

Nicaragua - Resource conservation - Bosawas

Ex post evaluation report

OECD sector	41030 Biodiversity
BMZ project ID	1998 65 056
Project executing agency	SECRETARIA DE COOPERACION EXTERNA, MINISTERIO DEL AMBIENTE Y DE LOS RECURSOS NATURALES (MARENA)
Consultant	Not applicable
Year of ex post evaluation	2009
	Project appraisal (planned)
Start of implementation	Q1 1999
Period of implementation	3 years
Investment costs	EUR 2.91 million
Counterpart contribution	EUR 0.36 million
Financing, of which FC funds	EUR 2.55 million
Other institutions/donors involved	GTZ (cooperation project)
Performance rating	4
• Relevance	3
• Effectiveness	4
• Efficiency	3
• Overarching developmental impact	3
• Sustainability	4

Brief description, overall objective and programme objectives with indicators

The aim of this FC/TC cooperation project was to contribute to the protection and development of the Bosawas Biosphere Reserve, which was recognised first by UNESCO in 1997 and then under national law in 2001. The project was directly managed (with TC support) by SETAB, the Technical Secretariat for the Bosawas nature reserve, a body mandated by the Ministry of the Environment and Natural Resources (MARENA).

The overall objective of the TC component was to improve living conditions for the resident population whilst preserving the ecological capacity of the Bosawas biosphere reserve. No separate overall objective for the FC component was established. The project objectives for the FC measures were as follows: proper use and effective operation of the conservation investment facilities that had been put in place (component A); and improved access for impoverished sections of the population to functioning, regularly used social and/or economic infrastructure facilities (component B). The indicator defined for both components was: three years after commissioning, at least 80% of the conservation/social infrastructure investments should still be operational, used appropriately, and properly serviced and maintained.

The target group was a section of the population living within the biodiversity reserve. At project appraisal in 1998, this population comprised roughly 10,000 indigenous Mayangna, approximately 45,000 Mestizo peasants, and a further 3,000 people who were employed in gold mining or working as independent gold prospectors. Today, due to a significant population influx and above average population growth, some 300,000 people live in the project area.

Project design / major deviations from original planning and their causes

Under component A (conservation investments), the following measures (amongst others) were implemented as planned: renovation of, and extensions to, administrative buildings; procurement of equipment (furniture, IT, telecoms); construction and fit-out of new checkpoints, and improvements to existing checkpoints; procurement of vehicles and communication devices (mobile telephony, local radio systems); introduction of a monitoring system (geographic information system, meteorological stations); demarcation of conservation areas; local community construction measures (build and fit-out of land use planning offices and guard posts, and the construction of a biological station). GTZ coordinated and supervised this component. The original implementation schedule of 36 months was more than doubled. Construction quality was satisfactory.

The social and economic infrastructure provided within component B principally comprised school buildings and, to a lesser extent, health centres and water supply systems, all built using the FISE social investment fund. Of the 28 sub-projects originally planned, 25 were implemented. Project duration, estimated at 36 months, overran by more than a year. The quality of construction was generally satisfactory. Responsibility for monitoring progress against objectives in this component rested with FC. GTZ had overall responsibility for the cooperation project.

In general, operation of the conservation facilities provided under component A has suffered both from the poor initial provision of operating supplies, and from the lack of planning and resources for the proper maintenance of mobile equipment and infrastructure. At the present time the MARENA/SETAB offices are still in relatively good condition; but some repair and maintenance actions are now required, only some of which are being carried out, this being dependent on the special commitment of local staff and/or on the availability of additional donor funds. The failure to maintain mobile assets is already apparent: hardly any of the vehicles purchased under the project are still in good working order, and several mobile radios are faulty.

As in other FISE projects, the Ministries responsible for health and education manage the social infrastructure facilities (component B) once the works have been accepted. Due to the region's extremely dynamic population growth, the school buildings (which represent the majority of component B) show good capacity utilisation, and they are clearly being put to appropriate use. Parent committees, working on an unpaid basis, attend to school affairs including school maintenance, for which roughly USD 300 per year is available to each school from the FISE maintenance fund.

The health centres are also well maintained and, according to the statistics available from the centres, are used much more extensively than had been envisaged by the Ministry responsible. The local user committees' positive influence is again evident here, and the FISE maintenance fund is once more available to cover maintenance costs (EUR 350 per year for each health centre).

With few qualifications, those involved in the new social infrastructure generally meet their obligations: the beneficiaries are active in user committees, payments from the FISE maintenance fund flow reliably, the responsible Ministries equip the facilities properly (as far as their resources allow), and the communities, to some extent, take on a coordinating role. But when faced with unpredictable problems such as natural disasters, these systems will reach their limits.

Key results of the impact analysis and performance rating

Because the population in the project region has grown so dramatically and a backlog of requirements has accumulated, the capacity of the social infrastructure facilities built under component B corresponds to the level of demand. Individual projects have not, in the main, placed a significant financial burden on beneficiaries. They prefer to make their contribution through unpaid work. Maintenance costs are defrayable against the FISE maintenance fund, provided no unforeseeable circumstances arise.

It is not possible to calculate the project's overall profitability in economic terms, since the planned effects are primarily environmental and social. The poverty level in the project region is well over 50 %. The people who benefit from the social infrastructure play an active part in the planning and maintenance of the new facilities; furthermore, they make their own contributions in the form of work.

This project features an opportunity to promote gender equality. Within component B, there is potential to ensure that women play an active role in the user committees. It is not possible to measure to what extent gender equality could be improved in component A.

The current status on the risks identified at project appraisal is as follows. Even with extensive TC support, it was not possible to make good the weaknesses in project execution that were demonstrated, as anticipated, by MARENA/SETAB. These led to long delays in implementation and to deficiencies in maintaining the facilities installed under component A. A particular problem has been that no alternative mechanisms were developed to finance maintenance costs. As had been feared, increasing settlement activity placed additional pressure on the Bosawas biosphere reserve, resulting in the rapid spread of rain forest destruction within the buffer zone. Significant progress has been made in designating protected areas for indigenous peoples and in the establishment of legal rights; however, as at today the land issue has not yet been resolved in such a way as to ensure the sustainable use of natural resources. This is due not least to the lack of a policy consensus between political and economic decision-makers at the local, regional and national levels. In component B, any difficulties envisaged with the participation of the target group in remote areas were largely avoided. As far as is possible, the commitment and efforts of the user committees has compensated for the shortcomings of the responsible Ministries.

Relevance (rating 3): the core problem has not changed since project appraisal in 1998. Increasing, unmodified land use and settlement activities threaten the ecological balance of the biosphere reserve and, in turn, the environment of the Mayangna people who live within the buffer zone. Today, with its rich variety of plants and animals, the environment of the Bosawas biosphere reserve still deserves priority protection. The reserve also fulfils important ecological functions which stretch far beyond the project territory. At the same time an estimated 300,000 people now live in the region (1998: 130,000), most of them in the buffer zone. Hence today the project remains highly relevant within its sector. The causal chain assumed — that investments in conservation infrastructure and social infrastructure would improve living conditions for the resident population, whilst preserving the ecological capacity of the Bosawas biosphere reserve — is basically sound. The project conforms to BMZ developmental goals and guidelines on the preservation and promotion of biodiversity (MDG 7) and on poverty reduction (MDG 1). 'Environmental policy, conservation and sustainable use of natural resources' forms one of the three focal points in the BMZ's local concept for Nicaragua. GTZ continues to be active in the sector and in the Bosawas region, whilst FC involvement on the ground has ended, due to the challenging operating conditions and the poor project execution structure. Through its support for SETAB, the German development cooperation sector, and GTZ in particular, has achieved a high level of visibility in the environmental field. In principle, the FC contribution was integrated successfully into the TC project: its function was more supportive than formative. In contrast, coordination between donors was at best informal.

Effectiveness (rating 4): under component A, some of the facilities built or renovated by SETAB either do not conform to present requirements or are not being used as planned. Certain offices are more actively utilised than others. Several MARENA/SETAB buildings are not being used to their full extent. Some classrooms stand empty, for example, or are used

as stores. In some cases checkpoints are no longer in operation, either because the timber smugglers have now chosen other routes, or because smuggling activities have been successfully blocked. Vehicles and mobile radios are still in partial service, but some have long been faulty, and in other cases their use is limited through lack of resources (fuel). On a positive note, MARENA/SETAB's physical presence in the region has fundamentally improved. However, utilisation of the new conservation infrastructure varies considerably; in total less than 80% of the conservation investments made are being properly used, and hence the project objective for component A was not attained overall. On the other hand, the project objective for component B was achieved. As stated earlier, there were only a few isolated problems in the maintenance and sustainable use of the new social and economic infrastructure.

Efficiency (rating 3): the original project duration of 36 months more than doubled. This resulted in some marked cost increases in component A, which could only be considered reasonable to a certain extent. Both executing agencies – SETAB and FISE – used competitive tendering procedures and, taken overall, item costs are judged to be appropriate.

Overarching developmental efficacy (rating 3): from a current perspective, the decision not to formulate a standalone overall objective for FC is understandable. Any overall objective today would certainly be underpinned by quantifiable indicators, such as, for example, the rate of deforestation (see the Development Cooperation programme objective in the programme proposal for the sector presented in 2009), or by specific social indicators (school enrolment rates, etc.). Satellite images show that deforestation has increased markedly since 1987. The core zone of the biosphere reserve is still largely intact; however, due to the advance of the agricultural front line, the buffer zone has hardly any tropical forest left standing. It is not possible to estimate with any certainty to what extent the limited FC contribution has influenced the deforestation rate during this time. But a more general statement can be made: through these FC measures, conditions were created and/or improved that allowed environmental protection measures to be implemented in the Bosawas biosphere reserve more effectively, and enabled improvements to be made in the social situation of the resident population. However, given the lack of more precise socio-economic data and in the absence of any baseline, there is little hard evidence of the project's contribution to its overarching developmental objectives. We have come to the following overall conclusions: 1) At the community level, the measures that were funded in effect made a small contribution in some individual cases to the overall objective. 2) It is rather doubtful whether these measures produced any structural effects that would make a permanent contribution to solving the region's core problem.

Sustainability (rating 4): under component A, the project carries substantial risks with regard to its sustainability, and at this point in time that sustainability must be considered uncertain. To maintain these FC investments and the Bosawas biosphere reserve, MARENA is dependent on donor-financed projects to defray maintenance costs. As noted at project appraisal, it is clear (and, in principle, reasonable) that, in this regard, Nicaragua will continue to be reliant on long-term external support. Although the need is generally recognised, progress to date in generating these external funds has been minimal. This is due in part to the lack of political will to implement a clear plan for using the international financing mechanisms available. Progress in the establishment of a national environmental fund using GEF resources has faltered and stands at risk of failure, even though the required funding has long been available.

From the information provided, the FISE maintenance fund ensures greater sustainability in component B.

Due to the project's inadequate sustainability, the unsatisfactory efficiency of component A, and the similarly unsatisfactory overarching developmental efficacy, the overall score that has emerged is rating 4 (unsatisfactory).

General conclusions and recommendations

Experience in component A has once again shown that, in environmental FC programmes which take a straightforward project approach, sustainability can only be achieved under certain conditions. Individual projects must be linked into the global mechanisms of environmental governance in a more systematic fashion. There is no shortage of international financing mechanisms for the protection of valuable environmental resources

around the world. What is frequently missing is the political will and capability in the beneficiary countries to take advantage of these opportunities.

As a general rule, neither user groups nor social investment funds can be expected to finance replacement investments in the event of unforeseeable circumstances (natural disasters). A special fund — in effect, an insurance policy against catastrophic external events — could be one way of returning unproductive, unused infrastructure into service.

Erläuterungen zur Methodik der Erfolgsbewertung (Rating)

Zur Beurteilung des Vorhabens nach den Kriterien Relevanz, Effektivität, Effizienz, übergeordnete entwicklungspolitische Wirkungen als auch zur abschließenden Gesamtbewertung der entwicklungspolitischen Wirksamkeit wird eine sechsstufige Skala verwandt. Die Skalenwerte sind wie folgt belegt:

Stufe 1	sehr gutes, deutlich über den Erwartungen liegendes Ergebnis
Stufe 2	gutes, voll den Erwartungen entsprechendes Ergebnis, ohne wesentliche Mängel
Stufe 3	zufrieden stellendes Ergebnis; liegt unter den Erwartungen, aber es dominieren die positiven Ergebnisse
Stufe 4	nicht zufrieden stellendes Ergebnis; liegt deutlich unter den Erwartungen und es dominieren trotz erkennbarer positiver Ergebnisse die negativen Ergebnisse
Stufe 5	eindeutig unzureichendes Ergebnis: trotz einiger positiver Teilergebnisse dominieren die negativen Ergebnisse deutlich
Stufe 6	das Vorhaben ist nutzlos bzw. die Situation ist eher verschlechtert

Die Stufen 1-3 kennzeichnen eine positive bzw. erfolgreiche, die Stufen 4-6 eine nicht positive bzw. nicht erfolgreiche Bewertung.

Das Kriterium Nachhaltigkeit wird anhand der folgenden vierstufigen Skala bewertet:

Nachhaltigkeitsstufe 1 (sehr gute Nachhaltigkeit): Die (bisher positive) entwicklungspolitische Wirksamkeit des Vorhabens wird mit hoher Wahrscheinlichkeit unverändert fortbestehen oder sogar zunehmen.

Nachhaltigkeitsstufe 2 (gute Nachhaltigkeit): Die (bisher positive) entwicklungspolitische Wirksamkeit des Vorhabens wird mit hoher Wahrscheinlichkeit nur geringfügig zurückgehen, aber insgesamt deutlich positiv bleiben (Normalfall; „das was man erwarten kann“).

Nachhaltigkeitsstufe 3 (zufrieden stellende Nachhaltigkeit): Die (bisher positive) entwicklungspolitische Wirksamkeit des Vorhabens wird mit hoher Wahrscheinlichkeit deutlich zurückgehen, aber noch positiv bleiben. Diese Stufe ist auch zutreffend, wenn die Nachhaltigkeit eines Vorhabens bis zum Evaluierungszeitpunkt als nicht ausreichend eingeschätzt wird, sich aber mit hoher Wahrscheinlichkeit positiv entwickeln und das Vorhaben damit eine positive entwicklungspolitische Wirksamkeit erreichen wird.

Nachhaltigkeitsstufe 4 (nicht ausreichende Nachhaltigkeit): Die entwicklungspolitische Wirksamkeit des Vorhabens ist bis zum Evaluierungszeitpunkt nicht ausreichend und wird sich mit hoher Wahrscheinlichkeit auch nicht verbessern. Diese Stufe ist auch zutreffend, wenn die bisher positiv bewertete Nachhaltigkeit mit hoher Wahrscheinlichkeit gravierend zurückgehen und nicht mehr den Ansprüchen der Stufe 3 genügen wird.

Die Gesamtbewertung auf der sechsstufigen Skala wird aus einer projektspezifisch zu begründenden Gewichtung der fünf Einzelkriterien gebildet. Die Stufen 1-3 der Gesamtbewertung kennzeichnen ein „erfolgreiches“, die Stufen 4-6 ein „nicht erfolgreiches“ Vorhaben. Dabei ist zu berücksichtigen, dass ein Vorhaben i.d.R. nur dann als entwicklungspolitisch „erfolgreich“ eingestuft werden kann, wenn die Projektzielerreichung („Effektivität“) und die Wirkungen auf Oberzielebene („Übergeordnete entwicklungspolitische Wirkungen“) als auch die Nachhaltigkeit mindestens als „zufrieden stellend“ (Stufe 3) bewertet werden.