Ex post evaluation – Brazil

Sector: Environmental policy and administrative management (CRS: 4101000)
Programme/Project: Amazon Fund (BMZ no.: 2008 66 830*, project I) and Amazon basin (Fast Start; BMZ no.: 2010 52 026, project II)**
Implementing agency: Brazilian development bank BNDES (Banco Nacional de Desenvolvimento Econômico e Social)

Ex post evaluation report: 2016

Project		I (Planned)	I (Actual)	II (Planned)	II (Actual)
Investment costs (total)	EUR million	18.00	18.00	3.00	3.00
Counterpart contribution	EUR million	0.00	0.00	0.00	0.00
Funding	EUR million	18.00	18.00	3.00	3.00
of which BMZ budget funds	EUR million	18.00	18.00	3.00	3.00
NICFI*** funding (in USD million)		1,000.0	1,002.3		
Environmental compensation payments by Petrobras (in USD million)			6.8****		

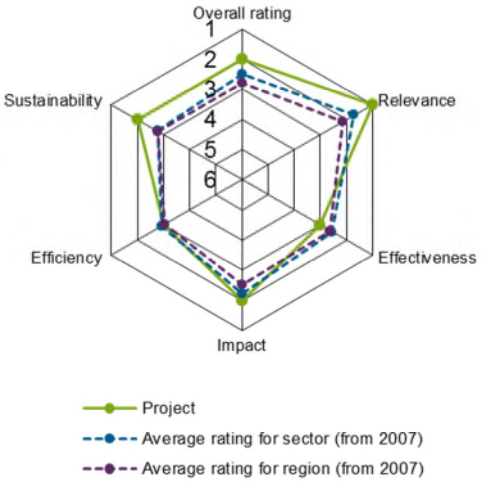
*) Project in the 2016 random sample; **) Contrary to customary practice, the projects are examined as one overall project in terms of content, since it is not possible to distinguish between the measures funded within the framework of the projects; ***) Norway's International Climate and Forest Initiative; ****) Until May 2016.

Summary: The Financial Cooperation support co-funded the Amazon Fund (Fundo Amazônia, FA) with EUR 21 million, in addition to the USD 1 billion in funding received from Norway's International Climate and Forest Initiative (NICFI). In 2008, the FA was established by the Brazilian government as the world's first results-based financing mechanism for a national Reducing Emissions from Deforestation and Forest Degradation (REDD) regime. The Brazilian development bank BNDES acts as fund manager. Based on the success that had been achieved by 2008 in reducing deforestation in the Brazilian Amazon biome and the resulting fall in greenhouse gases (GHG), the Brazilian Government raised the above mentioned funds (result-based support) with the declared intent to employ these - via FA - to support national forestry policy in line with REDD+'s benefit sharing concept (REDD plus forest protection, sustainable forest management and the expansion of carbon reservoirs). FA's intervention areas include the promotion of sustainable production, environmental monitoring and control, regional planning and protected areas as well as science and research, predominantly in the Amazon biome. In May 2016, FA's project commitments stood at USD 581 million (USD 232 million disbursed) for 82 projects (10 completed) with national, federal state and municipal institutions as well as non-governmental organisations (NGOs). Complementing this, the German Technical Cooperation (TC) project "Amazon Fund for Forest and Climate Protection" (PN 2009 228 72) advises BNDES and project applicants.

Objectives: Developmental objective (impact): the achievement of positive effects on climate protection (under decoupling of deforestation and economic development). Project objective (outcome): contribute to the success of the national forestry policy through the promotion of projects in the areas of combating deforestation, forest protection and its sustainable use.

Target group: The population living in and from the forest and the population benefiting secondarily from the measures. Reductions in CO_2 are a global benefit.

Overall rating: 2 (both projects)



Rationale: As the FA has not been exhausted and the majority of the projects supported have not been completed, this evaluation assesses as an interim evaluation the viability of the FA concept, its award mechanism and the strategic orientation of the project portfolio. Following initial difficulties encountered in the first few years, the FA has become one of the pillars supporting the national plan to combat deforestation in the Amazon biome (PPCDAm). The project portfolio implements the elements of a REDD+ strategy effectively and has the potential to follow on from Brazil's past successes in fighting deforestation and supplement them with forest protection and sustainable production measures.

Highlights: Prior to fund management for the FA, BNDES had no experience in selecting grant-financed projects in forest protection. Through the FA, the BNDES is starting to fulfil its potential as a lever and ambassador for environmental policy in Brazil ("put the environmental cause on a different level").

Rating according to DAC criteria

Overall rating: 2

General conditions and classification of the project

Fundo Amazônia (FA) utilises REDD+ funds, which Brazil procured result-based for measurably and verifiably reduced deforestation in the past and thus reduced CO_2 emissions or bound tonnes of CO_2, for benefit-sharing measures in four intervention areas: (1) promotion of sustainable production, (2) environmental monitoring and control, (3) regional planning and protected areas and (4) science and research. The FA's measures therefore supported the three pillars of the national plan to combat deforestation in the Amazon biome PPCDAm of 2004 (last revised in 2012) and the cross-cutting issue of research.

Relevance

Spanning almost 5 million km^2, Brazil has the second largest expanse of forest in the world, after Russia. Included within these forest areas is the rainforest in the Amazon basin – the largest tropical rainforest in the world – which covers some 3.3 million km^2, equivalent to over 60% of Brazil's forests.[1] Its global importance as a carbon reservoir and therefore in protecting the climate, as well as the refuge it offers to a unique diversity of flora and fauna, are as equally undeniable as the threat posed to it by large-scale deforestation. Since pre-1970 measurements, close to 20% of the Brazilian part of the Amazon rainforest has been lost.[2] However, as a result of decisive political action to protect the forest and tackle illegal deforestation activities, Brazil has managed to reduce annual deforestation from 19,625 km^2 (average for 1996 to 2005) to below 13,000 km^2 in 2006 to 2008, the year the FA was established. At that time, the value of emissions avoided was estimated at USD 14 billion (valued at USD 5 per tonne of CO_2 avoided).[3] In 2009, Norway was the first country to reward Brazil for the progress it had made. Norway's International Climate and Forest Initiative (NICFI) made USD 1 billion available to the FA as the first national REDD+ mechanism. Against this background, the German contribution to the FA was, without question, highly relevant for global climate protection in three respects. First, with regard to rewarding Brazilian policymakers for their past successes – the German contribution, paid out in 2010, was explicitly linked to cutting emissions through prevented deforestation in the forest years[4] 2009 and 2010[5]. Next, support for the REDD+ regime from a second donor country sent out a signal. Thirdly, there was the potential impact of the projects supported by the FA.

This third impact channel underlines the auspicious circumstances in which the FA was founded, for the Brazilian government undertook to use the funds acquired for the FA for the protection of forests in line with the PPCDAm in addition to the funds from the Brazilian budget already provided for this purpose. This indication of national ownership was emphasised by the selection of the renowned Brazilian development bank BNDES as fund manager. Even though BNDES had until then been involved primarily in financing major infrastructure and had no experience in the grant-based financing of projects in the environmental sector, all interviewees questioned on this point agreed that it was the only national institution with the capacity to manage a fund the magnitude of the FA. The selection of BNDES, notable for its size and profile, brought with it not only the hope but also the realistic potential of gaining a lever and a multiplier for national environmental policy. As one interviewee in the Ministry for the Environment put it: "The choice of BNDES put the environmental cause on a different level." Moreover, the integration

[1] http://rainforests.mongabay.com/amazon/deforestation_calculations.html

[2] http://rainforests.mongabay.com/amazon/deforestation_calculations.html

[3] The total value of the avoided emissions, on the basis of the reduction in emissions calculated for the years 2006 to 2014 of 3,803 million tonnes of CO_2, now totals USD 19 billion (provisional FA annual report 2015, table 3).

[4] A forest year runs from August to the following July (forest year 2009: August 2008 to July 2009).

[5] According to PRODES (Programa de Cálculo do Desflorestamento da Amazonia - Programme for calculating the deforestation of Amazonia; http://www.obt.inpe.br/prodes/index.php and http://www.obt.inpe.br/prodes/prodes_1988_2014.htm), the average gross deforestation during this period was 7,232 km^2.

of the FA into the governance structure of BNDES meant that the FA was permanently safeguarded against any direct influence from day-to-day politics.

The projects financed by the FA were intended to strengthen the three pillars of national forestry policy in harmony with REDD+ and in additionality to national budget funds. Against the backdrop of unpopular political decisions and huge investment in regulation and control, which were necessary to achieve the reduction in deforestation seen in previous years, benefit sharing arising from FA projects was perceived as highly relevant. While the FA projects were also intended to contribute to a further reduction in deforestation, a further main objective was to garner broad and long-lasting support among the population for the protection of the forest, by such means as promoting sustainable production and the management of indigenous territories. The FA afforded the opportunity to develop further and implement the complementarity of negative and positive incentive mechanisms that were firmly established in deforestation policy, with the aim of securing political and economic sustainability for measures intended to combat deforestation.

One point of criticism that potentially weakens the relevance of the projects is that no clear rules exist as to how the additionality of FA projects is to be ensured in relation to the measures financed out of the national budget. However, in the evaluation mission's view this criticism can be classified as marginal, since additionality is generally regarded as being hard to measure and the mechanism for deciding on the criteria for FA funding requires unanimity among the members of COFA (Comitê Orientador do Fundo Amazônia), the FA steering committee, which is composed of representatives of the national government, the federal states and civil society (with one chair each for indigenous peoples, traditional communities, NGOs, the private sector and academia). The latter appears to offer adequate protection against the additionality principle being undermined.

Finally, it should be mentioned that, owing to the recent decision taken by the BMZ to make the Intended Nationally Determined Contributions (INDCs), negotiated at the UN Climate Conference of the UNFCCC (Framework Convention on Climate Change) held in Paris in December 2015, a guideline for German development policy, the FA has gained even more relevance in terms of development policy. Accordingly,t it appears adequate to classify the relevance of the FA overall as very high.

Relevance rating: 1 (both projects)

Effectiveness

Ex-post, on the basis of previous cuts in GHG emissions resulting from deforestation, the FA should seek out contributions from international donors, companies and individuals, which could then be used to finance further measures to combat deforestation. On the basis of the conceptual objectives of the FA, the project objective was specified for the ex post evaluation and defined as "support for national policy on combating deforestation through the promotion of projects in the areas of combating deforestation, protection and the sustainable use of forests".

Achievement of the project objective is assessed by means of the following newly defined indicators[6]:

Indicator	Ex post evaluation 2016
(1) Mobilisation of funds for forest protection (REDD+ "proof of concept"), assessed on the basis of a) the potential to secure funding on the basis of already achieved reductions in GHG emissions and b) the tapping of new sources of financing.	a) Annual deforestation in Amazonia was reduced from 19,625 km^2 (1996 to 2005) to 12,949 km^2 (2006 to 2008), with the resultant avoided emissions estimated at USD 14 billion. On this basis, NICFI granted USD 1 billion to the FA. The German contribution of EUR 21 million was made in recognition of the cut in emissions resulting from reduced deforestation rates in the forest years 2008/2009 and 2009/2010 (average: 7,232 km^2). The FA's total potential to raise funds, calculated on the basis of the

[6] No target values were defined

	total value of emissions avoided for the years 2006 to 2014 of 3,803 million tonnes of CO_2,[7] equates to USD 19 billion.[8] b) It was not possible to obtain further contributions from international donors or contributions from individuals. Until May 2016, the Brazilian company Petrobras supported the FA with environmental compensation payments totalling USD 6.8 million[9].
(2) Additional areas placed under protection, managed sustainably or registered in the rural land register CAR[10] by the FA.	Among other things, FA projects supported the designation of new protected areas (708,251 ha), advanced training in sustainable production activities (4,644 people demonstrably make use of the knowledge gained, according to BNDES) and registration in the rural land register CAR (57 million ha, 207,564 farms). As a result of FA projects, management or the safeguarding of territory was strengthened over an area of nearly 20 million ha and an estimated 22,352 indigenous inhabitants benefited indirectly from the project activities.[11] Furthermore, between 2008 and 2016 in the Amazon biome – and this cannot be clearly attributed to the FA – the establishment of 20 new protected areas was prepared, 8 protected areas were created and 2 protected areas were expanded. The new and expanded protected areas meant that 3.3 million ha of forested areas were placed under protection.[12] Since January 2011, an additional 15 indigenous territories covering almost 1.8 million ha have been designated.[13]
(3) The number of people benefiting directly from projects for the sustainable management/use of natural resources.	An estimated 86,158 direct beneficiaries.[14]

Concept and award mechanism

Nearly all interviewees stated that they found the process of granting projects via BNDES to be relatively ineffective in the initial years. This assessment is confirmed by the output indicators of only 21 awarded FA projects and fund disbursements of approx. USD 40 million (BRL 71 million) within the first three years. Equally, however, all interviewees were in agreement that the FA team was quick to learn and developed into a professional counterpart. This statement is also affirmed by the considerably improved

[7] Provisional FA annual report 2015, table 3

[8] The value of the emissions avoided is calculated on an annual basis by the Brazilian Ministry for the Environment (Ministério do Meio Ambiente, MMA) and confirmed by the CTFA, the technical committee of the FA (Comitê Técnico do Fundo Amazônia).

[9] http://www.fundoamazonia.gov.br/FundoAmazonia/fam/site_pt/Esquerdo/Doacoes/

[10] Cadastro Ambiental Rural

[11] Cumulative figures up to the end of 2015 from the provisional FA annual report 2015

[12] http://www.oeco.org.br/noticias/no-apagar-das-luzes-governo-dilma-cria-5-unidades-de-conservacao

[13] http://pib.socioambiental.org/pt/c/0/1/2/demarcacoes-nos-ultimos-governos

[14] Cumulative figures up to the end of 2015 from the provisional FA annual report 2015

output indicators (in the years 2014/2015: 21/11 new projects per year and fund disbursements of USD 72 million / USD 39 million).

One of the factors behind the improved output was a modification of application rules, supported to a significant degree by German TC. The initially customary unsolicited application, which resulted in many, in some cases very small and, in thematic terms, very heterogeneous project applications, was replaced by thematic invitations to tender, which permitted a more strategic orientation of the portfolio. In addition to this, an application procedure was set up for NGOs wanting to implement multiple small-scale projects (< BRL 100,000) under their auspices. In this way, the FA managed to indirectly extend its scope significantly, from 1,000 small projects in 2013 to 2,654 by 2015.

Support for the approved projects from the FA team at BNDES is described as good by the implementing institutions, with quick response times and sufficient flexibility. On the other hand, applying for projects is still seen as an extremely complex process and the time taken to process applications – up to two or three years – is regarded as far too long. This can be attributed to the fact that each FA project goes through the standard assessment process for all BNDES investments, in which great store is set by the completeness of all legally prescribed documents and the integrity of the applicant (e.g. no outstanding unpaid taxes). This affords good protection against the misuse of funds and reputational risks both for BNDES as a whole and for the FA, but also takes up a lot of time.

The FA team were felt to be exceptionally motivated and committed, doing their utmost for the fund with great professionalism. The standard of project planning and monitoring is high, and transparency and PR work are exemplary.[15] The governance mechanism of the FA, which is based on interaction among representatives of the different stakeholder groups on the FA steering committee, also seems to function well.

Portfolio and project level

It is too early for statements regarding effectiveness at portfolio and project level, since only ten of the eighty-two projects in the portfolio have been completed. Moreover, this evaluation was not designed to deal with individual projects. However, the evaluation mission was able to establish that the contributions made by the FA to the rural land registry CAR are perceived as being of particular significance. The CAR was an important topic in almost all interviews. Everyone underlined the significance of CAR in the initial registration of all privately owned areas, which are thought to account for around half of the total Amazon region, since without such registration there can also be no monitoring or control of compliance with forest legislation. During the local field visits, we observed how NGOs successfully support CAR-registered smallholders in sustainable production methods by providing technical advice and other support for the project beneficiaries, e.g. the organisation of local markets or the acquisition of machinery, while contributing to a professionally appropriate implementation of corresponding forestry regulations under CAR at the same time.

The progress made by the FA is reflected in an increase in almost all indicators for the monitoring of areas of strategic intervention on the part of the FA, an account of which is given in the annual reports of the FA, most recently in 2015.

More detailed information about the project effectiveness can be expected from the evaluations planned for the ten completed projects.

Given the information available and taking account of the insufficient effectiveness in the first few years, the effectiveness can be classified as satisfactory.

Effectiveness rating: 3 (for both projects)

Efficiency

Concept and award mechanism

In view of the fund volume of over USD 1 billion and with the aforementioned 21 awarded projects and a disbursement volume of only USD 40 million in the first three years of its existence, i.e. until the end of

[15] In these areas, BNDES was also advised by German TC.

2011, the production efficiency of the FA was so low that doubt arose as to the suitability of BNDES – inexperienced in the grant-financed environmental sector – as fund manager. This changed in subsequent years with around twice the number of projects (between 13 and 21) being awarded each year in comparison to the initial years and the annual disbursement volume rising significantly as well (2015 USD 39 million/BRL 127.5 million, 2014 USD 72 million/BRL 168 million). One main reason for the increase in production efficiency was, as described under Effectiveness, the changed application procedure, which switched from unsolicited applications to thematic invitations to tender and created a window for applications by intermediaries hoping to implement a bundle of micro-projects (< BRL 100,000) under their own auspices. Behind the 13 to 21 approved projects per year, there are therefore several hundred to well over a thousand subprojects that are approved annually.

Only a limited amount of information is available concerning the costs of fund management, since the senior management of BNDES has declared itself willing, as a sign of its commitment to the goals of the FA, to restrict the management fee to a one-off 3 % margin based on the payments into the FA, while any costs in excess of that will be born by BNDES. The FA team at BNDES consists of the manager (female) and 35 employees (13 women and 22 men), who in addition to project tendering and awarding are also responsible for monitoring, documentation and publications, including the comprehensive annual report. In this respect, too, performance has improved continuously and now attained an exemplary standard, so that the production efficiency of the award mechanism can today be classified as high.

To assess the allocation efficiency of an award via BNDES, it is necessary to examine the question of whether alternative mechanisms are possible that could achieve the objectives of the FA to the same extent but at a lower cost. In this context, a formula-based mechanism comes to mind that, as opposed to the awarding of projects and project bundles, distributes the FA funds e.g. on the basis of existing forests directly to municipalities or districts in the Amazon biome. A formula-based distribution mechanism of this kind would probably incur lower transaction costs than awards via the FA team at BNDES, but it is doubtful whether it would achieve comparable results. First, the potential of a further reduction in deforestation is not particularly high either when funds are granted to the municipalities with the largest forested areas (where there is not generally a high level of deforestation pressure) or when they go to the municipalities with the smallest forested areas (where deforestation has already happened). A more meaningful criterion for the allocation of FA funds would therefore be reduction efforts measured in terms of deforestation rates at the municipal level. Secondly, monitoring of what the funds are used for and which outputs are achieved would be far more difficult, particularly with regard to the target achievement for outcomes and impacts, which are currently pursued in exemplary fashion by the FA team for the individual projects. Thirdly, it is doubtful whether at local level in municipalities or districts there would be enough capacity for the proper administration and use of the allocated FA grants. Fourthly, such a formula-based mechanism, in comparison to the existing one, is not as well suited to reaching different groups in society in the sense of the benefit sharing striven for by REDD+, or winning them over to the goal of forest protection. One point of criticism that must be made, and which also applies to the existing mechanism, is that it has not yet proven possible to initiate cooperation with the private sector, despite the fact that it is represented by a member of the FA steering committee.

Finally, our comments on allocation efficiency will turn to the concern expressed by some interviewees regarding the undermining of the additionality principle in the use of FA funds. This concern was triggered by a (unanimous) decision taken by the FA steering committee in May 2016 to assume the running costs of the 2015/2016 period for the enforcement of and compliance with the laws on forest protection. In the past, these costs had always been charged to the state budget. However, the evaluation mission did not share this concern to the same extent, since additionality, which can in any case almost never be measured exactly, has to be assessed from the perspective of the current budget (and not previous budgets). As the acute economic crisis meant that all parts of government had to accept drastic cuts in their budgets, there were good grounds for making up for the shortfalls with FA funds and thus providing the means to maintain at the same level the follow-up of offences against laws on forest protection.

Portfolio and project level

At present, an assessment of the efficiency of the portfolio and projects is only possible to a limited extent. Most of all, we can expect to gain more knowledge from the ten planned evaluations of completed projects.

Nonetheless, there are already some indications that the composition of the fund's portfolio is a sensible one. Support for monitoring and control, which in the past have proven to be the key to success in preventing deforestation and which need to be maintained if past achievements are not to be jeopardised, is increasingly being enhanced by projects for land use planning and sustainable production. Both of these fields of activities are crucial for reaching out to the population living in and from the forest in the Amazon region and win them over to the idea of forest protection. All representatives of implementing institutions interviewed during the mission were either working on the introduction of the rural land register CAR, from registration through to monitoring and sustainable production in the areas and within the limits prescribed by the CAR, or on supporting the management of indigenous territories. These are two areas in which, in recent years, shortfalls in the forest protection system have been identified and the necessity of remedying them has been recognised.

Up to now, the decision to approve applications and allocate the FA funds to projects, municipalities and federal states is not systematically (co-)determined by such aspects as the applicant's or beneficiaries' need for support, successful impact of applicant's activities in the past or own efforts on the part of applicants to reduce deforestation and implement forest protection policies. A corresponding adjustment of the selection criteria most likely has the potential to significantly increase the allocation efficiency.

Against the background of the available information and these assessments, it appears reasonable to evaluate the efficiency as satisfactory.

Efficiency rating: 3 (both projects)

Impact

The developmental objective of the project was to contribute to the achievement of positive effects on climate protection and sustainable economic development.

Within the framework of the ex post evaluation, it is not possible to filter out which effects on climate protection are attributable to FA-funded projects. However, the reduction in gross deforestation in Amazonia can be used as an auxiliary indicator in assessing the positive impact on climate protection.

Indicator	Target value at project appraisal 2010	Ex post evaluation 2016
(1) Decrease in gross deforestation in Amazonia in accordance with PRODES/INPE.	- 80% by 2020 in comparison to 1996-2005 average*	In the forest years 1996 to 2005, average gross deforestation was 19,625 km^2, in 2008 to 2009 (inception of the FA) 10,188 km^2 and in 2010 to 2015 5,787 km^2. In 2015, gross deforestation stood at 5,831 km^2 and was thus above the average for recent years, although still 70.3 % below the reference value.

*) Reference value 1996-2005: 19,625 km^2 (according to PRODES; appraisal report 2010: 19,533 km^2)

Concept and award mechanism

When BNDES was appointed fund manager for the FA in 2008, there were many among those committed to environmental and forest protection who criticised this choice as inappropriate, in part because BNDES had no experience in this area. However, the then controversial decision to opt for BNDES has today become a valuable asset for the FA.

The FA team at BNDES has developed into a highly professional entity, familiar with the pressing environmental issues in the Amazon biome and beyond as well as possessing good contacts with all players in the "green" sector in the Amazon region. Even though the team of 35 employees is small when compared with BNDES as a whole (3,000 employees), there are initial indications that the FA team has a certain degree of potential to act as an agent of change for BNDES and not only boost awareness of environmental issues, but also increase knowledge and raise standards in this area. For example, the FA team is in regular contact with the department for environmental safeguards, which is located on the same

floor, and also enjoys lively dialogue with the planning department, which reviews the FA's projects to ensure they meet BNDES standards before passing them onto the FA for assessment. The evaluation mission was able to observe directly the FA's interaction with BNDES evaluators. Interviewees also stated that talks and presentations on FA-related topics at BNDES were also attended by employees from other departments.

Of equally great importance are the indications the evaluation mission was able to collect in interviews that the FA team is able to use the profile of BNDES to bring a very wide variety of players around the same table, to the benefit of individual projects funded by the FA. The representative of one NGO reported that, regarding its projects, the municipalities concerned were impressed by the fact that the projects in question had been approved by BNDES and hence gave more attention to these projects than to past projects of the same NGO.

Despite the almost exclusively positive nature of the feedback on fund management by BNDES, it must be stated that the representative of one NGO observed that, in her opinion, access for NGOs would be facilitated by a mechanism through which FA projects could be awarded not only by BNDES, but also by at least one other institution. Even in light of this critical observation, the evaluation mission recognises the potential that arises for BNDES as the sole FA-awarding institution to become a national lever for the environment and forest protection.

Portfolio and project level

This evaluation can say little or nothing about the impact of the projects financed. It can merely establish that the composition of the portfolio seems to be good and that individual completed projects support activities of key importance. Aside from the CAR, which has already been mentioned on several occasions, one example of this is the bridging of a two-year shortfall in financing for the management of the Amazon Region Protected Areas (ARPAs) by the FA, which by means of follow-on financing secured what had previously been achieved for forest protection with the designation of these conservation areas. Indications of the adequacy of FA's portfolio mix can be found in the academic literature as well, for example in the article of Nepstad et al. (2014) in the reputable journal **Science**, The article draws attention to the fact that in addition to supporting monitoring and control support for sustainable production both in deforested and forested areas constitutes a promising strategy for combating deforestation in the long term without neglecting the alleviation of poverty. The FA is even specifically mentioned in this publication as an appropriate vehicle for a strategy that focuses on positive incentives like support for sustainable production, and not only on monitoring and control.[16]

Finally, to safeguard against an overestimation of the positive effects to be expected from the FA projects, we must mention the fact that, despite historically low deforestation rates in recent years, no crucial breakthrough has been achieved in eliminating illegal deforestation. A number of interviewees voiced the opinion that it is going to be extremely difficult or even impossible to eliminate illegal deforestation (even though some Amazon states and the national government held out the prospect of this by 2020 or 2030 at the 21st Conference of the Parties (COP 21) in Paris). The interviewees went on to say that, in their personal view, the potential to reduce deforestation by means of negative incentives such as regulation, control and sanctions has almost been exploited to the full. They felt, the time had come for positive incentives. This indirectly confirms the FA's strategy of focusing more on benefit sharing, but that is scarcely likely to result in an end to illegal logging. In any case, the problems of legal deforestation, and leakage of illegal deforestation into other biomes and countries remain.[17] Achieving the targeted 80 % reduction in deforestation by 2020 would also require a change of strategy to one consisting not only of

[16] „Climate finance programs, such as the Amazon Fund, could establish innovative, competitive funding mechanisms for delivering finance to regional consortia that are ready to make the transition to low-deforestation, high production land use systems." (Nepstad, Daniel, et al. Slowing Amazon deforestation through public policy and interventions in beef and soy supply chains. Science, 2014, 344. Jg., Nr. 6188, S. 1123)

[17] Unfortunately, the reduction in deforestation of the Amazon rainforest in Brazil is being accompanied by increased deforestation in Bolivia, Peru and Venezuela, although no causal relationship has yet been identified by rigorous methods. (http://rainforests.mongabay.com/amazon/deforestation_calculations.html) At the national level, the high and also international visibility in Amazonia contrasts with the considerably lesser importance attached to fighting deforestation in the neighbouring Cerrado region, characterised by the spread of modernised agriculture, in which annual deforestation rates have been above those of Amazonia for several years now. (http://www.mct.gov.br/upd_blob/0235/235580.pdf)

positive incentives but also involving new command and control approaches. The majority of deforestation is now no longer focused on large and medium-sized “deforesters”, but small farmers and agricultural colonisation areas, where the enforcement mechanisms that have proven the most successful to date cannot be implemented, either for practical or political reasons.

In conclusion, and with a heavier weighting of the conceptual level evaluated here, the overarching impacts can be assessed as good.

Impact rating: 2 (both projects)

Sustainability

Concept and award mechanism

The FA management by BNDES as represented at the time of the evaluation mission is well-suited to the granting of the as yet unallocated funds, the appropriate maintenance of the growing project portfolio and, in the near future, the absorption of additional funds that exceed the payments into the FA thus far. Emphasising this last point, it would have to be regarded as a loss of efficiency if the now well-functioning mechanism were only used once and the expertise built up by BNDES were thus lost (even if it was hoped at the inception of the FA that the problem of illegal deforestation would be eliminated sooner and that no additional financing would be necessary for this purpose). In view of this situation, it is to be welcomed that, at the COP 21 held in Paris in December 2015, both Norway and Germany held out the prospect of further considerable sums for the FA.

Such additional financing for the FA would likely also mean an increase in FA personnel. Clarity must be achieved regarding who would bear the costs for this since, in the current crisis, it is unreasonable to automatically assume that BNDES will, as a counterpart contribution, continue to take on those costs in excess of the 3 % margin.

Portfolio and project level

It would not be appropriate as part of this evaluation to assess the sustainability of the funded projects. Instead, we again refer to the ten planned project evaluations for more detailed information. Given the information collected and impressions gained, the following at least can be established: the evaluation mission considers it highly unlikely that the progress made so far, e.g. in relation to CAR, will be lost in the future. Nonetheless, maintaining the monitoring and control of compliance with forest legislation is essential to the consolidation and expansion of the results achieved so far in most of the FA's intervention areas. This also applies to past and future achievements in the area of sustainable production and sustainable use of the forest.

Even if certain risks arise from the current economic and political situation in Brazil, in light of the continued international support for the FA and the international attention it enjoys as the world’s first functioning national REDD+ mechanism, the sustainability can be rated as good.

Sustainability rating: 2 (both projects)

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).