

The Tabaconas Namballe Sanctuary on the tropical mountain forest / Paramo border in northern Peru – a protected area under threat

A marginal setting

“The supporting program for sustainable development in the area of influence of the National Sanctuary of Tabaconas Namballe (SNTN) in the Province of San Ignacio, Department of Cajamarca” is located in the Peru-Ecuador border zone on the east Andean slopes of the Amazon Basin. The project arose from the international peace agreement that ended the armed conflict between the two countries in the 1990s. It forms part of a series of attempts by the parties of the Brasilia agreement to overcome conflicts through investment in development, coordinated by the bilateral Plan Binacional for peace and development. Moreover, it is a contribution of the Belgian government to the international peace effort in the border region, with focus on poverty abatement and environmental conservation.

The project area’s nucleus is the rather small-sized (300 km²) SNTN Sanctuary, conformed by tropical cloud-forests and cold-humid “Paramo”, a shrub, grass and wetland ecosystem that stretches from the forest line up to the mountain peaks at about 3500 m. It houses emblematic species like the Andean spectacled bear and mountain tapir of the Paramos of which a few dozen remain in the area, as well as old growth forests dominated by tropical *Podocarpus* conifers. The Sanctuary is surrounded by a growing patchwork of small holdings at an altitude of some 1000 - 2000 m. The main source of income for the 15 000 families living in its vicinity stems from coffee production, which is increasingly oriented to the sustainable and specialty coffee markets of Europe and North America.



Fig. 1: Map of the SNTN Sanctuary and Project Area in north Peru

The project area is marginal in several aspects:

- Geographically, it is hours off the paved national road system which links only a few Andean, Amazonic or other rural areas to the coastal Pan-American highway with its major cities and ports. These, in the past few years, have become synonymous to access to world markets and opportunities of progress.
- With respect to human development and education, the area is considered to belong to the lowest quarter of the national score, which accentuates the inability of the locals to manage their own way out of poverty.
- Concerning land management practices, there is no self-sustained land-use culture as you can find in many parts of the Andean highlands or on the Pacific coast, which became established over millennia. The local farmers that moved into the area just a couple of generations ago, usually extend their fields by burning up new parcels from the remaining primary forests, once the soil capital is exhausted and returns no longer sustain the needs for family subsistence.

- The absence of a framework of basic institutions that offer security, education, health and other public services, encourages the free inflow of migrant families marginalized elsewhere, but sometimes also of individuals in conflict with the law. In neighboring regions with similar features, drug farming and trafficking has been a frequent consequence, whilst in the project area illegal wood extraction from the few forest remains has become a major environmental problem.

Due to the political stability, economic bonanza and onset of fiscal and financial austerity during the present 2000th decade, Peru has been earning international respect. Although leading governmental institutions are now aware of an increasing availability of financial resources, they are confronted with an insufficient level of management capacities and a still widespread bribery culture in the public and services sectors. This affects the opportunities of advancement and successful investment in development, and harms the rural areas in particular. The latest governments have been trying to find their way out of this handicap with some success, by strengthening the public institutions and their staff sector by sector. For example, finance, transport, communications, housing and sanitation are known to have undergone at least partial reform and progress, despite a short supply of qualified technical and administrative professionals. Meanwhile, reform of other state agencies is still kept on the waiting list. Nonetheless, the project area itself has largely benefited from a recent, government-promoted boost of rural telecommunications and electricity coverage.



Fig. 2: On the fringes of the protected area

In conclusion, the socioeconomic background and threats to the SNTN Sanctuary and its environs are similar to those of other protected areas in the tropical forest zone of Peru. If not intimidated by the drug business, these regions are often subject to illegal wood-, endangered species- or land tenure trafficking, as well as to slash-and-burn agricultural expansion. Often, the marginalized people employ or participate in these practices in order to cover their immediate needs, or to make some additional cents for their living. In consequence, at the local as well as at the national level, not only the integrity of the protected areas that cover some 14% of the country's territory is at stake, but also the entire tropical and mountain forest coverage of one of the most biodiverse countries.

Responding to the diagnosis

Project design and scope

Based on this socio-economic and environmental context, the project's main objectives are confined to support rural poverty reduction and strengthen the SNTN protected area by helping to improve the basic infrastructures, assets and capabilities needed for local development in the surrounding populations. The project design comprises an integrative approach that uses response strategies such as institutional and civil society capacity building, promotion and support of local economic endeavors, agribusinesses and services, improvement of the basic rural public infrastructures, promotion of permanent-cover

agroforestry practices and a reinforcement of the protected area's services and facilities. These strategies, implemented with active participation and co-financement of the local governments and beneficiary populations, are sought to initiate a process of smoothening and reducing the pressures exerted on the area's remaining natural resources.

It is important to note, however, that the scope of a temporary international project cannot embrace direct or even supportive action against environmental wrongdoings or crimes, due to the complex interrelationships between local actors, interests and handling of law. Thus, the project does not have the ultimate control of the ongoing degradation processes.

Implementing strategies of change

Pertinent action with immediate results

In order to respond to its main challenges and create public awareness for its objectives, the project has first of all concentrated its efforts on the very core and immediate needs of the local populations. Thus, it gave priority to actions that were able to generate perceptible results from the early beginning, with a strong involvement of the local governments and farmer cooperatives. These initial activities comprised the improvement of rural access ways (i.e. bridges), water and sanitation systems embracing domestic facilities, and amplification of outputs per cultivated area from organic coffee production through on-site training and natural mineral and organic fertilization, sponsored by the project. In parallel, mid-term oriented schemes were set up to reinforce capacity building and equipment in the local governments and state agencies, the agribusinesses, farmer and civil society organizations.



Fig. 3: Agroforestry training in coffee crops

Coaching

Due to the low levels of knowledge and skills of the local populations, the project tries to accompany and reinforce the transfer of capacities by extended small-group and individual on-site training and coaching. This applies to the fields of farming, construction, services, planning and administration. The approach is intended to overcome the traditional but fruitless classroom or seminar style of teaching, usually offered as capacity building to the rural population and institutions.

Transparency and participation

The project has made the financial implications of the public works it finances and carries out, transparent and public (e.g. publishing the detailed lists of providers, materials, labor costs and payments). This has proved to be a popular, though unusual and rule-breaking practice, intended to stimulate more public control and to introduce a tiny cornerstone to overcome subornment habits. Transparency and comprehension of the criteria used in any process of priority or decision making has been crucial for generating participation and comprehension in the local participants of the diverse development activities. As expected, it

has produced friction with various of the local partners and institutions, accustomed to the traditional handling of commercial and contractual relationships.

Strategic investment in local assets

The project is interpreting itself as an effort that focuses on effective investment in local productive (soil), infrastructure and human capital, wherever possible. In acquisitions and commitments, though not always the cheapest or easiest option, it encourages and gives priority to local suppliers and uses and trains the local human resources. It also employs local muscle, administrative and technical workforce in the construction and training processes in order to maximize the net-transfer of knowledge and financial resources to the locality, stimulating the local training, economy and supply capacities.

Reorientation away from the marginal forests

Currently, the strongest pressure on the Sanctuary's natural ecosystems is exerted from the newer settlements that have arisen in the SNTN buffer zone perimeter in the past decades. For example, spectacled-bear appearances reported in the villages outside the Sanctuary have reduced by more than 90% during the past two decades. This figure goes even beyond the reduction of the forest cover.



Fig. 4: Inhabitants of the cloud forest perimeter

In consequence, one of the main goals of the project is to help these forest dwellers stick to their cultivated small-holdings by increasing their output and market linkage. This should help avoid a further expansion of farmlands into the forests of the SNTN, and reduce the extraction of timber, usually subcontracted and ill-paid to the tenants by illegal loggers from Peru's local timber industry.

The project considers that an improved agricultural management, comprising more productive coffee agroforestry, tropical fruit cropping (e.g. passiflora) or bee-keeping, is a key to generate more income, even in the remote locations on the fringes of the Sanctuary. Wherever possible, it also helps to ease the access ways and lower the transport costs between these marginal settlements and the main routes, local markets and service centers, e.g. through the construction of pedestrian bridges. Better access routes help boost opportunities not only for raised earnings, but also for increased connectedness and capacity building opportunities in farming and non-farming options, especially benefiting the younger generation. In order to amplify its effects towards raising living standards, the mentioned strategies are reinforced by an additional investment in rural water and sanitation systems and the respective operational training. It is expected that the combination of investment in agricultural productivity and infrastructures, accompanied by adequate training and capacity building opportunities, offers tangible alternatives to a further depredation of the upland and Sanctuary's forest remains.

Murky outlooks

Although there are a variety of noticeable advances in important aspects of local development, so far nobody assumes the competence or has the capacity to put a definite halt to the quickly advancing depredation of the last primary forests and the protected reserve. Previous efforts undertaken by local pressure groups and municipalities, promoting environmental education and sensitivity, have stimulated local public discussion but proved to be insufficient for safeguarding the Sanctuary. Do the forests, considered by loggers and farmers as a free asset, have to disappear in order to regain value, as occurred in Western Europe during the Middle Ages? There, deforestation could only be stopped and reversed by force.

At the SNTN Sanctuary, the few national park guards in charge are often criticized for doing a bad job. Although well equipped by the project, they lack sufficient stimulus from the state agency responsible for the protected areas. Moreover, as natural resources protection has never been a priority of a national government, it is understandable that the guards are not keen on playing the role of pawns in conflicts over territories or environmental crime; apart from lacking any backing from the authorities, they might even put their own jobs at risk.



Fig. 5: Illegal logging in the SNTN's buffer zone

The neighboring large scale-mining projects, as well as the ongoing shift of the climatic ranges in the tropical mountains, are additional threats to the integrity of the Sanctuary. They are likely to put an end to the few remaining corridors of biological dispersal and exchange which connect the area with Ecuador's Paramo and remains of cloud forests. This is expected to result in a genetic isolation of the SNTN with fatal consequences for the survival of its rare species.

Moreover, in their effort to stabilize and fuel the national economy, the recent governments of Peru have been opening vast territories to mining or fuel drilling, without defining the priorities that are able to balance financial short-term interests against the country's long-term assets, its cultural and natural patrimony and diversity. Thus, like in other parts of the Andes and the Amazon, the SNTN protected area is more and more surrounded by mining claims that, once converted into reality, not only will affect its biodiversity and longevity, but also the local microclimate, the land and water resources on which the rural populations and their produce depend.

Lessons to be learned

Several lessons can be learned from setting up projects designed to support natural patrimony. The project scope is to be clearly defined and should be tailored to the legal and social reality. Is the intervention made early enough or is it too late to produce a redirection of processes of environmental depredation? Do the national authorities show a consistent commitment to natural resources protection, is this sustained by realpolitik? Is there sufficient time to reverse ongoing degradation processes by environmental education or are

more immediate measures required? Does the project have sufficient independence from third parties, such as the often ineffective state authorities – this can be, besides their limited time horizon, a major deficit of a development project? Does it use its operative autonomy in an intelligent way?



Fig. 6: Pedestrian bridge opening rural access and communication

Nonetheless, most important for any advancement in the diverse fields of development and conservation, is an adequate relationship, understanding and cooperation with the local actors and final beneficiaries. Because the beneficiaries do know their most relevant and urgent needs best, any development project should be able to identify and take these priorities into account and respond to them adequately. Project efforts that do not respond to the local dweller's demands, will neither be replicable nor sustainable. It is therefore advisable to initiate with activities that respond to the core needs of the local population, e.g. by strategically implementing infrastructures that create broad and immediate effects. The usually positive acceptance of such public works can also be employed to implement accompanying activities and create secondary effects in favor of the environment. A project can use its independence to promote transparency by making public contracts and payments, as a tool to embark upon an often needed new culture towards honesty in public finances.

P.S.

The deforestation of most accessible areas of Peru's tropical forests has resulted in an increased lack of wood needed for the local construction and furniture industries. Since there is no timber available from alternative local managed forests or plantations, the depredation of the last natural forest resources is escalating and local prices are increasing. Putting sufficient timber from elsewhere on the local market could lower the yearning of the local industries for the few remains in the remote forests. It could be a first step towards reversing the extinction of tropical wood species and forest destruction...aren't the managed temperate forests of Europe and elsewhere widely overstocked?

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