

Peru: Protected Areas

Ex post evaluation report

Peru, Protected Areas (Phase I), FC (D)		
OECD sector	410 3000 (Biodiversity)	
BMZ project ID	1997 65 777	
Project executing agency	PROFONANPE/ SERNANP	
Consultant	GFA	
Year of ex post evaluation	2011 (2010 random sample)	
	Programme appraisal (planned)	Ex post evaluation (actual)
Start of implementation	December 1998	December 1999
Period of implementation	60 months	72 months
Investment costs	EUR 5.11 million	EUR 5.11 million
Counterpart contribution	EUR 2.8 million	EUR 2.8 million
Financing, of which FC funds	EUR 7.9 million (EUR 5.11 million FC)	
Other institutions/donors involved	GIZ, World Bank (parallel funding)	
Performance rating	2	
• Relevance	1	
• Effectiveness	2	
• Efficiency	2	
• Overarching developmental impact	2	
• Sustainability	2	

Brief description, overall objective and programme objectives with indicators

The project aimed at supporting the conservation of selected ecosystems in Peru. Improvements in infrastructure and equipment sought to improve monitoring and achieve more effective law enforcement in six Peruvian protected areas (PA)¹. The project agency was PROFONANPE, the Peruvian fund for protected areas, with SERNANP (previously: INRENA), the official conservation authority within the Ministry of the Environment, in charge of actual implementation. The programme was designed and delivered in close cooperation with projects supported by GIZ² (particularly with regard to institutional development) and the World Bank/GEF³ (strengthening of participatory

¹ *Reserva Nacional Lachay, Reserva Nacional Titicaca, Parque Nacional Huascarán, Reserva de la Biósfera del Noroeste (Parque Nacional Cerros de Amotape, Zona Reservada de Tumbes y Coto de caza el Angolo), Río Abiseo*

² *Gesellschaft für Internationale Zusammenarbeit (German Organisation for International Cooperation, formerly: GTZ)*

³ *Global Environment Facility*

protected areas management). The programme objective - "improved, more efficient management of the designated protected areas" - aimed to "contribute to the preservation of biodiversity in representative locations" (the overall objective). The following indicators were used as measures of objective achievement:

- a) The degree of self-financing achieved after 10 years in selected PA with revenue-generating potential (*Lachay*: 34 %, *Titicaca*: 45 %, *Huascarán*: 76 %).
- b) The proportion of internal funds (budget and self-generated income) available for operating activities, as compared to external sources.
- c) The application of management tools foreseen by conservation law (principally, management plans) in all PA; with SERNANP taking remedial action in case of utilisation activities within PA not conforming to the negotiated guidelines.
- d) Patrolling intensity in the PA.

For measuring the overall objective, a gradual reduction of threat levels was used as key indicator. Since no sufficiently consistent vegetation cover are available at present, this (potentially valuable) indicator could not be applied.

The project's most significant benefit was the protection of ecosystems with their biological diversity and their natural resources. In various respects, those are unique worldwide, and their conservation is of global importance. Although no explicit objectives were formulated concerning socio-economic development, those aspects were taken into account on site by virtue of participatory development of management plans as well as through forming so-called management committees for each PA. Those committees comprise representatives from all relevant stakeholder groups around the PA and serve as advisory body to SERNANP at local level.

Project design / major deviations from original planning and their main causes

The project conforms in all major respects with the 1997 programme plan. Despite a 12-month commencement delay, all programme measures were implemented successfully. These comprised: 1. the construction and/or rehabilitation of control posts, park administration offices and environmental information centres, as well as pertinent facilities and equipment; 2. the supply of equipment for park rangers; 3. boundary demarcation; 4. the development of management plans; 5. the construction of basic tourism infrastructure. Implementation of the planned monitoring system was delayed beyond the second programme phase due to capacity constraints.

Overall, the measures taken under this project achieved the following results: infrastructure and equipment support through the programme created important preconditions required for systematic PA monitoring, environmentally-friendly tourism and more efficient overall management within the programme areas. In terms of advancing management tools, the development of long-term management plans was of equal significance as the master plan (*Plan Director*) for the entire PA system (*SINANPE/ Sistema Nacional de Áreas Naturales Protegidas por el Estado*). Those documents served to shape a common long-term vision of all major players in the PA sector, thereby creating the central foundation for short- and long-term sectoral policy.

Site visits showed that infrastructure and equipment supported through the programme as well as the PAs' funding situation are in good condition. Their use and upkeep generally conform to expectations at project appraisal. Responsibility for maintenance and operation rests with the respective park administrations. Adjustments to the original plan (e.g. financing of preparatory measures for Phase II, stepping up consultancy services) served to align the project with prevailing conditions and had no negative effects.

Key results of the impact analysis and performance rating

Until 1996, management and operation of national PA was inadequate – primarily due to the lack of financial resources. Meanwhile the running costs of the six programme areas are largely financed out of the (significantly increased) national budget as well as of growing tourism revenues and enhanced contributions from regional governments and other actors. By financing basic infrastructure for tourism (environmental information centres, marking out hiking paths) the programme has triggered significant developments, especially in the area of nature tourism. To a limited extent, it has also contributed to creating employment in park administrations and, through ecotourism activities, to increased income levels for the local population. By preserving the natural habitat as a livelihood base for the resident population, the project can be classified as being generally oriented toward poverty reduction.

The programme's impact on target groups, including its gender-specific effects, is hard to ascertain in detail, and varies across the individual PA. With regard to participatory development, the concept of involving the local population – promoted especially in association with the World Bank/GEF project – has been broadly successful. Illegal logging, overgrazing, uncontrolled tourism and mining activities inside the PA were threatening their conservation objective. With the support of this project, those activities are being partially prevented or at least contained.

In accordance with its objectives, the project has succeeded in improving the protection of natural resources in the selected national PA. At local level, nature conservation activities have met with significantly greater acceptance, thanks to the participatory approach taken. The measures have made an important contribution to the conservation of natural capital – a decisive factor for the country's long-term economic development. However, risks continue to exist, particularly from external interest groups who benefit from the illegal use of natural resources – necessitating a more stringent enforcement of environmental legislation.

In summary, the developmental impact of the programme is assessed as follows:

Relevance (rating: 1): from today's perspective, the relevance of the programme approach has been validated – i.e. achieving more effective protection through participatory, financially sustainable PA management, with enhanced involvement of their surroundings. Conserving the country's natural capital is crucial for long-term development and, in view of the ongoing threats, is a priority of the Peruvian Government. With its primarily structural approach to developing the PA sector, the project conformed to the requirements prevailing at the programme appraisal stage. Today this approach is still included in national strategies for biodiversity protection and conservation, and is in keeping with BMZ objectives. Concerning donor coordination, we view the cooperation with GIZ (institutional strengthening) and the World Bank (development of participatory park management) as a major contribution to the positive sector development.

Effectiveness (rating: 2): With regard to the programme objective of "improved, more efficient management for the designated protected areas" and its underlying indicators - a) intensified monitoring activities and b) the degree of self-financing - the number of patrols in the designated areas showed an increase by almost 50 % (from 1,652 to 2,440 in 2010). Self-generated income also rose. With the exception of *Titicaca* (where no regular income was generated due to conflict among the local communities), targets were achieved (*Lachay*: 45.7%), and, in the case of *Huascarán*, substantially exceeded (88 %). With regard to other indicators - c) the proportion of running costs self-financed and d) compliance with environmental legislation - the self-financed proportion rose from 0 % in 1999 to around 77 % in 2010. Due to an improved legal framework (tightened legislation, penalties), conservation legislation is being increasingly enforced.

Patrols have increased not only in quantity, but also from a quality perspective. Over time, the park rangers have not only received better equipment, but also better training; furthermore, they are increasingly supported by volunteer park rangers from neighbouring communities, who recognise the protection of PA as important for maintaining their own livelihood base. Over the last ten years, the programme also had a positive impact on generally strengthening the Peruvian PA sector. For the above reasons, the programme objective is considered to have been achieved.

Efficiency (rating: 2): despite initial delays in programme implementation, all project activities were successfully completed at reasonable costs. Shortcomings occurred with the envisaged monitoring system, which necessitated repeated amendments, in turn leading to a scarcity of consistent indicators. Those, as per their original formulation can, in retrospect, be considered as over-ambitious, with a lack of methodologically reliable baseline data. Concerning financial autonomy, some 70 % of self-generated income is permitted to remain within the respective PA since 2010, providing an additional incentive for on-site management. Along with budget increases, this has greatly reduced dependency on external funding in the programme areas. Furthermore, the scant value initially attached to natural capital has given way to considerable appreciation – also due to the programme itself. Considering the long-term effects achieved in conserving public goods, overall rating apparent in terms of efficiency is good, despite the initial shortcomings noted above.

Overarching developmental impact (rating: 2): the overall objective, “to contribute to the preservation of biodiversity in representative sites”, was geared toward reducing threat levels in the PA. Data collection on the threats faced by individual areas only began in 2007, whereas limited monitoring-capability at the beginning of the programme resulted in a lack of usable data for previous periods. Estimates by park management reveal a threat level drop for the selected PA by an average of around 20 % between 2007 and 2010. Nonetheless, the challenge to ensure an appropriate level of monitoring persists, especially in large areas with difficult access.

Overall, programme funds have contributed to the instigation of financially and socially sustainable development in these reserve areas. According to local agencies, the chosen protected areas now tend to be better equipped and consequently have better control capability than other reserves which were not part of the programme. This has led to improved protection and, as a result, to a reduction in the threat level. There is no doubt that the implementation of the project coincided with a healthy economic situation, and that this has also contributed at the national level. Local experts are in agreement that the value placed on natural capital today would not be at the same level without the contributions of KfW, GIZ and the World Bank/GEF. The overall objective is therefore considered attained, even though the effects achieved are not attributable to the programme alone, but also to the favourable conditions prevailing.

Sustainability (rating: 2): the project’s financial and institutional sustainability, which was assessed as a particular problem in 1997, has shown positive developments: Since 2008, the challenge of financing running costs in the programme areas has been largely resolved through a marked growth in budgetary allocations and other sources of revenue. Thus, a foundation was laid which was crucial to expanding control capacity in the PA. Building on this, strategies were developed for financial sustainability and long-term system support. With the establishment of the Ministry for the Environment and the conservation agency’s institutional transformation from INRENA to SERNANP, major sectoral reforms were implemented which have improved pertinent legislation and their enforcement. The park administrations therefore have greater leverage when confronting illicit forms of use like resource extraction within their areas.

Mining, transport infrastructure and, in isolated instances, by agriculture and livestock farming continue to threaten various PA – not least as a result of dynamic economic

development. Whilst attempts are ongoing to address those threats through innovative concepts locally, there is a need for improved implementation and enforcement of environmental policy and rules, mainly on the part of decision-makers in central government. Besides, further investments from the regional government and the private sector are necessary to ensure the long-term functionality of SINANPE in total, in view of SINANPE's continued expansion and the widening range of tasks.

Taken altogether, the programme has achieved a good overall result (rating: 2).

General conclusions and recommendations

In projects of such broad scope - six PAs in various biomes with a wide range of challenges and constraints - the formulation of objectives and the identification of appropriate, measurable impact indicators becomes a complex affair. Due to the difficulties in measuring direct ecological effects, so-called "auxiliary indicators" had to be applied (like the implementation of management plans, patrolling intensity, qualitative threat estimates, level of self-financing etc). Comparable conservation projects should – at an early stage – attempt to compile and specify baseline data for each area, in order to facilitate the measurement of site-specific threat levels more precisely. Realistic monitoring system targets should be formulated accordingly.

From the experience gained in this project (and considering comparable previous cases), we conclude that, in conservation projects with a systemic orientation (i.e. targeting PA systems), it is essential to stay engaged for a longer period – with a sufficiently flexible programme approach, in order to respond to changing circumstances and ultimately achieve the envisaged structural impact.

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

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

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

A rating of 1 to 3 denotes a positive assessment and indicates a successful project while a rating of 4 to 6 denotes a negative assessment and indicates a project which has no sufficiently positive results.

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. A rating of 1 to 3 indicates a “successful” project while a rating of 4 to 6 indicates an “unsuccessful” project. It should be noted that a project can generally only be considered developmentally “successful” if the achievement of the project objective (“effectiveness”), the impact on the overall objective level (“overarching developmental impact”) and the sustainability are considered at least “satisfactory” (rating 3).