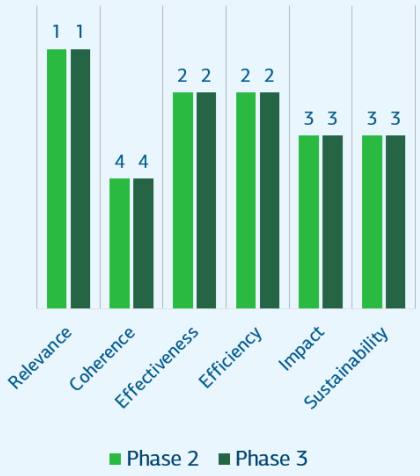
Ex-post evaluation

Sustainable Management of Natural Resources in the South-West Region, Cameroon

Title	Programme for the Sustainable Management of Natural Resources in the South-West Region of Cameroon (PSMNR II + III)
Sector and CRS code	41030 Biodiversity
BMZ number	2010 65 820 (Phase II) and 2013 65 345 (Phase III)
Client	Federal Ministry for Economic Cooperation and Development
Recipient and implementing agency	Republic of Cameroon, Ministry of Forests and Wildlife (MINFOF)
FC financing volume and instrument	EUR 10.0 million (Phase II), EUR 10.0 million (Phase III); grant
Project duration	2011-2017 **Reporting year** 2025 **Sample year** 2021

Overall rating

Successful



1: very successful – **6:** completely unsuccessful

Project objectives and implementation

The outcome-level objective was sustainable forest and wildlife management, with particular consideration given to the interests of local communities. At the overarching development policy level, the objective was to preserve globally significant and high-value forest ecosystems in south-western Cameroon while considering the interests of local communities. The project promoted various forest protection activities, infrastructure investments and village development measures to reconcile the interests of local communities with nature conservation.

Key findings

The project made a decisive contribution to the conservation of forests and wildlife in south-western Cameroon. The outbreak of the Anglophone crisis has destroyed some of the project's achievements. Nevertheless, the project is still rated as "successful" for the following reasons:

- The project was implemented in a conflict-sensitive and good-practice manner, which was able to reconcile the interests of the local population with those of nature conservation. At the heart of the project were the participatively negotiated nature conservation development agreements, which define the rights of use of the forests and the obligations of the local population (relevance).
- In return for their participation in the project, village development measures to improve living conditions were financed and incentives for behaviour conducive to nature conservation were provided in the form of a nature conservation bonus (effectiveness).
- Decision-making power lay with the regional nature conservation authority, which was advised by an international consultant on planning, implementation and monitoring. This contributed to efficient project implementation and strengthened local support (efficiency).
- Despite ongoing forest loss, the project has made a significant contribution to preventing further deforestation. However, it should be noted that hunting pressure remains high and wildlife populations have not stabilised (impact).

Conclusions

- The participatory formulation of nature conservation and development agreements has great potential to reconcile the interests of local communities with nature conservation interests.
- Monetary incentives and active involvement in nature conservation activities can contribute significantly to the effectiveness of nature conservation projects.
- Enforcing rules against poaching and deforestation is essential to counteract free riders.

Contents

Abbreviations

GDP	Gross domestic product
BMWS	Bayang Mbo Wildlife Sanctuary
BMZ	Federal Ministry for Economic Cooperation and Development
CDA	Conservation and Development Agreement
CEM	Coarsened Exact Matching
CFA	Central African Franc
DAC	Development Assistance Committee
EPE	Ex-post evaluation
EUR	Euro
EZ	Development cooperation
FESP	Forest and Environment Sector Programme
FMU	Forest Management Units
FC	Financial Cooperation
FC E	FC evaluation
GESP	Growth and Employment Strategy Paper 2010-2020
GIZ	German Society for International Cooperation
IGA	Implementation of income-generating activities
KNP	Korup National Park
MCNP	Mt. Cameroon National Park
MINEPAT	Ministry of Economic Planning and Land Management
MINFOF	Ministry of Forests and Fauna
NP	National Park
NGO	Non-governmental organisations
NTFP	Non-timber forest products
OECD	Organisation for Economic Co-operation and Development
PAMETT	Protected Areas Management Effectiveness Tracking Tool
PA	Project Appraisal
PCR	Project Completion Report
SMP	Simple Management Plans
SWR	South-West Region
TNP	Takamanda National Park
TOU	Technical Operation Units
TC	Technical Cooperation
VDF	Village Development Funds

Overview

General conditions and classification of the project

The two projects are follow-up phases of the Programme for the Sustainable Management of Natural Resources (PSMNR) in the South-West region of Cameroon. The programme combines various nature conservation activities under the leadership of the regional delegation of the Cameroonian Ministry of Forestry and Wildlife (MINFOF). The framework conditions were challenging both before the start of the projects and at the time of the evaluation. The challenges include strong pressure on the natural resources of the protected areas from poaching, land development and logging, especially by the rural population, which is dependent on these resources due to poverty. In addition, tensions between the Anglophone minority in South-West Cameroon and the government have escalated since October 2016 (Anglophone crisis). Peaceful teacher protests were violently dispersed and the conflicts intensified. Since the end of 2017, several areas have been under the control of armed separatist groups at times, which has affected the accessibility of many project areas, even at the time of the evaluation, and has meant that some activities had to be suspended.

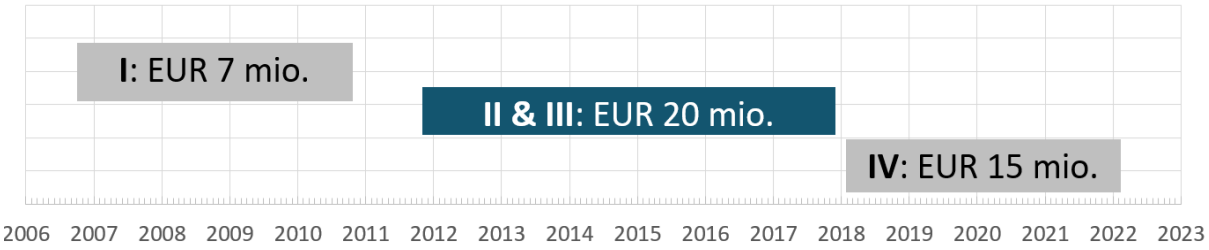


***Figure 1**: Financing phases of the programme.*
***Source**: Own illustration.*

Brief description

The PSMNR programme aimed to preserve the biodiversity of four nature reserves in South-West Cameroon and improve the living conditions of the affected population (Mt. Cameroun, Korup National Park, Takamanda National Park and Bayang-Mbo Wildlife Reserve). The funding priorities included sustainable forest management, support for the local population through infrastructure and agricultural support measures, and the development and implementation of conservation and development agreements (CDAs) with the local communities. In addition, collaborative management of the protected areas was sought and studies on the development of sustainable financing mechanisms were carried out. The project executing agency was the Cameroonian Ministry of Forestry and Wildlife, and the immediate target group was the local population.

Breakdown of total costs

	Phase 2 (plan)	Phase 2 (actual)	Phase 3 (plan)	Phase 3 (actual)
Investment costs (total) in million EUR	10.0	10	10	10.0
Own contribution in EUR million	0.0	0.0	0.0	0.0
External financing in EUR million	0.0	0.0	0.0	0.0
of which BMZ funds in EUR million	0.0	0.0	0.0	0.0

***Table 1**: Cost breakdown.*

Map of the project region

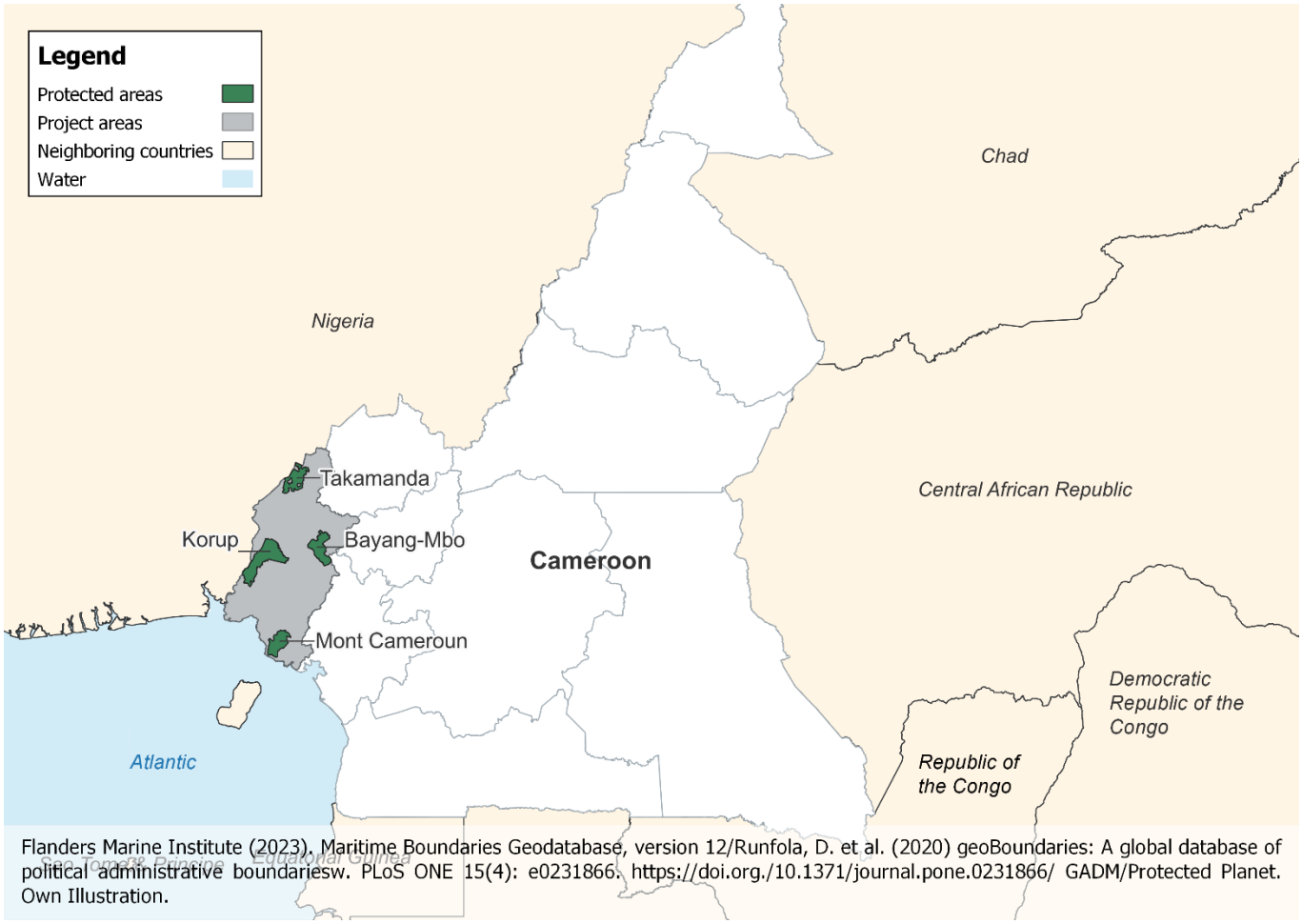


***Figure 2**: Map of the project region showing the protected areas receiving funding. The neighbouring villages are scattered around the respective protected areas and are not shown on this map.*
***Source**: Own illustration.*

Strengths and weaknesses of the project

The strengths include in particular:

- The project pursues an good-practice approach to integrated protected area management, which sensibly combines ecological, economic and social interests. It has contributed significantly to the effective management of the national parks and has brought the interests of local communities and ecological objectives into alignment.
- The project responded to the Anglophone crisis in a conflict-sensitive manner, which enabled positive effects to be achieved despite the difficult security situation. The project facilitated good cooperation with local communities and strengthened local capacities.
- The development of patrol strategies and the training of rangers in law enforcement significantly increased the anti-poaching measures' effectiveness. Sworn rangers were empowered to file criminal charges and accompany court proceedings, which led to several convictions against poachers. In addition, former poachers benefited from targeted income-generating measures that enabled them to find alternative livelihoods.
- Decentralised decision-making at regional level enabled close and effective cooperation with local communities. This governance system promoted local capacity development and contributed to the acceptance and effectiveness of protected area management.

The weaknesses include in particular:

- Hunting pressure on wildlife could not be sufficiently reduced, as despite increased patrol intensity and anti-poaching measures, pressure from exploitation remained high. The Anglophone crisis also led to the suspension of anti-poaching patrols and increased access to protected areas to external hunters, which significantly limited the protective effect.
- Limited demand for ecotourism due to the tense security situation restricted the possibilities for the protected areas 'sustainable financing.
- At the time of the evaluation, no long-term funding had been secured for the continuation of the programme. This makes weaknesses in financial sustainability evident. The long-term impact depends heavily on the development of sustainable financing mechanisms in the subsequent phases.
- Wildfire management in the project was inadequate, as the project's active fire management to maintain the savannahs also damaged smaller forest areas and hampered their regeneration. In addition, fires near eco-lodges posed a risk to infrastructure.

General conclusions/lessons learned

- Decision making at regional level rather than at the capital level enabled efficient and high-quality implementation of the project close to the target group.
- Integrated protected area management with the local population is a modern approach to nature conservation.
- Conservation development agreements can be a key component in increasing the participation and ownership of local communities to active nature conservation, given the focus on economic benefits rather than restrictions.
- Targeted measures involving poachers are crucial to reduce hunting pressure. Without alternative income sources, there is insufficient incentive for behavioural change.
- Protected area management based purely on incentives is not sufficient. It is also necessary to have the possibility of legal enforcement in the event of illegal activities.

Rating according to OECD DAC criteria

Relevance

1. Alignment with policies and priorities

The programme aimed to promote the sustainable management of forests and wildlife, taking into account the interests of local communities, which is in line with the BMZ's goals of poverty reduction and the promotion of sustainability. The South-West region of Cameroon is one of the eight most important biodiversity hotspots in Africa, with a large number of endemic species, including the Cross River gorilla, the Nigeria-Cameroon chimpanzee subspecies, the drill, the Preuss' red colobus and the Preuss's guenon. Some of these primates are threatened with extinction. At the same time, Cameroon's tropical forests have a high tree density and store large amounts of carbon. The protection of these forest areas is therefore a global public good and contributes to the 30x30 targets of the Kunming-Montreal Global Biodiversity Framework, which were only agreed in December 2022. The project's objectives were thus closely aligned with the priorities of MINFOF and the German Federal Ministry for Economic Cooperation and Development (BMZ).

The overall objective of the programme was to contribute to the conservation of highly valuable ecosystems in the South-West region of Cameroon while ensuring the sustainability of the livelihoods of the local communities. The project was in line with BMZ priorities, which aim to improve the living conditions of poorer sections of the population. In addition, the plans and their objectives also reflected the relevant quality characteristics of the BMZ, such as respect for human rights, poverty reduction and conflict sensitivity.

The PSMNR programme was part of *the* national *Forest and Environment Sector Programme* (FESP), which is embedded in the *Growth and Employment Strategy Paper 2010-2020* (GESP).[1] The PSMNR programme contributed to the achievement of FESP objectives in sub-programme 962, "*Management and valorisation of wildlife and protected areas*". The programme was thus clearly aligned with policies and priorities of the partner.

2. Alignment with the needs and capacities of stakeholders and beneficiaries

Before the project began, around 320,000 residents lived in 125 villages surrounding the four project participating national parks (NP). A highly participatory approach was used to ensure that the needs of the local population were considered in the nature conservation activities. Such approach was necessary since the challenges and needs in each of the four nature reserves were slightly different, even though water supply is a major problem for most villages: around *Mt. Cameroon National Park (MCNP)*, agriculture is the main source of income for 95% of residents. Compared to other national parks, the forest is less important as a direct source of income. Access to the park is provided by a ring road. Around *Takamanda NP (TNP)*, 60% of livelihoods are based on traditional agriculture, supplemented by the collection of non-timber forest products (NTFP) and hunting. The ethnic groups are diverse, including Boki, Anyang and Becheve. The infrastructure is often inadequate, and most villages are only accessible by footpaths. *Korup National Park (KNP)* has a large number of villages with an ethnic composition of eight groups. The population is mainly engaged in agriculture, but also in hunting and the cultivation of cocoa and palm oil. Economic trade mostly takes place between households, as there is no access to markets due to the poor infrastructure. This means that residents have to walk long distances to obtain special goods. Drinking water is obtained from natural sources, which can be scarce during the dry season and contaminated during the rainy season. Around the *Bayang Mbo Wildlife Sanctuary (BMWS)*, livelihoods are based on agriculture, hunting and the collection of NTFPs. Road access is poor; water supply and electricity are only available in a few villages. Youth unemployment is high and access to formal employment is limited. Hunting and traditional agriculture are therefore the main sources of income for the local population. Hunting in particular puts pressure on animal species, some of which are threatened with extinction. Agricultural land development also leads to deforestation in and around the national parks. Village development measures and the development of alternative sources of income should address the needs of local communities, in particular.

Aligning the project with the needs of the local population is fundamental to the protection of the national parks. However, other actors sometimes play a much greater role in deforestation than the local population, which requires different measures. Patrolling and law enforcement are crucial, as poachers also come from neighbouring Nigeria and the demand for timber there promotes illegal logging in Cameroon's national parks. Within the country, large companies are also trying, often successfully, to obtain concessions for plantations or mines in nature reserves. This means that it is not only necessary to address the interests

[1] Since 2020, the GESP has also been known as the Stratégie Nationale de développement 2020-2030 (SND 30). It covers the planning of the country's overall development, while the FESP reflects developments in the forestry sector.

of the local population, but also to strengthen capacities in protected area management and in resolving conflicts of interest. The project was very well suited to the complex problem situation thanks to its holistic approach (see below).

3. Appropriateness of design

The management of protected areas usually evokes negative associations among the local population, as they fear restrictions on use. The PSMNR programme is based on the understanding that the protection of natural resources begins outside the nature reserves and that participatory management is necessary to reconcile ecological, economic and social interests. This differs fundamentally from the authoritarian management of protected areas that was previously common in the region. The *integrated park management* approach is at the heart of the programme and is an appropriate response to the core problem of unsustainable use of natural resources.

Integrated park management involves the local population in the management of protected areas. In the PSMNR programme, concrete cooperation between the surrounding villages and park management is negotiated and formalised in a participatory manner in a Conservation and Development Agreement (CDA). The CDAs specify the rights of use granted to local communities and their obligations. For example, local communities are allowed to harvest non-timber forest products, but must participate in the preparation of simple management plans for the surrounding community forests, comply with these plans and thus refrain from illegal activities. The CDAs also specify how and for which activities individual communities are remunerated and how the entire village is rewarded.

The establishment of Village Development Funds (VDF) is at the heart of the incentive system. The CDAs set individual remuneration for participation in park management (e.g. for demarcating park boundaries) and define when a *conservation bonus* is paid into the VDF. The *Conservation Bonus* should be available in two ways. Firstly, an additional contribution of 10% of the individual remuneration paid should be paid into the VDF. Secondly, villages should receive special payments if they can demonstrate good cooperation with the project. The funds from the VDFs can then be used for village development measures. The specific measures are proposed by the local population and accepted or rejected based on criteria from the PSMNR programme. For example, the projects must not pose a threat to nature conservation and must be beneficial to the entire community. In this way, the project also follows the do-no-harm principle, as favouring certain decision-makers can cause conflicts within villages. In addition, the highly participatory approach should avoid problems encountered in the first phase of the programme (e.g. destruction of park infrastructure) that resulted from the previously repressive management approach to protected areas.

By taking community forests into account, the buffer zones of the national parks should also be integrated into nature conservation.[2] This included the formulation of management plans and agreements on the harvesting of trees and non-timber forest products. The combination of NTFP and various other income-generating measures (e.g. cassava processing, pig farming for former poachers) was intended to reduce pressure on the forest and hunting. Overall, the concept of the local community measures is very good, as it attempts to reconcile nature conservation objectives with the interests of local communities.

The project also took land use conflicts into account in its design. To this end, it supported Technical Operation Units (TOUs), which were intended to serve as an intersectoral platform for consultation, planning and negotiation of land use conflicts. Land use conflicts are complex challenges for protected areas. They occur frequently because the boundaries of protected areas are unclear both on the ground and on maps. Locally, residents claim rights to use land based on customary law and tradition. However, conflicts can also arise between ministries. Specifically, the Ministry of Economic Planning and Land Management (MINEPAT) has approved concessions for large palm oil plantations located in the buffer zones of the national park. In addition, mining concessions have been granted within national parks. The TOUs are intended to mediate land use conflicts as far as possible. Conceptually, however, it is clear that the TOUs have no decision-making power and are therefore possibly too weak institutionally to enforce nature conservation interests.

The measures mentioned above serve primarily to prevent the unsustainable use of flora and fauna. Investment measures in park management infrastructure and activities (e.g. ranger posts, SMART system, patrol strategies, eco-guard training) should, on the other hand, help to strengthen law enforcement in the fight against illegal activities.

In order to ensure the long-term operation of the NP, mechanisms for sustainable financing should be discussed, developed and implemented. At the time of the module proposal, MINFOF did not have sufficient funding to adequately increase staffing levels in and to finance training, equipment and long-term nature conservation operations. In particular, the conceptual approach of discussing the possibility of *payment for ecosystem services* is promising, even if the targeted revenues are not expected to be sufficient to ensure long-term operation. The concept also envisaged the involvement of non-governmental organisations (NGOs) in the management of the park (co-management). This can increase the capacity of the NPs and reduce the budget requirements for MINFOF, as additional sources of funding can be tapped. So far, long-term funding has not been secured. Thus, the

[2] Communal forests are forests owned by municipalities or towns and are comparable to corporate forests in German forestry law.

development of a financing strategy is a fundamental first step towards the long-term operation of the NPs, even though the project review clearly emphasised that financial sustainability cannot (yet) be assumed after the completion of phases II and III.

The project's governance system should contribute to efficient implementation and local capacity development. The MINFOF regional delegation acts as the programme sponsor. This delegation was supported by an implementation consultant who, in close coordination with the sponsor, was to accompany all activities from planning to implementation of the programme, including financial management. The decision-making power lay with the regional delegation, which aimed to strengthen local capacities and make decisions efficiently and in close coordination with the local population. The operationalisation of the project as an open programme allows for a high degree of flexibility, as the specific needs were to be discussed through a participatory process. In addition, nature conservation NGOs were mandated to take on parts of the protected area management, which was intended to relieve the burden on the implementing agency and mobilise additional financial resources.

With regard to the monitoring system, the project had drawn its own conclusions from the previous phase and made conceptual adjustments for phases II and III. In the first phase, it had already been established that the data collected was insufficient for quantifying the income effects. For the second phase (this evaluation), responsibility for data collection and analysis was transferred to the programme consultant. The transfer of responsibility was a logical decision that was intended to improve the quality of implementation.

Figure 2 summarises the impact logic of the project as reconstructed for this evaluation. The various impact levels interact in a meaningful way and the activities contribute plausibly to the achievement of the impact goal. The integrated protected area management approach is an exemplary approach to modern protected area management that can also be adopted by other nature conservation programmes.

4. Adaptability – response to change

As an open programme, the project was able to continually adapt its activities and utilise new findings during implementation or in the follow-up phase. For example, at the beginning of the second phase, a national monitoring officer was hired to further strengthen the programme's capacity. In the third phase, biodiversity monitoring strategies were developed for all four protected areas. Since 2014, PSMNR has revised its measures (e.g. income-generating activities) and focused more specifically on communities that are considered hotspots for poaching. This approach was piloted in two communities in the KNP, with additional conditions introduced to strengthen enforcement of the agreed rules. This *community-based wildlife monitoring* was expanded to all four protected areas in phase IV.

The project responded to the escalation of the Anglophone crisis in 2017 in a conflict-sensitive manner and made adjustments. Further details on the impact of the crisis are discussed in the other evaluation criteria. In terms of relevance, it is crucial that the project acted in a conflict-sensitive manner based on KfW guidelines. For example, it is also common practice in Cameroon for employees of nature conservation authorities to wear uniforms and, where necessary, carry weapons. Both uniforms and weapons were abolished in the South-West Region (SWR) by the implementing agency in order to contribute to de-escalation and protect eco-guards and their families from armed groups. Furthermore, funding for anti-poaching patrols was rightly no longer approved, as these activities could have been confused with operations by the military or armed groups and thus posed a risk to employees.

Theory of Change

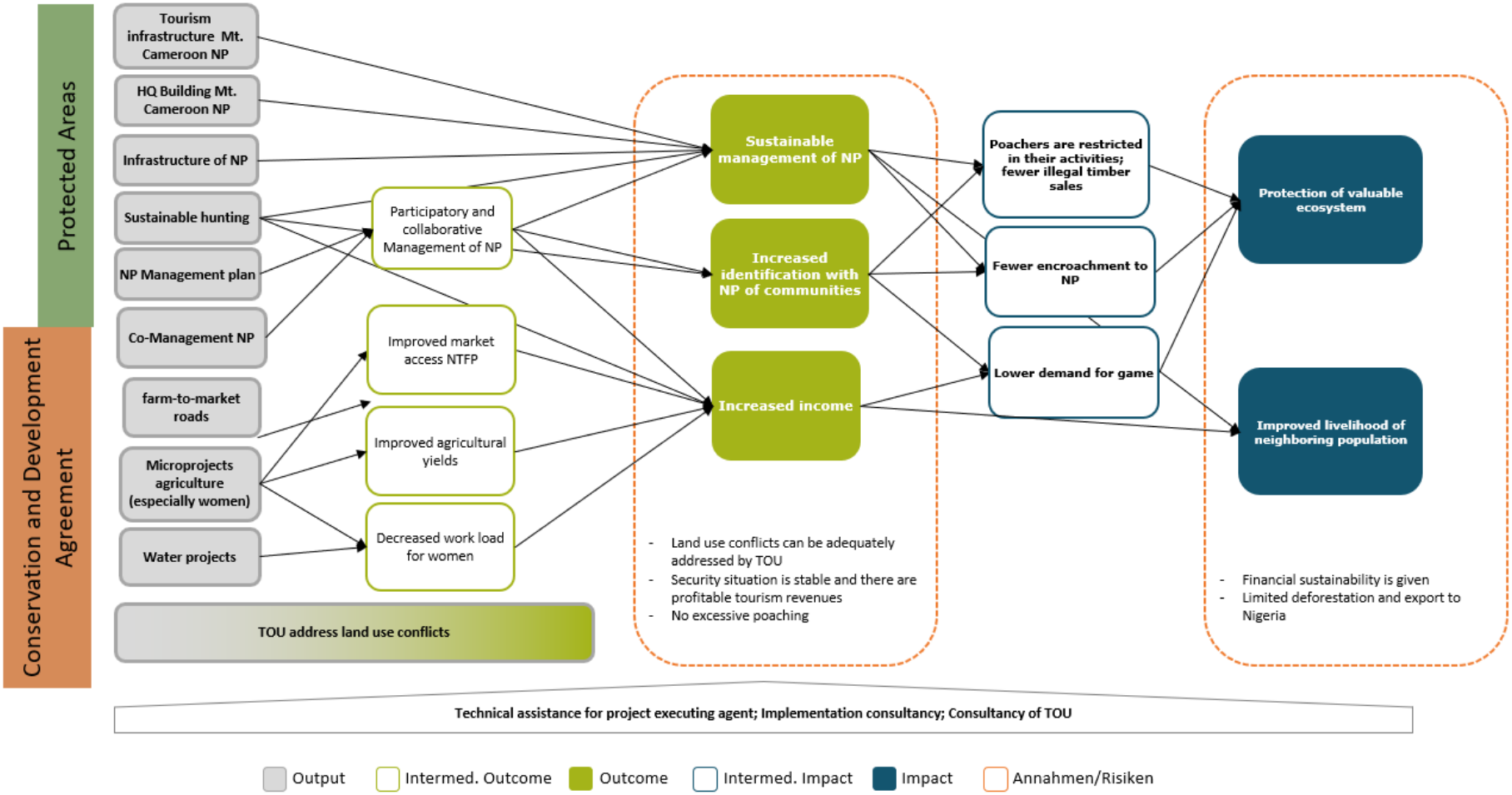


***Figure 3**: Visualisation of the programme's theory of change (impact logic).*
***Source**: Own illustration.*

Rating summary of relevance: very successful (1) (both phases)

The project is characterised by special features in many respects, which provide a rational for a very good appraisal of the relevance criterion. In particular, the concept of integrated protected area management addresses ecological, economic and social interests in an exemplary manner. In addition, the governance system is effectively established and capable of strengthening local capacities. The monitoring system is well developed and the project was conceptually well prepared to respond to the Anglophone crisis in a conflict-sensitive manner.

Coherence

5. Internal coherence

The project was coherently aligned with the BMZ strategy for the protection of biodiversity and nature defined in 2024, as evidenced by the strategy paper "Preserving our natural resources".[3] The world's forests serve as an important basis of life for humans. Forests not only provide habitats for wildlife and plants, but their conservation is also a pillar of the fight against climate change. In addition, wildlife habitats are preserved, which can reduce the risk of zoonoses.

However, the picture is different when it comes to coherence between FC measures and TC measures. Initially, a high level of cooperation was planned between TC and FC, which worked together under the development cooperation programme "Environmental protection, conservation and sustainability of natural resources". The TC module "Forest and Environment" (ProPFE) contributed EUR 3 million to the development cooperation programme through consulting and other services. It aimed to increase the capacity of the implementing agency. Among other things, management staff and eco-guards were trained in co-management with local communities, communication and conflict resolution.

Even in the first phase of the PSMNR programme (not part of this evaluation), cooperation was less close than envisioned, even though the programme and the partners repeatedly sought dialogue during phases II and III. The reasons for this were different understandings of roles and quality requirements for certain outputs. As a result, the implementation consultant took on tasks of the TC. The decision was reasonable, but it also shows that the potential for synergy with the TC in phases II and III was already low and had been exhausted. In addition, it became apparent that there was some duplication of activities, so that in 2014 the activities planned by the TC were handed over to the PSMNR programme. Ultimately, the procedures were adapted to operate without the TC. The TC finally withdrew from the South-West region in 2019 and closed its regional office. It can therefore be concluded that there was little internal coherence between the FC and the TC.

6. External coherence

As already mentioned in the relevance criterion, the project systematically contributed to the achievement of the objectives of sub-programmes 961, 962 and 063 of the MINFOF FESP and was thus in line with the partner's own efforts. The project executing agency also covered the personnel costs of the Eco-Guards. Nevertheless, it must be noted that nature conservation has only a low priority in Cameroon compared to the interests of other ministries and that MINFOF contributed only limited funds to the programme.

Overall, the model of natural resource conservation in Cameroon relies on donor funding from the Global North. This makes coordinated interaction between all donors even more important in order to use scarce resources efficiently. The FESP provided the framework for coordinating the various donors. Other donors to MINFOF included the EU, France, Japan and other international organisations and international NGOs. In the SWR itself, only NGOs and the World Bank were still involved in financing nature conservation projects and tourism development. At the time of the evaluation, however, the World Bank had discontinued its involvement in the SWR and handed over partially completed infrastructure to MINFOF. The PSMNR programme was able to take over some of the remaining work.

Two international nature conservation NGOs acted as partners in the programme and carried out various activities (e.g. measures for local communities, training, eco-tourism development, co-management of the national park). The NGOs acted partly independently, but in a manner consistent with the PSMNR programme.

Overall, it can be said that there was low external coherence between the various donors.

[3] Strategy paper Preserving our natural resources. 2024. Federal Ministry for Economic Cooperation and Development (BMZ). Source: https://www.bmz.de/resource/blob/207320/bmz-strategiepapier-erhalt-unserer-natuerlichen-lebensgrundlagen.pdf. Last accessed on 07.08.2025.

Rating summary of coherence: moderately unsuccessful (4) (both phases)

The coherence of the project was moderately unsuccessful. From an internal coherence perspective, the project was able to operate more effectively without cooperation, despite the capacity development measures of the TC and despite efforts to promote dialogue. From an external coherence perspective, no synergies could be identified, which is mainly due to the low presence of other donors in the conflict-ridden South-West region.

Effectiveness

7. Achievement of objectives

The objective at the outcome level was sustainability in forest and wildlife management, with particular consideration given to the interests of local communities.

The following indicators were used to measure the outcome objective:

Indicator	Status at time of PA	Target value at EPE (PA)	Actual value at PCR	Actual value at EPE
(1) Performance Index of Protected Area Management (PAMETT)	Unknown	At least 5% increase annually between 2012 and 2016	Partially achieved. PAMETT index between 2012 and 2015: MCNP (+20%), KNP (+18%), BMWS (+31%) TNP (-8%)	Target value partially achieved
(2) All active forest management units (FMUs), communal forests and at least 8 village forests are managed according to a valid management plan.	4 FMUs 187,888 ha, 4 communal forests 15,295 ha.	All active FMUs (6) 256,948 ha, 6 village forests with valid management plans (17,366 ha). In addition, 3 village forests with provisional plans	Achieved.	Simple management plans continue to be used. Target value achieved
(3) Index of illegal activities in protected areas	Not available.	Annual decrease of 10% from 2013 to 2016	Illegal activities remain high, especially near the Nigerian border and by separatist groups	Overall, illegal activities remain high Target value not achieved
(4) Average revenue development	Not available.	20% increase in income, at least 6,000 beneficiaries	Achieved. A total of 207 microprojects have been implemented, with a total of 6,667 direct beneficiaries, >20% achieved in most cases. There are several thousand indirect beneficiaries, estimated at more than 9,000 for cassava alone.	Target value achieved

***Table 2** : Outcome target achievement.*
***Source**: Own illustration.*

Further information:
Re 1): The Protected Areas Management Effectiveness Tracking Tool (PAMETT) is a working tool developed to assess the effectiveness of protected area management. Among other things, it considers the planning, implementation and monitoring of protective measures. It offers a structured method for appraising the performance of protected areas. However, PAMETT has some limitations when it comes to tracking progress and results in protected area management. The subjective nature of the appraisals means that they cannot be used to compare different sites, but only to make intertemporal comparisons for a single management unit. Nevertheless, it provides a quick overview of the management status of a protected area, which is particularly helpful for evaluation purposes. Even though the PAMETT score increased, the Anglophone crisis had a major impact on access to protected areas and thus effectively brought the active management of the parks to a standstill, with the exception of Mt. Cameroun NP.

Re 2): The community forests are mostly located around the national parks. The transfer of responsibility to the communities comes with the obligation to comply with simple management plans (SMPs). The SMPs continue to be used. At the time of the evaluation, it is unclear to what extent the local communities comply with usage restrictions in locations that are no longer accessible.

Re 3): Various indicators indicate ongoing high hunting pressure, presumably also by separatist groups using the forests as hiding places. The number of cartridge cases found has decreased in some parks and increased in others. The number of wire traps has fallen dramatically. However, since the outbreak of the Anglophone crisis, patrols in the parks have no longer been possible, with the exception of Mt. Cameroun NP, so it must be assumed that hunting levels remain high.

Re 4): Income increases had already been achieved at the time of the project completion and were confirmed at the time of the evaluation by statements from village representatives and focus group discussions with approximately 40 residents.

8. Contribution to the achievement of objectives

Contributions to protected area management

The PAMETT Index is a rough approximation of the protection performance of park management, despite the criticisms mentioned. Essentially, the index assesses whether a protected area is carrying out the planned activities. The project has played a decisive role in the fulfilment of protection activities. Some investments and activities are explained in detail below:

The park management plans created by the project are still used and revised. They form the basis for structured park administration. The park infrastructure that has been built (e.g. ranger stations, offices) is being used and serves as a starting point for work in the national parks. The project has also produced strategic documents designed to increase the national parks' work more effective and efficient. For example, a co-management concept has been formulated, which forms the basis for cooperation with local communities.

Furthermore, the project developed a patrol strategy for each NP in workshops, which did not exist beforehand. This has increased the effectiveness of the patrols. An inspection of the project's internal documents shows that, on average, both the absolute number of patrol kilometres and the intensity of patrols, measured in kilometres per patrol day, have increased. In addition, it can be observed that the number of encounters with poachers and the number of wire traps collected decreased on average between 2012 and 2016. No trend could be identified in the number of ammunition casings collected, the number of shots recorded during patrols or the number of poachers' bush huts destroyed, as these figures rose, fell or remained the same depending on the park. Despite the increase in patrol intensity, no direct link to the reduction in wire traps collected could be established. Furthermore, the eco-guards received trainings in law enforcement to ensure a professional approach when encountering poachers. As a result, sworn eco-guards were able to file criminal charges, and the organisation was able to provide standardised support in court cases. This led to several convictions against poachers.

In combination with information from local communities, it can be plausibly concluded that the patrols have contributed to the protection of wildlife. In addition, it was reported that villagers removed individual bush huts on their own initiative. In one case, it was stated that a *conservation bonus* from the PSMNR programme was not paid due to high levels of poaching, and individual poachers in the village had to compensate for the lost bonus payments. All this evidence suggests that the management of the NP and the conservation development agreements have contributed to the protection of forests and wildlife (see Impact chapter). Although there has been a slight positive development, hunting pressure remains very high at the time of the EPE.

Contributions to improved income generation

The project has implemented 238 of 293 (81%) of the measures agreed in the CDAs in 88 of 91 villages in the areas of infrastructure, livelihoods and community development. The project has reached approximately 116,000 people. Below is an overview of the most important village development measures with examples.

Table Summary of contributions to improved income generation:

Measures	Contribution to improved income generation
1. Construction of at least 80 km of motorbike tracks, 14 water projects and other infrastructure	In the town of Batoke, with a population of approximately 5,000, a water supply system was financed that is capable of supplying 90% of the population with water, thereby making a significant contribution to improving living conditions. Water systems were also built in smaller villages. Before the project, water use in a village cost 10,000 CFA per household per week. After the investment in the water supply, water now costs only 200 CFA per week per household. It is highly likely that not all 18 water projects led to such cost savings, as some villages preferred other projects and the benefits of the water projects were therefore probably lower for these villages. Other measures included the construction of motorbike roads to provide isolated villages with access to markets, schools, hospitals and workplaces. In addition, a health centre and many smaller measures (e.g. solar systems, training courses on cost-effective construction) were financed, as well as a storage facility for NTFPs such as bush mango and cocoa beans for later resale.

2. Implementation of training programmes for the community to teach modern construction and agricultural techniques.	The programme supported 9 larger and 22 smaller tree nurseries in establishing cooperatives, which enabled members to actively participate in the work of the nurseries by purchasing shares. As part of the PSMNR programme, 88 men and 36 women were trained in nursery management and horticultural techniques and methods. Nurseries grow seedlings and graft some of them to increase the yield of the trees. The shareholders received income from the profits of the cooperatives. However, the shares were not affordable for every village member, which led to inequality in participation. One positive aspect was the benefit-sharing system of a tree nursery, which distributed 5% of the seedlings grown to the villagers so that they were able to plant trees for their own use. Even though not every villager benefited from the tree nurseries, they did contribute to improving living conditions. A systematic distribution of profits could lead to increased satisfaction among the local population. However, this would have to be designed in such a way that the economic viability of the tree nurseries and the incentive to invest are maintained.
3. Implementation of income-generating activities (IGAs)	1. Distribution and dissemination of improved cassava varieties and soil fertility management (54 projects). 2. Provision of cassava processing equipment (31 projects). 3. Distribution and dissemination of improved plantain varieties and improved propagation methods (19 projects). 4. Improvement of cocoa cultivation through Farmer Field Schools (39 projects) and Farmer Business Schools (32 projects). 5. Establishment of multi-purpose plantations and improvement of agroforestry systems (30 projects).
4. Permanent use zone management plans in Erat and Esukutan	The KNP has signed two agreements to designate permanent use zones within the park following a year-long participatory process. This process was carried out with technical and financial support from the project. The project also developed and partially implemented the management plans and built community halls and solar power systems. The aim was to develop these enclaves in such a way as to secure the livelihoods of local communities while preserving the integrity of the KNP. The permanent use zone covers a total of 2,940 hectares of land and provides legal certainty. It enables cooperation with the KNP administration to protect the valuable ecosystem and develop the villages.
5. Development of management plans for community forests and management plans for the harvesting of Prunus bark	So-called community forests have been established in the forests surrounding the protected areas. In Cameroon, this means that local communities are granted rights to use the forests and, in return, are entrusted with the sustainability of the forest management. To this end, *simple management plans* were drawn up, all of which were updated every five years. Most of these plans provided for reforestation, which was also successfully implemented. The survival rate of the seedlings was approximately 85%. Only at the end of phase III in 2022 was there significant destruction due to elephants and heavy rainfall. The project area contains Prunus trees (Prunus Africana), whose bark is used both in the manufacture of traditional medicines and as an ingredient in cosmetics. The harvesting and sale of Prunus bark generates income for the local population. The project has carried out a complete inventory (identification and numbering) of 1,005 Prunus trees and developed a Prunus management plan, compliance with which would guarantee sustainability in the rotation cycle.

***Table 3**: Summary of contributions to improved income generation.*

The project successfully addressed the interests of the local population and brought about a change in attitudes towards hunting and forest conservation. Many village representatives were impressed by the changes brought about by the income-generating measures and attributed the improved protection of wildlife and forests in the adjacent protected area to these measures. It is also worth mentioning that the participatory approach meant that, despite the Anglophone crisis, the population maintained a positive relationship with ministry officials, which cannot be taken for granted.

9. Quality of implementation

Initially, the cooperation with NGOs was good, but deteriorated over the course of the project. The nature conservation NGOs make a valuable contribution to nature conservation through their specialisation. For example, they provide services in the training of eco-guards, SMART training and wildlife monitoring, and advise on nature conservation issues. Through their own conservation programs, they complemented the project and, in some cases, also raised own financial resources. However, during phase III, changes occurred that made cooperation more difficult: one NGO changed its funding guidelines, leading to delays in implementation. Restructuring and office relocations meant that responsible persons took on other tasks and positions were not filled. The security situation around the TNP almost brought an NGO's activities to a standstill.

One NGO criticised the fact that the project did not transfer more decision-making power to local institutions. At the time of the evaluation, the PSMNR programme decides which activities can be carried out in the protected areas and which investments can be made with the *Conservation Bonus*. However, the evaluation concludes that the project's approach was very conducive to achieving its objectives and that the diverse measures were appropriate, high-quality and, for the most part, effective. For example, a village's request to purchase chainsaws to produce school desks was rejected because they could be used for active deforestation. At the same time, the evaluation recognises that co-management with nature conservation NGOs can be a suitable exit strategy to ensure the sustainability of the effects achieved, as NGOs can raise their own funds.

With regard to the MINFOF governance system, it was very positive that decision-making power for the project lay at regional level and not in the capital. This enabled good cooperation with local communities in park management. The good relationship between park management and local communities was evident, which cannot be taken for granted in the context of projects in nature reserves and is even more noteworthy in the context of the Anglophone crisis. A key factor in the good relationship is the close cooperation and usefulness of the CDA projects and the use of *conservation bonuses* for the benefit of the entire community.

Before the start of the first phase of the PSMNR, local communities tended to have a negative attitude towards the programme, as nature conservation was often associated with restrictions on use. This evaluation found that there was increased positive cooperation between local communities and MINFOF's regional delegation, as local communities benefit significantly from the programme. It was also stated that nature conservation was positively associated with living conditions. Regarding women's participation, it is not clear whether men or women have benefited more. Some measures were justifiably aimed primarily at men – for example, poachers (exclusively men) were specifically targeted to increase the effectiveness of wildlife protection – while others were aimed primarily at women. In the case of the introduction of improved cassava varieties, for example, women's participation was 74% of a total of 928 people. Women also benefited particularly from the improved water supply. In general, women's participation is relatively high, and during the evaluation it was found that women's interests had been explicitly considered and that female participants had also expressed their satisfaction with the programme.

10. Unintended effects (positive or negative)

The project executing agency did not have a uniform position on the extent to which savannahs on Mt. Cameroon should be treated with fire. MINFOF and helpers also set fires annually before the start of a sporting event in Buea to clear the way for runners to the summit of Mt. Cameroon and to promote greening. The evaluation found that forest areas were also affected by the fire. It was reported that the forest is increasingly being displaced by savannah. After the fire, ferns are growing more and more on the burned areas. It therefore seems unlikely that the affected (small) forest area will regenerate on its own. In addition, fires were also used near the eco-lodges. Blackening from fire is visible on some sides of the eco-lodges. The eco-lodges remain functional and are not expected to be affected by the fire in the long term. However, inadequate fire management also poses a risk to the infrastructure. Some local communities have complained that they do not benefit directly from eco-tourism and that Sherpa activities only generate income for villagers for half of the year. The project may therefore have contributed to social discontent. From an evaluation perspective, this situation is considered appropriate, as the tourist destinations are located deep within the national parks, all costs and risks are borne by the national park, and tourism revenues do not cover costs. Furthermore, it is in the nature of eco-tourism that there is seasonality due to the rainy season. The focus of the PSMNR programme on addressing the interests of local communities through income-generating activities and participation in park management is considered to be far more effective for local communities and nature conservation.

Rating summary of effectiveness: successful (2) (both phases)

The project has made a significant contribution to the effective management of the NPs. In addition, the interests of local communities have been brought into line with the ecological objectives to a particular degree. The project has provided local communities with noticeably better income opportunities. However, the inadequate fire management and the continuing high hunting pressure on wildlife must be criticised. The project was carried out in a high-quality manner.

Efficiency

11. Production efficiency

Overall, the project's production efficiency is satisfactory. Although there were delays in individual measures, the overall project timeline was met. The following table provides an overview of the project's expenditure. The largest share of expenditure is accounted by investments relating to the NPs and surrounding community forests. A quarter of the investment was used for measures affecting local communities. This is a significant proportion, also in comparison with other FC projects in the natural resource conservation sector.

Table Overview of expenditure:

Expenditure	Share in %
Investments in the protected area and community forest management	43.2
Measures for local communities	25.1
Consulting services	19.1
Miscellaneous items[4]	12.6

***Table 4**: Overview of expenditure.*

In addition, management decisions could be made at regional level, which enabled the project to be implemented cost-effectively. The alternative of centralising decision-making power in Yaoundé at MINFOF would most likely have led to considerable delays, higher costs and poorer results.

CDA were initially signed at the village level. During Phase III, the programme recognised that combining several villages into a cluster improved implementation efficiency and also helped to promote democratic norms. The shift from village to cluster level is also appreciated by beneficiaries and has promoted knowledge exchange between villages.

It should also be emphasised that the project was able to generate its own synergies by promoting tree nurseries. The PSMNR programme was a major buyer of young trees to mark the park boundaries as part of integrated park management. As a major buyer, the programme was able to benefit from favourable purchasing conditions and rely on high-quality seedlings. At the same time, the tree nurseries had a reliable customer to sell large quantities of trees.

It is not possible to assess the extent to which the involvement of nature conservation NGOs represents efficiency gains. The NGOs, as implementing partners, contributed some of their own financial resources, but it is not clear how much. In addition, cooperation did not always run smoothly due to differing understandings of roles. At the end of Phase III, the implementing partners decided to relocate offices and staff. As a result, a management position that should have managed the PSMNR programme on the NGO side was not filled. These decisions contributed to higher programme costs and hampered the coordination of programme activities.

Infrastructure construction was logistically challenging. The areas are often isolated and difficult to access, so that in some construction projects, building materials had to be carried by workers from the last available road to the construction site. In the case of the eco-lodges on Mt. Cameroon, building materials had to be carried over distances of up to 13.5 km and 1,600 metres in altitude. There was no cheaper alternative. At the time of the evaluation, not all of the premises in the Mt. Cameroon NP office building were being used, indicating a slight overcapacity.

The consulting costs (approx. 19%) were comparatively high. However, the involvement of the implementation consultant in the day-to-day business of the programme and the variety of tasks was also significantly higher than in comparable projects. The commitment of the implementation consultant and the cooperation with the regional delegation contributed to the significant

[4] Miscellaneous items include costs for accounting, audits, planning workshops, etc., which affect all components.

success of the project, enabling many outputs to be achieved cost-effectively and with a high level of participation from local communities. The project's internal procurement commission ensured effective and timely procurement processes, which contributed significantly to the efficiency of the project. The participatory nature of the programme required considerable resources, but was crucial for trust building, promoting ownership and having a tangible impact on people's livelihoods.

12. Allocation efficiency

The use of financial resources for nature conservation by the SWR represents a sensible investment in forest protection. As a global public good, forests store large amounts of carbon in their dense woodlands. Preventing tree loss is one of the most cost-effective ways to avoid further greenhouse gas emissions. In addition, the project is characterised by a relatively high degree of financial additionality, as the implementing agency had only limited funds available to finance nature conservation activities and, at the time of the evaluation, the German FC was the only major player in the field of nature conservation apart from two cooperating nature conservation NGOs.

The continuation of the first phase of the PSMNR programme is reasonable, as nature conservation projects can only be effective through long-term commitment. This is particularly true when working with local communities, as a relationship of trust must be established. A slight increase in efficiency in the allocation of funds would have been possible if the funds had been invested in one project instead of being divided into two projects (phases II and III).

An alternative design for the measure that would also have made it possible to reconcile ecological, economic and social interests is not evident. An alternative project design would have been a landscape approach that also includes marine protected areas. This would also protect an entire ecosystem instead of individual forest areas. Alternatively, there would be the option of selecting areas to connect protected areas, which would ensure the migration of wildlife. The latter will be implemented in a follow-up project.

Rating summary of efficiency: successful (2) (both phases)

The production efficiency of the project is appraised as satisfactory. Decentralised, regional decision-making has proven to be efficient. The project was also able to create its own synergies. The involvement of nature conservation NGOs was partially successful, but there were challenges in terms of cooperation. Slight overcapacity was identified at the headquarters of Mt. Cameroun NP. In terms of allocation efficiency, the financial allocation for nature conservation in the SWR is considered reasonable. The continuation of the PSMNR programme was particularly important in terms of cooperation with the local population in order to build trust and reconcile the interests of local communities with the objectives of the project sponsor.

Impact

13. Overarching development policy changes

The objective adjusted within the framework of the EPE was to conserve globally significant and high-quality forest ecosystems in south-western Cameroon, with particular consideration given to the interests of local communities.

The following indicators were used to measure the impact target/no indicators were specified.

Indicator	Status at time of PA	Target value at EPE (PA)	Actual value at PCR	Actual value at EPE
(1) Development of the population of key species (e.g. gorilla, chimpanzee, drill, elephant, buffalo) Measurement using encounter rates (indirect and direct observation/km)	Base value: N/A	Stabilisation	Significant differences between protected areas; comprehensive stabilisation has not been achieved. While the figures for Mt Cameroun indicate stabilisation, a decline has been observed in Korup since 2007, although stabilisation may have occurred in comparison with 2010. In Takamanda, stabilisation at a low level; in Bayang Mbo, decline between 2007 and 2014	Target value not achieved

(2) Development of ecologically intact forest cover in the selected protected areas	Base value: N/A	Stabilisation	Reduction in land loss. However, complete preservation of intact forest areas is not guaranteed. Takamanda Farm Encroachment 2007 – 1,290 ha; 2017 – 824 ha, a reduction of 36%. In MCNP, active development of agricultural land has been reduced from 435 ha in 2012 to 17 ha in 2014 (-96%). In KNP, the 2013 baseline is 142 ha, with 85% concentrated on five oil palm plantations in the south of the park. In Bayang Mbo, figures are only available for the north of the SG, where 398 ha are affected.	Target value partially achieved
(3) Improvement of living conditions for the local population	Baseline value: N/A	Local population reports improvement in living conditions	-	Target value achieved

***Table 5**: Impact target achievement.*
***Source**: Own illustration.*

14. Contribution to overarching intended developmental changes

The effects of the project are discussed below from three perspectives: wildlife population, forest protection and living conditions. The Anglophone crisis plays an overarching role in all three areas, as explained below.

The results for **wildlife populations** tend to be negative. The hunting pressure remains high. An analysis of audio recordings at various locations over time and on-site surveys have shown that hunting with rifles continued during the project. This has decreased significantly since the start of the Anglophone crisis, as some of the weapons were confiscated by the military or participated in the project's weapons exchange programme. Poachers then increasingly switched to using wire traps. The project also estimated wildlife populations using camera traps and transect analyses. The information is subject to considerable statistical uncertainty, but all indications suggest that wildlife populations cannot be assumed to have stabilised. Restricted access in many areas meant that external hunters from Nigeria and separatist groups were able to hunt more intensively[5] , the work of the anti-poaching patrols was suspended and the *Conservation Bonus* System had to be paused. All of these are important reasons why the programme was less effective at protecting wildlife towards the end of its term.[6]

In terms of **forest protection**, the project made a significant contribution to conservation, even though the indicators were not fully met. This conclusion is based on the quality of the measures implemented, statistical analyses of the forest areas in the protected areas that received funding, and the discernible effects of the individual components. These are discussed in more detail below.

Various measures were taken as part of the project. On the one hand, active reforestation took place – over 15,000 hectares between 2012 and 2018; at the same time, the forest stand was successfully regenerated over an area of more than 25,600 hectares. While afforestation requires the active planting of trees, regeneration relies on the recovery and growth of existing vegetation by improving environmental conditions, taking protective measures and promoting natural regeneration processes. Targeted cooperation with local tree nurseries was also important for successful reforestation. Equipping these nurseries with appropriate equipment not only increased the occupational safety of local workers but also improved the quality and quantity of the seedlings produced.

During the programme, vegetation loss due to interventions in the forest for the development of agricultural land was reduced. Before the programme, border violations were difficult to prove as the national parks had no visible border markings. Clear boundary marking with the help of tree planting, patrol presence, the establishment of buffer zones with community forests and income-generating measures for local communities have reduced this type of land development. At the same time, it is reported that land development has intensified since the Anglophone crisis, as law enforcement has been weakened.

[5] External hunters are free riders in the economic sense. They make it difficult to comply with rules, as hunters benefit from common goods without giving anything in return, while non-hunters bear the pure costs.
[6] Despite various measures such as training courses, a bonus programme for park staff, improved infrastructure and increased patrols, the parks' protection and surveillance concept is reaching its limits. The PSMNR programme has already made adjustments for the fourth phase.

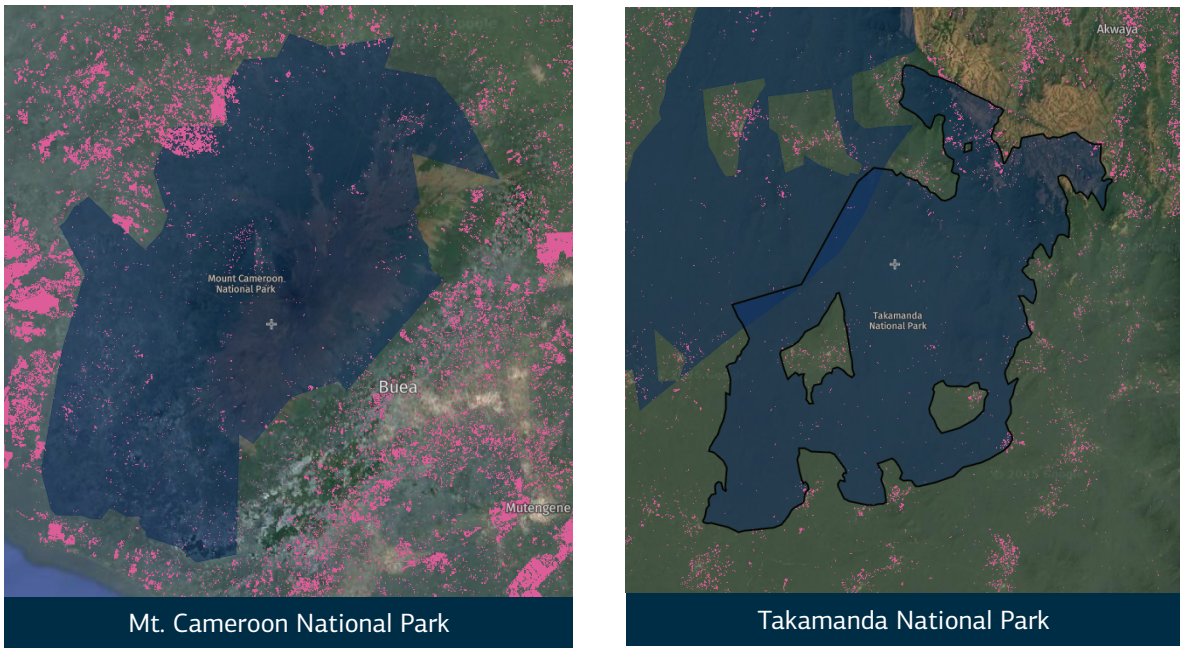


***Figure 4** : Visualisation of tree loss in Mt. Cameroon NP (left) and Takamanda NP (right) in pink, and natural regeneration and/or reforestation in blue.*
***Source**: Global Forest Watch.*

In addition, the project has been able to prevent some significant land acquisitions. A particular success was the project's use of TOUs as a coordination platform for land use conflicts to prevent a planned plantation of approximately 12,000 hectares in the buffer zone of Korup NP and adjacent areas. Nevertheless, the PSMNR programme has been able to identify land development in the protected areas through its own satellite data analyses. Figure 3 visualises the tree losses (in pink) based on Global Forest Watch between 2000 and 2024 in Mt. Cameroun NP and Takamanda NP. In Mt Cameroun NP, larger areas of land development are visible in the north-west. In Takamanda NP, significant tree loss is also evident, particularly in the north. In all NPs, isolated tree loss can be observed in many places.

However, simply looking at the development of forest cover is not sufficient for appraising the success of the project: for example, increasing deforestation could be considered a failure, even though the project successfully prevented more severe deforestation.

As part of the EPE, a more robust statistical analysis was therefore carried out to answer the question: "How would the protected areas supported by the project have developed without the project?" To this end, the development of forest cover in the supported NPs was compared with developments in comparable forest areas, i.e. a "statistical twin". Specifically, for each 500 ha square of the NPs, a comparable forest area (twin) outside the NPs was identified on the basis of predefined characteristics[7] and a matching procedure (Coarsened Exact Matching - CEM).[8] This allows for a comparison of "apples with apples". Figure 4 illustrates the advantages of matching: the left panel shows the development of the subsidised forest areas from 2000 to 2023 and the developments of all other forest areas in the country before the matching procedure. It is clear that these two groups are not comparable, as neither the forest cover nor the deforestation trend prior to the project are the same for these two groups ("apples and oranges"). The right-hand panel shows that the CEM procedure has successfully created a "statistical twin": the subsidised protected areas (treatment group) and the non-subsidised areas selected by matching (control group) have relatively similar forest cover and the same deforestation trend before funding began in 2006. Based on the successful matching process, further analysis is permissible. The comparison date (treatment) was deliberately set at 2006, as this was the year in which the first phase of the programme began. An analysis from 2011 onwards – the start of phases II and III evaluated here – would lead to erroneous results, as the nature reserves had already benefited from the protective effect of the PSMNR I project. The protective effect of previous phases must be considered to avoid distorted results. The estimated effects therefore refer to the impact of all PSMNR phases.

[7] For this purpose, the land area was divided into squares (500 ha) using geographic information systems (GIS), for which the following characteristics were calculated: the forest area in 2000, the clay content of the soil, the unevenness of the terrain (TRI), the average forest loss from 2001-2013, the altitude of the forest area, and the travel time to the nearest town with more than 5,000 inhabitants.
[8] The CEM method is based on Stefano M. Iacus, Gary King, and Giuseppe Porro. 2012. "Causal Inference Without Balance Checking: Coarsened Exact Matching." Political Analysis, 20, 1, pp. 1–24.

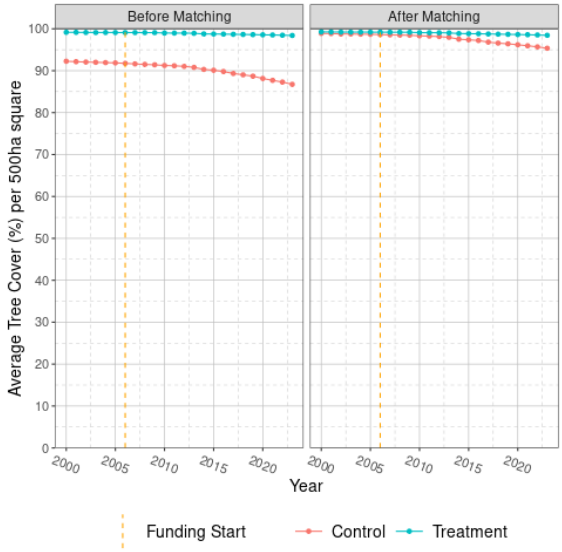


***Figure 5**: Data element of the impact evaluation of avoided deforestation in protected areas.*
***Source**: Own illustration.*

The analysis shows that deforestation in protected areas has been relatively low. It also shows that comparable forest areas have suffered significantly higher tree loss since the start of the PSMNR programme. The programme has therefore plausibly contributed to a reduced rate of deforestation and thus to a contribution to the achievement of the overarching objectives of the programme.

An important limitation of this analysis is that the underlying data from Global Forest Watch for this analysis measures pure gross deforestation. Forest areas covered by afforestation and regeneration measures are not included. Due to the afforestation and regeneration measures carried out as part of the project, it can therefore be plausibly assumed that the net forest cover in the financed NPs is even higher than the analysis suggests. Further technical information on the analysis can be found in the appendix under "Data element".

In terms of **improving the living conditions** of the local population, the project made a generally positive contribution.

Measures	Contribution to improved living conditions
1. Construction of at least 80 km of motorbike tracks, 14 water projects and other infrastructure	The provision of affordable and clean drinking water has improved living conditions, especially for women and children. The construction of motorbike tracks to provide isolated villages with access to markets, schools, hospitals and workplaces has contributed to improving living conditions. At the outbreak of the Anglophone crisis, the motorbike tracks were only usable to a limited extent due to the security situation. For several months, the Cameroonian government also banned the use of motorbikes.[9] Some of the roads were destroyed. All this increased the likelihood that individual communities would return to hunting. However, at the end of the crisis, the roads were repaired and put back into use, enabling the local population to market their agricultural products again. Information on the use of the health centre and storage locations for NTFPs at the time of the EPE could not be obtained.
2. Implementation of training programmes for the community to teach modern construction and agricultural techniques.	Based on the profits generated by the cooperative and the profit sharing for village members, it can reasonably be assumed that living conditions have improved or remained stable despite the socio-economic crisis in the South-West.
3. Implementation of income-generating activities (IGAs)	Local communities have generally responded positively to the IGAs and are benefiting from the investments.
4. Permanent use zone management plans in Erat and Esukutan	No differentiated information is available, as the IGAs and investments are very similar to those in the other villages. It can therefore be assumed that motorbike trails are of limited use and that other IGAs have contributed to improved living conditions.

[9] Information from https://www.theguardian.com/global-development/2019/sep/03/cameroon-pupils-risk-being-shot-back-to-school. Last accessed on 12 August 2025

5. Development of management plans for community forests and management plans for the harvesting of Prunus bark	While Prunus bark has been successfully harvested, the global market for bark has become saturated in the course of the project. At the time of the evaluation, no significant contributions by Prunus bark to improving living conditions could be demonstrated.

***Table 6**: Summary of contributions to improved living conditions.*

15. Contribution to overarching unintended developmental changes

The project had a broad impact since it serves as good-practice example of conservation for other national parks in Cameroon. The successful implementation of the project's innovative approach was also replicated in the South-East region and incorporated into national guidelines.

Rating summary of impact: moderately successful (3) (both phases)

On a positive note, despite some forest loss, the project made a significant contribution to preventing further deforestation. In addition, the living conditions of the local population were improved through the construction of infrastructure such as motorbike tracks and water projects, as well as through training programmes and income-generating activities. However, it should be noted that hunting pressure remains high and wildlife populations have not stabilised. The use of motorbike trails has been restricted by armed groups, which has impaired access to markets, schools and hospitals. In addition, the global market for Prunus bark has become saturated, resulting in a lack of profit from its sale. Although the Anglophone crisis has, at least temporarily, undone many of the project's achievements, the project has made an important contribution to wildlife and forest conservation and to improving living conditions. Due to the Anglophone crisis, the project is below expectations, but the positive results dominate.

Sustainability

16. Capacities of beneficiaries and stakeholders

Before the project, the project executing agency's capacities were severely limited. MINFOF's capacities were severely restricted in terms of personnel, finances and institutions. There were hardly any resources available to strategically plan and implement activities in the NPs or to provide adequate training for the eco-guards. In addition, the areas are often remotely located, meaning that access is not always possible. Furthermore, the implementing agency only has the resources to cover personnel costs, but not to finance protected area management activities.

The nutrient-rich soils enable the local population to earn a living through subsistence farming and to increase their income by selling and consuming NTFPs. In general, however, the income situation is characterised by poverty. NTFPs are an important source of income and, if used with sustainability, can reconcile the interests of forest conservation with the economic interests of local communities. On the other hand, there is the lucrative sale of timber, the use of charcoal for cooking, land conversion for agriculture and the demand for wildlife for consumption.

These two perspectives illustrate that there is a lack of sustainability in financing and that the tragedy of the commons is in full swing. The typical market failures of public goods stand in the way of nature conservation. Contributions to support sustainable capacities are therefore essential for the long-term effectiveness of the project.

17. Contribution to supporting sustainable capacities

In terms of sustainably created capacities, the income-generating measures paint a positive picture on average. Even though not all activities achieved lasting benefits, many measures were sustainable and continued to fulfil their function at the time of evaluation, contributing to increased capacity among local communities.

- When cultivating cassava with new varieties, farmers showed a clear preference for the introduced cassava varieties. In addition, many farmers passed on the improved cassava seedlings to other farmers. The productivity of the improved variety has increased significantly compared to the traditional variety, with an increase of 42.9% in Mt. Cameroun NP, 70% in Takamanda NP and 42% in Korup NP. Through the continued use of the varieties, farmers generate sustainably higher incomes and improved living conditions, as a significant proportion of the harvest is sold. In addition, it was found that the introduction of new cassava varieties was more promising when farmers already had previous experience in cassava cultivation. In one case, some of the machines for processing cassava were not being used or were not accessible at the time of the evaluation. On the one hand, there is a lack of water to operate the machines. On the other hand, it was not economically viable to process cassava and then sell it in the city.

- At the time of the evaluation, 26 of the 40 people involved in the nurseries were still active in the cooperatives that had been set up. The nurseries had grown significantly in terms of capacity. During the project, one tree nursery was able to expand its capacity to 2,000 seedlings, which it can grow at the same time. At the time of the evaluation, phase IV of the programme was underway and the tree nursery had more than 8,000 seedlings, most of which it sold to the PSMNR project. In the future, other buyers are to be found in order to achieve financial independence. In particular, training in the operation of tree nurseries, but also in horticultural techniques such as the grafting of fruit trees, which significantly increases the selling price of the seedlings, has contributed to financial independence. Overall, the tree nurseries are operating profitably.
- Although Prunus bark continues to grow, demand has reached saturation point. Nevertheless, communities have been able to purchase motorcycles through the sale of bark to date, creating long-term income opportunities for themselves through this investment. At the time of evaluation, however, there are signs of a recovery in demand, so income from bark sales can be expected.[10]

The project has also made significant contributions to the management of protected areas. The programme has conducted feasibility studies and developed a strategy for sustainability in financing. This is important preparatory work for phase IV of the programme, as financial independence has not been achieved at the time of evaluation and was also considered unattainable for these phases.

The contributions of ecotourism development remained below expectations. In ecotourism, the goal is rarely to fully finance operations, but rather to supplement the income of protected areas and promote the local economy. In the case of Mt. Cameroon NP, 55% of the park's entrance fees go to the state treasury and 45% to a special fund for wildlife. The number of visitors had risen sharply since 2012 until the start of the Covid-19 pandemic, but came to a standstill during the pandemic. At the time of the evaluation, there was still no significant income from tourism, which is also due to the limited potential of the South-West region because of the Anglophone crisis and corresponding security concerns. Overall, eco-tourism contributes marginally to covering the running costs of protected area management, and only at Mt. Cameroun, but it also generates added value by promoting local income and nature conservation education.

In addition to the financial aspects, the project's investments in infrastructure, management plans and training have increased the capacity of the managing authority. The infrastructure provides the tools for day-to-day protected area management and has enabled the managing authority to carry out its mandate, the management and protection of forests and the enforcement of wildlife laws, in the SWR. The management plans are important strategic documents for structuring and prioritising work in and around the NP. Finally, the training has increased capacity by further developing the skills and competencies of the eco-guards. For example, the training has enabled the eco-guards to work with the SMART system, patrol more effectively and file criminal charges. At the time of the evaluation, these investments and the knowledge acquired are being used for day-to-day nature conservation management.

18. Durability of impacts over time

The sustainability of the effects for the protected areas depends on the extent to which capacities and infrastructure are maintained and long-term financing is secured, for example to prevent poaching and illegal logging through patrols. For local communities, the sustainability of the effects depends on the extent to which they are able to derive economic benefits from the measures so that they do not overexploit natural resources. At the time of the evaluation, the project was only able to carry out activities in 50% of the villages, while the other half was no longer accessible for security reasons. As a result, many of the effects achieved at the time of the EPE could no longer be maintained.

Sustainability of the effects through protected area management

At the time of the evaluation, the financed park management infrastructure was in good condition with few deficiencies. Minor repairs are being carried out and it is expected that the park management infrastructure will continue to be usable in the medium term for the management of the national park. At the time of the evaluation, there is no maintenance concept for the long-term preservation of the park management infrastructure. The sustainability of the impact through the financed infrastructure depends largely on sustainable financing.

The aim of the project was to cover 50% of the running costs of protected area management through sustainable financing mechanisms.[11] One source of funding is tourism revenue. Eco-tourism in Mt. Cameroon NP initially developed very positively until it came to a near standstill due to the intensification of the Anglophone crisis in the SWR and the pandemic. Between 2012 and 2016, the number of tourist visitors had increased by 75% to approximately 2,000 visitors. This increase is attributable to the

[10] Source: https://www.factmr.com/report/2076/prunus-africana-market; last accessed on 13 November 2025.
[11] Covering 50% of costs through revenue from payment for ecosystem services or eco-tourism is considered ambitious in the evaluation, as the opportunities for payment for ecosystem services and tourism appear limited in the SWR.

development of strategic papers on tourism development and the provision of high-quality ecotourism infrastructure. At the time of the EPE, the Anglophone crisis had intensified, resulting in negligible tourism revenues. It cannot be ruled out that the political situation will calm down. However, at the time of the evaluation, it seems unrealistic that significant revenues can be generated from tourism in the short to medium term, which currently only cover around 4% of management costs. This figure is already positive for the ecotourism sector, but it is clear that other financing mechanisms are necessary. The fourth PSMNR phase is developing further plans to ensure sustainability in financing, which also plays an important role for the *Conservation Bonus*.

This *Conservation Bonus* is an important lever for the project sponsor. The bonus has been able to demonstrate the tangible benefits of nature conservation to local communities. The sustainability of the impact therefore depends in part on the reintroduction of the bonus, which was discontinued due to the lack of monitoring options because of the armed conflict.

A potential threat to the sustainability of the effects are human-elephant conflicts, which were first recorded in 2018 and have become a major problem since 2019. Local communities' acceptance of wildlife could wane if elephants increasingly destroy agricultural land and endanger children on their way to school. Measures have already been taken in Phase IV to mitigate these conflicts.

Sustainability of the effects through income-generating measures

As already described, the project has made a significant contribution to supporting the sustainability of local communities. The tree nurseries are profitable, pig farming continues to generate income for former hunters, and agricultural measures are improving the economic situation of the population by generating additional income. The transfer of knowledge among farmers indicates the broad impact and sustainability of the capacities created. In combination with nature conservation awareness-raising, all these measures contribute to the protection of wildlife and reduce the amount of agricultural land being developed in and around the NPs.

The infrastructure created to improve living conditions is also expected to remain functional in the future. For example, the motorbike tracks will continue to be maintained and used.

At the time of the EPE, the water supply system in Batoke, which was only one of many water supply systems financed by the project, is still functional. Simple weekly inspections and daily cleaning and maintenance work are carried out by a hired craftsman. To cover the costs, 5000 CFA per household is charged per year, which is a fraction of the water supply costs that would have been paid for water in the absence of the newly built system. Despite this, approximately 60% of residents do not pay this fee, which does not entirely call into question the sustainability of the impact but does pose a risk to the functional condition of the facility. However, it is very positive that there are maintenance committees that actively collect funds and maintain the facilities. Heavy rainfall poses a residual risk, which could destroy the facility in the long term. There were no signs of significant damage at the time of the evaluation.

The health centre was built as part of the project on the condition that the Ministry of Health would take over its management. During the evaluation, there were no indications that the health centre would no longer be used. For the purposes of the evaluation, it is therefore assumed that the health centre continues to be of benefit to women, children and men, even though it must be assumed that the condition of the building has most likely deteriorated.

Various activities aimed at raising environmental awareness could only be recorded anecdotally during the evaluation. There was positive feedback that it was better to farm than to hunt. In addition, hunting was moved from the protected areas to the community forests. This means that wildlife are still being hunted, but at least they enjoy a safe haven in the national parks. Overall, the project has contributed to a change in behaviour and an understanding in favour of nature conservation, as the community has also benefited economically from nature conservation. As long as the implementing agency has the funds to maintain activities, an integrated approach such as that used in the PSMNR can successfully reconcile the conflicting ecological and economic interests of nature conservation in the long term. At the time of the evaluation, there is no sustainability in the funding for the continuation of the programme. This was not foreseen at the time of the appraisal. Further phases focusing on sustainability in funding are crucial for the long-term impact of the project, as the state itself does not provide sufficient funding for protected areas, which also takes into account the development of neighbouring areas.

Rating summary of sustainability: moderately successful (3) (both phases)

Overall, participation in protected area management in conjunction with income-generating measures has contributed to an income situation that provides a sustainability-based incentive not to overexploit natural resources. The project has also further developed the capacities of the implementing agency and the local population. The durability of the effects depends heavily on the development of sustainable financing mechanisms. At the time the project was conceived, financial sustainability was not yet planned, but this is to play a more dominant role from the fourth phase onwards.

Overall rating: successful (2) (both phases)

The project is characterised by an exemplary concept of integrated protected area management that combines ecological, economic and social interests and responds to the Anglophone crisis in a conflict-sensitive manner. However, coherence was limited because, despite efforts, the FC and TC were unable to achieve significant synergies and there was a lack of synergies with other donors in the region, as no other donors were active in this security-critical region. However, it was highly coherent with the objectives of the partner government. It made a significant contribution to the effective management of national parks and reconciled the interests of local communities with ecological objectives, although fire management was inadequate, and hunting pressure remained high at the time of the evaluation. The working methods were of high quality and the decision-making power at regional level, together with a consultant, constituted an efficient governance system. Despite ongoing forest loss, the project contributed significantly to preventing further deforestation and improved the living conditions of local communities through socio-economic infrastructure and income-generating measures. The project promoted sustainable income situations and capacity development, although the sustainability of the effects depends on sustainable financing mechanisms in the follow-up phases. The Anglophone crisis also had a significant negative impact on the project's results, but the positive effects of the project clearly outweigh this.

Contribution to Agenda 2030

The project contributes to the 2030 Agenda for sustainability: Goal 1: No poverty, Goal 2: Zero hunger, Goal 6: Clean water and sanitation, Goal 13: Climate action and Goal 15: Life on land.

Universal applicability: The project has contributed to Goal 15, which focuses on the protection, restoration and sustainable use of terrestrial ecosystems and the sustainable management of forests to combat biodiversity loss. The project has made a significant contribution to the conservation of biodiversity, even though there has been a loss of forest area.

Shared responsibility: Goal 19 of the Kunming-Montreal *Global Biodiversity Framework* states that "the totality of international financial resources related to biodiversity from developed countries, including official development assistance, as well as countries that voluntarily assume commitments of developed countries, to developing countries, in particular the least developed countries and small island states, as well as countries with economies in transition, should be increased to at least $20 billion per year by 2025 and to at least $30 billion per year by 2030." The project is to be understood as Germany's contribution to this goal.

Interplay between economic, ecological and social development: The project was in line with SDG 1 "No Poverty". It aimed to integrate residents living near nature reserves. The residents surveyed were positive about the project, as they were able to derive direct economic and ecological benefits from integrated protected area management.

Methodology

Evaluation methodology

The ex-post evaluation follows the methodology of a rapid appraisal, i.e. a data-based, qualitative contribution analysis, and represents an expert opinion. The project's effects are attributed on the basis of plausibility considerations based on a careful analysis of documents, data, facts and impressions. Where possible, this also includes the use of digital data sources and modern techniques (e.g. satellite data, online surveys, geocoding). The causes of any contradictory information are investigated, attempts are made to resolve them, and the appraisal is based on statements that are confirmed by several sources of information (triangulation), where possible.

The analysis of the effects is based on assumed causal relationships, documented in the impact matrix developed during the project appraisal and updated during the ex-post evaluation, if necessary. The evaluation report sets out arguments as to why certain influencing factors were identified for the effects observed and why the project under review probably made a certain contribution (contribution analysis). The context of the development measure is taken into account in terms of its influence on the results. The conclusions are put into relation to the availability and quality of the data basis. An evaluation concept serves as the reference framework for the evaluation.

The method offers a balanced cost-benefit ratio for project evaluations, on average, with a balance between knowledge gain and evaluation effort, and allows for a systematic appraisal of the effectiveness of FC projects across all project evaluations. Individual ex-post evaluations cannot therefore meet the requirements of a scientific assessment in the sense of a clear causal analysis.

The main objective of the evaluations (knowledge interest) is to measure impacts, provide accountability, promote transparency and enable institutional learning.

Type of evaluation:

Trip to the project area

Key questions of the evaluation according to the evaluation concept:

- Is effective protected area management being practised?
- How are wildlife populations developing?
- To what extent do local communities benefit from the project?
- How do investments in tourism contribute to the sustainability of protected areas?

Non-public (internal) documents

Internal project documents

Directory of public sources

Data sources and analysis tools

Monitoring data from partners, GPS data, Global Forest Watch data

Project sites visited

Mt. Cameroon National Park and surrounding villages. Further information in "The following aspects limited the evaluation"

Interview partners and modality (in person, virtual/by telephone, in writing)

Project executing agency, implementation consultant, target group, NGOs

The following aspects limited the evaluation

Due to the conflict situation, it was not possible to speak with residents of all four national parks (NP). For this reason, village representatives were invited to travel to Buea for the evaluation in order to conduct various focus group discussions. The evidence presented in this report is therefore based on concrete observations made during the evaluation mission and, in part, on individual statements and anecdotal evidence. In addition, a rigorous impact evaluation was carried out using geographical data. As it was only possible to visit project sites in and around Mt. Cameroon NP, it is largely impossible to make statements about the other project sites. In particular, the findings on the criteria of effectiveness and sustainability are based on the sites in and around Mt. Cameroon NP.

Assessment methodology

A six-point scale is used to assess the project according to the OECD DAC criteria, with the exception of the sustainability criterion. The scale values are as follows:

Level 1 Very successful: results significantly above expectations

Level 2 Successful: results fully in line with expectations, without significant shortcomings

Level 3 Limited success: results below expectations, but positive results predominate

Level 4 rather unsuccessful: significantly below expectations and negative results dominate despite recognisable positive results

Level 5 predominantly unsuccessful: despite some positive partial results, the negative results clearly dominate

Level 6 Completely unsuccessful: the project is useless or the situation has deteriorated

The overall rating on the six-point scale is based on a project-specific rationale for the weighting of the six individual criteria. Levels 1–3 of the overall rating indicate a 'successful' project, while levels 4–6 indicate an 'unsuccessful' project. It should be noted that a project can generally only be classified as "successful" in terms of development policy if both the achievement of objectives at the outcome level (effectiveness) and impact level, as well as sustainability, are appraised at least as "moderately successful" (level 3).

The annex to this report is available upon request (German only).

Imprint

Responsible: Evaluation Department of KfW Development Bank

FZ-Evaluierung@kfw.de

Cartographic illustrations are for informational purposes only and do not imply recognition of borders and territories under international law. KfW accepts no responsibility for the topicality, correctness or completeness of the map material provided. Any liability for damages arising directly or indirectly from its use is excluded.

KfW Bankengruppe
Palmengartenstraße 5-9
60325 Frankfurt am Main, Germany