

Ex post evaluation – Brazil



Sector: Forest development (CRS Code: 31220)
Programme/Project: Atlantic Forest Conservation Fund – AFCoF I & II,
 BMUB-Nr.: 209810169 & 209810524
Implementing agency: AFCoF I: FUNBIO, AFCoF II: MMA and FUNBIO



Ex post evaluation report: 2016

in EUR million	AFCoF I (Planned)	AFCoF I (Actual)	AFCoF II (Planned)	AFCoF II (Actual)
Investment costs (total)	2.0	2.0	8.5	8.5
Counterpart contribution	in kind	in kind	2.0	2.0
Funding	2.0	2.0	6.5	6.5
of which BMBUB budget funds	2.0	2.0	6.5	6.5

Summary: The Atlantic Forest Conservation Fund I (AFCoF I) project established a flexible financing mechanism for environmental purposes in Brazil’s tropical Mata Atlântica (Atlantic Forest Conservation Fund / AFCoF) at the non-profit foundation FUNBIO. The AFCoF I financed the following five components: (1) public protected areas, (2) protection of private areas, (3) prevention and fighting of forest fires, (4) sustainable business and biodiversity, and (5) institutional capacity building and project management. The AFCoF II made a few changes to the project set-up, such as involving the Ministry of the Environment (MMA) as the implementing agency together with FUNBIO, and involving GIZ to provide technical assistance. AFCoF II focused on the following four components: (1) extending public and private protected areas, (2) introducing payments for environmental services, (3) developing a monitoring system, and (4) capacity building. However, during implementation the creation and expansion of federal protected areas within the Mata Atlântica (a major project focus) ceased to be public policy.

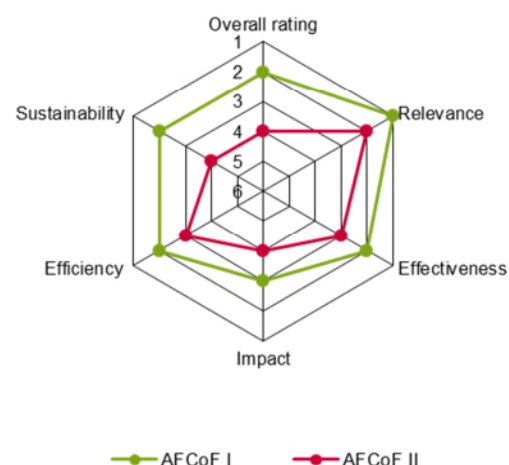
Objectives: The overarching goal of AFCoF I was to contribute to protecting biodiversity of the Mata Atlântica and to mitigate the effects of climate change. The project objective for AFCoF I as described at appraisal was to establish a flexible financing mechanism for the environment of the Mata Atlântica (Atlantic Forest Conservation Fund / AFCoF). The overarching goal of the AFCoF II was to contribute to the protection, sustainable use, and rehabilitation of Brazil’s Mata Atlântica as a globally significant CO2 sink, and with a climate-relevant biodiversity using four specific project objectives.

Target group: The target groups of the AFCoF I & II consisted in the population living in the Mata Atlântica, as well as the global community at large, benefitting from the protection of biodiversity and tropical forests.

Overall rating: AFCoF I: 2, AFCoF II: 4

Rationale: While the indicators of AFCoF I were achieved, the political setting during the implementation of AFCoF II proved less conducive and the indicators were only partially achieved. The projects' efficiency was somewhat hampered by the complex institutional set up and the impact was considerably reduced because of changes in policy and legislation outside of the projects' control. It is worth noting though that the AFCoF II created the basis for certain activities, such as payments for environmental services, which might still be implemented in the future, once the required legal underpinning has been provided.

Highlights: The design of AFCoF II was originally fully in line with the priorities of the Government regarding the Atlantic Coastal Forest biome, and the project was competently implemented. The changes in Government priorities during the time of project implementation, however, significantly impaired the impact of the project.



Rating according to DAC criteria

Overall rating: AFCoF I: 2; AFCoF II: 4

Background

Between 2008 and 2015, the German Federal Ministry for the Environment, Nature Conservation, Building, and Nuclear Safety (BMUB) supported two Brazilian environmental sector projects: Atlantic Forest Conservation Fund I and II in the framework of the International Climate Initiative (Internationale Klimaschutzinitiative, hereafter IKI).

The first project (Mata Atlântica I, BMUB-No. 2098 10 169), implemented between December 2008 and December 2012 for the purpose of protecting Brazil's Atlantic coastal forests, was appraised at Euro 2 million (actual disbursement following returns was Euro 1,980,632.33). It financed the following five components:

- Creation of public protected areas
- Creation of private protected areas
- Prevention and management of forest fires
- “Sustainable Business” (Promotion of agro-forestry-systems and biodiversity products, etc.)
- Project management and institution building

The second project (Mata Atlântica II, BMUB-No. 209810524), implemented between January 2009 and October 2012 focused on providing direct support to a number of partner organizations working in the same forest zone, while relying on both, financial cooperation (FC) with KfW Development Bank and technical cooperation (TC) of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). Fund II was appraised for technical cooperation in the amount of Euro 3,095,986 (actual disbursements Euro 3,053,972); the financial cooperation (FC) amounts were Euro 6.5 Mio. (appraised and actual). The BMUB provided the funding. Phase II included the following three components (in addition to a few TC components):

- Delimitation of public and private protected areas
- Development and testing of a transfer system for payments for environmental services
- Mapping and monitoring of the Atlantic Coastal Forest

Both projects were implemented through FC on behalf of BMUB. The biodiversity foundation (FUNBIO) managed the funds for phases one and two via the Atlantic Forest Conservation Fund. Phase I components started in 2008 and were implemented in 2009 (using funds earmarked for 2008). Phase II components were implemented from November 2009 until the end of 2012. FUNBIO distributed funding in cooperation with KfW by issuing requests for proposals. Proposals were evaluated and approved by a technical committee on the basis of project appraisal reports. In phase II, the coordination of actions and strategies changed from FUNBIO to the Brazilian environment agency (MMA). However, FUNBIO continued to manage the funds.

Relevance

In these projects, BMUB-funding helped the Government of Brazil to address at the biome level what was a high priority environmental problem at the time of project design. The South America's Atlantic Coastal Forest (known in Portuguese as the Mata Atlântica; hereafter ACF) was endangered, and its ecological importance as well as the environmental services it continually provides to the most densely populated parts of the country caused it to be the subject of not only constitutional protection, but also its own spe-

cial body of legislation. It was the stated intention of the Government of Brazil to develop an ACF-focused national program of public and private protected areas.

The second phase project is rated lower for relevance than the first because, even though the ACF has not lost any importance, during the course of implementing the two IKI projects, governmental priorities changed radically and environmental strategy changed dramatically. While the ACF's problems and potential are still of the highest priority, focusing work on the ACF biome is not what the country wants to do at the moment. Although the Government of Brazil continues to focus on the Amazon biome with respect to protected area implementation, all other work focused on other biomes, such as the ACF, was largely suspended. The national forestry law was rewritten. And the executive branch basically stopped signing protected-area-creating legislation and official recognition.

A new administration was no longer interested in establishing fully protected and sustainable use conservation lands. It may have seen these lands as representing a significant financial and opportunity cost. The impact on the project was that at a certain point, all the building blocks (studies, public consultation) that partner agencies thought would underlie enabling protected area legislation could not culminate as intended. The Government of Brazil retains its commitment to biodiversity, environmental hazard reduction, preservation of the water supply, and so on. It is just looking for new ways to give attention to these things nationwide rather than on a biome basis. Also protected areas need to be staffed, they make energy development and resource extraction more difficult, and they keep politically important industries from cheaply and easily obtaining natural resources. Even though the ACF is no longer a priority policy focus, its problems and its potential warrant that in light of the current situation, its challenges continue to be relevant.

The results chain for AFCoF I was plausible in that it intended to protect biodiversity of the Mata Atlântica and to mitigate the effects of climate change, through establishing a flexible financing mechanism. The results chain for AFCoF II was plausible as well in that it intended to contribute to the protection, sustainable use, and rehabilitation of Brazil's Mata Atlântica as a globally significant CO2 sink, through extending public and private protected areas, introducing payments for environmental services, and improving monitoring and management capacity. However, because of the Ministry of Environment's cumbersome budgeting, staffing and procurement processes, project designers saw no way around using the Brazilian Biodiversity Fund (FUNBIO), as a financial intermediary; and NGOs as implementers.

Relevance rating: AFCoF I: 1; AFCoF II: 2

Effectiveness

The AFCoF I had the following three intermediate objectives:

- (1) Extending and consolidating the system of public and private protected areas
- (2) Promoting sustainable use initiatives and the rehabilitation of natural resources
- (3) Building institutional capacities in environmental administration, monitoring, enforcement, and forest-fire fighting.

AFCoF I did establish the funding mechanism as planned. IKI projects had successfully been implemented with FUNBIO in the past, and in Brazil FUNBIO is the best in the business. It regularly functions as a financial intermediary for many other international and local agencies doing work in the environmental sector. The first phase basically did two things: it was a procurement exercise, and it made small contributions to several agencies' operating budgets. Items procured (vehicles, computers, satellite imagery, GIS systems, two-way radios, and so on) were unquestionably badly needed. But to meet the planned disbursement target date meant that the selection and implementation processes were hectic and rushed.

The AFCoF II project's goal was to contribute to the preservation of an important part of the tropical forest. The project consisted of a technical assistance module, implemented by GIZ, and a financial assistance module, implemented by KfW.

Activities planned under the project goals were to extend the systems of public and private protected areas; contribute to Brazil's commitments under the Convention on Biodiversity (protected areas of 10 percent of the Mata Atlântica); introduce transfer systems and mechanisms that would facilitate payments to

stakeholders for environmental services; create relevant management information systems; and strengthen institutional capacities to contribute to project goals at the federal, state, and municipal levels, while enhancing environmentally relevant skills and organizational structures within civil society and the private sector.

As with AFCoF I the target group consisted of the rural population within the ACF that earns its livelihood directly from forest resources and those urbanites whose livelihood depend on environmental services. Furthermore, the world at large benefited from the global public goods of protecting biodiversity and absorbing carbon dioxide.

Notwithstanding its somewhat limited scope of actions, the first project substantially achieved its ambitious goals by means of activities that were consistent with the desired impacts and effects. Government policy changed during implementation in a manner that constrained implementation, but, other than demonstrate commendable flexibility, there was little that could be done to overcome executive resistance to further conservation area creation. A competent and experienced implementing agency was able to respond to severe time constraints by focusing on known and capable NGOs already engaged in ongoing activities. It then largely supported those activities through an intensive procurement exercise that provided among other things vehicles, computer systems, radios, and Geographic Information System (GIS) software and related licensing.

The second project was more ambitious. The MMA became much more actively involved in setting directions and priorities. Many activities were managed through request for proposals directed at the community of environmental NGOs. These proposals were carefully scrutinized by a panel of independent experts put together by FUNBIO, and the best ones were supported. MMA activities were supported without any such process, with FUNBIO still managing procurement, contracting, etc. The project supported GIS systems and environmental monitoring within the MMA. The monitoring unit that was created does not exist anymore, because of personnel changes within MMA in response to the new forest code. Some of the former responsibilities of the monitoring unit were assumed by relevant departments of the MMA or other institutes. Some of the activities ceased altogether.

Both projects — AFCoF I on a much smaller scale — prepared the expansion and consolidation of public protected areas through the initiation and/or completion of the legally required preparatory steps, such as the preparation of studies and public hearings. The equipment supplied in AFCoF I included information and communication systems which helped staff to handle their day-to-day supervision task in the protected areas more effectively as well as to elaborate strategic management plans.

AFCoF I determined the following indicators that were slightly modified by this evaluation to make them more outcome-focused. Because of the short implementation timeframe, however, the AFCoF I did not set up specific targets to be achieved.

Indicator	AFCoF I
(1) Number of delimited and consolidated public protected areas uses equipment.	A total of 49 federal and state protected areas with a total area of 1,043 ha in the Brazilian Mata Atlântica use the equipment provided under AFCoF I.
(2) Area of private protected areas extended and number of management plans prepared and used.	AFCoF I approved 43 of the 175 submitted proposals for setting up private protected areas in the Mata Atlântica, thereby extending the private protected area system by 3,761 ha. Furthermore, the project financed 15 management plans for already existing private protected areas.
(3) Improved environmental units for fire-fighting.	Two strategic forest fire fighting centers in the protected areas of Descobrimento (Bahia) and Itatiaia (Rio de Janeiro) as well as the fire brigade staff use the equipment provided.

AFCoF II improved its monitoring system and partially achieved its indicators as explained in the following table:

Indicator	AFCoF II
<p>(1) By June 2009, an area of 2,360,000 ha of the Mata Atlântica was being strictly protected. The objective was to demarcate an additional 1,500,000 ha strictly protected areas by October 2012 that completed the process described by law.</p>	<p>This indicator was partially achieved:</p> <p>Quantitative achievement of actual demarcation of protected areas: 468,607 ha (31 percent of 1,500,000 ha)</p> <p>Completion of legally required preparatory steps for demarcation: 551,346 ha (37 percent of 1,500,000 ha)</p> <p>Total prepared and/or demarcated: 1,019,953 ha (68 percent of 1,500,000 ha)</p> <p>Furthermore, the legally required preparatory steps for demarcation were initiated for an additional 1,545,635 ha.</p>
<p>(2) The project will develop a transfer system and mechanism for payments of environmental services (PES) until October 2012 (for water provision, CO₂, and biodiversity) and implement PES on about 5,000 ha.</p>	<p>This indicator was partially achieved. Legal regulations intended to allow public and private sector PES were never passed. The project funded 14 pilot projects that explored the feasibility of payments for environmental services. As of March 2015, no payments were ever made in any of them. Involved staff estimates that, should the passage of necessary related legislation ever take place, about half of these pilots identified for payment arrangements were feasible. That is, there were benefits identified and quantified with interested buyers/sellers. Still, none could take place without the necessary legal underpinnings that would recognize the legality of public and commercial entities making the necessary financial transfers.</p>
<p>(3) A monitoring system monitors forest cover, CO₂ sequestration and sinks, as well as biodiversity in the Mata Atlântica and provides environmental and nature protection policies of the Mata Atlântica with relevant information.</p>	<p>The project was weak in building institutional capacities in environmental administration within the MMA. The project set up a monitoring unit within MMA, which was later dissolved. While some of its activities were assumed by other departments of the MMA and other institutes, altogether monitoring did not take place as intended and enforcement remains spotty and weak.</p>

Effectiveness rating: AFCoF I: 2; AFCoF II: 3

Efficiency

Overall the activities supported by the two projects utilized inputs efficiently. The stream of benefits flowing from project investments in private and public conservation areas will exceed their cost. The second phase project is rated lower than the first because, in spite of the supporting activities being completed, more than half of the project-identified forest conservation areas (where technical studies and public consultation processes were paid for and completed) were not legalized as intended. While it was not in the power of involved staff to complete this last step, almost all the necessary expenses were incurred nevertheless. Beyond this, implementation did a good job of balancing costs and benefits. Procurement was quickly handled at agreed upon rates. The project implementing agency has in-depth sector knowledge, and its staff was well-trained and capable. It consequently was able to rely on its contacts and awareness of what was happening in the sector to put together the first project in an expeditious manner. Even

though time was severely constrained, reportedly FUNBIO refused to approve the purchase of items with inflated prices.

Allocation efficiency was high. With the relatively limited amount of funding, the projects prepared and equipped a large number of public and private protected areas involving many NGOs and individuals.

Efficiency rating: AFCoF I: 2; AFCoF II: 3

Impact

The overarching objective of AFCoF I was to contribute to protecting biodiversity of the ACF and to mitigate the effects of climate change by establishing a flexible and demand-driven financing mechanism that would support the protection of the ACF.

The AFCoF II overarching project goal was to contribute to the protection, sustainable use and rehabilitation of Brazil's ACF as a globally significant CO2 sink with climate-relevant biodiversity.

The independent evaluation finds that the two projects contributed to the protection of biodiversity of the ACF and will help to mitigate the effects of climate change. A flexible and demand-driven financing mechanism was created that has proven its ability to support the protection of the ACF. As reported above, the bulk of the resources provided went into extending and consolidating the system of public and private protected areas.

Many of the projects' partners are still active and continue activities that support the project aims. The rehabilitation of natural resources is ongoing.

Even though the planned measures were implemented properly as foreseen, the three components of AFCoF II had little effect. Monitoring did not take place as intended and enforcement remains spotty and weak. Throughout the duration the environmental agenda was dominated by discussion of the Forest Code, and this discussion redounded to the detriment of many related issues.

The first phase of this otherwise very nice endeavor is rated marginally satisfactory for impact, the second phase is rated unsatisfactory. While both phases had significant shortcomings, the nature of their deficiencies was quite different in each case.

As intended, for AFCoF I FUNBIO's experienced staff quickly set up a small project team, created an internal fund with stand-alone accounting and controls and issued a call for proposals. It disbursed significant amounts in a timely fashion and, by all accounts the disbursements and the identification of activities financed were handled in a competent way. In discussions with project partners, a few informants characterized the process as rushed, and found the 3-4 months left to them to complete their activities as a challenge. According to the operations completion report, project investments financed by AFCoF I helped to establish new and consolidate existing public and private protected areas, and contributed to reducing deforestation. While independent evaluation does not dispute this contention directly, in many cases support was packaged in easily disbursed "kits" consisting of a vehicle, computer, digital cameras, and two-way radio system for the conservation land management teams. The project's provision of the kits was well received. Field visits showed these items everywhere in use, and they very likely contributed to improving natural resources management inside and outside of the protected areas. The evaluation team visited conservation areas in several of the vehicles. But it might be a stretch to say that the nature of what was provided under of AFCoF I led to the mitigation of greenhouse gas emissions.

At the outset it seemed that AFCoF II was not going to suffer from any similarly unrealistic expectations. The implementation period was reasonable; it was designed to support a very high priority issue which had been identified by the Government. The Atlantic Coastal Forest biome was enshrined in the national constitution, the subject of its own law and related regulations, and the focus of a forthcoming national program. And then, in the middle of implementing this project, the Government changed its mind. Prioritizing biomes (other than the Amazon) was no longer an acceptable option. The creation and expansion of federal protected areas within the ACF (a major project focus) ceased to be public policy.

The indicators measuring the environmental impact of the AFCoF II are illustrated in the table below. To assess the impact of the project, the indicators regarding protected areas and PES-transfers were assessed based on the achieved legally protected areas and payments made, respectively, without giving

advance plaudits to preparatory works laying the basis for possible but not yet realized future achievements (which were considered in the effectiveness assessment). Taking new federally protected areas and the expansion of already established protected areas as the units of analysis, less than half of the preparatory work (technical studies, area demarcation, and public consultation) done by project partners culminated in legally protected reserves. The project achieved the demarcation of 468,607 ha and thus less than one third of the demarcation target. Similarly, even though 14 pilot projects were funded exploring the feasibility of PES-transfers, actual payments could not be made due to the non-existing legal underpinning. While it is also the case that there could be another change in direction within MMA, and policy could shift back to what it was previously, there is no indication that this is likely to happen. Until such a time, however, much of the preparatory work has no relevance: whether and when this might happen is unknowable. But the fact that the Government of Brazil lost interest in its ACF-focused activities decreases the project's development impact considerably.

Indicator	AFCoF II
(1) Demarcation of an additional 1,500,000 ha strictly protected areas by October 2012.	Total quantitative achievement: 31 percent, 468,607 ha - Demarcated federal protected areas: 397,798 ha - Demarcated state and municipal protected areas: 70,020 ha - Demarcated private protected areas: 789 ha
(2) PES-transfers will be made on about 5,000 ha until October 2012 based on the developed transfer system and mechanism.	As of 2015, no payments were ever made in any of project funded 14 pilot projects. Involved staff estimates that, should the passage of necessary related legislation ever take place, in about half of the pilot projects identified payment arrangements were feasible. Thus, while there were benefits identified and quantified with interested buyers/sellers, none could take place without the necessary legal underpinnings that would recognize the legality of public and commercial entities making the necessary financial transfers.

Information on deforestation rates in the area of the ACF is scarce. Deforestation rates published by the Brazilian Institute of Space Research (Instituto Nacional de Pesquisas Espaciais; INPE)¹ indicate that annual deforestation rates in the Mata Atlântica were between 14,000 ha and 22,000 ha during the four years of project implementation (December 2008-December 2012) with the total deforestation amounting to 66,433 ha. Average annual deforestation rates before the start of the two projects in the timeframe 2001-2008 stood at 34,721 ha and then at 23,948 ha in 2013, the year after the completion of the projects. No clear trend is evident from these numbers and it is unclear if the two projects had an impact on deforestation rates.

Before the forest policy change much had been accomplished. Several new conservation lands had been approved. But the policy shift and new strategic directions meant that important project efforts in several areas (joint management, payment for environmental services, federal protected areas, to name a few) were abandoned. This is a significant project shortcoming.

Brazil is a very large country. While the amount of money made available through the second phase is considerable, especially given the environment ministry's extremely limited capacity to invest in pilot projects; given the national budget and the scale of the environmental problems the country faces it is a drop in a bucket. Stated differently, it would be unreasonable to expect Brazil to maintain its strategic direction because of the existence of the AFCoF II project agreement. Elections bring changes. It is beyond the scope of this evaluation to determine why the policy change occurred.

Impact rating: AFCoF I: 3; AFCoF II: 4

¹ http://www.inpe.br/noticias/noticia.php?Cod_Noticia=3610

Sustainability

At the time of the evaluation, there was a great likelihood that the benefits emanating from project-financed activities would continue. The management of protected areas has been improved, and it can be expected that it will continue to do so. Conservation areas that have been approved and/or enlarged will conserve their hard-won status. Certain project achievements have taken place after project closing. Several of the NGOs supported by the project continue to work in the ACF and to be an important force within the environmental movement. Some focus on reforestation and the management of tree nurseries. Others work with municipalities helping them to comply with the requirements of the new forest law. Still others help the private sector to make important contributions to the expansion and/or survival of the ACF.

There will come times when the Government opts to commemorate a milestone event with the creation of a new park/conservation area based on already completed preparatory work. This happened recently: the Bom Jesus forest was approved based on project-financed activities several years after the projects' closing. Some aspects of institutional development, however, did not take place as intended. While the equipment purchased for the monitoring unit remained in the MMA's department responsible for protected areas, the MMA monitoring unit does not exist anymore and enforcement remains weak. The longer term impacts of MMA's abandonment of the biome focus could be either positive or negative depending upon whether the nation-wide mitigation strategies prove effective, or whether the broadening of the focus of attention results in inadequate attention across the board.

Sustainability rating: AFCoF I: 2; AFCoF II: 4

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).