

Ex post evaluation – Nigeria

>>>

Sector: Biodiversity (4103000)
Project: Oban Hills Tropical Forest Conservation (BMZ no. 1991 65 481)*
Implementing agency: National Park Governing Board / Cross River National Park



Ex post evaluation report: 2017

		Project A (Planned)	Project A (Actual)
Investment costs (total)	EUR million	29.91**	3.23
Counterpart contribution	EUR million	1.89	1.00***
Financing	EUR million	28.02	2.23****
of which BMZ budget funds	EUR million	11.25	0.49

*) Random sample 2017 **) A reduced budget was proposed in the annual reporting to the Federal Ministry for Economic Cooperation and Development (BMZ) in 1996 following the end of the EU co-financing. The total costs planned were thereby reduced to EUR 12.27 million. ***) The annual partner contribution was estimated at EUR 250,000 per year (four-year term). ****) The EU disbursements of EUR 1.74 million encompassed the financing of consulting costs, the marking of boundary sections, the construction of a project office and the recruitment of park staff.

Summary: The project's aim was to conserve the rainforest in the Oban Hills (in the Nigerian state of Cross River) by developing a national park with a total area of around 3,000 km² and promoting productivity in the residents' zone. Furthermore, the project was to finance voluntary resettlements for the affected population in the national park. The project was implemented as part of a co-financing arrangement from 1992 until the withdrawal of the European Union (EU; formerly EEC) in 1996. The project was ended early in 1996 due to political differences in the development cooperation with Nigeria and Nigeria's violent confrontations with the neighbouring country Cameroon. The project's residual funds were not cut until 2016, meaning that the project was not included in the basic population and was drawn with the random sample to be evaluated in 2017.

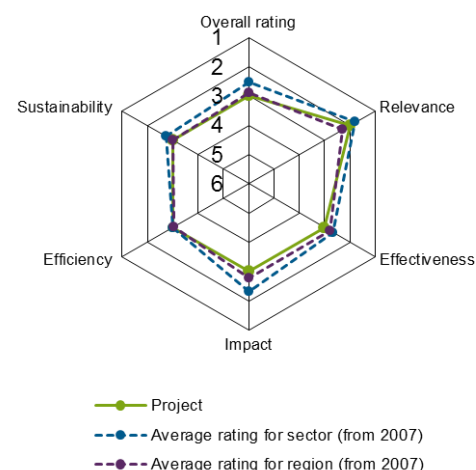
Development objectives: The project's ultimate objective (impact) was to contribute to reducing the progressive destruction of the forest and to thereby stem further ecological destabilisation in the region. The project objective (outcome) was to preserve the primary rainforests in the Oban Hills Division.

Target group: The project's target group included both the population in the planned national park (four villages with a total of around 1,600 inhabitants) and the population of the residents' zone (1991: around 40,000 inhabitants), which displayed strong population growth of 3.5% p.a. at that time.

Overall rating: 3

Rationale: The part of the Cross River National Park that was financially supported in the 1990s still exists. A satisfactory rating therefore appears justified in spite of the early project termination, which prevented many of the planned measures from being implemented. The Cross River National Park is one of the last remaining primary rainforests in Nigeria (more than 50% of the remaining rainforest areas) and a biodiversity hotspot which is recognised today as a UNESCO World Heritage Site and continues to contain intact primary rainforest on a large scale.

Highlights: A fact particularly worth mentioning is that, despite the project termination and low use of funds of around EUR 0.5 million, the project area that was supported continues to exist as intact rainforest and an international NGO is supporting it in terms of financial means and staffing.



Rating according to DAC criteria

Overall rating: 3

General conditions and classification of the project

This is one of the first forest conservation projects that KfW has financed.¹ The Oban Hills project area spans an area² of 3,000 km² and UNESCO declared it a World Heritage Site deserving of protection in 2013 due to its wide abundance of species. The Park Division is one of Nigeria's oldest and last remaining rainforests. The current challenges for the Oban Hills Park Division, which forms the Cross River National Park together with the Okwangwo Division (around 1000 km² in size), are illegal logging, agriculture and infrastructure expansion, and poaching. The Wildlife Conservation Society (WCS), a US non-governmental organisation (NGO), has supported the Cross River National Park financially and technically since 2014.

The planned project measures included the construction of park infrastructure (demarcation of boundaries, construction of ranger posts, recruitment/training of park staff, development of monitoring and control systems) along with support for the population (information campaigns, public infrastructure, income-generating measures such as intensifying agriculture, promoting tourism, and so on). While the FC contribution focused on developing the park infrastructure and supporting the population, the consulting costs, planned village resettlements and some of the running costs were to be covered from the EU funds.

In 1996, the project was aborted early after running for four years, following the discontinuation of the EU co-financing due to political differences in international cooperation as well as Nigeria and Cameroon intensifying their military confrontation.³ Attempts to resume the project at the end of the 1990s failed due to a change in developmental priorities in the cooperation with Nigeria and the partner country's high indebtedness. The data underlying the evaluation is only available to a limited degree because of the project termination, which is the reason for some evaluation criteria being difficult to rate with a justifiable amount of effort from today's perspective.

Relevance

The problem analysis for the project is still valid today even though the deforestation dynamic was significantly reduced since project appraisal: unsustainable land use, logging, and expansion of settlements and infrastructure due to strong population growth are still the main drivers of forest loss in Nigeria today. Nigeria lost 35 % of its forest cover between 1990 and 2005. The annual deforestation rates have significantly reduced since then. Effective forest conservation and promotion of sustainable land use can only succeed if the losses these cause to the local population in and around the protected areas are compensated for. Alongside the compensation, the conflict of objectives between agricultural use and conserving natural resources can only be adequately addressed in the long term if monitoring and control effectively prohibit the illegal land use. The operating logic of that time and the defined raft of measures are well considered and coherent. In particular, it is to highlight that this was a pilot project that is still in line with current project approaches and operating logic, despite its novel nature at the time.

An innovative approach for that period was also developed for the cooperation with the population in the context of a residents' zone programme: the restrictions on use were to be compensated for by means of suitable alternative income opportunities. This included plans to introduce sustainable farming techniques. The logic of the project intervention is therefore consistent with the basic idea for biosphere reserves, as per the current Federal Ministry for Economic Cooperation and Development (BMZ) sector paper. Con-

¹ Financial Cooperation (FC) started to be involved in the field of natural resource conservation from the early 1990s onwards. The project can therefore be viewed as a first generation project in this field. The approach was very innovative at the time and able to act as a pilot.

² 3,000 km² is the originally planned size, because the park boundary has still not been conclusively demarcated. Some sources also state an area of 2,700 or 2,800 km².

³ The execution of several civil rights activists (including the recipient of the Alternative Nobel Prize, Ken Saro-Wiwa) specifically led to the Nigerian-European cooperation being aborted. The confrontations with Cameroon were related to the oil-rich Bakassi region.

servation can only succeed in being sustainable if a balance is achieved between user interests and protection of biodiversity. The ideal concept is of residents' living conditions effectively rising on their own in accordance with the ecological goals, for example via the income from sustainable tourism envisaged in the project. However, such cases are the exception, as the experiences from previous ex post evaluations demonstrate. This is why following up on relevant measures is so important, which reads particularly true for approaches involving increased income through agricultural intensification that could also enhance the pressure to use the protected areas.

It is also worth noting that no concept was designed then to cover the Park's ongoing upkeep costs over the long term. Additionally, covering the costs from tourism income alone is unrealistic in most cases. The "programmatic" approaches in the sector are therefore recommended; these do not promote individual protected areas, but collectively organise protection systems (nationwide, regional) to group high-revenue protected areas together with low-revenue ones, sharing both revenues and costs. The comparison with those parks on the African continent with the highest numbers of visitors, however, shows that subsidies are necessary even in these cases to cover the operating costs. The Cross River National Park was already organised as an association at that time, consisting of the Oban Hills and Okwangwo divisions. On the other hand, it has not yet been possible to establish a national park association across the whole of Nigeria.

The project fitted in with Nigeria's development priorities, and its ecological objectives were in line with the German Federal Government's aims. In retrospect, it also adheres to numerous Aichi Biodiversity Targets, which were adopted in 2010 by the member states of the United Nations' Convention on Biological Diversity, such as Target 1: raising awareness for biodiversity, Target 5: reducing the rate of forest loss and Target 12: sustaining and improving the lives of threatened species. The project sensibly built on the preparatory studies by the World Wide Fund for Nature (WWF). The WWF took on an advisory role as an implementation consultant during planning and at the start of the implementation, bringing relevant expertise in the field of natural resource conservation. The positive climate impacts from the forest's role as a valuable carbon sink were not an explicit objective at the time of the appraisal. However, from today's perspective, these are an important climate-related contribution from forest conservation measures.

Relevance rating: 2

Effectiveness

The project objective (outcome) was to preserve the primary rainforests in the Oban Hills Division. This was to be achieved by formulating forest conservation concepts and intensively monitoring the Park Division (output 1), developing and expanding cultivation techniques to increase productivity per unit area in the residents' zone (output 2) and increasing awareness among the resident population (output 3). Only one indicator on the outcome level was specified for the whole project, intended to measure the area of the intact primary rainforest. However, baseline data were not collected either during the appraisal or in the later course of the project.

The indicators for the preservation of the primary rainforest in the project division were expanded to include the second and third indicators within the scope of the ex post evaluation. The attainment of the project objectives defined at the project appraisal can be summarised as follows:

Indicator	Status PA, target value PA	Ex post evaluation
(1) Stabilisation of the intact primary rainforest area	n.a.	There are currently no valid data on the exact area of the primary rainforest. However, conversations with WCS and current aerial photographs show that the Park Division continues to comprise mainly intact primary rainforest. ¹

(2) Introduction of a follow-up system with ranger posts and regular patrols	Percentage; a monitoring area of 20-50 % of the Park Division would have been realistic in the planned seven-year project duration	Four patrols a month are conducted with WCS support. Around 650 km ² is currently being monitored over a three-month period. ² Despite the small number, the measures are relatively successful, as poaching incidents in the monitored areas have significantly decreased since 2014. ³
(3) Introduction of effective park administration	Sufficient budget to cover the running costs and enough staff to be capable of action in the Park Division	There is currently no effective park administration in the Park Division. A park administration does exist, but it is not really capable of action in either financial or staff terms.

1) WCS assumes that there is 4,000 km² more of intact primary rainforest in the entire Oban Hills Division (park including residents' areas). Although there is high land use pressure from illegal logging and private hunting groups, the forest area continues to be well preserved.

2) This figure can be found in a WCS interim report from January 2017.

3) WCS emphasised that 16-20 patrols a month would be necessary for a park division of this size to monitor the whole area sufficiently and record incidents promptly.

The preservation of the primary rainforest would also have been a sensible main objective for the measure from today's perspective. The planned raft of measures are understandable and reasonable. One positive point to mention is that the national park that was supported then exists to this day. The resettlement planned during the project of then around 1,600 inhabitants into four villages has not yet occurred. From today's perspective, one would avoid such a resettlement as early as the planning stage, bearing in mind social compatibility risks. Instead, an attempt would be made to preserve the existing forest areas for the long term along with the local population in the Park, by means of sensible use restrictions and the involvement of the affected population.

The project measures that had been started before the project was terminated essentially included: recruiting staff for park monitoring, marking park boundaries, spreading information among the resident population, developing concepts for promoting the residents' zone and park monitoring, and preparing tenders for deliveries and services. The project activities implemented had created high expectations among the resident population as far as the question of compensation to be provided for use restrictions and prohibitions was concerned. This resulted in frustration and resentment building in the resident communities, which persist to this day. The people complain that the Park has only led to bans, but has produced no advantages for them in the form of compensation.

Overall, as of today we cannot sufficiently rate the effectiveness of the measures financed at that time in many aspects, because more than 20 years have passed since the project termination. However, the fact that the rainforest continues to exist and is systematically monitored by regular ranger patrols shows that the area is still protected today. The forest area was "occupied" due to the international donor involvement and commercial timber concessionaires could not obtain it for logging purposes.

Effectiveness rating: 3

Efficiency

The total budget was subsequently adjusted after the EU withdrew from the cofinancing and was considerably reduced compared with the programme appraisal because of the bilateral funds that were available (from EUR 29.91 million to EUR 12.27 million, albeit with only around EUR 0.5 million of this being spent). The consulting costs were somewhat higher than 30 % of the total costs, which is a relatively high proportion but seems to be appropriate due to the capacity-building nature of the project. Except for the consult-

ing costs, however, most of the costs were never retrieved because of the project termination, meaning that this is only a planning estimate. The costs incurred, around EUR 0.5 million, were principally consulting costs since they were used to prepare a) tender documents, b) the marking of the park boundary and c) information to spread among the resident population. The costs for these vary within a reasonable range. The park boundary was started to be legally and physically marked before the cofinancing by the Park and WWF started. Some 98 km of boundary were probably marked by the time of project termination, with 174 km still unfinished. The consulting documents available from the project suggest that only 20 km of the boundary was financed in the project by EU funds.

The relationship between costs and micro as well as macro-economic benefits must be explored to evaluate the measure's allocation efficiency. It has not yet been possible to complete the marking process that has started⁴. The relatively low implementation status, however, must be regarded critically for a planned total project duration of seven years as well as a four-year preparation and implementation period of the project. The project's characteristics (particularly EU co-financing) could have been better considered during the project's design by more clearly addressing binding coordination processes between the EU and KfW during the project appraisal. On a positive note, the marking sections from then still exist now (boundary stones and new paths) and provide an important foundation for the Park, even numerous years after the project ended (for example, in monitoring and control efforts for the park area). The allocation is satisfactory in light of the low use of funds and the fact that the primary forest still exists. Currently, WCS provides around USD 50,000 a year as the main financial backer, with this being used to finance anti-poaching patrols and train the responsible park staff. Alongside WCS, the Nigeria National Parks Service – a government body – also provides funds. However, these are far from sufficient and reliable information about their amount has not been specified. WCS' annual expenditure is used more efficiently today than the FC's consulting funds in the 1990s, due to monitoring and control impacts that have been achieved. The latter were also used for technical designs and tenders but were not ultimately used due to the project termination. Overall, the allocation efficiency can be evaluated as satisfactory.

Efficiency rating: 3

Overarching developmental impact

The project's ultimate objective was to contribute to reducing the progressive destruction of the forest and thereby to contain further ecological destabilisation in the region. Indicators were not specified even back at the project appraisal due to the difficulties of measurement (for instance, species diversity, soil fertility). This presents the ex post evaluation with the challenging situation of neither providing indicators nor base and target values. Another critical observation is that there is no clear distinction between the ultimate objective and the project objective. This is because both are related to the preservation of the rainforest and do not differentiate clearly in terms of their set targets. An ultimate objective today would deal more with the long-term impacts of the conservation, beyond the pure preservation of the forest area. Additionally, it would consider the climate and biodiversity impacts such as the CO₂ storage and development of "key-stone species" in the park division.

Ultimate objective indicators for conservation projects of this type, adequate from today's perspective, are therefore proposed below:

Indicator	Status PA, target value PA	Ex post evaluation
(1) CO ₂ storage via preservation of the forest areas	Tonnes of carbon per hectare – target value: 150 t C/ha for the preservation of tropical rainforest ¹	Supposing that the park division continues to encompass an area of 3,000 km ² of intact primary rainforest, we can assume that 45 million t C can be stored by preserving the forest area.

⁴ The whole boundary spans a length of 435 km, with a large part already "naturally" bounded (by rivers, international border with Cameroon). Another 174 km of demarcation was still unfinished. This boundary is still not completely demarcated to this day.

(2) Development of keystone species in the National Park	Number – growing number of selected keystone species in the project area	There is a lack of financial resources to systematically monitor the number of keystone species. WCS assumes that the number of animals has fallen slightly. All keystone species, however, continue to be present in the Park Division.
--	--	--

1) This reference figure is the mean value between CO₂ storage calculations by the scientists Gibbs and Brown (from 2007) and those of the Intergovernmental Panel on Climate Change (from 2006). For a precise explanation of the calculation method, refer to the article "Monitoring and estimating tropical forest carbon stocks: making REDD a reality" by Gibbs et al. (online at http://redd.unfccc.int/uploads/2_112_redd_20081022_tfq.pdf).

The overarching developmental impacts are currently difficult to evaluate due to the data situation. The data available, however, indicate that the impacts can be classified as satisfactory, although many of the planned measures were not implemented and so a broad impact could not be reached (especially with supporting the local population and developing their own revenues). Well beyond the planned and actual project duration, the forest was still able to fulfil its function as a valuable CO₂ sink due to the intact primary rainforest being preserved. We can assume, based on scientific calculation methods, that the Park Division can store around 45 million tonnes of carbon. If one factors in the residents' areas, which are still not protected and encompass around 1,000 km² more, this value increases to 60 million tonnes. As an intact primary rainforest, the Oban Hills Division thus has particularly high potential for CO₂ storage. Protecting the areas is desirable over the long term to alleviate the impacts of climate change with successful carbon storage.

Moreover, another positive factor is that the protection of the Park Division has contributed to the continuing presence of threatened keystone species being native to the area and not falling victim completely to poaching or the expansion of commercial agriculture (especially palm oil production, which has grown strongly in the rest of the country). The keystone species include the following species threatened by extinction: Preuss's red colobus (*Procolobus preussi*), the slender-snouted crocodile (*Mecistops cataphractus*), the drill (*Mandrillus leucophaeus*), the Nigeria-Cameroon chimpanzee (*Pan troglodytes ellioti*), the African forest elephant (*Loxodonta cyclotis*) and the leopard (*Panthera pardus*).

The opportunity costs of conservation in the region are high because of the agricultural potential to cultivate oil palms, which becomes evident when looking at increasing palm oil production in the area around the National Park. Agriculture is continuing to spread rapidly and is moving ever closer to the protected area, meaning that the first oil palm plantations have already been created close to the Park in recent years. The land use pressure and deforestation in the Park Division, however, continue to be lower than in other parts of the country with better road access.

Overarching developmental impact rating: 3

Sustainability

Only limited conclusions can be drawn about the project's sustainability because it was aborted at an early implementation stage. However, the Oban Hills Division is now still a functional primary rainforest, a positive aspect worth stressing. That past financial contribution and the four-year project duration most likely bought valuable time to protect the Division from commercial land use. In addition, the fact that WCS is active in the project area is evidence that it continues to be protected. Selective biodiversity follow-up and regular patrols help to monitor and protect the nature and wildlife, even though poaching and logging frequently occur in contempt of legal prohibitions. However, such incidents are documented and the culprits are criminally prosecuted, according to the information provided.

Nevertheless, this cannot obscure the fact that the long-term preservation of the Division is also threatened by commercial agriculture spreading as well as the persistently strong population growth in the region around the Cross River National Park (1991: 40,000 inhabitants in the surrounding area; 2016: about

70,000). In particular, the planned construction of a motorway through the Park Division poses a major threat, which WCS is countering together with BirdLife International and the Heinrich Böll Foundation. Experience indicates that conflicts with the affected population will not always be avoidable in this regard. Accordingly, institutionalising conflict resolution mechanisms, making the process more transparent for all parties involved, is recommended. The Oban Hills Division being declared a World Heritage Site, a process already initiated at national level during the project, is definitely a major advantage for the preservation of the area, although it alone cannot contribute in the long term to the conservation of biodiversity without local support.

In terms of institutionally strengthening the National Park, the Park can at least be seen to have small revenues of its own today. These revenues are composed of admission fees to the Park and payment for tourist services (offering professional guided tours, providing overnight accommodation, and so on). A day's visit for an adult with a night's stay in simple accommodation currently costs approximately EUR 18 for international visitors. The admission prices are fairly inexpensive compared with other world-renowned national parks, although this seems necessary in view of the lower potential for tourism.⁵ In fact, international visitors are more of an exception. Most of its own revenues are generated by local school or university visits, meaning there is still heavy reliance on external financing. In summary, despite the limitations, we assess the project's sustainability as satisfactory.

Sustainability rating: 3

⁵ The Kruger National Park in South Africa costs around EUR 20 for admission and an overnight stay costs around EUR 60; the Serengeti Park in Kenya is about EUR 55 for admission, plus simple accommodation for EUR 30 a night.

Notes on the methods used to evaluate project success (project rating)

Projects (and programmes) are evaluated on a six-point scale, the criteria being **relevance, effectiveness, efficiency** and **overarching developmental impact**. The ratings are also used to arrive at a **final assessment** of a project's overall developmental efficacy. The scale is as follows:

Level 1	Very good result that clearly exceeds expectations
Level 2	Good result, fully in line with expectations and without any significant shortcomings
Level 3	Satisfactory result – project falls short of expectations but the positive results dominate
Level 4	Unsatisfactory result – significantly below expectations, with negative results dominating despite discernible positive results
Level 5	Clearly inadequate result – despite some positive partial results, the negative results clearly dominate
Level 6	The project has no impact or the situation has actually deteriorated

Rating levels 1-3 denote a positive assessment or successful project while rating levels 4-6 denote a negative assessment.

Sustainability is evaluated according to the following four-point scale:

Sustainability level 1 (very good sustainability): The developmental efficacy of the project (positive to date) is very likely to continue undiminished or even increase.

Sustainability level 2 (good sustainability): The developmental efficacy of the project (positive to date) is very likely to decline only minimally but remain positive overall. (This is what can normally be expected).

Sustainability level 3 (satisfactory sustainability): The developmental efficacy of the project (positive to date) is very likely to decline significantly but remain positive overall. This rating is also assigned if the sustainability of a project is considered inadequate up to the time of the ex post evaluation but is very likely to evolve positively so that the project will ultimately achieve positive developmental efficacy.

Sustainability level 4 (inadequate sustainability): The developmental efficacy of the project is inadequate up to the time of the ex post evaluation and is very unlikely to improve. This rating is also assigned if the sustainability that has been positively evaluated to date is very likely to deteriorate severely and no longer meet the level 3 criteria.

The **overall rating** on the six-point scale is compiled from a weighting of all five individual criteria as appropriate to the project in question. Rating levels 1-3 of the overall rating denote a "successful" project while rating levels 4-6 denote an "unsuccessful" project. It should be noted that a project can generally be considered developmentally "successful" only if the achievement of the project objective ("effectiveness"), the impact on the overall objective ("overarching developmental impact") and the sustainability are rated at least "satisfactory" (level 3).