations	[F.44]										
Source of data	Measurements in the leakage area(s)										
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.3										
Frequency of monitoring/recording	Every monitoring period										
Value applied	<table border="1"> <thead> <tr> <th colspan="2">PAA</th></tr> </thead> <tbody> <tr> <td>1</td><td>180,226.6</td></tr> <tr> <td>2</td><td>19,859.7</td></tr> <tr> <td>3</td><td>0</td></tr> <tr> <td>Total</td><td>200,086.3</td></tr> </tbody> </table>	PAA		1	180,226.6	2	19,859.7	3	0	Total	200,086.3
PAA											
1	180,226.6										
2	19,859.7										
3	0										
Total	200,086.3										
Monitoring equipment	Not applicable										
QA/QC procedures to be applied	Review of monitoring records										
Purpose of data	Calculation of leakage										
Calculation method	Equation [F.45]										
Comments	For the first monitoring period, cumulative emissions from activity-shifting leakage were accounted as the deforested area within the leakage										

Data / Parameter	$E_L^{[m-1]}$
Data unit	tCO2e
Description	Cumulative emissions from leakage at the beginning of the current monitoring period
Equations	[F.44]
Source of data	Measurements in the leakage area(s)
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.3
Frequency of monitoring/recording	Prior monitoring period
Value applied	0
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Not applicable
Purpose of data	Calculation of leakage
Calculation method	Equation [F.45]
Comments	

Data / Parameter	$E_{L\Delta}^{[m]}$
Data unit	tCO2e
Description	Change in emissions due to leakage
Equations	[F.53]
Source of data	Not applicable
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.3
Frequency of monitoring/recording	Every monitoring period
Value applied	PAA

	<table> <tr> <td>1</td><td>180,226.6</td></tr> <tr> <td>2</td><td>19,859.7</td></tr> <tr> <td>3</td><td>0</td></tr> <tr> <td>Total</td><td>200,086.3</td></tr> </table>	1	180,226.6	2	19,859.7	3	0	Total	200,086.3
1	180,226.6								
2	19,859.7								
3	0								
Total	200,086.3								
Monitoring equipment	Not applicable								
QA/QC procedures to be applied	Review of monitoring records								
Purpose of data	Calculation of leakage								
Calculation method	Equation [F.44]								
Comments	For the first monitoring period, cumulative emissions from activity-shifting leakage were accounted as the deforested area within the leakage								

Data / Parameter	$E_{L\ ASF}^{[m]}$										
Data unit	tCO ₂ e										
Description	Cumulative emissions from activity-shifting leakage in forested strata at the end of the current monitoring period										
Equations	[F.45]										
Source of data	Measurements in the activity-shifting leakage area										
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.3										
Frequency of monitoring/recording	Every monitoring period										
Value applied	<table> <tr> <th colspan="2">PAA</th></tr> <tr> <td>1</td><td>180,226.6</td></tr> <tr> <td>2</td><td>19,859.7</td></tr> <tr> <td>3</td><td>0</td></tr> <tr> <td>Total</td><td>200,086.3</td></tr> </table>	PAA		1	180,226.6	2	19,859.7	3	0	Total	200,086.3
PAA											
1	180,226.6										
2	19,859.7										
3	0										
Total	200,086.3										
Monitoring equipment	Not applicable										
QA/QC procedures to be applied	Review of monitoring records										

applied	
Purpose of data	Calculation of leakage
Calculation method	Equation [F.46]
Comments	For the first monitoring period, cumulative emissions from activity-shifting leakage were accounted as the deforested area within the leakage

Data / Parameter	$E_{L\ ASG}^{[m]}$
Data unit	tCO2e
Description	Cumulative emissions from activity-shifting leakage in native grassland strata at the end of the current monitoring period
Equations	[F.44], [F.45]
Source of data	Measurements in the activity-shifting leakage area
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.3.3.4
Frequency of monitoring/recording	Every monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Calculation of leakage
Calculation method	Equation [F.47]
Comments	Parameter not used

Data / Parameter	$E_{L\ ME}^{[m]}$
Data unit	tCO2e
Description	Cumulative emissions from market leakage at the end of the current monitoring period
Equations	[F.45]

Source of data	Measurements in the market leakage area
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.3
Frequency of monitoring/recording	Every monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Not applicable
Calculation method	Not applicable
Comments	Parameter not used

Data / Parameter	$E_p^{[m]}$
Data unit	tCO ₂ e
Description	Change in project emissions
Equations	[F.53]
Source of data	Monitoring records for Forest Fire, Burning, logging, wood products, and natural disturbance events
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.2
Frequency of monitoring/recording	Every monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Not applicable

Calculation method	Equation [F.41]
Comments	

Data / Parameter	$E_p^{[m]} \Delta BRN$
Data unit	tCO2e
Description	Cumulative project emissions due to burning at the end of the current monitoring period
Equations	[F.41]
Source of data	Monitoring plots in the project
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.2.2
Frequency of monitoring/recording	Every monitoring period
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Not applicable
Calculation method	Equation [F.42]
Comments	

Data / Parameter	$E_p^{[m]} \Delta LS$
Data unit	tCO2e
Description	Cumulative project emissions due to livestock grazing within the project area.
Equations	[F.43]
Source of data	Monitoring in the project area

Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.2.4										
Frequency of monitoring/recording	Every time measured (≤ 5 yrs)										
Value applied	<table border="1"> <thead> <tr> <th colspan="2">PAA</th></tr> </thead> <tbody> <tr> <td>1</td><td>0</td></tr> <tr> <td>2</td><td>33,847.4</td></tr> <tr> <td>3</td><td>3,590.1</td></tr> <tr> <td>Total</td><td>37,437.5</td></tr> </tbody> </table>	PAA		1	0	2	33,847.4	3	3,590.1	Total	37,437.5
PAA											
1	0										
2	33,847.4										
3	3,590.1										
Total	37,437.5										
Monitoring equipment	Not applicable										
QA/QC procedures to be applied	Review of monitoring records										
Purpose of data	Calculation of project emissions										
Calculation method	Equation [F.43]										
Comments	Assumed value for 31/12/2020										

Data / Parameter	$E_p^{[m]} \Delta SF$
Data unit	tCO ₂ e
Description	Cumulative project emissions due to the use of synthetic fertilizers within the project area.
Equations	[F.53]
Source of data	Monitoring in the project area
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.2.5
Frequency of monitoring/recording	Every time measured (≤ 5 yrs)

Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Not applicable
Calculation method	Not applicable
Comments	Parameter not used

Data / Parameter	$E_U^{[m]}$
Data unit	tCO ₂ e
Description	Cumulative confidence deduction at the end of the current monitoring period
Equations	[F.55]
Source of data	Not applicable
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.4.1.1
Frequency of monitoring/recording	Every monitoring period
Value applied	0
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Calculation of confidence deduction
Calculation method	Equation [F.57]
Comments	Per Project Accounting Area

Data / Parameter	$n_{LS}i$
Data unit	Count
Description	The number of head of livestock species / category i in the project area

Equations	[F.43]			
Source of data	Monitoring in the project area			
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.2.4			
Frequency of monitoring/recording	Every time measured ($\leq$ 5 yrs)			
Value applied				
	Year	PAA 1	PAA 2	PAA 3
	2016	0	100,000	N/A
	2017	0	70,000	N/A
	2018	0	20,000	N/A
	2019	0	10,000	N/A
	2020	0	5,000	20,000
Monitoring equipment	Not applicable			
QA/QC procedures to be applied	Review of monitoring records			
Purpose of data	Calculation of project emissions			
Calculation method	Aerial estimation			
Comments	Value calculated according to the monitored data			

Data / Parameter	$P_{L\ DEG}^{[m]}$
Data unit	Proportion (unitless)
Description	Portion of leakage due to degradation in forest at the end of the current monitoring period
Equations	[F.46], [F.47], [F.48], [F.49]
Source of data	Monitoring in the leakage area

Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.3.2.3
Frequency of monitoring/recording	Every time measured (≤ 5 yrs)
Value applied	0.18
Monitoring equipment	See annex 3 of the PD
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Calculation of project emissions
Calculation method	Field measurements
Comments	

Data / Parameter	$P_{L\ DEG}^{[m=0]}$
Data unit	Proportion (unitless)
Description	Portion of leakage due to degradation prior to first verification event
Equations	[F.48]
Source of data	Monitoring in the leakage area
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.3.2.3
Frequency of monitoring/recording	First monitoring period
Value applied	0.18
Monitoring equipment	See annex 3 of the PD
QA/QC procedures to be applied	Project verification
Purpose of data	Calculation of project emissions
Calculation method	Field measurements
Comments	

Data / Parameter	$P_{L\ CON\ G}^{[m=0]}$
Data unit	Proportion (unitless)
Description	Portion of leakage due to native grasslands prior to the first verification event
Equations	[F.47], [F.49]
Source of data	Monitoring in the leakage area
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.3.2.4
Frequency of monitoring/recording	First monitoring period
Value applied	Not applicable
Monitoring equipment	Nor applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Calculation of project emissions
Calculation method	Field measurements
Comments	

Data / Parameter	$P_{L\ CON\ G}^{[m]}$
Data unit	Proportion (unitless)
Description	Portion of leakage due to native grasslands conversion at the beginning of the current monitoring period
Equations	[F.47], [F.49]
Source of data	Monitoring in the leakage area
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.3.2.4
Frequency of monitoring/recording	Every time measured (≤ 5 yrs)

Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Calculation of project emissions
Calculation method	Field measurements
Comments	

Data / Parameter	$P_{L\,CON\,G}^{[m-1]}$
Data unit	Proportion (unitless)
Description	Portion of leakage due to native grasslands conversion at the end of the current monitoring period
Equations	[F.47], [F.49]
Source of data	Monitoring in the leakage area
Description of measurement methods and procedures to be applied	VCS Methodology VM0009, section 8.3.2.4
Frequency of monitoring/recording	Every time measured (≤ 5 yrs)
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Calculation of project emissions
Calculation method	Field measurements
Comments	

Data / Parameter	$P_{SL}^{[m]}$
Data unit	Proportion (unitless)
Description	Proportion of AGMT that is not merchantable and goes into slash estimated from inventory

Equations	[F.34]
Source of data	Estimated from inventory
Description of measurement methods and procedures to be applied	8.1.6.3
Frequency of monitoring/recording	Every time measured (≤ 5 yrs)
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Not applicable
Calculation method	Not applicable
Comments	Parameter not used

Data / Parameter	$t^{[i-1]}$
Data unit	Days
Description	Time from project start date to beginning of monitoring period i
Equations	[F.32], [F.33]
Source of data	Monitoring records
Description of measurement methods and procedures to be applied	Not applicable
Frequency of monitoring/recording	Prior monitoring period
Value applied	Various
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Not applicable
Purpose of data	Calculation of baseline emissions
Calculation method	Subtraction

Comments	
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Data / Parameter	$t^{[m]}$
Data unit	Days
Description	Time from project start date to end of current monitoring period
Equations	[F.19], [F.20], [F.24], [F.21], [F.25], [F.27], [F.28], [F.32], [F.33], [F.36], [F.37], [F.38], [F.39], [F.40]
Source of data	Monitoring records
Description of measurement methods and procedures to be applied	Not applicable
Frequency of monitoring/recording	Every monitoring period
Value applied	Various
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Calculation of baseline emissions
Calculation method	Subtraction
Comments	

Data / Parameter	$t^{[m-1]}$
Data unit	Days
Description	Time from project start date to beginning of current monitoring period
Equations	[F.10], [F.36]
Source of data	Monitoring records
Description of measurement methods and procedures to be applied	Not applicable

Frequency of monitoring/recording	Prior monitoring period
Value applied	Various
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Not applicable
Purpose of data	Calculation of baseline emissions
Calculation method	Substraction
Comments	

Data / Parameter	$U_B^{[m]}$
Data unit	tCO2e
Description	Total uncertainty in proxy area carbon stock estimate
Equations	[F.57]
Source of data	Not applicable
Description of measurement methods and procedures to be applied	Not applicable
Frequency of monitoring/recording	Every monitoring period
Value applied	32.45
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Calculation of confidence deduction
Calculation method	Equation [B.34]
Comments	Per Project Accounting Area

Data / Parameter	$U_{EM}^{[m]}$
Data unit	tCO2e
Description	Total uncertainty in Baseline Emissions Models for the Project

	Accounting Areas		
Equations	[F.57]		
Source of data	Not applicable		
Description of measurement methods and procedures to be applied	Not applicable		
Frequency of monitoring/recording	Every monitoring period		
Value applied		PAA	
	1	0.09938	
	2	0.08182	
	3	0.08182	
Monitoring equipment	Not applicable		
QA/QC procedures to be applied	Review of monitoring records		
Purpose of data	Calculation of confidence deduction		
Calculation method	Equation [F.14]		
Comments			

Data / Parameter	$U_p^{[m]}$
Data unit	tCO2e
Description	Total uncertainty in Project Accounting Areas carbon stock estimate
Equations	[F.57]
Source of data	Not applicable
Description of measurement methods and procedures to be applied	Not applicable
Frequency of monitoring/recording	Every monitoring period
Value applied	33.81
Monitoring equipment	Not applicable

QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Calculation of confidence deduction
Calculation method	Equation [B.34]
Comments	

Data / Parameter	$WC_{Pi}^{[m=0]}$			
Data unit	tCO2e			
Description	Weighted average carbon stocks for biomass or SOC in the project for the set of selected strata for the Project Accounting Areas			
Equations	[F.29] [F.24]			
Source of data	Inventory			
Description of measurement methods and procedures to be applied	Inventory, GIS			
Frequency of monitoring/recording	Every monitoring period			
Value applied		PAA		
		1	652.7	
		2	179.98	
		3	179.98	
Monitoring equipment	Not applicable			
QA/QC procedures to be applied	Review of monitoring records			
Purpose of data	Calculation of project emissions			
Calculation method	Equation [B.35]			
Comments				

Data / Parameter	$x^{[m]}$
Data unit	Varies

Description	Covariate values
Equations	[F.19], [F.20], [F.21], [F.24], [F.25], [F.27], [F.28], [F.37], [F.38], [F.39], [F.40]
Source of data	Participatory Rural Appraisal, analysis of public records, and/or expert interpretation of inventory data or remotely sensed imagery
Description of measurement methods and procedures to be applied	Not applicable
Frequency of monitoring/recording	Every time measured (≤ 5 yrs)
Value applied	Not applicable
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Review of monitoring records
Purpose of data	Not applicable
Calculation method	Not applicable
Comments	Parameter not used

3.1.3 Monitoring Plan

As mentioned in the PDD, the monitoring plan consists of an inventory for carbon stocks through sampling, following the guidelines described in Appendix B of the methodology VM0009. The complete monitoring plan is described in Annex 3 of the PD.

The organizational structure was the following:



Figure 13: Organizational structure for the Climate monitoring plan

The responsibilities are divided as follows:

South Pole AFOLU team develops the monitoring plan as a first step; then oversees and provide technical support for the sampling process. Once the sampling process is carried out, South Pole AFOLU team of will review and use the results to calculate the emissions reductions.

African Parks conservation manager reviews the monitoring plan submitted by South Pole, providing feedback prior to the field sampling, if needed, and adjusting the documentation for the local context, if required. Later, African Parks conservation manager is also in charge of contracting a third party with the relevant expertise to carry out the first sampling procedure and to train African Parks field personnel for supporting the process and, in case is needed, to perform resampling processes.

African Parks conservation manager also acts as interface between South Pole and the third party of experts if needed. The contracted third party follows the monitoring plan and implements procedures that ensure independent verification and are in charge of providing the information to the conservation manager in African Parks for analyzing and processing the information.

The responsibilities of the different team members have been defined as follows:

The crew leader (from the third party of experts) is responsible for preparing, managing, and overseeing the fieldwork and data collection. The crew leader is also responsible for finding the location of plots, for logistics, and ensuring that forms are properly filled in and collected data are reliable. They must organize meetings after fieldwork to sum up daily activities and implement field worker safety measures. The remaining crew team is responsible for fieldwork.

African Parks conservation manager ensures the team have the resources and logistics to collect relevant data. He is also in charge of overseeing the security of the team on the ground, and the monitoring of the work during and after data collection period.

Training of the African Parks field employees on the survey methodology was undertaken at the beginning of the fieldwork through theoretical and practical sessions, during which techniques of different forest and tree measurements, tally of data, and techniques were reviewed.

South Pole is responsible for reviewing, analyzing and using the field results to calculate the emissions reductions.

In regard to the methods for measuring and recording, Section 2 of Annex 3 of the PDD provides all the details. The sample size was calculated using the area per stratum following the proportional allocation equation. The location of the plots for the PAAs was determined as follows:

- the selection of priority categories were initially defined taking into account the differences in the project area and the accessibility conditions; these categories are projected to be monitored during the period 2020–2024
- according to the prioritised category, areas within 4 km radius were drawn
- within each of these areas, the carbon plots were located with the criteria of being at least 250 m within the radius of with the same stratum in the case of forest areas, and a radius of 100 m for grassland areas
- a minimum distance of 3 km between plots of the same stratum and 1 km between plots of different stratum was determined

Figure 15 shows the stratification done in the area and the location of the carbon plots.

The sampling for the first monitoring process was carried out by a team of experts from the region together with a team of Chinko employees, the experts trained the employees from Chinko and together monitoring plots were established.⁶⁸

As stated in the Climate Monitoring Plan, submitted along with the PDD, the carbon plots for the project accounting areas and the proxy areas were done as a circular plot with a prescribed size of 1,000 m² (circle

⁶⁸ MR 88 supporting data presents evidence of the contracts for the experts as well as the trainings done.

radius 17.84cm) inside each plot 4 subplots to measure grass and shrub were also used. These subplots had a 1m² area, for the activity shifting areas, the layout and the process was different and consisted in a walk throughout following the approach suggested in the methodology.

The monitoring process for the first monitoring period has two set of measurements, the first one started in November 2020 and the second one in November 2021. A total of 168 plots were sampled in the project area: 119 for the closed canopy cover (CCF), 19 for the open woodland savanna (OWS), 17 for the dry edaphic grassland (DEG) and 13 for the wet edaphic grassland (WEG). For the proxy areas, a total of 13 plots were carried out in the forested land covers (CCF and OWS) and for the leakage areas, a total of 10 plots were carried out.⁶⁹

The monitoring process follow the methodology requirements and therefore, the plots will be remeasured at least every five years and as expressed in the section 3.1.6 of the PDD, there is a small deviation in which rather than having all plots measured in the first verification, future plots will be added once the project accounting area is expanded in the northern part of the project area.



Figure 14: Climate monitoring team performing the biomass and soil inventory procedure

⁶⁹ MR 92 supporting data presents the Coordinates of the areas monitored.

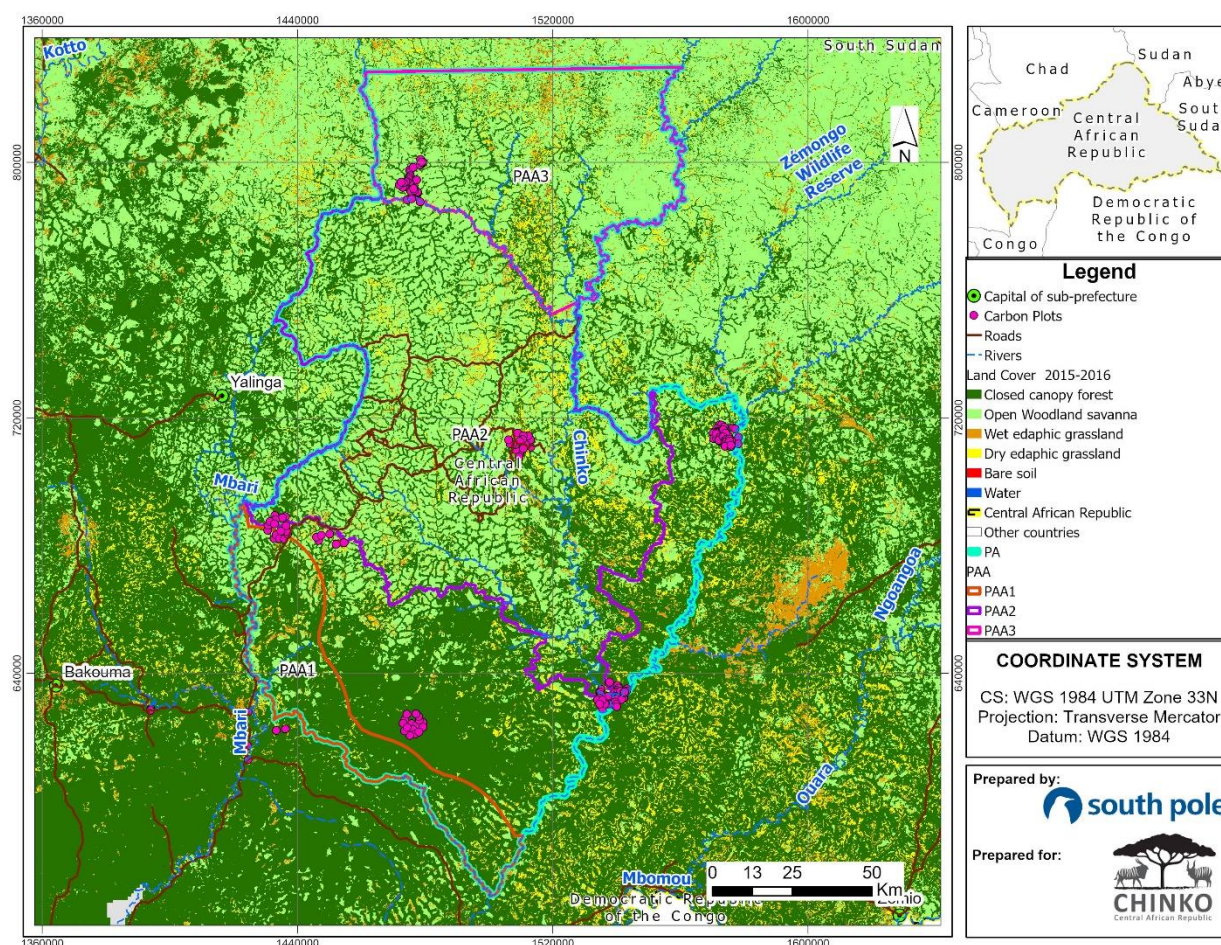


Figure 15: Allocation of the carbon plots.

(Source: South Pole, 2023)

Once the information was collected from the site, the biomass was calculated using the allometric equations described MR99-103 Allometry supporting document. Once the information was processed, the results of the plots in forest areas show that the carbon stock in the CCF stratum is 652.7 tCO₂e/ha, and in the OWS, is 179.98 tCO₂e/ha. The calculated standard error is 9.3.

The QA/QC procedures of biomass data and carbon stocks changes were managed internally by a forestry and land use expert. The procedure for the calculation of biomass and carbon stock changes included:

- cross-checking the information from the original form and the database;
- confirming there are no non-realistic values measured;
- reviewing with the monitoring crew leader in case there are non-realistic values;
- cross-checking descriptions of validation and verification parameters;
- confirming that bibliographical data references are properly cited in internal documentation;
- checking that units are correctly carried through from the beginning to end of the calculations;
- checking that the conversion factors are correct;
- checking that temporal and spatial adjustment factors are used correctly;

- checking that there is detailed internal documentation to support the estimates and to enable reproduction of the emission reduction estimates;
- confirming that estimates are reported for all years;
- checking that known data gaps that may result in incomplete emissions estimates are documented and treated conservatively; and
- comparing current estimates to previous ones, if available. If there are significant changes or departures from expected trends, the estimates should be re-checked, and the differences explained.

During the processing of the raw data and following the QA/QC procedure minor mistakes were identified while reviewing the inventory data, this was informed to African Parks manager and was later solved after comparing the data with the original forms and discussing with the crew leader. In addition, the post-processing analysis also included a comparison of the results in the area with the values obtained in other regions of African, Asia and South America. This comparison was useful to validate that the values are aligned with what should be expected from the literature.⁷⁰ Finally, during this period there were no non-conformances with the monitoring plan.

3.1.4 Dissemination of Monitoring Plan and Results (CL4.2)

For the employees, physical copies of the documents (PDD and MR) were made available at the parks' offices prior to the audit site visit, all the employees were told about the location of such copies. In addition, meetings were held to explain them the results of the biomass plots activity.

For local communities one way to share summaries of the results is that the documentation is translated into French and distributed (physically and by sharing the files using USBs in direct meetings) amongst their representatives and local government structures. A second strategy that is used due to the high levels of illiteracy amongst local community members but also for the transhumant pastoralists is the dissemination of the project information through local staff such as community liaisons and sensitisation team (presentation materials are used wherever possible during workshops). These employees have experience and training in engaging with local communities around the project area, as well as the transhumant pastoralists that enter the CAR from neighbouring countries. This ensures that, even with the high levels of illiteracy in the region, monitoring information is publicly available to all local communities living on the periphery of the park.

For other stakeholders with more technical background, such as governmental institutions and private and philanthropic financial donors, African Parks is providing them access to project documentation and delivering frequent reports of the project activities either by sharing the files using USBs (in direct meetings) or by mail.

In addition, as stated in the PDD, the relevant documentation about the results of the Monitoring, Reporting, and Verification (MRV) process of this project will be published in the VERRA platform every monitoring period. AP annual reports, which are publicly available on their website, also include summaries of the project results.⁷¹ AP has also been using its social media to publish relevant information about the project.

⁷⁰ For more details, please check the supporting information: MR 90_Data analysis

⁷¹ <https://www.africanparks.org/about-us/financials-and-annual-reports>

3.2 Quantification of GHG Emission Reductions and Removals

3.2.1 Baseline Emissions

The change in baseline emissions for the first monitoring period [$m=1$] ($E_{B\Delta}^{[m=1]}$) was calculated using equation [F.15] of the methodology. This process was applied separately for each project accounting area.

$$E_{B\Delta}^{[m]} = E_B^{[m]} - E_B^{[m-1]} \quad [F.15]$$

This is a function of the cumulative emissions at the beginning ($E_B^{[m-1]}$) and end ($E_B^{[m]}$) of the monitoring period as given by equation [F.16].

$$E_B^{[m]} = E_{B\,BM}^{[m]} + E_{B\,SOC}^{[m]} - C_{B\,SOC}^{[m]} - C_{B\,BGB}^{[m]} - C_{B\,DW}^{[m]} - C_{B\,WP}^{[m]} \quad [F.16]$$

Where:

$E_{B\,BM}^{[m]}$ = Cumulative baseline emissions from biomass at the end of the current monitoring period;

$E_{B\,SOC}^{[m]}$ = Cumulative baseline emissions from soil carbon at the end of the current monitoring period;

$C_{B\,SOC}^{[m]}$ = Carbon not decayed in SOC at the end of the current monitoring period;

$C_{B\,BGB}^{[m]}$ = Carbon not decayed in BGB at the end of the current monitoring period;

$C_{B\,DW}^{[m]}$ = Carbon not decayed in DW at the end of the current monitoring period; and

$C_{B\,WP}^{[m]}$ = Carbon not decayed in WP at the end of the current monitoring period.

The following sections explain the process followed to obtain the values used in the equation. The project does not include SOC, wood products or deadwood; therefore, the variables of equation [F.16] were not calculated. For more details, please refer to the ER calculations in the supporting information climate folder to check the calculations of baseline emissions as required in MR.10, MR.11 and MR.12.

Calculating Baseline Emissions from Biomass

The baseline emissions from biomass were determined based on the baseline type applicable (F-U3) and the carbon pools selected.

The cumulative emissions from biomass ($E_{B\,BM}^{[m]}$) were calculated using equation [F.21]. However, considering that the baseline type is F-U3, the Spatial Algorithm for Biomass, expected in equation [F.24], was used. This algorithm is the most conservative spatial model for depleting carbon stocks.

$$E_{B\,BM}^{[m]} = BEM_{U2,3}(c_{p\,BM}^{[m=0]}, c_{B\,BM}^{[m]}, t^{[m]}, x^{[m]}) \quad [F.21]$$

$$E_{B\,BM}^{[m]} = BEM_{U2,3}(c_{p\,1\,BM}^{[m=0]}, c_{B\,BM}^{[m]}, t^{[m]}, x^{[m]}) \quad [F.24]$$

The BEM for baseline type F-U3 is presented in equation [F.4].

$$BEM_{U2,3}(c_P, c_B, t, x) = \frac{A_{PAA}(c_P - c_B) + \frac{HA_{U2,3}(c_P, c_B)t}{t_{PL}}}{1 + e^{\ln\left(\frac{1}{r_U}\right) - \beta(t+0.5q) - \theta(x)^T}} - HA_{U2,3}(c_P, c_B)$$

where

$$HA_{U2,3}(c_P, c_B) = \frac{A_{PAA}(c_P - c_B)}{1 + e^{\ln\left(\frac{1}{r_U}\right) - \beta(0.5q) - \theta(x_0)^T}} \quad [F.4]$$

To implement the spatial algorithm, as required in MR.15, the average carbon stocks in biomass per stratum were ordered from lowest to highest. OWS is the stratum with the lowest stock and was assigned as the first, while CCF has the highest stock and was assigned as the second.

Table 3 below presents the values for the parameters used in the calculation considering m=1 is from the starting date until 31/12/2020.

Table 3: Parameters used for baseline emissions from biomass calculation

Parameter	Description	PAA 1	PAA 2	PAA 3
A_{PAA}	Area of project accounting area	148,395.64	713,408.61	363,225.39
C_{p1}	Project carbon stocks in stratum 1	652.70	179.98	179.98
C_{pBM}	Carbon stocks in biomass from PAA	652.70	179.98	179.98
C_B	Baseline carbon stocks in proxy	195.55	42.83	42.83
r_U	Onset proportion of conversion	3.1242	5.5914	1.8925
β	Effect of time on the cumulative proportion of conversion over time	2.488E-04	1.18E-04	1.18E-04
θ	Effect of certain covariates on the cumulative proportion of conversion over time	0	0	0
q	Lag between start of degradation and conversion	0	0	0

Parameter	Description	PAA 1	PAA 2	PAA 3
x_0	Covariate values as of the project start date	0	0	0
t	Time since project start date (days until 31/12/2020)	1,568	1,568	1,568
t_{PAI}	Days after the project start date for the start of a project activity instance in a grouped project	0	0	1,308
t_{PL}	Length of project crediting period	10,438	10,438	10,438

Following the equations above the results for the 2016 – 2020 period (m=1) are:

PAA 1: $E_{B\ BM}^{[m]} = 951,021.5$

PAA 2: $E_{B\ BM}^{[m]} = 1,035,715.1$

PAA 3: $E_{B\ BM}^{[m]} = 186,962.1$

For more details, please refer to the ER calculations in the supporting information climate folder to check the calculations of baseline emissions from biomass as required in MR.13, MR.14 and MR.16.

Calculating Carbon Not Decayed in BGB

The carbon non-decayed in BGB was calculated using equation [F.32].

$$C_{B\ BGB}^{[m]} = \sum_{i \in M} DEM_{BGB} \left(E_{B\ \Delta\ BGB}^{[i]}, t, t^{[m]}, t^{[i-1]} \right) [F. 32]$$

Following the equation above the results for the 2016 – 2020 period (m=1) are:

PAA 1: $C_{B\ BGB}^{[m]} = 161,890.3$

PAA 2: $C_{B\ BGB}^{[m]} = 176,387.4$

PAA 3: $C_{B\ BGB}^{[m]} = 34,759.4$

For more details, please refer to the ER calculations in the supporting information climate folder to check the calculations of carbon not decayed in BGB as required in MR.26, MR.27 and MR.28.

Once the different values for each parameter were found, is possible to go back to [F.16] to determine the cumulative baseline emissions in the period 2016 – 2020 (m=1) and the same value will be applied in [F.15] as the current baseline emissions in the first monitoring period.

PAA 1:

$$E_B^{[m]} = E_{B\ BM}^{[m]} - C_{B\ BGB}^{[m]} = 789,131.2$$

$$E_{B\Delta}^{[m]} = E_B^{[m]} - 0 = 789,131.2$$

PAA 2:

$$E_B^{[m]} = E_{B\ BM}^{[m]} - C_{B\ BGB}^{[m]} = 859,327.7$$

$$E_{B\Delta}^{[m]} = E_B^{[m]} - 0 = 859,327.7$$

PAA 3:

$$E_B^{[m]} = E_{B\ BM}^{[m]} - C_{B\ BGB}^{[m]} = 152,202.7$$

$$E_{B\Delta}^{[m]} = E_B^{[m]} - 0 = 152,202.7$$

3.2.2 Project Emissions

Project emissions for the first monitoring period [$m=1$] ($E_{P\Delta}^{[m=1]}$) were calculated using the equation [F.41], this process was applied separately for each project accounting area.

$$E_{P\Delta}^{[m]} = E_{P\Delta\ BRN}^{[m]} + E_{P\Delta\ LS}^{[m]} + E_{P\Delta\ SF}^{[m]} + A_{PAA} \left(C_p^{[m-1]} - C_p^{[m]} \right) - C_{p\Delta\ WP}^{[m]} \quad [F.41]$$

Where

$E_{P\Delta\ BRN}^{[m]}$ = Cumulative project emissions due to burning at the end of the current monitoring period,

$E_{P\Delta\ LS}^{[m]}$ = Cumulative project emissions due to livestock grazing within the project area,

$E_{P\Delta\ SF}^{[m]}$ = Cumulative project emissions due to the use of synthetic fertilizers within the project area,

A_{PAA} = Area of project accounting area,

$C_p^{[m-1]}$ = Project carbon stocks at the beginning of the current monitoring period,

$C_p^{[m]}$ = Project carbon stocks at the end of the current monitoring period,

$C_{p\Delta\ WP}^{[m]}$ = Project carbon stocks in wood products at the end of the current monitoring period.

The project does not consider emissions from the use of synthetic fertilizers, due to burning nor wood products, therefore, the parameters $E_{P\Delta\ SF}^{[m]}$, $E_{P\Delta\ BRN}^{[m]}$ and $C_{p\Delta\ WP}^{[m]}$ are assumed as zero in the equation.

Calculating Emissions from Changes in Project Stocks

As stated in section 8.2.1 of the methodology, emissions from forest fires, grass fires, natural disturbance, logging and other events within the project accounting areas are inherently captured by the monitoring of forest carbon stocks.

For this reason, and considering that woodland savannas are subject to fire events, the majority of the carbon plots in the OWS stratum were installed in areas subject to such events during the monitoring period. By doing so we are guarantying that carbon stocks measured capture the influence of fires.

Table 4: Amount of carbon plots installed in areas disturbed by fire events during the monitoring period.⁷²

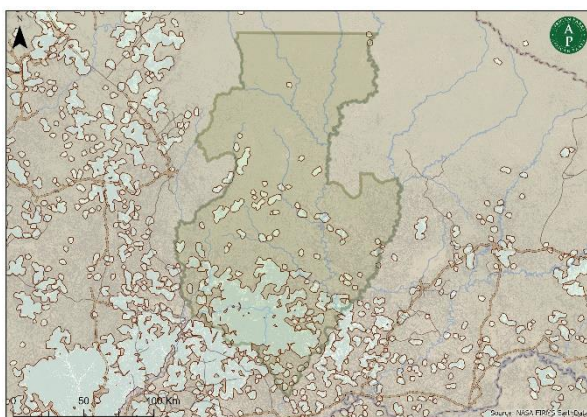
Was a plot installed in an area disturbed during the monitoring period?	Stratum of the plot		Total
	CCF	OWS	
Yes	30	24	54
No	96	1	97
Total	126	25	151

It is important to clarify that considering this is the first monitoring period, and the verification is being done in parallel with the validation carbon plots have been measured only once. Project carbon stocks at the beginning and end of the monitoring period are the same, therefore, the part of the equation [F.41] in which the parameters are considered equals to 0.

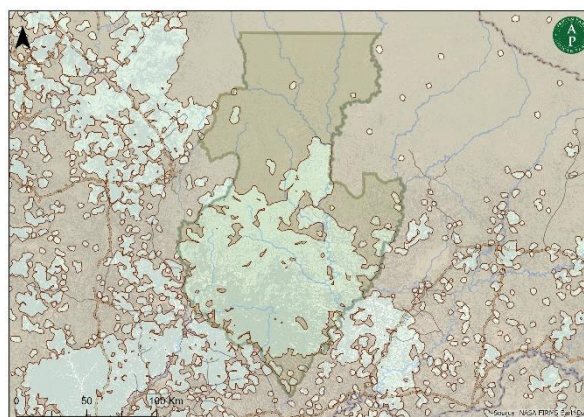
$$A_{PAA}(c_p^{[m-1]} - c_p^{[m]}) = 0$$

During future verifications, in order to determine changes in project stocks, the project proponent will follow the methodology requirement of remeasuring the carbon stocks in the project at least every five years.

The methodology also states that maps of significant disturbance events are necessary to aid with the verification of carbon stock estimates. Figure 16 below shows a map of the extent of significant disturbances in the project accounting areas during the monitoring period.



2016 – 2017



2017 – 2018

⁷² MR 32 and MR 33 supporting documents present evidence of the disturbance events and shows that there are plots installed into disturbed areas following the methodology requirements.

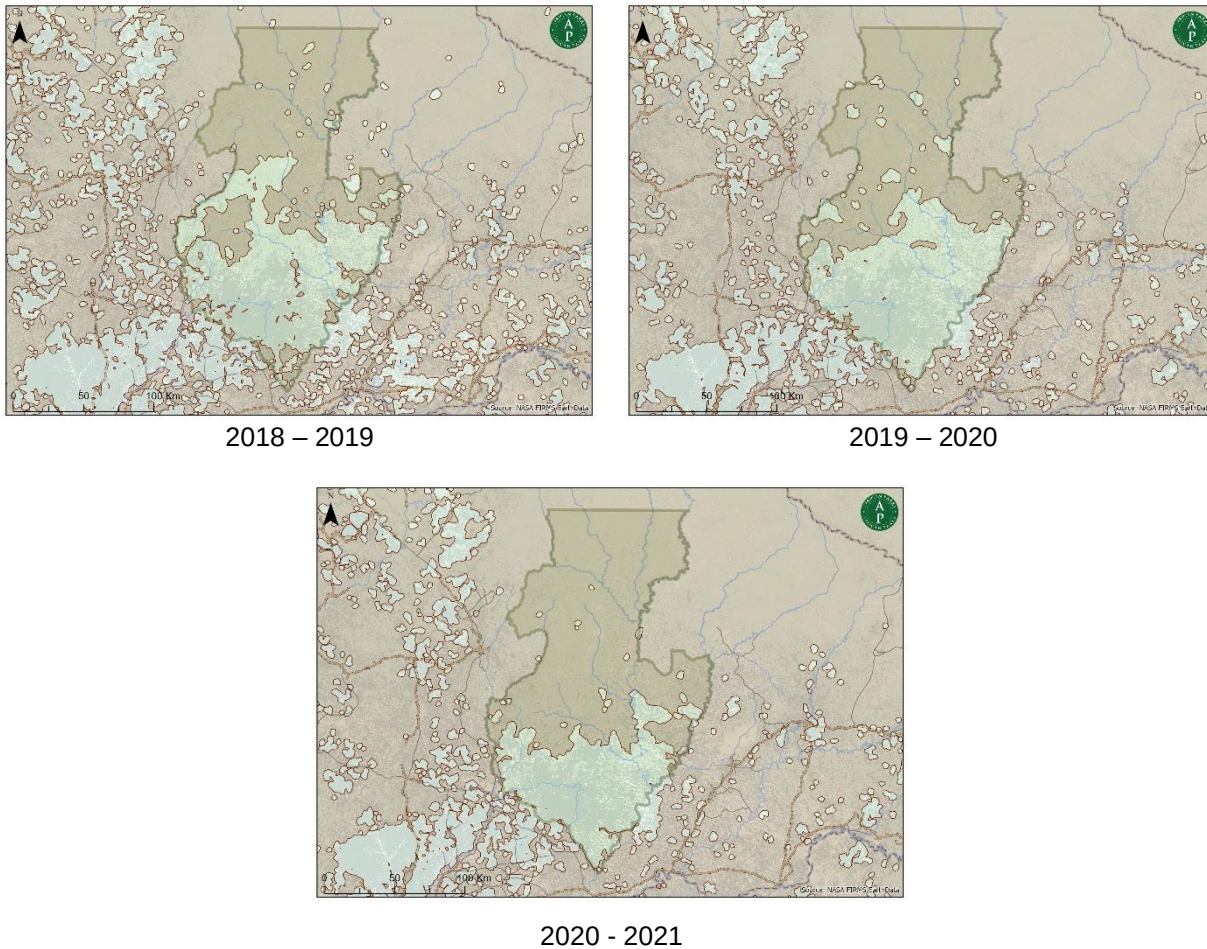


Figure 16: Disturbances during the monitoring period are displayed in the figures above by the darker colouring. Southern areas of CCA have been consistently kept out of fires.

Calculating GHG Emissions from Livestock Grazing

According to the methodology, emissions from livestock grazing, when occurring, are calculated using equation [F.43]

$$E_{P \Delta LS}^{[m]} = \sum_{i \in T} \left(\frac{f_{LSi} * n_{LSi}}{10^3} \right) * 21 \text{ [F.43]}$$

Following the equation above, the results for the 2016 – 2020 are:

$$\text{PAA 1: } E_{P \Delta LS}^{[m]} = 0$$

$$\text{PAA 2: } E_{P \Delta LS}^{[m]} = 33,847.4$$

$$\text{PAA 3: } E_{P \Delta LS}^{[m]} = 3,590.1$$

In the context of the project, these emissions are considered when the pastoralists graze within any project accounting area (PAA). However, it is important to note that even though these emissions are accounted they are not linked to project activities, the livestock is owned by the transhumant pastoralists not by African Parks.

In addition, considering the migratory characteristics of the pastoralists, the livestock, when illegally entering the project boundaries, is not roaming during the full year but only during the beginning of the dry season, therefore, when applying the equation [F.43] a minor adjustment is applied: the emission factor defined for the livestock population (f_{Lst}) is multiplied by a factor of the number of months in the year in which the livestock grazed during the year (3 months, therefore a 0.25 factor).

During the monitoring period the amount of cattle that grazed within the PAAs was reduced year by year thanks to the effectiveness of the implementation of the project activities. However, some cattle were still able to stay within the borders for short periods of time during the dry season.

In regard to the number of livestock species being grazed per year, it is also important to note that African Parks during its first years implementing the project activities did not try to obtain the exact number of livestock heads, they focused in the law enforcement and moving the stock out of the project accounting area, therefore, the values used to obtain the GHG emissions are linked to secondary evidence such as information from the aerial surveys done in the region and ground data from the rangers and echo-transhumance monitors and approximations of the total number were done considering the area free of cattle per year.

An improvement in the approximation of cattle heads inside the borders is expected for the following monitoring reports considering that since 2021 African Parks will start collecting information in regard to the number of heads entering the borders.

For more details of the emissions calculation process, please refer to the ER calculations in the supporting information climate folder to check the reports of livestock within the project area as required in MR.38 and calculations of the emissions from livestock grazing as required in MR.39 and MR.40.

3.2.3 Leakage

Leakage Mitigation Strategies

Table 5 has a description of the project activities implemented or being analysed so far as leakage mitigation strategies that will reduce the demand of and impact on forest resources. It is important to note that these strategies will continue during the project lifetime and will evolve according to any needs identified and lessons learned.

Table 5: Leakage mitigation strategies

Activity	Description	Effect
Sensitise pastoralists	The echo-transhumant officers are equipped and trained to effectively engage with transhumant pastoralists. Every dry season, the officers have direct interaction with the pastoralists, they have been educated on the carrying capacity of the land and the sustainable use of natural resources.	Trust is built between AP and the pastoralists and any perceived negative impacts of protected area management are mitigated. The project area is protected and managed effectively.
Conduct meetings to sensitise local communities	The echo-monitors are equipped and trained to effectively engage with local communities. Strategic communities on the periphery of the	Relationships and trust are established between AP and the local communities living on the periphery of the project area. Local

Activity	Description	Effect
	project area are educated on the sustainable use of natural resources and the benefits associated with protected area management.	communities are educated on the sustainable use of natural resources and are receptive to the land-use plan. The perceived negative impacts of protected area management are mitigated.
Identify and implement key income-generating opportunities for local communities; enhance local skills through training sessions (Ongoing process)	Effective engagement and consultation take place with local communities. A number of small realistic and achievable business opportunities are identified. Training sessions are conducted to improve local skills to ensure the income-generating activities are successful. The small business development opportunities that have been identified are implemented.	Trust and good relationships are established between AP and local communities and the benefits of protected area management are understood and embraced by the local communities living on the periphery of the project area. Increased employment and improvement in knowledge and skills among local community members. Reduction in poverty and decreased pressure on the forests in the project area.
Establish transhumant pastoralism corridors	Grazing areas are defined, and cattle corridors are established around the core protected area.	Sustainable grazing takes place in controlled areas.

Estimating Emissions from Activity-Shifting Leakage

As described in the methodology, for the first monitoring period, cumulative emissions from activity-shifting leakage are zero. During this period, the project proponent carried out the first monitoring of the leakage plots to estimate the parameter $p_{L\ DEG}^{[m=0]}$. This parameter will be used to fit the leakage emissions model and $p_{L\ DEG}^{[m]}$ will be estimated at least once every five years using field measurements as specified in the methodology.

For more details, please refer to the ER calculations in the supporting information climate folder and look at the process for estimating emissions $p_{L\ DEG}^{[m=0]}$ as required in MR.56 and MR.57

However, as described in the methodology deviation section, in order to perform conservative emission reduction claims the project proponent monitored the area deforested within the ASLAs during the 2016 – 2020 period using Global Forest Watch data and included such deforestation as leakage emissions.

Table 6: ASLA 1 Leakage emissions

Year	Deforestation in hectares	Leakage emissions (tCO ₂ e)
2016	11	4,159.0
2017	359.4	136,559.2
2018	10.6	7,218.7
2019	43.3	19,727.7

Year	Deforestation in hectares	Leakage emissions (tCO ₂ e)
2020	23.5	12,562.0

Table 7: ASLA 2 Leakage emissions

Year	Deforestation in hectares	Leakage emissions (tCO ₂ e)
2016	12.6	4,774.1
2017	21.7	8,364.2
2018	1.3	798.3
2019	11.0	4,496.4
2020	2.7	1,426.7

Determining Emissions from Market Leakage

As described in the PDD, emissions from market leakage will not be accounted for, and the cumulative emissions from market leakage for every monitoring period will be zero.

3.2.4 Net GHG Emission Reductions and Removals

Quantification of Gross Emissions Reductions

The gross ERs (GERs) for the first monitoring period [$m=1$] ($E_{\Delta GER}^{[m=1]}$) and project accounting area were quantified using the equation [F.53].

$$E_{\Delta GER}^{[m]} = E_{B \Delta}^{[m]} - E_{P \Delta}^{[m]} - E_{L \Delta}^{[m]} - E_U^{[m]} \quad [F.53]$$

Where:

$E_{B \Delta}^{[m]}$ = Change in baseline emissions;

$E_{P \Delta}^{[m]}$ = Change in project emissions;

$E_{L \Delta}^{[m]}$ = Change in emissions due to leakage; and

$E_U^{[m]}$ = Cumulative confidence deduction at the end of the current monitoring period.

For more details, please refer to the ER calculations in the supporting information climate folder to see the quantification of GERs for the current monitoring period as required in MR.65, as well as the confidence deduction calculations as required in MR.68 and MR.69. Figure 17, below, shows a graph of GERs per PAA for this monitoring period.

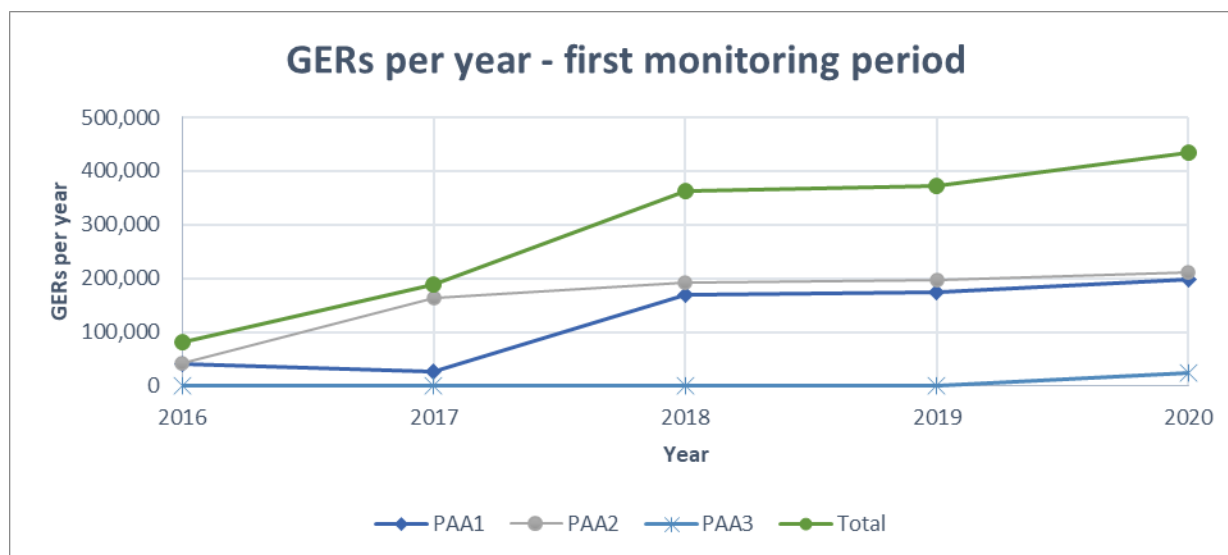


Figure 17: GERs per year during the first monitoring period

Determining Reversals

There have been no reversals in the PAA during this monitoring period.

Quantifying Net Emissions Reductions for a PAA

The total net ERs (NERs) for each of the PAA during the first monitoring period [m=1] were calculated using equation [F.55], which calculates GERs minus the buffer account allocation.

$$E_{\Delta NER}^{[m]} = E_{\Delta GER}^{[m]} - E_{BA}^{[m]} \text{ [F.55]}$$

For more details, please refer to the ER calculations in the supporting information climate folder to see the quantification of NERs for the current monitoring period as required in MR.74. Figure 18, below, shows a graph of NERs per PAA for this monitoring period.

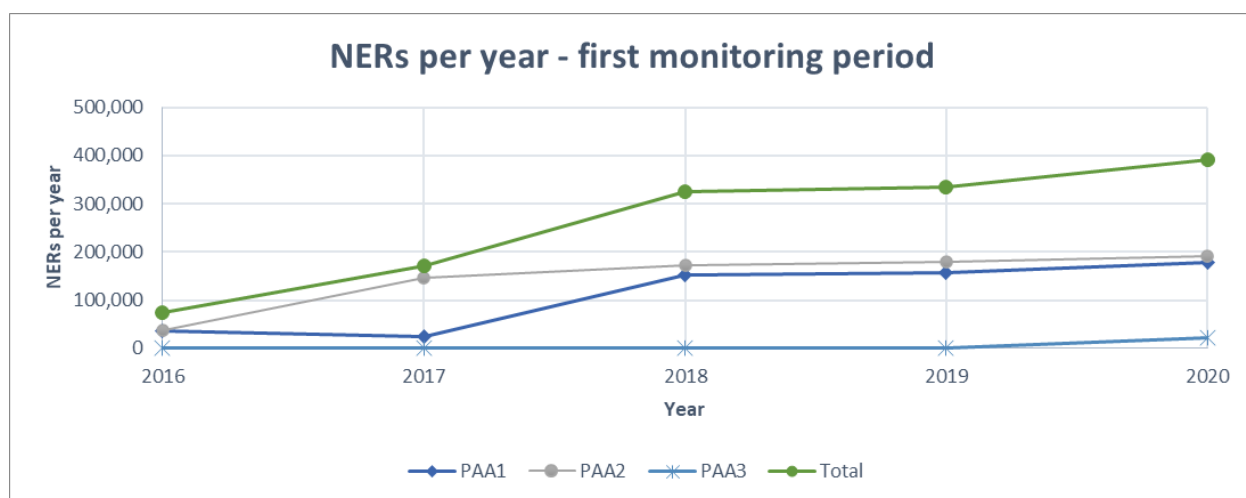


Figure 18: NERs per year during the first monitoring period

Determining Buffer Account Allocation

The allocation of GERs to the buffer account was determined following the AFOLU Non-Permanence Risk Tool, Version 4.0.

After applying the tool, the total value obtained was 6.5% (2% in the internal risks, 0% in the external risks and 4.5% in the natural risks), however, according to the requirements of the tool, the minimum risk rating shall be 10, regardless of the risk rating calculated. Therefore, a 10% was used to determine the buffer account allocation.

As a result of the process, the percentage of GERs allocated in the buffer account is 10% (please refer to the Non-Permanence Risk Report for more details). For more details, please refer to the ER calculations in the supporting information climate folder to see the calculation used to determine the buffer allocation for the current monitoring period as required in MR.78.

Quantifying Net Emissions Reductions across PAAs

As shown in the sections above, the NERs were calculated separately for each PAA and then summed to determine the total NERs in a monitoring period. For more details, please refer to the ER calculations in the supporting information climate folder to see the quantification of NERs across PAAs for the current monitoring period as required in MR.79. The green line in Figure 17, above, presents the NERs per year across PAAs for this monitoring period.

Determining Vintages in a Monitoring Period

Table 8, below, shows the quantified NERs by vintage year for the current monitoring period. For more details in the calculation process, please refer to the ER calculations in the supporting information climate folder.

Table 8: Ex-post Estimation of NERs⁷³

Year	Estimated baseline emissions or removals (tCO ₂ e)	Estimated project emissions or removals (tCO ₂ e)	Estimated leakage emissions (tCO ₂ e)	Estimated NERs or removals (tCO ₂ e) ⁷⁴	Buffer (tCO ₂ e)	VCUs ⁷⁵
Sep 2016 – Dec 2016	97,680	7,387	8,933	81,358	8,136	73,222
2017	352,384	17,640	144,923	189,819	18,982	170,837
2018	374,724	5,040	8,017	361,666	36,168	325,498
2019	398,538	2,520	24,224	371,793	37,180	334,613

⁷³ Values are rounded, a direct subtraction may differ.

⁷⁴ Under VCS terms the net emission reductions are the equivalent to gross emission reductions under VM0009 methodology

⁷⁵ Under VCS terms the VCUs are the equivalent to net emission reductions under VM0009 methodology

Year	Estimated baseline emissions or removals (tCO ₂ e)	Estimated project emissions or removals (tCO ₂ e)	Estimated leakage emissions (tCO ₂ e)	Estimated NERs or removals (tCO ₂ e) ⁷⁴	Buffer (tCO ₂ e)	VCUs ⁷⁵
2020	452,672	4,850	13,989	433,832	43,384	390,448
Total	1,675,998	37,438	200,086	1,438,468	143,850	1,294,618

Evaluating Project Performance

Table 9 below presents a comparison of the NERs presented for verification relative to NERs presented for validation, both values are the same considering the validation and verification was done at the same time.

Table 9: Project performance comparative

Year	VCUs - Ex post	VCUs - Ex ante
Sep 2016 – Dec 2016	73,222	73,222
2017	170,837	170,837
2018	325,498	325,498
2019	334,613	334,613
2020	390,448	390,448
Total	1,294,618	1,294,618

3.3 Optional Criterion: Climate Change Adaptation Benefits

3.3.1 Activities and/or processes implemented for Adaptation (GL1.3)

As stated in the PDD, the implementation of the project will create positive net climate change impacts. The sequestration of carbon in living biomass and the avoided deforestation of natural covers, which act as CO₂ sinks that contribute to the reduction of GHG emissions in the project zone.

The measures to assist communities and biodiversity to adapt to the probable impacts of climate change are designed to prevent the loss of forest cover by fighting the main drivers. All these activities have been, and will continue to be, implemented in alignment with AP's five-pillar strategy and the project business plan. The main measures implemented to date are listed in Table 10.

Table 10: Activities implemented for adaptation

Activity	Description
Sensitise pastoralists	The echo-transhumant officers are equipped and trained to effectively engage with transhumant pastoralists. Every dry season, the officers have direct interaction with the pastoralists to educate them on the carrying capacity of the land and the sustainable use of natural resources.

Activity	Description
Conduct meetings to sensitise local communities	The echo-monitors are equipped and trained to effectively engage with local communities. Strategic communities on the periphery of the project area are educated on the sustainable use of natural resources and the benefits associated with protected area management.
Identify key income-generating opportunities for local communities and enhance local skills through training sessions	Effective engagement and consultation take place with local communities. A number of realistic and achievable small business opportunities have been identified. Training sessions have been conducted to improve local skills to ensure the income-generating activities are successful.
Establish transhumant pastoralism corridors	Grazing areas have been defined, and cattle corridors have been established around the core protected area.
Monitor wildlife and human activities	This monitoring helps optimise conservation activities and document how wildlife populations and habitats are developing.
Expand the core protection area	Maintaining the core protected area and keeping it free of cattle and poachers helps ensure the continuity of biodiversity in the region.
Recruit and train a sufficient number of rangers, echo-monitors, echo-transhumant officers and control room operators	A sufficient number of well-trained rangers maintains control over the project area and enforce the law of CAR. A sufficient number of well-trained echo-transhumant officers are adequately equipped to carry out the sensitisation activities. This will result in a reduction of deforestation and degradation and reduce emissions from the project area.
Strengthen coordination with local and national government and civilian agencies/committees	Ensure that positive, shareable messaging reaches the national audience to promote awareness of conservation among local communities.

4 COMMUNITY

4.1 Net Positive Community Impacts

4.1.1 Community Impacts (CM2.1)

During the monitoring period, all adjacent communities have benefitted from the effective management of the CCA. This means approximately 250,000 people have indirectly benefitted from the project activities. Improved livelihoods for these communities have been experienced in at least three areas. These are as follows:

- improved security;
- preservation of wildlife that serve as an important source of nutrition for local communities; and
- diverse ecosystem services such as a constant supply of freshwater, protection from erosion, high air quality, among others.

The project has also directly impacted approximately 2,000 local community members (from 35 different communities) through project activities such as training, workshops and other sensitisation activities. The tables below provide more details describing the impacts on each community group resulting from project activities, including: the employees of the protected area that have been positively impacted by the project; peripheral residents in villages that have been involved in project activities (including internally displaced people); transhumant pastoralists who have annually migrate through the region; and stakeholder authorities who proudly learn and help in the development of the protected area alongside national, regional and local participation. See section 4.3.1 for more detailed information about the achieved results for the period 2016-2020. Annex 2: Community impacts provides an overview of the impacts generated for the community groups of Chinko.

Community Group	Employees
Impact	The project is one of the largest employers in the Eastern CAR. Staff benefits from participating in the co-development of the Workers Agreement and on the ongoing trainings (staff is recruited from local communities) on topics such as: leadership, hygiene and health. Chinko's approach to sustainable natural resource use, conservation and agricultural micro-project development, BFR and advanced tactical training. Classes in French, English and mathematics were also provided during this period.
Type of Benefit/Cost/Risk	The impact is a benefit, actual, direct, planned and positive
Change in Well-being	During the monitoring period under review, the project has continuously employed approximately 400 people (between permanent and temporary staff) with 45 non-armed echo-monitors, 45 non-armed echo-transhumant officers and about 25 rangers.

Community Group	Local communities
Impact	Besides the fact AP is the largest employer in the region and that sustainable income for the employees can generate better opportunities, the project also provides: • protection from armed groups; • co-development of the land-use plan; • connect the community with agricultural cooperatives; • learn about the challenges of achieving local sustainable economic activities such as mining, fishing, farming and hunting; • learn and promote Chinko's vision to sustainable natural resource use, conservation and agricultural micro-project development; and • understanding of the boundaries of Chinko.
Type of Benefit/Cost/Risk	The impact is a benefit, actual, direct and indirect, planned and positive

Change in Well-being	A good relationship has begun to be established with the communities that will help to enhance local training, welfare development and the development of self-sustaining enterprises.
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Community Group	Internally Displaced People
Impact	Provided temporary humanitarian assistance to the internally displaced population (380 people) during the conflict
Type of Benefit/Cost/Risk	Benefit: Unplanned and positive
Change in Well-being	Chinko's staff provided shelter, food, water, healthcare and other life-saving provisions to a group of 380 people displaced by the armed conflict. The project activities have also helped to restore internal security.

Community Group	Transhumant pastoralists
Impact	• Provided solutions such as a corridor that will allow the pastoralists to continue their activities and avoid land-use conflict with local communities. • Created the conditions for dialogue and reduced conflict between local villagers and transhumant pastoralists. • Mbororo cattle herders recruited in Chinko have improved monitoring and educated transhumant herders coming from Sudan.
Type of Benefit/Cost/Risk	The impact is a benefit, predicted, direct, planned and positive
Change in Well-being	The establishment of grazing corridors is helping prevent conflict between pastoralists and settled communities.

Community Group	Government entities
Impact	• Multiple meetings to discuss the project activities • Present and share knowledge of the role of Chinko in the area including how to stop large-scale poaching in the reserve and how wildlife recovers once protected. • Co-development of the master plan for the land-use plan.
Type of Benefit/Cost/Risk	The impact is a benefit, actual, direct, planned and positive
Change in Well-being	Strengthen coordination with the local and national government and civilian agencies/committees. The plan and strategy for the CCA will contribute to regional stability and ensure long term habitat for wildlife.

4.1.2 Negative Community Impact Mitigation (CM2.2)

Firstly, it is important to stress that the main focus of African Parks around the CCA in terms of community outreach is to co-implement a framework of sustainable resource use. Depending on the location of the communities, this can go from extraction of natural resources further away from the villages to rolling out sustainable farming practices closer by the villages.

As stated in section 2.1.11 of the PDD, the negative impact of protected area management on community livelihoods through reduced access to natural resource exploitation is mitigated through the development of sustainable agriculture activities with the local communities as well as the rolling-out of improved sustainable natural resource management around the CCA.

This section presents a description of the activities done during the monitoring period to mitigate negative community impacts.

With the arrival of a Community Development Manager in May 2017, first steps were taken to start up the community program. A work plan was drawn up to implement income-generating activities away from natural resource depletion such as poultry breeding, gardening, conservation farming etc. The plan was to roll out several community development initiatives in 2017 and 2018, however these projects were dependent on the security situation in the communities.

Due to the difficult political situation in the country during those years there were cases in which armed groups engaged in fighting in the areas surrounding the CCA. This affected the local communities as well as project staff and their families. For example, in 2017, a spike in conflict led to 380 internally displaced people (IDP), mainly women and children, fleeing into the CCA for safety. Humanitarian assistance was organised and resulted in the creation of the emergency fund to address the crisis⁷⁶ and deliver life-saving measures. After months of receiving safety, food, water, shelter, healthcare and even employment, the group voluntarily relocated back to their village in June 2018.

Considering the details above it was risky for African Parks employees to go out into the communities and implement major activities at the onset of the project. During these two years, sensitization was mainly done at Chinko HQ through training of the local staff and assisting the IDP.

A significant step forward occurred in September 2018 in Bangassou in the presence of the community leaders from Bangassou, Bakouma and Rafai to establish active working relationship between the CCA and the communities. As a result, Focal Point Officers were recruited in the communities of Rafai, Bangassou and Bakouma, who serve as the liaison between the park and the communities.

A slight improvement of the security situation could be observed in Chinko's periphery in the year 2019, which allowed the Community Development team to enter the villages and conduct a needs assessment. Numerous meetings were held in the community of Rafai to create awareness on conservation issues and to highlight the importance of conservation and sustainable use of natural resources.

In May 2019 a consultancy firm called Oversee Advising Group was selected to carry out an in-depth socio-economic study of Chinko and its surroundings. The study assessed the socio-economic situation of the Chinko area and its "broad periphery" i.e., the sub-prefectures bordering the Chinko conservation area (Bangassou, Rafai, Bakouma, Djema and Yalinga). The aim of the study was to enable the economic and social components to be better integrated into the Land-Use Plan and to be able to address the specific

⁷⁶ African Parks established the Chinko Crisis Fund and launched an emergency appeal at the end of July 2017 to raise much-needed funds for the protection and provisioning of the internally displaced people in Chinko and Bakouma. See Supporting information: APN Monthly Report of July 2017 and APN Annual Report of 2017.

socio-economic concerns of the communities. The study took place in two phases and was completed in December 2020, along with the publication of the final study report.⁷⁷

In line with the recommendations of the study, a market gardening project began in February 2020 with a pilot phase in Rafaï, focusing on revitalizing the local economy by providing another source of income and to diversify the diet of the communities. The project started with a soil study, carried out by an agronomist (left image in Figure 19). The soil analysis highlighted the following type of soil: loamy, clayey and sandy, which determined the type of crop recommended for production. Support was provided to the different market groups by supplying farming equipment and several types of vegetable seeds (especially those that are easily consumable and marketable at a local level). In the second phase of the project, the support was extended to 15 market gardening groups (5 in Rafaï, 5 in Bangassou and 5 in Bakouma) with approximately 300 members (right image in Figure 19).



Figure 19: Agronomist taking soil samples for the study of soils (left), Members of market gardening groups after receiving seeds and their farming equipment in Bangassou (right)

The members of each group received capacity building sessions in order to strengthen their skills in market gardening production in the following areas:

- Organisational management of a group;
- The development of a simple operating account forecast;
- Financial management of a group;
- Keeping a cash book;
- Keeping stock records and equipment and material management records;
- Preparation of market gardening land;
- Means of making organic fertiliser from existing elements;
- Preparation of the seedbed;
- Transplanting techniques;
- The different types of organic phytosanitary products that can be manufactured from locally available elements.

⁷⁷ Document added as supporting documentation.

In May 2020, a call for NGOs was published for the implementation of micro-projects to assist the local communities of the region towards sustainable socio-economic development. In August 2020, the offers were analysed and two NGOs were selected:

- The NGO "Collectif Sauvons La Centrafrique" with the project to extend Village Savings and Credit Associations in 3 Mbomou sub-prefectures (Bangassou, Bakouma and Rafaï)
- The NGO JUPEDEC with the project for the socio-economic reintegration of the population on the periphery of the CCA in the Haut Mbomou department, through the production of small ruminants.

These two NGO's will further support African Parks in designing and implementing micro-projects to promote a sustainable socio-economic development in the region. Specifically, once funding has been secured from carbon credits, African Parks will support 2 farming components in a first phase (2020-2021):

- Scalling-up of the vegetable gardening in Bangassou, Bakouma and Rafaï outskirts. A minimum of three support campaign during the dry season will be developed near water points.
- Food crops: with multiplication plots of cassava cuttings, and groundnuts / maize seeds. A minimum of 16 farming groups will be supported in a first campaign.

Besides the sustainable agriculture activities progress during the monitoring period, there is also persistent conflict between transhumance pastoralists and the local communities in the region. The enrolment of vulnerable young men into armed groups, the lack of traditional agro-pastoralist mediation structures and the annual migration of pastoralists into the CAR contributes to this conflict. Some pastoralists are also exploited by armed groups to plunder supplies from local communities. The Chinko team, through sensitisation groups (see Figure 20) and meetings with representatives (see Figure 21), has been working on a new corridor for transhumance and creating a safe route around the CCA to replace the old route, which bisected the middle of the CCA. The new route will not only mitigate the negative biodiversity impacts of transhumance pastoralism but also contribute towards strengthening the relationship between African Parks, transhumance pastoralists, and local communities, thus, reducing internal conflict.



Figure 20: Mbororo cattle herders now employed as Transhumance Sensitisation Officers⁷⁸



Figure 21: Meeting in Rafai with local transhumance herder discussion about a southern corridor – October 2020

AP has been sensitising hunters, fishermen, miners, loggers and local communities and authorities to promote the sustainable use of natural resources and communicating the future vision for Chinko, its legal status, the park boundaries and the development of a comprehensive and participative land-use plan (see Figure 22 and Figure 23). An example was the sensitisation conducted in the large fishing cities and towns

⁷⁸ Photography taken by Gael le Martin

along the Mbomou River, since people from these communities have been fishing in the Chinko River during the dry season.



Figure 22: Meetings to discuss transhumance, fishing, hunting and agroforestry in Bangassou (left) and Dembia (right), June 2020



Figure 23: Meeting with local miners to discuss the relocation of mining sites – November 2020

Chinko staff have also begun addressing the negative impact of mercury (as used in the mining sector) on the environment. They've created strong teams with relevant knowledge and capacities to convey to local communities the importance of keeping rivers clean and free of pollution or dangerous chemicals, thereby contributing to sustainable fisheries management.

Finally, in June 2020, Chinko staff succeeded in actively involving all major peripheral communities to contribute to the CCA land-use plan to establish long-term strategies for sustainable natural resource use. This was part of a joint mission between the Conservation and Land-use planning teams.

4.1.3 Net Positive Community Well-Being (CM2.3, GL1.4)

By improving the lives and livelihoods of local communities, the project is ensuring the area is protected in the long term and that these critical ecosystem services are maintained and will continue to generate benefits for local people. Approximately 250,000 people are indirectly benefitting from the project's activities. Improved livelihoods for these communities can be explained through four key improvements; 1) improved security (fewer armed groups and uncontrolled movements); 2) the preservation of wildlife

(mammals, birds, fish, molluscs) that serve as an important source of nutrition for local communities; 3) diverse ecosystem services such as a continuous supply of freshwater, protection from erosion, high air quality; 4) and income-generating activities.

Chinko and the existing protected areas protect 52,100 km² of 52,817 km² of the Chinko drainage system (98,6%). Furthermore, the source and the eastern headwaters of the Mbari River as well as three important tributaries of the Kotto River are within the project zone. The rivers in Eastern CAR have their source at low elevation (<1'400 m.a.s.l) within marginal topographic features. Therefore, the permanent water flow of major rivers significantly depends on natural vegetation and functional ecosystems that maximize influx, stocking capacity and resilience of ground water. Any alteration of the natural vegetation by human activities will most likely reduce the influx, stocking capacity and resilience of ground water and therefore significantly negatively affect the balance of water discharge of main rivers in Eastern CAR.

The rivers Chinko, Mbari and Kotto are highly seasonal with average peak discharge during the rainy season up to 20x bigger than minimum average discharge in dry season. It is very likely that alteration of the natural vegetation will cause destructive flooding events downstream during the rainy season and will lead to minimal discharge and likely complete dry up of rivers during peak dry season in February, March and April. Violent flooding events and the lack of freshwater during several months in a year would negatively affect the (drink-) water supply of remote local communities fully dependent on natural resources as well as population centres like Rafai, Bangassou and Bria.

Important economic activities like fishery and agriculture would be affected by devastating floods and dry riverbeds what would affect most people and the backbone of the regional economy with long lasting negative impacts on local communities. The active conservation of species rich communities and resilient functional ecosystems in the project zone allow the maintenance of large freshwater oyster banks that seem to significantly increase water quality during the dry season and most likely reduces the load of pathogens and microbes in surface water used by local communities.^{79 80} Uncontrolled harvest of oysters, the use of destructive fishing methods and the pollution of waters with sediments and toxins for artisanal mining and fishing all negatively affects healthy oyster banks and leads to deterioration of water quality especially during the dry season when river water and nearby ground water becomes the main water resource of the local communities.⁸¹

The project also positively impacted approximately 2,000 local community members (from 35 different communities). AP has extensively consulted local communities through a participatory approach that identified several activities impacting the lives and livelihoods of local communities. As mentioned in the previous section, the project developed a comprehensive land-use plan to ensure that positive benefits are maximised. The project activities will not restrict any legal productive activities that local communities rely on within the project area, thus ensuring that the project does not negatively impact these communities.

The main impact areas of the project objectives are:

⁷⁹ Burge, Colleen A., et al. "The use of filter-feeders to manage disease in a changing world." *Integrative and Comparative Biology* 56.4 (2016): 573-587.

⁸⁰ Gopko, M., et al. "Freshwater mussels (*Anodonta anatina*) reduce transmission of a common fish trematode (eye fluke, *Diplostomum pseudospathaceum*)." *Parasitology* 144.14 (2017): 1971-1979.

⁸¹ Grabowski, Jonathan H., and Charles H. Peterson. "Restoring oyster reefs to recover ecosystem services." *Ecosystem engineers: plants to protists* 4 (2007): 281-298.

- social development through skills training;
- environmental integrity through sustainable natural resource management; and
- economic resilience through secure livelihoods.

Table 11: Positive net expected impacts of the project

Without the Project	With the Project	Net Impact
Regional insecurity and the persistent threat of armed groups on local communities is likely to continue or worsen.	The project activities, particularly those focused on law enforcement are improving security in the region. In fact, this can already be observed and is well accepted among local communities as being directly attributable to the project. ⁸²	Positive
The persistent conflict between local communities and transhumant pastoralists continues.	AP has engaged with pastoralist groups (as described in section 4.1.2 and shown in Figure 20 and Figure 21 to create suitable corridors (transhumant pastoralism corridors) that have a minimal impact on biodiversity and carbon stocks within the project area, while also minimising potential conflict with local communities. This has resulted in a reduction in conflict between local communities and pastoralists. ⁸³	Positive
Reduction in the quantity and quality of natural resources near villages, particularly in terms of large game and non-timber forest products.	The active management of the CCA and the buffer zones, together with local communities, is allowing community members to find more and higher quality hunting game in relatively close proximity to the village. ⁸⁴ This enables an efficient harvest that follows sustainable practices. It follows the development of the plan and strategy for Greater Chinko to contribute to regional stability and ensure long-term habitat protection for wildlife.	Positive
The lack of recognition of the value of forest resources and their associated ecosystem services will	Through community engagement and education, the project has continued with its intention to create a constituency for conservation among local communities ⁸⁵ , ensuring the sustainable	Positive

⁸² As demonstrated when African Parks supported the local communities in 2017 and 2018 during the displacement and contributed to achieve a safer environment for the return to their homes.

⁸³ This is the perception of African Parks and also has been described by the local communities to them

⁸⁴ This is correlated to the increase of the herbivore's numbers spotted within Chinko (see section 5.3.1), once the numbers of fauna population increase the availability for local communities also increase

⁸⁵ See the monthly and annual reports for more details on all community engagement focused on building a constituency for conservation amongst local communities. 2019 was the year in which the project team was able to start engaging with communities surrounding the park at a significantly higher and more involved level since the project start date (see Annual Report 2019). Awareness campaigns on park activities that includes information on conservation

continue among local communities. This will ultimately lead to deforestation, degradation and a loss of biodiversity in the region.	management of forest resources in the long term. Forest ecosystems will continue to provide benefits to communities.	
Lack of income-generating opportunities, employment opportunities and skills will continue to negatively impact local communities.	The project has provided employment and skills training to local community members, thereby improving living conditions. ⁸⁶ The project has also identified and implemented income-generating opportunities, such as a soap-making project involving 26 women, that are improving the livelihoods of local communities (see section 2.3.14 for more details).	Positive

4.1.4 Protection of High Conservation Values (CM2.4)

The project has identified two High Conservation Value (HCV) areas related to community well-being: the buffer/transition zones and the Chinko and Mbari Rivers (see Figure 24). To date, the project has not had any negative impacts on these HCV areas.

Communities living on the periphery of the CCA have a strong dependence on hunting and other forest resources for consumption and generating income. Therefore, as part of the project implementation, the project proponent has been working with the government of CAR developing a comprehensive land-use plan for Eastern CAR with the participation of local communities that will propose the new zonation of the region. Once finalized the land use plan will include transhumance corridors, grazing areas, dedicated areas for agricultural activities and regulated hunting areas/buffer/transition (to provide critical ecosystem services that are fundamental to the livelihoods and well-being of the local communities, this is being done with full participation of the different stakeholders, the process includes continuous communication with community leaders as well as with the regions representatives to ensure that all interests are aligned. Figure 24 shows the delineation of such zones.

In addition, as mentioned in section 2.1.1, during the current monitoring period African Parks worked on closing the mining sites within the project accounting area. This will prevent the harmful chemicals from entering the water supply of the Chinko and Mbari basins, which was affecting not only aquatic life but also the communities downriver. This was achieved through constant dialogue and sensitisation efforts.

and related national law, were heavily targeted towards villages along the south and western sides of the park and were well received, even attracting the support of local authorities.

⁸⁶ As stated in section 2.1.10 Chinko is the largest employer in the region.

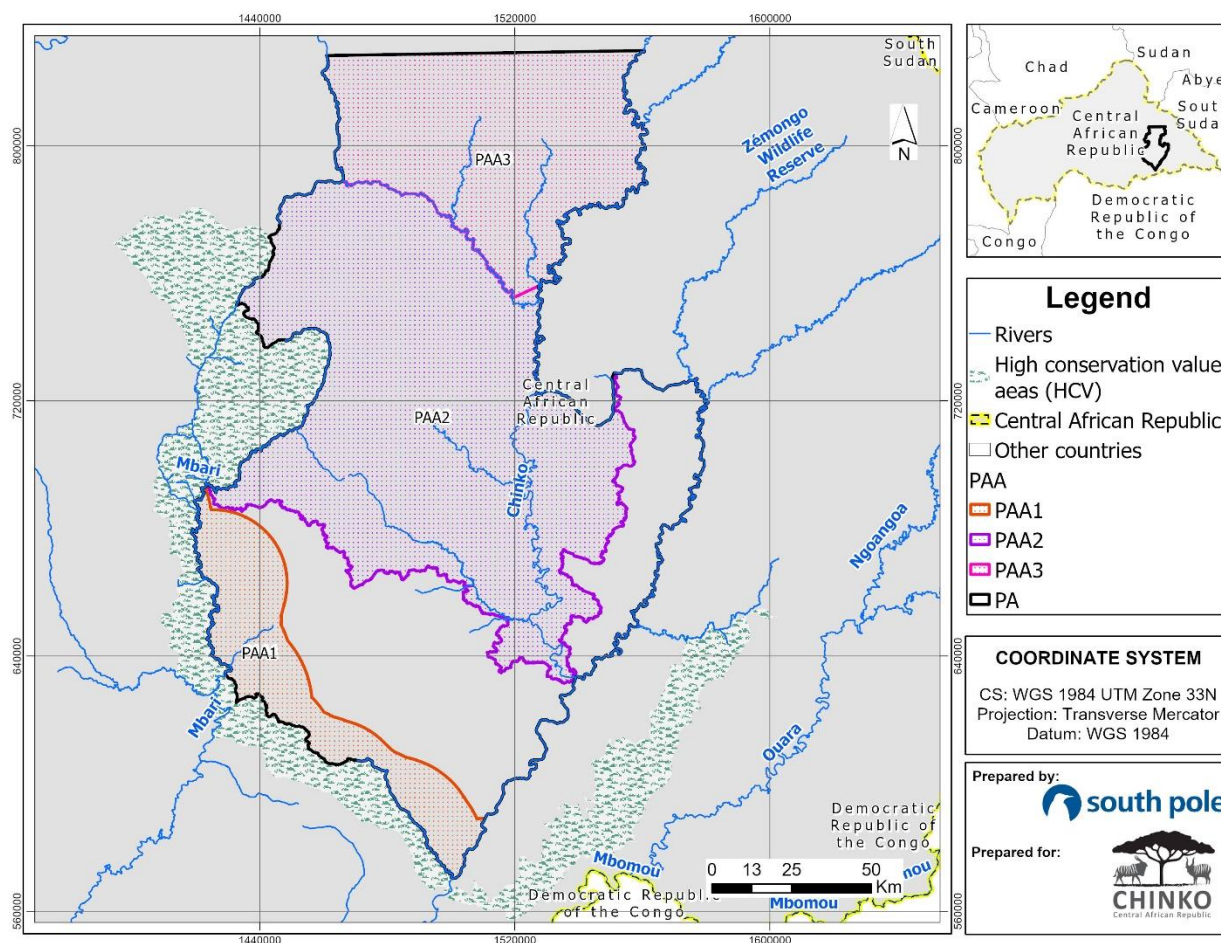


Figure 24: HCV in the project boundaries

(Source: South Pole, 2023)

4.2 Other Stakeholder Impacts

4.2.1 Mitigation of Negative Impacts on Other Stakeholders (CM3.2)

The project activities have not created negative impacts on other stakeholders. The transhumant pastoralists that enter the CAR from the Darfur region of Sudan may have been temporally impacted by the project activities because grazing is now illegal in the project area. The project aims to enforce national laws that these communities have historically had no awareness of or regard for. This situation has been managed through the establishment of corridors where the pastoralists can graze their cattle and the provision of support and knowledge sharing to the pastoralists. These steps will ensure that the project area is protected and that pastures are managed sustainably over the long term.

AP has also trained echo-transhumant officers to carry out sensitisation activities with the transhumant pastoralists to prevent non-controlled impacts. These echo-transhumant officers maintain a regular presence in the area and undertake frequent assessments of programme activities to ensure that any potential negative impacts are identified, reported, documented, addressed and ultimately resolved in a timely manner.

4.2.2 Net Impacts on Other Stakeholders (CM3.3)

No net negative impacts on other stakeholders have been identified; on the contrary, the project has generated positive impacts for these stakeholders. An example is the accord achieved with pastoralists on the transhumant pastoralism corridors, where they approved and respected the establishment of a corridor to achieve equilibrium between their practices and the protection of the environment, and prevent conflict between farmers and pastoralists. The project activities are designed to ensure transhumant pastoralists that used to practice illegal grazing in the project area are provided with improved access to sustainably managed pasture. These corridors will ultimately improve the integrity of ecosystem services provided in the project area. The forest understory and barren ground will recover to perennial grasslands. Hydrology and microclimate will also improve, ensuring levels of regeneration that will support the carrying capacity of cattle in the future and yield a more stable and healthier habitat.

4.3 Community Impact Monitoring

4.3.1 Community Monitoring Plan (CM4.1, CM4.2, GL1.4, GL2.2, GL2.3, GL2.5)

Before AP signed a mandate to manage the CCA, transhumant pastoralists were beginning to drive their cattle deeper into the CCA, which was resulting in large scale degradation and deforestation. The first objective of the project has been to ensure that the CCA is well protected and managed comprehensively. By improving management, governance and technical capacities, the project has been able to effectively manage and enforce national laws on protected areas across the entire CCA.

As a result of the AP's focus on law enforcement during its initial years in the CCA, most of the project impacts have been on biodiversity and climate. However, AP understands the need to build a strong constituency for conservation among local community members and has been engaging with communities through a variety of sensitisation activities and other ad-hoc activities wherever possible. These community-based activities will continue to be a major focus of the project moving ahead. Key results of community activities during this monitoring period are presented in Table 12.

Regular monitoring of the project's impacts on local communities has been, and will continue to be, conducted throughout the project's lifetime. AP has enough well-trained staff that engage regularly with all local communities living on the periphery of the CCA. This regular engagement will ensure that all project impacts on communities are effectively and accurately monitored.

The long-term success of the project relies heavily on building a strong constituency for conservation among the local communities living on the periphery of the CCA. During the project's initial years some activities have been developed to build this constituency for conservation through ensuring that community members understand the benefits of wildlife and habitat conservation, mitigating any perceived negative impacts of the management of the protected area and improving livelihoods through the sustainable use of natural resources and skills development.

In the coming years, the monitoring plan will continue with a focus on the activities presented in Table 12, the indicators were designed to evaluate whether the project activities are contributing towards meeting these objectives. Annual, biannual or quarterly monitoring frequency is expected for most indicators and the effectiveness of the indicators will be evaluated at least every five years. At the end of the evaluation period, and according to the results of the evaluation of the indicators, the project will reconsider them or set new goals in relation to the community impacts. Please see the community monitoring plan for 2021 onwards in Annex 3: Community monitoring plan.

Table 12: Community monitoring report results

Activity	Stakeholder monitored	Frequency of monitoring during this period	Results	Impact
Training of rangers, echo-monitors, echo-transhumant officers and control rooms operators	African Parks employees	Yearly results of trainings	Chinko has a team of trained personal of at least 25 rangers, 45 echo-monitors, 45 echo-transhumant officers (during the dry season) and 10 control room operators	Reduced poaching, increase in wildlife and comprehensive habitat management Effective ranger force established Effective and formalised management structure for echo-teams in place
Development of a comprehensive land-use plan	Local communities Transhumant pastoralists	Once off	Extended consultations with communities living outside the project area to develop a Land-use Plan. A comprehensive Land-use Plan, including all required wildlife corridors and exclusion zones, is being agreed upon and communicated to local stakeholders. Thanks to the engagement activities, the communities surrounding the CCA are supportive of AP and its mandate	The project has directly impacted approximately 2,000 local community members (from 35 different communities) through project activities such as training, workshops and other sensitisation activities.
Establishment of community liaisons	Local communities	Every verification period	Four community liaisons have been established (Nzako, Yalinga, Debrikassa and Fode).	Coordination has been strengthened with local and national government and civilian agencies/committees
Identification of potential income-generating activities	Local communities	Every verification period	The Bakouma and Bangassou communities started discussions on developing a beekeeping project and other micro-projects. Soapmaking project with families started.	Enhancement of local skill training, welfare development and self-sustaining business development through building

Activity	Stakeholder monitored	Frequency of monitoring during this period	Results	Impact
				good relationships with the communities
Identification of tourism opportunities	African Parks employees Local communities	Once off	Tourism revenue plan completed. Potential tourism zones identified. Goliath Expeditions camp is established.	Increased revenue from tourism activities Community outreach is expanded with an emphasis on sustainable natural resource management/utilisation
Support regional education	Local communities	Every verification period	Schools and universities visited during the monitoring period ⁸⁷ Forty-five schoolteachers from local communities were provided with salary contributions ⁸⁸	The perceived negative impact of protected area management is mitigated Increased perception/recognition of the value of forest resources

⁸⁷ For more details check the summary of stakeholder engagement at: Supporting Information: [2. General\ 2.3 Stakeholder engagement]

⁸⁸ Annual Report 2019

4.3.2 Monitoring Plan Dissemination (CM4.3)

For the employees, physical copies of the documents (PDD and MR) were made available at the parks' offices prior to the audit site visit, all the employees were told about the location of such copies.

For local communities one way to share summaries of the results is that the documentation is translated into French and distributed (physically and by sharing the files using USBs in direct meetings) amongst their representatives and local government structures. A second strategy that is used due to the high levels of illiteracy amongst local community members but also for the transhumant pastoralists is the dissemination of the project information through local staff such as community liaisons and sensitisation team (presentation materials are used wherever possible during workshops). These employees have experience and training in engaging with local communities around the project area, as well as the transhumant pastoralists that enter the CAR from neighbouring countries. This ensures that, even with the high levels of illiteracy in the region, monitoring information is publicly available to all local communities living on the periphery of the park.

For other stakeholders with more technical background, such as governmental institutions and private and philanthropic financial donors, African Parks is providing them access to project documentation and delivering frequent reports of the project activities either by sharing the files using USBs (in direct meetings) or by mail.

In addition, as stated in the PDD, the relevant documentation about the results of the Monitoring, Reporting, and Verification (MRV) process of this project will be published in the VERRA platform every monitoring period. AP annual reports, which are publicly available on their website, also include summaries of the project results.⁸⁹ AP has also been using its social media to publish relevant information about the project.

4.4 Optional Criterion: Exceptional Community Benefits

The project does not seek to be validated at the Gold Level for exceptional community benefits.

5 BIODIVERSITY

5.1 Net Positive Biodiversity Impacts

5.1.1 Biodiversity Changes (B2.1)

The Eastern CAR wilderness is one of the largest contiguous forest and savanna woodland of high ecological integrity in the world, covering more than 103,000 km². The long-term preservation of this unique intact vegetation is of high value for the regional climate, ecosystem functioning and biodiversity.

The establishment of the CCA and its active management since 2016 is the first step in preserving this unique contiguous wilderness and is already showing results in reversing the impacts of overgrazing by transhumant pastoralists and the uncontrolled felling of trees. In the future, this successful strategy will be expanded to incorporate the entire wilderness. The new public-private partnership signed in April 2020

⁸⁹ <https://www.africanparks.org/about-us/financials-and-annual-reports>

allows AP to develop a land-use plan for 64,700 km² and defines the legal framework for further nature conservation in the area.

In the future, it will also be crucial to incorporate the existing protected areas in the region, like the Zémongo and Yata-Ngaya Faunal Reserve and the André-Felix National Park. Furthermore, the last intact Sahelo-Sudanian shrublands south of Birao also need to be actively preserved through the development of community-based buffer zones. AP aims to gradually expand the active management of protected areas and to initiate nature conservation activities in Eastern CAR over the next 25 years.

The tables below highlight the changes in biodiversity resulting from project activities during the last monitoring period.

Change in Biodiversity	Landscape Connectivity
Monitored Change	Connectivity is a key parameter for the desired long-term biodiversity impacts of the project. The CCA falls between pristine moist forest and open savanna woodlands, making the area one of the most diverse in the CAR and providing important shelter and transit zones for fauna. The CCA's mosaic of ecosystems at such a latitude on the African continent makes this area incredibly rich and biodiverse. The CCA is an important area for endangered wildlife and is a vast ecosystem with complex interactions. It is the only managed and protected environment in the remote eastern part of CAR. The enormous size of the continuous wilderness it encompasses, along with its natural vegetation over a climate gradient from tropical humid rainforests to arid Sahelian savannas, allows large and mobile wildlife populations to accumulate and maintain high genetic and phenotypic diversity. The establishment of the CCA and its active management since 2016 has contributed significantly to landscape connectivity in the region. During the last monitoring period, AP also increased the area under its management from about 20,000 km² to about 24,300 km². The project activities have also successfully kept the CCA cattle-free during this period, further ensuring healthy ecosystems and connectivity throughout the region.
Justification of Change	The change has occurred through improved infrastructure and law enforcement activities in the project area, as well as the extension of the CCA from an initial core zone of about 5,000 km² (2016) to about 20,000 km² (2020). This will be further expanded to 24,300 km² in the following years. Project-employed armed rangers and non-armed sensitisation officers have successfully managed the CCA. These project employees also help manage leakage and livestock incursions from outside the project area.

Biodiversity Element	Fauna (threatened and endangered species)
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Monitored Change	The CCA hosts threatened species such as African savanna elephants, African wild dogs, eastern chimpanzees and lowland bongo antelopes. Initial monitoring of the biodiversity in the CCA during this period has documented 90 large mammal species (> 100 g) excluding species-rich groups like smaller bats, rodents and shrews. • 25 species of carnivores including top predators such as the endangered African wild dog and highly vulnerable Northern lion • Nine different species of mongoose • 14 primate species including eastern chimpanzees • 24 even-toed ungulates including the eastern giant eland (Lord Derby), Bongo antelope, Lelwel hartebeest and eight different species of duikers are present • Four to five ant-eating mammals, including most likely all four species of African pangolin To date, 454 bird species have been identified through monitoring activities conducted by trained staff (of which 50% were not yet documented for this part of the CAR). Evidence-based predictions indicate the presence of 600 bird species in Eastern CAR and 115-215, of which 100 different fish species have been confirmed so far within the CCA.
Justification of Change	The improved infrastructure, law enforcement activities and optimal management of the CCA have created a safe place for wildlife. Armed rangers and non-armed sensitisation officers patrol the entire CCA. The armed rangers have been successful in reducing illegal poaching while the sensitisation officers have been working with local communities and other stakeholders such as the transhumant pastoralists to build a strong constituency for conservation in the region and educate stakeholders on the benefits of sustainable natural resource use. Improved law enforcement techniques, daily aerial surveillance and the other project activities conducted by project staff, has resulted in all threats being kept out of the entirety of the CCA during this monitoring period.

5.1.2 Mitigation Actions (B2.3)

Project activities have been designed to mitigate any potential negative impacts on biodiversity in the CCA and to maintain the HCV attributes. Project activities are focused on protecting and improving biodiversity, including the HCVs. Mitigation measures like the training of rangers, the establishment of buffer zones with sustainable practices and improvement in the area's management, will reduce any possible negative impacts.

The negative effects from poaching and natural resources exploitation have been kept out of the CCA, resulting in better conditions for biodiversity in terms of refuge and the provision of ecosystem services such as food and shelter. In addition, management activities and sensitisation regarding the transhumant pastoralism practice have reduced the impact on ecosystems and fauna, which has helped protect vulnerable and endangered species in the CCA. Similarly, the Chinko and Mbari Rivers (another HCV

identified in the project documentation) have been protected through the project's law enforcement activities. This ensures that the high value and pristine quality of these aquatic ecosystems are preserved.

The following activities are aligned with the main strategic goals outlined in the PDD:

- a reduction in poaching;
- effective fire management;
- the effective management of transhumant pastoralism in the CCA; and
- sustainable natural resource management.

The project employs several armed rangers and non-armed sensitisation officers who secure the CCA and sensitise hunters, fishermen, miners, loggers and local communities, authorities and other stakeholders to promote the sustainable use of natural resources and mitigate negative impacts on biodiversity. The following table details the main mitigation actions that have been implemented by the project.

Table 13: Primary mitigation actions

Strategic Lines	Main Activities Implemented
Reduction in poaching	• The core protected area has been expanded from an initial core zone of about 5,000 km² (2016) to about 20,000 km² (2020). It will be further expanded to 24,300 km² in the coming years. • The project has recruited, trained and equipped 25 armed rangers, 45 echo-monitors, 45 (increased to 60 in 2020) echo-transhumant officers and 10 control room operators to secure the CCA.
Effective fire management	• The project has developed and implemented a comprehensive fire management plan.
Transhumance sensitisation	• The project has recruited, trained and equipped 45 (increased to 60 in 2020) echo-transhumant officers that have been engaged in sensitisation activities with transhuman pastoralists. • Approximately 19,000 km² have been kept cattle-free during this monitoring period. • The project is finalising a comprehensive land-use plan that will establish a grazing corridor for the pastoralists to utilise in the long term.
Sustainable natural resource management	• The project has recruited, trained and equipped 45 echo-monitors (ECHO) that have been engaged in sensitisation activities with local communities living on the periphery of the project area. • The process to initiate buffer areas has been established for sustainable fishing, hunting and the use of non-timber products.

5.1.3 Net Positive Biodiversity Impacts (B2.2, GL1.4)

Although the region in which the project is located has low human influence, the communities living on the periphery of the CCA can still impact its ecosystems and biodiversity. Without the project, the impacts of

transhumant pastoralism, unsustainable hunting practices and natural resource use, and intensive agriculture would have undoubtedly continued.

The project activities have resulted in a net positive impact on biodiversity compared with the without-project land-use scenario. The negative impacts of poaching and unsustainable resource use have been kept out of the project area. This provides better conditions for biodiversity in terms of refuge and the provision of ecosystem services such as food and shelter. In addition, the management and sensitisation activities have reduced negative impacts on the natural ecosystems and fauna, which has protected vulnerable and endangered species. Similarly, the project activities focused on the transhumant pastoralists have kept the CCA cattle-free during the last monitoring period.

According to Sonwa et al.⁹⁰, at the local level in Central Africa, forest communities suffer the effects of climate change in the absence of well-planned policy and institutional frameworks, and communities appear unprepared to cope with climate change. Climate change is, therefore, likely to exacerbate development challenges in CAR, impacting agricultural production and food security significantly due to the changes in precipitation and temperature, and will weaken the ability of the environment to provide vital resources and ecosystem services. Similarly, many pastoral communities including transnational migrants are likely to be impacted negatively by climate change and may need to search for new seasonal grazing areas. In drought conditions in particular, pastoralists may come into conflict with settled agrarian communities.

The CCA is also home to megafauna that could be affected by the disrupted ecosystem dynamics and human encroachment that climate change will cause. The climate impacts in the region could shrink the physical extent of habitats that currently have protected status or shift the distribution of specific plant species on which endangered species depend to areas outside of protection.

By protecting the project area, the aim is to establish a self-regulating natural system that can adapt dynamically to changing conditions over time and maintain a high level of biodiversity and resilient ecosystem functions to support both wildlife and provide critical services to local communities. The large tropical wilderness has the potential to absorb and mitigate regional and global pollution and large-scale negative human-induced changes such as climate change, desertification due to overgrazing and the impoverishment of ecosystems, water scarcity because of altered water cycles and soil destruction, and rapidly spreading invasive species including diseases.

The structurally complex vegetation, with its diverse herbivore and predator community, is likely to stabilise the regional climate, mitigate extreme weather phenomena and provide moisture to air that passes over it.^{91,92} Functional ecosystems with rich biodiversity are likely to maintain healthy soils with high water storing capacities that can absorb and retain heavy rainfalls and provide surrounding land with moisture, ground and surface water during dry periods.

In conclusion, the net impact on biodiversity has been positive because of the protection of the ecosystems in the project area, as well as the conservation of vulnerable species that have their habitats in the park. Moreover, the management and sensitisation of transhumant pastoralism practice has and will continue to improve conditions in the park, with specific corridors for the movement of herds that reduce the impact on

⁹⁰ Sonwa, D., Scholte, P., Pokam, W. M., Carolyn, H., & Brown, P. (2014). *Climate change and adaptation in Central Africa*.

⁹¹ Schweiger, A., Svenning, J. Analogous losses of large animals and trees, socio-ecological consequences, and an integrative framework for rewilding based on megabiota restoration. <https://doi.org/10.1002/pan3.10066>

⁹² Cromsigt J., te Beest M, Kerley, G, et al. (2018). Trophic rewilding as a climate change mitigation strategy? <http://dx.doi.org/10.1098/rstb.2017.0440>

fauna from poaching and habitat degradation associated with the pastoralists and helping biodiversity adapt to the probable impacts of climate change.

5.1.4 High Conservation Values Protected (B2.4)

As described in the PDD, the HCVs in biodiversity are two: the Chinko Conservation Area and Chinko and Mbari rivers. During the current monitoring period, none of them have been negatively affected by the project. Conversely, the improved protection of the CCA as a result of project activities has preserved the biodiversity present in the ecotone of the savanna and rainforest areas.

The project activities have resulted in a net positive impact on biodiversity compared with the without-project land-use scenario. The negative impacts of poaching and unsustainable resource use that were present prior to the project implementation have been kept out of the project area. This provides better conditions for biodiversity in terms of refuge and the provision of ecosystem services such as food and shelter. In addition, the management and sensitisation activities have reduced negative impacts on the natural ecosystems and fauna, which has protected vulnerable and endangered species. Similarly, the project activities focused on the transhumant pastoralists have kept the CCA cattle-free during the last monitoring period.

In regard to the rivers as HCVs, echo-monitors sensitised fishermen, miners and local communities to promote the sustainable use of natural resources in line with the land-use plan operating in the far south at the periphery of the reserve. In 2019, local fishermen, hunters and cultivators were recruited to form a river-sensitisation team to sensitise fishermen and hunters in surrounding villages and along the main rivers in and around Chinko (see section 2.3.14 for more details).

5.1.5 Invasive Species (B2.5)

No invasive species are used for the project activities.

In addition, in terms of fauna, a new and tougher policy regarding the handling of domestic animals within the CCA will be implemented from 2021. This concerns mainly chickens for private use by employees in the main camp, goat and sheep for food provision during festivals, cattle for daily food provision for employees and cats in the storage rooms for rat control. Given the omnipresence of illegal livestock in the past, little attention was paid to domestic animals in the main camp of the CCA, but with more regulated access, the policy for internal domestic animals is now being adapted. The main objectives are to prevent any accidental spread of disease from domestic animals outside of the CCA in protected areas and to prevent the genetic contamination of wildlife with domesticated animals. When applied, the idea is to provide mandatory veterinary checks, vaccinations and quarantines and sterilisation (where necessary). The same strict veterinary rules will be applied for any potential reintroduction of lost fauna elements from outside of the CCA.

5.1.6 Impacts of Non-native Species (B2.6)

No invasive species are used within the project area.

5.1.7 GMO Exclusion (B2.7)

No genetically modified organisms are used to generate GHG ERs or removals.

5.1.8 Inputs Justification (B2.8)

No fertilisers, chemical pesticides, biological control agents and other inputs are used for the project.

5.2 Offsite Biodiversity Impacts

5.2.1 Negative Offsite Biodiversity Impacts (B3.1) and Mitigation Actions (B3.2)

No negative impacts on biodiversity have been observed outside of the project area. All management activities have included local communities and transhumant pastoralists in order to control hunting activities and promote the sustainable use of natural resources.

The echo-transhumant officers and the echo-monitors are trained and equipped to effectively engage with transhumant pastoralists and local communities. They have direct interactions focusing on sensitisation and education around the sustainable use of natural resources and the benefits of protected area management. This ensures that no negative impacts on biodiversity occur outside the project area.

5.2.2 Net Offsite Biodiversity Benefits (B3.3)

No explicit evaluation of biodiversity outside of the project area is available. However, project activities have likely had positive impacts on biodiversity inside and outside the project area and the net effect of the project in biodiversity is positive. Thanks to the project activities, vulnerable and endangered species are positively impacted, as their habitats are better protected and the occurrence of poaching and illegal hunting has been dramatically reduced, this is reflected by the increase on the number of individuals identified per species (see 5.3.1). Furthermore, the management of transhumant pastoralism in the area will reduce negative impacts on the natural ecosystems in the area that support more than 90 mammal species (> 100 g), including key species such as chimpanzees, elephants, wild dogs, lions and hippopotamuses.

By introducing mitigation measures, such as sensitisation meetings with local communities who live in the periphery of CCA and transhumant pastoralists and creating sustainable opportunities aligned with the conservation approach of African Parks, the negative impacts on biodiversity both inside and outside the project area have been reduced.

The establishment of the CCA and its active management since 2016 is the first step in preserving the unique contiguous wilderness of the eastern CAR and is already showing results in reversing the impacts of overgrazing by transhumant pastoralists, uncontrolled poaching and unsustainable natural resource use. The project will increase the natural capital throughout the eastern CAR through the restoration of resilient and productive ecosystems by restoring species rich and productive woodland and grassland savannas, tropical forests and productive freshwater systems. This will result in higher wildlife densities, expansion of species distribution and reintroduction of lost species inside and outside the project area.

The Eastern CAR wilderness is one of the largest contiguous forest and savanna woodland of high ecological integrity in the world, covering more than 103,000 km². The long-term preservation of this unique intact vegetation is of high value for the regional climate, ecosystem functioning and biodiversity. The large tropical wilderness has the potential to absorb and mitigate regional and global pollution and large-scale negative human-induced changes such as climate change, desertification due to overgrazing and the impoverishment of ecosystems, water scarcity because of altered water cycles and soil destruction, and rapidly spreading invasive species including diseases.

The establishment of the CCA and its active management since 2016 has also contributed significantly to landscape connectivity in the region further contributing towards positive impacts on biodiversity outside of the project area.

5.3 Biodiversity Impact Monitoring

5.3.1 Biodiversity Monitoring Plan (B4.1, B4.2, GL1.4, GL3.4)

One of the main objectives of the project is the restoration and maintenance of ecosystems to preserve biodiversity and species numbers, and allow natural ecological processes to flourish.

The main objectives of the biodiversity monitoring plan as described in the PDD are as follows:

- monitor wildlife to optimise conservation activities and strategies;
- monitor vulnerable and endangered species to secure their permanence in the CCA; and
- continuously review and amend zoning in relation to key species and habitats for effective management and appropriate protection.

During this first monitoring period, the focus of the biodiversity monitoring plan has been on the monitoring of wildlife including the vulnerable and endangered species. This activity allows for the project to collect valuable baseline information for a region in which very little research has been conducted in the past. In coming years, the project will focus on the other main objectives listed above to ensure the project meets its main objectives of restoration and maintenance of the ecosystems to preserve biodiversity and species numbers. Due to the high volume and various characteristics of the species present in the project area, multiple sampling methods have been implemented. These include camera traps (see Figure 28, Figure 29, Figure 30 and Figure 31), track counts and sightings (Figure 25), aerial surveys and satellite collars (see Figure 26).

Using this information, the project developed a comprehensive map with large wildlife biomass hotspots, identified key species distribution and high-value habitats. The data from this monitoring has also been used to inform various publications.^{93,94} Certain species are analysed but not publicly shared due to security reasons, however, during the audit site visit the VVB will have access to the information to confirm its existence. The data collected during this monitoring period will also be used to formalise a comprehensive land-use plan and develop an adaptive management approach that allows for continuous review and amendment of zoning in relation to key species and habitats. This will ensure effective management and appropriate protection for biodiversity in the project area for the long term.

⁹³ Aebischer, T. et al. 2017 Chinko/Mbari drainage basin represents a conservation hotspot for Eastern Derby eland in Central Africa, African Journal of Ecology.

⁹⁴ Aebischer, T. et al. 2017 First quantitative survey delineates the distribution of chimpanzees in the Eastern Central African Republic, Biological Conservation.

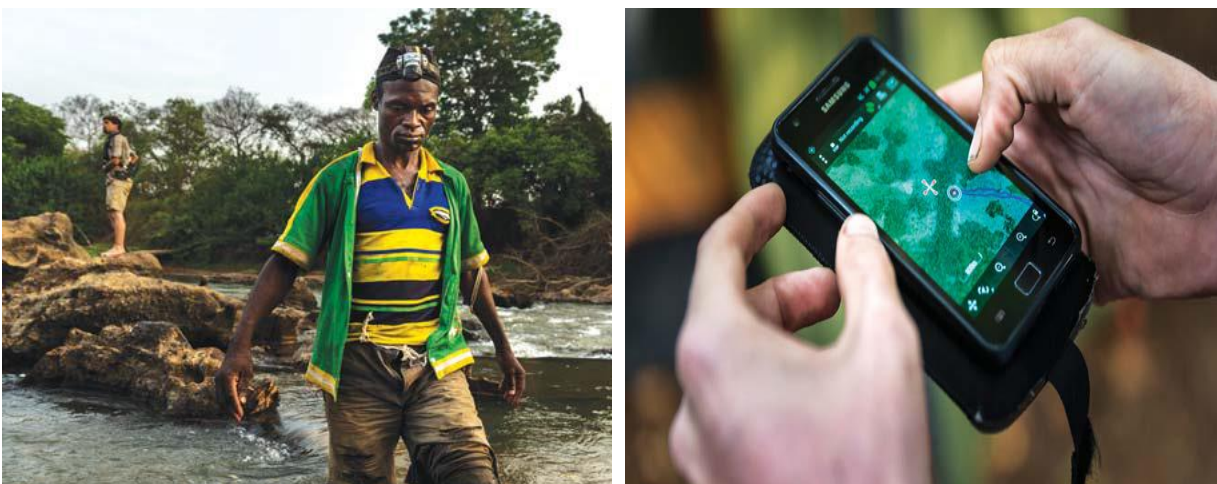


Figure 25: Research team carrying out line transects and analysing camera trap images to continue the long-term monitoring of Chinko's critical and diverse wildlife⁹⁵



Figure 26: Lord Derby eland collared process carried out in 2017⁹⁶

The remainder of this section will describe the results of the biodiversity impact monitoring for the first monitoring period in more detail.

Throughout the monitoring period, important research and monitoring activities were conducted. A ground survey in April 2017 found a 90% decrease in illegal human presence in the CCA since AP started active management of the area in 2016. This can largely be attributed to the success of law enforcement and sensitisation activities aimed at keeping cattle, armed poachers and herders out of the CCA. Improved law enforcement techniques, daily aerial surveillance and the other project activities conducted by project staff has resulted in all threats being kept out of the entirety of the CCA during this monitoring period.⁹⁷

⁹⁵ Photographies taken by Brent Stirton

⁹⁶ Left Photography taken by Dominique Prisloo and right one by Karen Lubbe

⁹⁷ African Parks 2017 Annual Report

In 2017, rangers conducted 423 patrols covering almost 80% of the CCA, which resulted in the seizure of 2.3 tonnes of illegal fish and 600 kg of bushmeat, the destruction of 200 illegal fishing and the confiscation of 22 firearms. A training camp was also built on-site and became operational. All rangers now complete refresher training annually as well as advanced tactical training (Figure 27).



Figure 27: Rangers taking the refresher training in the training camp⁹⁸

In 2018, Chinko's rangers conducted 1,157 patrol man-days and 570 aerial patrols – the latter consisting of 1,776 flight hours with the support of a new ULM Savannah S that is predominantly used for surveillance and anti-poaching missions.⁹⁹ In 2019, Chinko's rangers conducted 1,374 patrol man-days covering 11,500 km, over 8,000 km of which was covered by vehicle patrols. A total of 644 aerial patrols were also completed, amounting to 1,884 flight hours.¹⁰⁰

In 2020, AP further improved its strategy for law enforcement in the region, with a fit-for-purpose operations and infrastructure plan. Seventy percent of the reserve was patrolled via foot and vehicle, with over 30,000 km² under aerial surveillance and covered by the transhumance teams. These teams are made up entirely of local people and were largely responsible for keeping 23,000 km² cattle-free through non-confrontational and sensitisation techniques with herders. In 2020, ranger patrol man-days totalled 1,955, aerial patrols consisted of 2,200 flight hours, vehicle surveillance covered 6,312 km and boat patrols covered 2,224 km.¹⁰¹

A steady increase in wildlife has been observed throughout the monitoring period. An increase of key wildlife, including the eastern giant eland, bongo and the giant forest hog, has been reported compared with studies conducted in 2014.¹⁰² Additionally, increasing signs of lions (see Figure 28), hyaenas, wild

⁹⁸ Photography taken by Brent Stirton

⁹⁹ African Parks 2018 Annual Report

¹⁰⁰ African Parks 2019 Annual Report

¹⁰¹ African Parks 2020 Annual Report

¹⁰² Aebischer, T. et al. 2017 Chinko/Mbari drainage basin represents a conservation hotspot for Eastern Derby eland in Central Africa, African Journal of Ecology

dogs and even elephants with calves were documented, as well as a marked increase in the number of hippopotamus sightings indicated increased health of river systems. Much of the spatial distribution of these species is not publicly shared for security reasons.

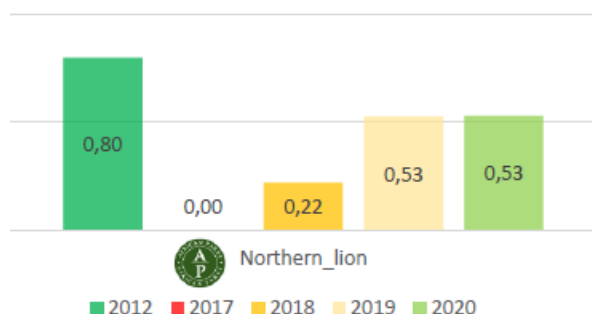


Figure 28: Extensive camera trap surveys (left)¹⁰³ revealed a growing population of Lions in Chinko since 2017 (right)¹⁰⁴

In 2017, nine eastern giant eland, four roan antelope and three Lewell's hartebeest were fitted with GPS satellite collars (see Figure 26). These individuals were monitored daily by the parks aerial surveillance team to collect essential data on their movements within the park, as well as on survivorship, to help inform the projects protection and management efforts for these understudied species. In 2018, the annual wildlife survey documented between 800 to 1,000 chimpanzees, 50 to 150 elephants, 2,788 buffalo, 437 eastern giant eland, and at least 76 African wild dogs and 12 lions.¹⁰⁵ It should be noted that it is likely that there are many more living in the project area.

The annual track count data from 2019 for the Western African buffalo shows an increase of more than 20% compared with 2017 data. Elephant tracks and direct observations suggest that several small groups now live in the CCA.¹⁰⁶ This confirms that the local elephant population is stabilising and moving securely around the CCA. Eastern giant elands have been spotted in large herds; spotted hyena, warhog, Colobus and Patas monkey, bushbuck, oribi and Grimm's duiker are now regularly seen; and leopard, lion and wild dog tracks have all been detected within seven kilometres of the project headquarters. Even the town of Rafai, 15 km from the project boundary, has documented the return of hippos, which have not been seen there since the 1990s.

¹⁰³ Camera trap survey by Thierry Aebischer

¹⁰⁴ Track events per 100 km, more details available at *Comptage des animaux - Aire de Conservation de Chinko - 2020 - Aebischer Thierry* in the supporting documentation. Note the massive population collapse between 2012 and 2017 after 5 years of uncontrolled grazing by transhumant pastoralists in the CCA and the population recovery of apex predators after active management of African Parks

¹⁰⁵ African Parks 2018 Annual Report

¹⁰⁶ African Parks 2019 Annual Report

The first-ever river survey in Eastern CAR was also conducted in 2019 with preliminary findings confirming the high value and pristine nature of the aquatic ecosystems. More than 70 different fish species including Goliath tigerfish have been confirmed, but possibly more than double are expected to be found in the Chinko River.¹⁰⁷ Camera trap data from 2019 further confirmed that key wildlife species are on the rise. While almost eradicated due to years of poaching by pastoralists, the local northern lion population has increased from just a few individuals in 2017 to at least 30 at that date.

In 2020, chimpanzees were documented via camera traps in the west of the reserve for the first time, and their population in the CCA is now estimated to be at least 1,200 (see Figure 29). New, independent groups of African wild dogs were found in the north and south, increasing the number of known packs from eight to 13, solidifying the CCA as a stronghold for this critically endangered species (see Figure 30).



Figure 29: Chimpanzee in camera trap



Figure 30: Chinko is one of the last strongholds for critically endangered African wild dogs in West and Central Africa¹⁰⁸

Additional camera-trap photos and video confirmed an array of species such as giant pangolins, common hippopotamus, western African buffalo, eastern giant eland, bongo antelope, defassa waterbuck, roan antelope and Lelwel hartebeest. At least four lion prides were confirmed within an 800 km² area. Elephants were also observed more frequently in 2020, via track count and aerial surveillance, with an estimated population of at least 80, substantially more than initially thought after decades of poaching before the active management of the area began in 2016.¹⁰⁹

Finally, Table 14 below presents the number of the focal fauna species subject to annual baseline monitoring as explained in section 5.4.1 of the PDD. The numbers are derived from trace counts by the project team during this monitoring period. It should be noted that the numbers derived here should be considered as very conservative minimum numbers. It should also be noted that large areas of the CCA, especially the south-central part, have no roads and, therefore, could not be included in the track count analysis. However, data from aerial surveillance flights suggests that this region is at least as rich in wildlife

¹⁰⁷ Ibid

¹⁰⁸ Camera trap survey by Thierry Aebischer

¹⁰⁹ African Parks 2020 Annual Report

and that, for some species such as buffaloes and leopards, the density of local populations is likely much higher than in the study area accessible by road.

Table 14: Population of focal species in the CCA¹¹⁰

Species	Population in year				Notes
	2017	2018	2019	2020	
Eastern giant eland (<i>Tragelaphus derbianus gigas</i>)	532	437	575	862	The population has increased gradually, as it is no longer being targeted by trophy hunters or poachers in the reserve. The population may be less stressed and, therefore, travel shorter distances resulting in a decrease in the number of traces in the years 2018-2019 and a strong increase in numbers in 2020. This change comes after a likely significant growth of the population in the last four years.
West African buffalo (<i>Syncerus caffer</i>)	2,038	2,788	3,469	3,388	The population is probably underestimated given that aerial surveys and ground patrols in the south-central part indicate that the West African buffalo population density is higher in the forest dominated and roadless part of the CCA than in the accessible study area.
Roan antelope (<i>Hippotragus equinus</i>)	796	838	889	1,106	The best habitats were not studied in 2019 because the road could not be opened.
Lowland Bongo antelope (<i>Tragelaphus eurycerus</i>)	945	1,031	1,232	1,654	The study of counts on roads most likely leads to very conservative population estimates, since Bongo antelopes are associated with dense closed-canopy forest. Most roads in the CCA follow headwater drainage and avoid the best forest habitats.
Lelwel Hartebeest (<i>Alcelaphus buselaphus ssp. lelwel</i>)	67	112	122	128	The best habitats were not studied in 2019 because the road could not be opened.
Waterbuck (<i>Kobus ellipsiprymnus</i>)	742	1,238	1,188	1,580	The best habitats were not studied in 2019 because the road could not be opened.
Northern lion (<i>Panthera leo</i>)	7 to 86	15 to 243	29 to 382	31 to 411	The actual value of the 2017 trace count survey was zero, but our call survey estimated a density

¹¹⁰ Data collected by African Parks team during the monitoring period. Refer to Supporting information: [5. Biodiversity/Chinko focal species estimated densities and actual numbers 2012-2020] for more details.

Species	Population in year				Notes
	2017	2018	2019	2020	
leo)					of 0.37 for 2017.
Spotted hyena (<i>Crocuta</i> <i>Crocuta</i>)	274 to 872	439 to 1,167	369 to 1,185	304 to 970	The spotted hyena is the only apex predator in CCA that shows a population decline between 2017 and 2020 when it comes to the annual count survey. Direct observations and camera trap data do not confirm such a decrease in population, and it is more likely that spotted hyenas have changed their behaviour, possibly due to the lack of livestock and decreased search distances for food along the roads between the different shepherd camps. This still needs to be confirmed. A playback survey in 2021 could help infer actual population size and compare relative abundance with data from 2017.
Leopard (<i>Panthera</i> <i>pardus</i>)	164 to 632	245 to 897	245 to 897	341 to 1,207	Camera trap surveys indicate that the leopard population in forest-dominated areas without roads is higher than in savanna-dominated areas covered by the road count survey. Therefore, the stated size of the leopard population is a very conservative minimum number.
African wild dog (<i>Lycaon</i> <i>pictus</i>)	73 to 269	93 to 344	111 to 412	119 to 442	By 2020, at least nine (900 km ² assumed home range) or 12 (540 km ² assumed home range) independent packs have been confirmed in the CCA, and it is highly likely that many more are still present, making this the largest population of well-protected wild dog in Central and West Africa with good prospects.
Eastern chimpanzee (<i>Pan</i> <i>troglydites</i> <i>schweinfurthii</i>)	1,200	1,200	1,200	1,300	Population census based on the number of nests in 2015 and 2018. There is no sign of a decrease in the chimpanzee population within the CCA but strong indications that the population is in very good health. In 2019, a new breeding population west of the Chinko River and approximately 90 km west of the known chimpanzee distribution within CCA. This new population will probably be greater than 100 individuals.
African forest elephant (<i>Loxodonta</i> <i>cyclotis</i>)	> 50	> 60	> 60	55 to 80	These are cautious minimum figures within the CCA. An additional 15-20 elephants could be confirmed along the periphery of the CCA, which could temporarily leave the CCA.



Figure 31: Camera trap photos of key species in the CCA during the last monitoring period

5.3.2 Biodiversity Monitoring Plan Dissemination (B4.3)

For the employees, physical copies of the documents (PDD and MR) were made available at the parks' offices prior to the audit site visit, all the employees were told about the location of such copies.

For local communities one way to share summaries of the results is that the documentation is translated into French and distributed (physically and by sharing the files using USBs in direct meetings) amongst their representatives and local government structures. A second strategy that is used due to the high levels of illiteracy amongst local community members but also for the transhumant pastoralists is the dissemination of the project information through local staff such as community liaisons and sensitisation team (presentation materials are used wherever possible during workshops). These employees have experience and training in engaging with local communities around the project area, as well as the transhumant pastoralists that enter the CAR from neighbouring countries. This ensures that, even with the high levels of illiteracy in the region, monitoring information is publicly available to all local communities living on the periphery of the park.

For other stakeholders with more technical background, such as governmental institutions and private and philanthropic financial donors, African Parks is providing them access to project documentation and delivering frequent reports of the project activities either by sharing the files using USBs (in direct meetings) or by mail.

In addition, as stated in the PDD, the relevant documentation about the results of the Monitoring, Reporting, and Verification (MRV) process of this project will be published in the VERRA platform every monitoring

period. AP annual reports, which are publicly available on their website, also include summaries of the project results.¹¹¹ AP has also been using its social media to publish relevant information about the project.

5.4 Optional Criterion: Exceptional Biodiversity Benefits

5.4.1 Trigger Species Population Trends (GL3.3)

As stated in the PDD, the project achieves the Gold Level for exceptional biodiversity benefits due to the presence of at least seven critically endangered species (four fauna and three flora species), 10 endangered (eight fauna and two flora species) and 21 vulnerable species, according to the IUCN (see Appendix 2: Endangered Species in the CCA for more details). Below is a description of the population trends for the trigger species.

Trigger Species	Eastern chimpanzee (<i>Pan troglodytes schweinfurthii</i>)
With-project Scenario	The project has undertaken numerous law enforcement and sensitisation actions in relation to transhumant pastoralism to reduce its impact on natural habitats and prevent poaching. The Chinko/Mbari area has some of the largest habitats and populations of chimpanzees. The active management of the CCA with echo-monitors and armed rangers patrolling at the ground leads to less poaching of Eastern chimpanzee in the protected area (it can be assumed to be close to zero) as well as in its adjacent border areas. Since poachers can no longer establish big camps at the periphery of the CCA and will be prosecuted if gunshots are heard, they have become less efficient at poaching chimpanzees at the periphery of the CCA. The transhumant pastoralists cut down big trees to harvest honey and burn wide paths through pristine forest to give their livestock access to water or to quickly pass through dense forests. This habitat destruction by the Sahelian pastoralists has likely had significant negative impacts on eastern chimpanzees in the forest-savanna ecotone, as they depend heavily on pristine forests large trees for food and shelter. The exclusion of herders from key chimpanzee habitats directly contributes to the protection of the species. The intensive and ongoing sensitisation of the local population about the negative effects of keeping chimpanzees as pets (transmission of diseases, accidents with aggressive animals, destruction of the wild chimpanzee population) is likely to reduce the local demand of chimpanzee orphans and decrease their value to poachers. During the current monitoring period, the population increased from 1,200 to 1,300. The population census is based on the number of nests between 2015 and 2018. There is no sign of a

¹¹¹ <https://www.africanparks.org/about-us/financials-and-annual-reports>

	decrease in the chimpanzee population within the CCA; there are some clear indications that the population is in very good health. In 2019, a new breeding population was found west of the Chinko River, approximately 90 km west of the previously known chimpanzee distribution within the CCA. This new population is likely larger than 100 individuals.
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Trigger Species	African wild dog (<i>Lycaon pictus</i>)
With-project Scenario	Project activities contribute to the conservation of the species through the protection of their natural habitats, an improvement in connectivity between the area and its surroundings, and a reduction in human conflicts. The Eastern CAR might be the only place in the world where a genetically independent population of African wild dog could be maintained over the long term. This gives the region a unique chance to be a global stronghold for this endangered species and might serve as a source population for reintroductions to areas in Western and Central Africa that have lost their native African wild dog populations or will lose them in the near future. The active management of the CCA, through echo-monitors and armed rangers patrolling on the ground, has ensured that populations are protected. During the current monitoring period, the population has increased from at least 73 to at least 120. By 2020, between nine (900 km² assumed home range) and 12 (540 km² assumed home range), independent packs have been confirmed in the CCA. It is highly likely that many more have yet to be identified, making this the largest population of well-protected wild dog in Central and West Africa with good prospects.

Trigger Species	African forest elephant (<i>Loxodonta cyclotis</i>)
With-project Scenario	Project activities contribute to the conservation of the species by protecting their natural habitats and reducing the potential for human conflicts. The active management of the CCA, through echo-monitors and armed rangers patrolling on the ground, has ensured that populations are protected. Landscape connectivity is also important as part of the with-project scenario for this species. During the current monitoring period, the population has increased from at least 50 to at least 55. These are cautious minimum figures within the CCA. An additional 15-20 elephants could be confirmed along the periphery of the CCA and are likely to reside within it.

6 ADDITIONAL PROJECT IMPLEMENTATION INFORMATION

There is no additional information related to project implementation.

7 ADDITIONAL PROJECT IMPACT INFORMATION

There is no additional information related to the project's impact.

APPENDICES

Appendix 1: Monitoring Report Requirements

Table 15, below, presents the different requirements of the methodology and the section where they can be found if applicable.

Table 15: Monitoring report requirements table

MR #	Category	Requirement	Section
MR 1	Spatial Project Boundaries	A digital (GIS-based) map of the project area with at least the minimum requirements for delineation of the geographic boundaries	2.1.7
MR 2	Temporal Project Boundaries	The project start date	2.1.5
MR 3	Temporal Project Boundaries	The project crediting period start date, end date and length	2.1.6
MR 4	Grouped Projects	A list and descriptions of all instances in the group	2.1.7
MR 5	Grouped Projects	A map of the locations or boundaries of all instances in the group indicating that all instances are in the same region	2.1.7
MR 6	PAAs	A digital (GIS-based) map of the project accounting areas with at least the above minimum requirements for delineation of the geographic boundaries	2.1.7
MR 7	Determining t_{PAI}	For each project activity instance in the group, its project activity instance start date	2.1.7
MR 8	Determining t_{PAI}	For each project accounting area, the value of t_{PAI}	3.1.2
MR 9	Determining x_{PAI}	A table of covariate values as of the project activity instance start dates and a description of how the values were determined, including any interpolation or extrapolation methods used	N/A
MR 10	Baseline Emissions	Calculations of current baseline emissions $E_{B\Delta}^{[m]}$ as of the current monitoring period	3.2.1
MR 11	Baseline Emissions	Calculations of baseline emissions $E_{B\Delta}^{[m-1]}$ from prior	3.2.1

		monitoring periods	
MR 12	Baseline Emissions	Calculations of cumulative baseline emissions for each selected pool ($E_{BA}^{[m]}$ and $E_{B SOC}^{[m]}$) and undecayed carbon ($C_{B BGB}^{[m]}$, $C_{B DW}^{[m]}$, $C_{B SOC}^{[m]}$ and $C_{B WP}^{[m]}$), as of the current monitoring period	3.2.1
MR 13	Baseline Emissions from Biomass	Calculations of cumulative baseline emissions from biomass $E_{B BM}^{[m]}$ for the current monitoring period	3.2.1 – Calculating Baseline Emissions from Biomass
MR 14	Baseline Emissions from Biomass	Calculations of cumulative baseline emissions from biomass $E_{B BM}^{[m]}$ for all prior monitoring periods	3.2.1 – Calculating Baseline Emissions from Biomass
MR 15	Applying the Spatial Algorithm	The order of strata from the lowest carbon stocks to highest carbon stocks based on the average across all pools	3.2.1 – Calculating Baseline Emissions from Biomass
MR 16	Applying the Spatial Algorithm	Calculations for each step that are carried through from monitoring period to monitoring period	3.2.1 – Calculating Baseline Emissions from Biomass
MR 17	Applying the Spatial Algorithm	Calculations of cumulative baseline emissions from biomass $E_{B BM}^{[m]}$ for prior monitoring periods	3.2.1 – Calculating Baseline Emissions from Biomass
MR 18	Baseline Emissions from SOC for Types F-P1.a, F-P1.b, F-P2 and G-P2	An estimate of current baseline emissions from SOC $E_{BA SOC}^{[m]}$ as of the current monitoring period	N/A
MR 19	Baseline Emissions from SOC for Types F-P1.a, F-P1.b, F-P2 and G-P2	An estimate of cumulative baseline emissions from SOC $E_{BA SOC}^{[m]}$ for the current monitoring period	N/A

MR 20	Baseline Emissions from SOC for Types F-P1.a, F-P1.b, F-P2 and G-P2	Calculations of cumulative baseline emissions from SOC $E_{B\Delta SOC}^{[m]}$ for all prior monitoring periods	N/A
MR 21	Carbon Not Decayed in DW	An estimate of carbon stored in non-decayed DW $C_{B DW}^{[m]}$ for the current monitoring period	N/A
MR 22	Carbon Not Decayed in DW	An estimate of cumulative baseline emissions from DW $E_{B DW}^{[m]}$ for the current monitoring period	N/A
MR 23	Carbon Not Decayed in DW	An estimate of cumulative baseline emissions from AGMT $E_{B AGMT}^{[m]}$ for the current monitoring period	N/A
MR 24	Carbon Not Decayed in DW	Calculations of cumulative baseline emissions from DW $E_{B DW}^{[m]}$ for all prior monitoring periods	N/A
MR 25	Carbon Not Decayed in DW	Calculations of cumulative baseline emissions from AGMT $E_{B AGMT}^{[m]}$ for all prior monitoring periods	N/A
MR 26	Carbon Not Decayed in BGB	An estimate of carbon stored in non-decayed BGB $C_{B BGB}^{[m]}$ for the current monitoring period	3.2.1 – Calculating Carbon Not Decayed in BGB
MR 27	Carbon Not Decayed in BGB	An estimate of cumulative baseline emissions from BGB $E_{B BGB}^{[m]}$ for the current monitoring period	3.2.1 – Calculating Carbon Not Decayed in BGB
MR 28	Carbon Not Decayed in BGB	Calculations of cumulative baseline emissions from BGB $E_{B BGB}^{[m]}$ for all prior monitoring periods	3.2.1 – Calculating Carbon Not Decayed in BGB
MR 29	Carbon Not Decayed in SOC	An estimate of carbon stored in non-decayed SOC $C_{B SOC}^{[m]}$ for the current monitoring period	N/A

MR 30	Carbon Stored in Wood Products	Carbon stored in long-lived wood products $C_{BWP}^{[m]}$ after 100 years	N/A
MR 31	Carbon Stored in Wood Products	Calculations to determine $C_{BWP}^{[m]}$	N/A
MR 32	Emissions Events in Project Area	A map of the boundaries of any significant disturbance in the project accounting areas during the monitoring period	3.2.2 – Calculating Emissions from Changes in Project Stocks
MR 33	Emissions Events in Project Area	Evidence that plots were installed into these disturbed areas and were measured per section 9	3.2.2 – Calculating Emissions from Changes in Project Stocks
MR 34	Emissions from Burning from Project Activities	A table of events when woody or herbaceous biomass was burned during the monitoring period, showing the weight of woody or herbaceous biomass in tonnes and the date consumed	N/A
MR 35	Carbon Stored in Wood Products from Project Activities	Carbon stored in long-lived wood products $C_{p\Delta WP}^{[m]}$ after 100 years	N/A
MR 36	Carbon Stored in Wood Products from Project Activities	Scale reports or records of carbon in log production by wood products type $C_{p ty}^{[m]}$	N/A
MR 37	Carbon Stored in Wood Products from Project Activities	Calculations to determine $C_{p\Delta WP}^{[m]}$	N/A
MR 38	Livestock Grazed in the Project Area	A report or record of the number of livestock per species of livestock n_{LSi} being grazed within the project area n_{LSi}	3.2.2 – Calculating GHG Emissions from

			Livestock Grazing
MR 39	Livestock Grazed in the Project Area	Emissions released due to livestock grazing $E_{P \Delta LS}^{[m]}$	3.2.2 – Calculating GHG Emissions from Livestock Grazing
MR 40	Livestock Grazed in the Project Area	Calculations to determine $E_{P \Delta LS}^{[m]}$	3.2.2 – Calculating GHG Emissions from Livestock Grazing
MR 41	Synthetic Fertiliser in the Project Area	A report or record of the quantity of synthetic fertiliser applied in the project area	N/A
MR 42	Synthetic Fertiliser in the Project Area	Emissions released due to the use of synthetic fertiliser $E_{P \Delta SF}^{[m]}$	N/A
MR 43	Synthetic Fertiliser in the Project Area	Calculations to determine $E_{P \Delta SF}^{[m]}$	N/A
MR 44	Leakage Mitigation Strategies	A description of project activities that have been implemented since the project start date and the estimated effects of these activities on leakage mitigation	3.2.3 – Leakage Mitigation Strategies
MR 45	Commodity Production for Leakage Mitigation	A list of mitigation activities reduce demand for forgone goods and services	3.2.3 – Leakage Mitigation Strategies
MR 46	Commodity Production for Leakage Mitigation	Quantities for the reduction or replacement of goods and services if they are used in section 8.3.3.4	N/A

MR 47	Commodity Production for Leakage Mitigation	Methods for measuring the reduction or replacement of goods and services	N/A
MR 48	Estimating Emissions from Activity-Shifting Leakage	Calculated cumulative emissions from activity-shifting leakage for the current monitoring period $E_{L\text{ ASF}}^{[m]}$, $E_{L\text{ ASG}}^{[m]}$ and supporting calculations	N/A in the first monitoring period
MR 49	Estimating Emissions from Activity-Shifting Leakage	Calculated cumulative emissions from activity-shifting leakage for the prior monitoring periods $E_{L\text{ ASF}}^{[m]}$ and $E_{L\text{ ASG}}^{[m]}$ If an activity-shifting leakage area is not installed, then include results from the participatory rural appraisal and/or expert knowledge, with an analysis of the nearest suitable forest cover for activity shifting leakage.	N/A in the first monitoring period
MR 50	Change to the Activity-Shifting Leakage Area	A description and justification of the change to the activity-shifting leakage area	N/A
MR 51	Change to the Activity-Shifting Leakage Area	A map of the delineated boundaries	N/A
MR 52	Change to the Activity-Shifting Leakage Area	Maps of the landscape configuration, including: a) topography (elevation, slope, aspect); b) recent land use and land cover (either a thematic map created by the project proponent or publicly available map); c) access points; d) soil class maps (if available); e) locations of important markets; f) locations of important resources like waterways or roads; and g) land ownership/tenure boundaries.	N/A
MR 53	Change to the Activity-Shifting Leakage Area	A narrative describing the rationale for the selection of activity-shifting leakage area boundaries. If the activity-shifting leakage area is smaller than the project accounting area or cannot be defined, provide a justification for the size of the area.	N/A

MR 54	Change to the Activity-Shifting Leakage Area	Results of a spatial analysis to demonstrate the activity-shifting leakage area is entirely forested as of the project start date	N/A
MR 55	Change to the Activity-Shifting Leakage Area	Results of a spatial analysis to demonstrate the activity-shifting leakage area is no larger than the project accounting area	N/A
MR 56	Estimating $p_{L\ DEG}^{[m]}$	The estimated value $p_{L\ DEG}^{[m]}$ for the current monitoring period and supporting calculations	3.2.3 – Estimating Emissions from Activity-Shifting Leakage
MR 57	Estimating $p_{L\ DEG}^{[m]}$	The calculated value $p_{L\ DEG}^{[m=0]}$ calculated for the first monitoring period	3.2.3 – Estimating Emissions from Activity-Shifting Leakage
MR 58	Estimating $p_{L\ CON\ G}^{[m]}$	The estimated value $p_{L\ CON\ G}^{[m]}$ for the current monitoring period and supporting calculations	N/A
MR 59	Estimating $p_{L\ CON\ G}^{[m]}$	The calculated value $p_{L\ CON\ G}^{[m=0]}$ calculated for the first monitoring period	N/A
MR 60	Determining Emissions from Market Leakage	The selected approach to determining emissions from market leakage	N/A
MR 61	Determining Emissions from Market Leakage	Estimated cumulative emissions from market leakage for the current monitoring period $E_{L\ ME}^{[m]}$ and supporting calculations	N/A
MR 62	Confidence Deduction Determining Emissions from Market Leakage	Calculated cumulative emissions from market leakage for the prior monitoring periods $E_{L\ ME}^{[m]}$	N/A
MR 63	Ensuring No Leakage Within Project Proponent's Ownership	Provide location-by-location evidence that management plans and land-use designations of all areas under the project proponent's control within the country have not changed as a result of the project. For entities with a conservation mission, provide evidence of the	N/A

		organisation's policy not to change the land use of other owned and managed lands, and evidence of compliance with such a policy.	
MR 64	Ensuring Constancy of Baseline Operator Management	Provide evidence in the form of GIS imagery, PRA evidence, or the baseline operator's management plan that management plans or land-use designations have not changed in the baseline operator's other lands	N/A
MR 65	Quantification of GERS	Quantified GERS for the current monitoring period including references to calculations	3.2.4 – Quantification of Gross Emissions Reductions
MR 66	Quantification of GERS	Quantified GERS for the prior monitoring period	N/A in the first monitoring period.
MR 67	Quantification of GERS	A graph of GERS by monitoring period for all monitoring periods to date	3.2.4 – Quantification of Gross Emissions Reductions
MR 68	Confidence Deduction	The confidence deduction $E_U^{[m]}$ and estimated standard errors used to determine the confidence deduction	3.2.4 - Quantification of Gross Emissions Reductions
MR 69	Confidence Deduction	Reference to calculations used to determine the confidence deduction	3.2.4 - Quantification of Gross Emissions Reductions
MR 70	Quantification of NERs Using a Linear Model	The linear model used to generate GERS for the current monitoring period	N/A
MR 71	Quantification of NERs Using a Linear Model	A graph of GERS from the linear model by monitoring period for all monitoring periods to date that used a linear model	N/A
MR 72	Reversal Event	A description of the reversal including which pools contributed to the reversal and reasons for its occurrence	N/A

MR 73	Reversal Event as a Result of Baseline Reevaluation	A description of the reversal including a summary of new data obtained in the reference area	N/A
MR 74	Quantification of NERs for a PAA	Quantified NERs for the current monitoring period including references to calculations	3.2.4 - Quantifying Net Emissions Reductions for a PAA
MR 75	Quantification of NERs for a PAA	Quantified NERs for the prior monitoring period	N/A in the first monitoring period.
MR 76	Quantification of NERs for a PAA	A graph of NERs by monitoring period for all monitoring periods to date	3.2.4 - Quantifying Net Emissions Reductions for a PAA
MR 77	Buffer Account	Reference to the VCS requirements used to determine the buffer account allocation	3.2.4 - Determining Buffer Account Allocation
MR 78	Buffer Account	Reference to calculations used to determine the buffer account allocation	3.2.4 - Determining Buffer Account Allocation
MR 79	Quantification of NERs across PAAs	Quantified NERs for the current monitoring period including references to calculations	3.2.4 – Quantifying Net Emissions Reductions across PAAs
MR 80	Quantification of NERs across PAAs	Quantified NERs for the prior monitoring period	N/A in the first monitoring period

MR 81	Quantification of NERs across PAAs	A graph of NERs by monitoring period for all monitoring periods to date	3.2.4 – Quantifying Net Emissions Reductions across PAAs
MR 82	Vintages	Quantified NERs by vintage year for the current monitoring period including references to calculations	3.2.4 – Determining Vintages in a Monitoring Period
MR 83	Evaluating Project Performance	Comparison of NERs presented for verification relative to NERs from ex-ante estimates	3.2.4 – Evaluating Project Performance
MR 84	Evaluating Project Performance	Description of the cause and effect of deviations from ex-ante estimates	3.2.4 – Evaluating Project Performance
MR 85	Data and Parameters Monitored	List of parameters from Appendix H, their values and the time last measured	3.1.2
MR 86	Data and Parameters Monitored	Quality assurance and quality control measures employed for each	3.1.2
MR 87	Data and Parameters Monitored	Description of the accuracy of each	3.1.2
MR 88	Description of the Monitoring Plan	Documentation of training for field crews	3.1.3
MR 89	Description of the Monitoring Plan	If included in project activities, a description of procedures used to estimate the rate of biomass burning and charcoal production and demonstration that these estimates are conservative	N/A
MR 90	Description of the Monitoring Plan	Documentation of data quality assessment such as a check cruise and plots of the data such as diameter distributions by strata or plot	3.1.3

MR 91	Description of the Monitoring Plan	Maps of a stratification (if any) and references to plot allocation	3.1.3
MR 92	Description of the Monitoring Plan	List of plot GPS coordinates	3.1.3
MR 93	Description of the Monitoring Plan	Description of plot sizes and layout (such as the use of nests and their sizes) for each carbon pool	3.1.3
MR 94	Description of the Monitoring Plan	If applicable, a detailed description of the process used to develop allometric equations, to include: a) sample size; b) distribution (e.g. diameter) of the sample; c) the model-fitting procedure; and d) model selection.	N/A
MR 95	Description of the Monitoring Plan	The estimated carbon stock, standard error of the total for each stock, and the sample size for each stratum in the area selected	3.1.3
MR 96	Description of the Monitoring Plan	Log export monitoring records and Standard Operating Procedures in the project area, if there is commercial harvest in the project scenario	N/A
MR 97	Description of the Monitoring Plan	Deviations from the measurement methods set out in Appendix B or the monitoring plan, per current VCS requirement	N/A
MR 98	Description of the Monitoring Plan	The frequency of monitoring for each plot for all plots – all plots should be measured for the first verification. All leakage plots should be measured every verification, and all proxy and project accounting area plots at least every five years, or after a significant event that changes stocks.	3.1.3
MR 99	Sources of Allometry	A list of all selected allometric equations used to estimate biomass for trees and non-trees	Supporting information: Climate folder
MR 100	Sources of Allometry	For each selected allometric equation, a list of species to which it is being applied and the proportion of the total carbon stocks predicted by the equation	Supporting information: Climate folder

MR 101	Sources of Allometry	For each selected allometric equation, an indication of when it was first employed to estimate carbon stocks in the project area (monitoring period number and year of monitoring event)	Supporting information: Climate folder
MR 102	Sources of Allometry	For each selected allometric equation, an indication of whether it was validated per sections 9.3.3.1 or 9.3.3.2	Supporting information: Climate folder
MR 103	Sources of Allometry	Documentation of the source of each selected allometric equation and justification for their applicability to the project area considering climatic, edaphic, geographical and taxonomic similarities between the project location and the location in which the equation was derived	Supporting information: Climate folder
MR 104	Validating Previously Developed Allometry	A list of allometric equations validated by destructive sampling	N/A
MR 105	Validating Previously Developed Allometry	For each, the number of trees (or non-trees) destructively sampled and the location where the measurements were made relative to the project area	N/A
MR 106	Validating Previously Developed Allometry	A field protocol used to measure destructively sampled trees (or non-trees)	N/A
MR 107	Validating Previously Developed Allometry	Justification that the field protocol for the destructive measurement method conservatively estimates biomass	N/A
MR 108	Validating Previously Developed Allometry	For each allometric equation in the list, a figure showing all the descriptive measurements of biomass compared to predicted values from its selected allometric equation	N/A
MR 109	Validating Newly Developed Allometry	A list of allometric equations cross-validated	N/A
MR 110	Validating Newly Developed Allometry	For each, the number of trees (or non-trees) destructively sampled to build the equation and the location where the measurements were made relative to the project area	N/A

MR 111	Validating Newly Developed Allometry	A field protocol used to measure trees (or non-trees) when developing the equation	N/A
MR 112	Validating Newly Developed Allometry	Justification that the field protocol for the measurement method to build the equation conservatively estimates biomass	N/A
MR 113	Validating Newly Developed Allometry	For each allometric equation in the list, the value of $\bar{E}$	N/A

Appendix 2: Endangered Species in the CCA

Table 16: List of endangered species in the CCA

#	Species	Category	Approximate Population
1	Slender-snouted crocodile (<i>Mecistops cataphractus</i>)	Critically Endangered A2acde+3cde+4acde ver 3.1	> 100
2	Hooded vulture (<i>Necrosyrtes monachus</i>)	Critically Endangered A2acd+3cd+4acd ver 3.1	< 100
3	Rüppell's vulture (<i>Gyps rueppelli</i>)	Critically Endangered A2abcd+3bcd ver 3.1	< 10
4	African white-backed vulture (<i>Gyps africanus</i>)	Critically Endangered A2bcd+3bcd+4bcd ver 3.1	< 10
5	Mukulungu (<i>Autranella congolensis</i>)	Critically Endangered A1cd ver 2.3	Undetermined
6	<i>Rotala robysiana</i>	Critically Endangered B1ab(iii)+2ab(iii) ver 3.1	Undetermined
7	<i>Xyris exigua</i>	Critically Endangered B2ab(iii) ver 3.1	Undetermined
8	African forest elephant (<i>Loxodonta cyclotis</i>)	Critically Endangered A2a ver 3.1	> 80
9	Eastern chimpanzee (<i>Pan troglodytes schweinfurthii</i>)	Endangered A4bcde ver 3.1	> 1,200
10	Lelwel hartebeest (<i>Alcelaphus buselaphus ssp. lelwel</i>)	Endangered A2acd ver 3.1	> 130
11	Giant ground pangolin (<i>Smutsia gigantea</i>)	Endangered A2cd+4cd ver 3.1	> 1,000
12	White-bellied pangolin (<i>Phataginus tricuspis</i>)	Endangered A2c+4cd ver 3.1	> 5,000

13	Martial eagle (<i>Polemaetus bellicosus</i>)	Endangered A2acde+3cde+4acde ver 3.1	> 1,000
14	Bateleur (<i>Terathopius ecaudatus</i>)	Endangered A2acde+3cde+4acde ver 3.1	> 100
15	Secretarybird (<i>Sagittarius serpentarius</i>)	Endangered A2acde+3cde+4acde ver 3.1	> 200
16	<i>Millettia laurentii</i>	Endangered A1cd ver 2.3	> 500
17	<i>Nymphoides tenuissima</i>	Endangered B2ab(iii) ver 3.1	Undetermined
18	African wild dog (<i>Lycaon pictus</i>)	Endangered C2a(i) ver 3.1	> 120
19	Leopard (<i>Panthera pardus</i>)	Vulnerable A2cd ver 3.1	> 800
20	Northern lion (<i>Panthera leo leo</i>)	Vulnerable A2abcd ver 3.1	> 40
21	Long-tailed pangolin (<i>Phataginus tetradactyla</i>)	Vulnerable A2cd+4cd ver 3.1	Undetermined
22	African golden cat (<i>Caracal aurata</i>)	Vulnerable A2c+3c ver 3.1	> 500
23	Common hippopotamus (<i>Hippopotamus amphibius</i>)	Vulnerable A4acd ver 3.1	> 250
24	Ground pangolin (<i>Smutsia temminckii</i>)	Vulnerable A4cd ver 3.1	> 500
25	Eastern giant eland (<i>Tragelaphus derbianus gigas</i>)	Vulnerable C1 ver 3.1	> 800
26	Kob (<i>Kobus kob ssp. kob</i>)	Vulnerable A2acd ver 3.1	< 100
27	Northern ground hornbill (<i>Bucorvus abyssinicus</i>)	Vulnerable A2bcd+3bcd+4bcd ver 3.1	> 1,000
28	Beaudouin's snake eagle (<i>Circaetus beaudouini</i>)	Vulnerable A2bcd+3bcd+4bcd; C1+2a(ii) ver 3.1	> 100
29	Ebony (<i>Diospyros crassiflora</i>)	Vulnerable A4c ver 3.1	> 500
30	Pterygota macrocarpa	Vulnerable A1cd ver 2.3	> 5,000
31	African mahogany (<i>Khaya grandifoliola</i>)	Vulnerable	> 5,000

		A1cd ver 2.3	
32	<i>Afzelia bipindensis</i>	Vulnerable A1cd ver 2.3	> 5,000
33	<i>Afzelia africana</i>	Vulnerable A2cd ver 3.1	> 5,000
34	<i>Mitragyna stipulosa</i>	Vulnerable A1cd ver 2.3	> 5,000
35	African dwarf crocodile (<i>Osteolaemus tetraspis</i>)	Vulnerable A2cd ver 2.3	Undetermined
36	African softshell turtle (<i>Trionyx triunguis</i>)	Vulnerable A4bcd ver 3.1	Undetermined
37	<i>Rotala smithii</i>	Vulnerable D2 ver 3.1	Undetermined
38	<i>Inversodicraea cristata</i>	Vulnerable B2ab(iii) ver 3.1	Undetermined
39	Caracal (<i>Caracal caracal</i>)	Near Threatened ver 3.1	> 500
40	Congo clawless otter (<i>Aonyx congicus</i>)	Near Threatened ver 3.1	> 500
41	Lowland Bongo antelope (<i>Tragelaphus eurycerus</i>)	Near Threatened ver 3.1	> 2,000
42	Bay duiker (<i>Cephalophus dorsalis</i>)	Near Threatened ver 3.1	> 1,000
43	White-bellied duiker (<i>Cephalophus leucogaster</i>)	Near Threatened ver 3.1	> 500
44	Yellow-backed duiker (<i>Cephalophus silvicultor</i>)	Near Threatened ver 3.1	> 5,000
45	Defassa waterbuck (<i>Kobus ellipsiprymnus ssp. defassa</i>)	Near Threatened A2d ver 3.1	> 1,500
46	African skimmer (<i>Rynchops flavirostris</i>)	Near Threatened C1+2a(ii) ver 3.1	< 100
47	White-naped pigeon (<i>Columba albinucha</i>)	Near Threatened B1ab(i,ii,iii,v); C2a(i) ver 3.1	> 500
48	Denham's bustard (<i>Neotis denhami</i>)	Near Threatened A2bcd+3bcd+4bcd ver 3.1	> 250
49	Crowned eagle (<i>Stephanoaetus coronatus</i>)	Near Threatened A2cde+3cde+4cde ver 3.1	> 700
50	Pallid harrier (<i>Circus macrourus</i>)	Near Threatened A2cde+3cde+4cde ver 3.1	> 100

51	Patas monkey (<i>Erythrocebus patas</i>)	Near Threatened A2cd ver 3.1	> 5,000
52	<i>Pouteria altissima</i>	Near Threatened A2cd ver 3.1	> 500

Appendix 3: List of supporting data

Supporting folders

Folder	Name
01	Supports
02	Annexes
03	NPRT
04	GIS figures
05	Public summaries

Supports

Subfolder name
1. Summary - Census - Profil socio-économique du Mbomou.pdf - Profil socio-écq HKoto.pdf - Evidence women employed
2. General 2.2.1 Implementation Schedule - APN Annual Reports - APN Monthly Reports - Donors' reports 2016 – 2022 - Donors' submissions 2016 – 2022 - M&E templates - Pastoralism presentations - TANGO efforts - Sustainable grazing in the Eastern Central African Wilderness and its periphery 2.3 Stakeholder engagement - Reports and lists - agroforestrie et foresterie APN small.pdf - Pastoralism_APN-Chinko_Aire-de-Conservation-de-Chinko_Aebischer-Thierry.pdf - Stakeholder engagement summary.pdf 2.3.12 Grievances - APN Grievance Mechanism 1er PV Negociation Grille Salariale.pdf 2nd PV Négociation Grille Salariale.pdf - PV CONTENTIEUX GERES AVEC LE DRT ET LA DELEGATION.pdf - PV de la rencontre Delegués-Chefs des Departements-Consultant RH.pdf - PV Election delegués.pdf - PV signé Reunion de 08 Mai à Kocho.pdf 2.3.13 Workers Training 2016 Final Training Report

○ 2017 - AP LAW ENFORCEMENT SOPs V. 1.2017 ○ 2020 - APN Law Enforcement SOP Manual V1.1.1_2020 ○ 2020.01.12 - MeISys-Comprehensive Course Report-APN-CHINKO-CAR-JAN2020 ○ 2020.01.12 - MeISys-Ranger Competency Reports-APN-CHINKO-CAR-JAN2020 ○ 2022 - RAPPORT FINAL BFR CHINKO 2022 • 2.4.1 and 2.4.2. CVs of management team ○ 1. ECOFAC Cordin Armand Serge ○ 2. Head of Finance Christian Makaya ○ 3. Health Manager Dr Arsene ○ 4. HR & Admin Manager Henry Dunia ○ 5. Research Manager Thierry Aebischer ○ 6. SPM Alizath Minoti ○ Operations manager - Loren Lungren ○ Park manager - Olivier Blaise • 2.4.4 Financial Health ○ CashFlow_2017_2030.xlsx • 2.5.1 Recognition of property rights • Evidence-of-recruitment • APN Human Rights Statement of Principles.pdf • APN Law Enforcement SOP Manual.pdf • Location
3. Climate • ER calculations • MR 32_Disturbances 2016 – 2020 • MR 33_Burned areas • MR 38_Pastoralism • MR 88_Training • MR 90_Data analysis • MR 92_Carbon plots coordinates • MR 99-103_Allometry
5. Biodiversity • Chimpanzee_pictures_western_CCA • Chinko focal species estimated densities and actual numbers 2012-2020 - Densité estimée et nombre réel d'espèces focales de chinko 2012-2020.xlsx

Annexes

Annex #	Name
Annex 1	Chinko timeline
Annex 2	Community impacts
Annex 3	Community monitoring plan

GIS Figures

Figure #	Name
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01	Project Location
02	Carbon plots allocation
03	HCV in the project boundaries

Public summaries

Document name
MR_Summary_Chinko_REDD_CAR_EN
MR_Summary_Chinko_REDD_CAR_FR

Appendix 4: Public comments period

The monitoring report was listed on Verra webpage for its public comments period as required by the standard, however, no comments were received during the 30-days period, therefore, there was no need to modify the document to include details coming from the comments.