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The Sajama National Park in Bolivia

Dirk Hoffmann

A Model for Cooperation Among State and Local Authorities and the Indigenous Population

Sajama National Park in Bolivia's Cordillera Occidental is not only the country's oldest national park; it also contains Bolivia's highest mountain, ice-capped Nevado Sajama, at 6542 m. Created in 1939 by presidential decree with the primary objective of protecting native keñua *(*Polylepis tarapacana*) forests, the Sajama National Park, later ratified by national law, had neither formal administration nor park rangers until 1995.*

Towering over the barren lands of the Altiplano—Bolivia's highland plateau, at an altitude of about 4000 m—Mount Sajama plays a key role in traditional indigenous mythology, as well as in the formation of the present-day identity of local communities. The latter factor is largely due to a new policy and to multiple activities launched by the Bolivian national parks authority (Servicio Nacional de Áreas Protegidas, SERNAP) during the past decade. As an initial result, local perception of Sajama National Park as an "imposition from above" has given way to referring to the park as "our protected area."

Nature conservation and sustainable development

Open *keñua* forests form a vast belt around the Sajama Volcano (Figure 1) at altitudes between 4300 and 5200 m, and are considered to be the highest forests in the world. Until Bolivian President Busch created Sajama National Park in 1939 to halt indiscriminate use of *keñua*, the forests had been cut on a large scale to produce charcoal, which was used in the mines of the Bolivian Altiplano, as well as to fuel the train connecting the mines with the Chilean ports. Nowadays local inhabitants use small quantities of *keñua* for cooking under special permits from the park authorities.

Relatively small—at somewhat more than 100,000 ha—and with an indigenous Aymara population of about 1700 within its limits, Sajama National Park lies in an otherwise poor and abandoned region where people earned a livelihood from raising native llamas and alpacas for most of the 20th century, as agriculture is virtually impossible due to altitude and climatic conditions (Figure 2). Only temporary or permanent migration, and the smuggling of goods from neighboring Chile, helped to alleviate endogenous poverty.

Development of a national policy for protected areas

The Bolivian National Park System as such has its origins in the 1992 UN Conference on Environment and Development, which provided the impulse for the Law on Environment (1992) and the subsequent creation of the Ministry of Sustainable Development, putting the country at the forefront of environmental politics in the southern hemisphere. One of the Law's articles calls for the creation of a national park system and park administration, which was put into full effect in 1998 with the founding of the SERNAP.

Throughout the 1990s and the early 21st century, new national parks were declared, and in many older ones, such as Sajama NP, an administration was put in place for the first time in 1995. Following standard top-down approaches, local acceptance of these national parks was generally non-existent. This was the situation in Sajama NP when, around the turn of the century, SERNAP tried to tackle existing problems in the management of its parks by elaborating principles and policies for managing the national park system and putting in practice its motto of "parks with people." Compared to older conservation practices, SERNAP's philosophy explicitly recognizes the existence of traditional communities within its parks, as well as these populations' rights to

"Sajama, for his works and deeds, gained himself the respect and tender recognition of the whole people, who made him their chief, calling him with much respect: Doctor Sajama." (José Mendoza Villca, Andean Mountain Tales)



FIGURE 1 Nevado Sajama; in the foreground, a typical wetland. (Photo by Dirk Hoffmann)

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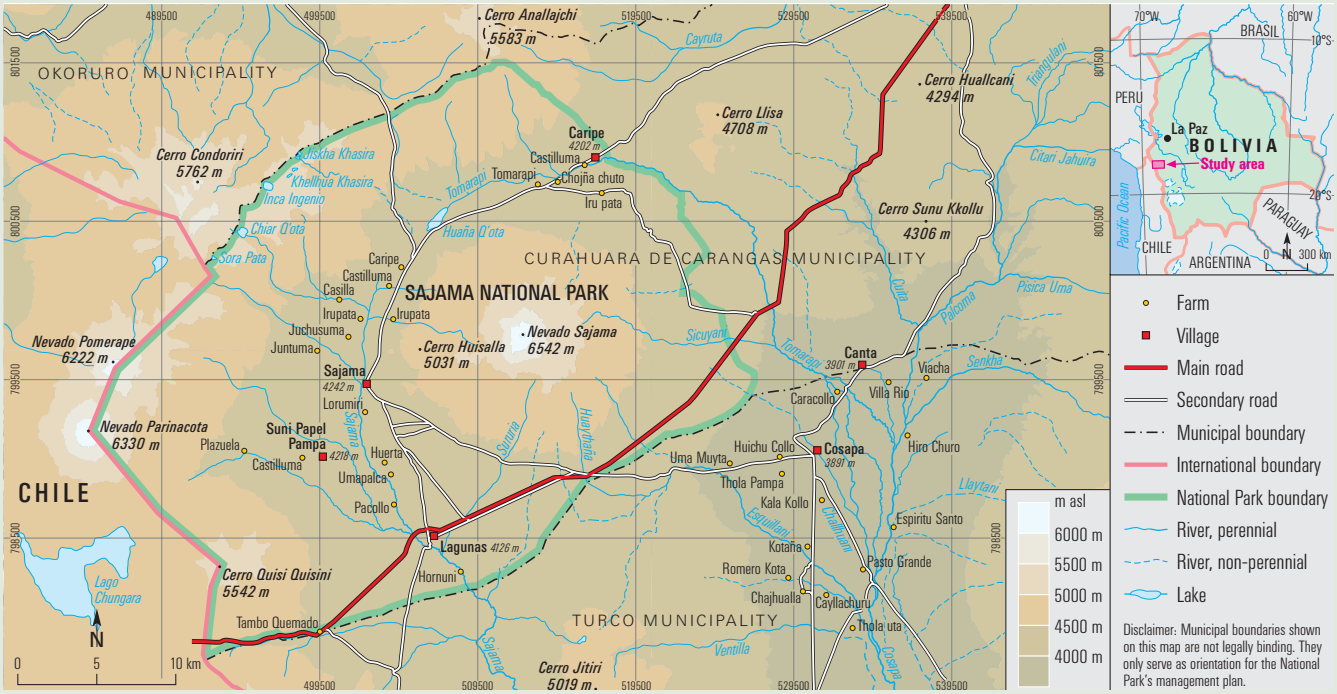


FIGURE 2 Map of Sajama National Park, showing the villages and farms involved in consultations and projects. (Map by Andreas Brodbeck, based on data collected for the Sajama NP Management Plan, courtesy of SERNAP)

development; this is clearly stated in the 2 main objectives established:

- To conserve the natural and cultural heritage of the protected area and its surroundings; and
- To contribute to socioeconomically sustainable development at local, regional, and national levels.

The Strategic Agenda, as the expression of state policy concerning protected area management, also defines the integration of the administration of national parks within a broader political and administrative context as one of its 6 strategic areas of action. This clear state policy of "neither islands nor impositions" as a guiding principle is probably the most innovative feature and cornerstone of success in Sajama National Park, and has helped gain acceptance over the years for its concept of biodiversity conservation.

Sajama NP: a model of implementation at the local level

At the center of this approach stands the orientation of state-protected areas towards municipal governments and local indigenous populations: active promotion of integrated planning processes, full participation of all stakeholders, and the realization of joint projects. In the case of *Parque Nacional Sajama*, this means the implementation of these policies for the integration of Sajama National Park, the Curahuara de Carangas municipal government, and the local communities of Lagunas, Caripe, Sajama, and Cosapa districts.

The main levels of cooperation and integration consist of the 3 "Ps": planning, participation, and projects. Planning, as a tool for coordination, aims at the integration of Sajama's management plan into the municipal development plan.

a) Integrative planning process

According to the law, all of Bolivia's more than 300 local administrative and political units, called *municipios*, must elaborate and periodically update Municipal Development Plans (PDMs) with a 5-year horizon, as a means of promoting a strategic approach to local development efforts. These plans commonly tend to neglect environmental matters or policies regarding the use of natural resources.

On the other hand, article 28 of the General Ordinance for Protected Areas defines management plans as "the fundamental instrument for planning and spatial organization, which defines and supports administration and conservation of the protected areas' resources." However, up until the elaboration of the SERNAP guidelines for the elaboration of management plans for protected areas, these "plans" often resembled biological encyclopedias and contained very little in terms of tools and instruments for the administration of the parks.

In the case of Sajama NP, SERNAP, assisted by German Development Cooperation's MAPZA project (*Manejo de Áreas Protegidas y Zonas de Amortiguación*, Management of Protected Areas and Buffer

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Zones), became involved in the elaboration of Curahuara de Carangas PDM, which, as a result, contains a strategy for livestock management and ecotourism, addressing both the main economic activities as well as future aspirations of its population regarding options for income generation. The elaboration of the Municipal Development Plan took several months and included extensive periods of participatory planning with each of the communities involved. During this process, for the first time, representatives of the municipality and the director of PNS related to each other in a structured way, overcoming established prejudices and getting to know the interests of the other side little by little, as well as administrative logistics and procedures. As a result, the park's management plan now contains elements of Curahuara's development strategy, while the *municipios'* strategic planning includes environmental and conservation issues.

b) Participation of local stakeholders

With respect to the second "P," participation, apart from local populations' participation in both planning processes, SERNAP's policy calls for the establishment of Management Committees (*Comités de Gestión*) as an instrument to guarantee the participation of all local stakeholders—municipal, regional, and traditional authorities, as well as communities—in the management of each of the country's national parks.

Sajama's Management Committee dates from 1995 and includes representatives of each of the communities, the *subalcaldía* (local administration's decentralized office in Sajama village), the mayor of Curahuara de Carangas, a representative of the prefectural administration, and delegates from different NGOs active in the area. Meetings are held at monthly intervals, and also make it possible to discuss other issues of importance to the local population, such as health and education. "We have come a long way," says Franz Guzmán, Sajama National Park's director, in terms of much-improved relations with the local population.

c) Income-generating projects

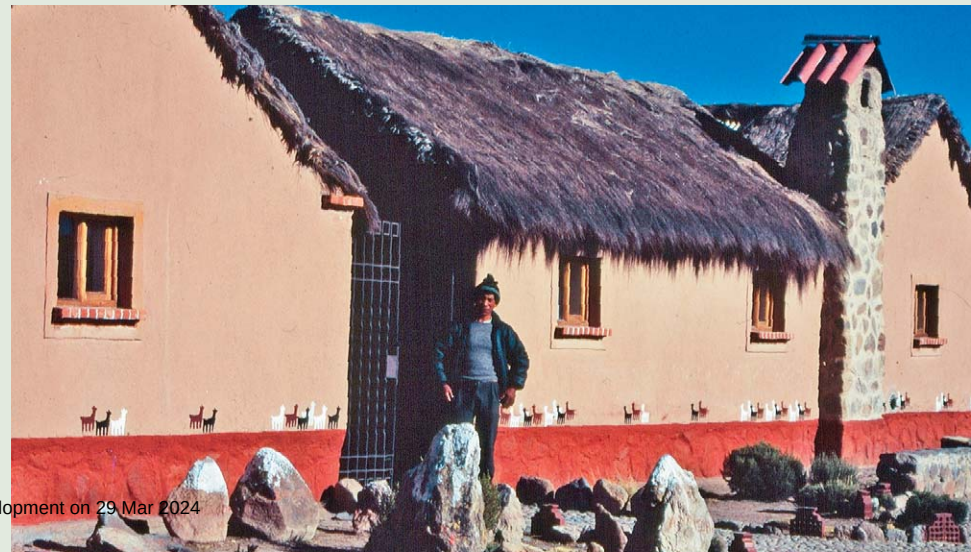
The third pillar—joint projects for the sustainable use of biodiversity resources, which aims primarily to offer livelihood alternatives—has also been designed as an instrument for fostering cooperation with the *municipios*. In many cases it is the main tool for ensuring tripartite technical assistance, often including international development cooperation in the form of financing. The main projects to mention in Sajama NP are initiatives for the sustainable management of the parks' *vicuñas*, as well as ecotourism potential. "The experiences generated in Sajama are used as inputs for the System of Protected Areas as a whole," explains MAPZA project coordinator Jürgen Czerwenka, "this is being reflected by SERNAP's policy and management strategies." The *vicuña* fiber, an accumulated 150 kg at present, still has to be stored, however, as regulations concerning the marketing of this product, which comes from an endangered species, have not been drawn up yet.

Up until a few years ago, climbers, environmentalists and an occasional scientist constituted the bulk of the quite reduced number of visitors to the area. Tourist infrastructure was virtually nonexistent. Thus, the idea of providing a certain standard lodging became the key element in fostering ecotourism in the *Parque Nacional Sajama*. In 2003 the Tomarapi ecolodge opened (Figure 3), now providing local food and lodging for between 2000 and 3000 visitors a year. The lodge is currently managed entirely by the villagers' association formed for this purpose.

Lessons learned and the way forward

Due to the efforts undertaken, there has been a clear shift in the local population's

FIGURE 3 Tomarapi eco-lodge. (Photo by Dirk Hoffmann)



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FIGURE 4 Rómulo Alconz, mayor of Curahuara de Carangas, addressing the local population at the end of a Management Committee meeting in Sajama. (Photo by Dirk Hoffmann)



FIGURE 5 Women outside a Management Committee meeting. Unfortunately, only few women have taken active part in such meetings to date, but this is changing little by little; in a year or two, these women observing the meeting from outside might be inside, even speaking up. (Photo by Dirk Hoffmann)

perception of the national park. "Don Franz has learned a lot," was the villagers' recent verdict about park management under the director, Franz Guzmán, pronounced at the Management Committee meeting this August. The most recent surveys show overwhelming support for the conservation approach adopted by the National Parks Authority, SERNAP, even though individual complaints about damage caused by pumas and foxes persist.

Nowadays the park is generally referred to as "our protected area" with a fair measure of pride (Figure 4). The *Parque Nacional Sajama* is seen as representing potential for local development, be it at an individual or communal level. This experience has had an enormous impact on self-esteem and local identity (Figure 5). Moreover, on the municipal level, the national park today is seen as an opportunity for (sustainable) development in the context of a poor mountain region in a poor country in the heart of South America.

In the field of planning, as a result of the success of past processes, efforts are now underway to go a step further and advance towards the formulation of a *Plan de Desarrollo Municipal Originario*—an indigenous municipal strategic development plan. This first-of-its-kind experience in Bolivia, taking up local Aymara identity as the key to development, relies on decisive support, both technical and financial, from the National Parks Authority.

Probably the main lesson to be drawn from Sajama NP is that it is possible to reconcile development needs with conservation, and consequently change people's perspectives. If we examine what made this possible, a mix of instruments is one of the first things that becomes apparent, as there is no one single magic element. Furthermore, what is needed is a strategic approach, a shared vision of the future, long-term involvement, and dedication by all actors involved.

Some of the limitations of the experience should be mentioned as well, as SERNAP's engagement does not by any means resolve all the region's problems. Even under the most optimistic scenarios, also in the future, a fair number of local people will have to migrate from this region in order to assure a minimum livelihood.

The experience of the *Parque Nacional Sajama* is clearly a model for the National Parks Administration, which aims at replication or adaptation in the other 20 NPs of the Bolivian national park system, mainly through the simultaneous approach of integrated planning procedures, common participation mechanisms ("management committees"), and joint projects. In fact, in a number of protected areas throughout the country, this process is already being implemented with varying degrees of success.

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Dirk Hoffmann holds a degree in Social Sciences and an MSc in Environmental Protection. He is coordinator of the BMI–Bolivian Mountain Institute, La Paz, and presently works for the Bolivian National Park Service (SERNAP), where he is responsible for local cooperation. His main areas of expertise are biodiversity management, regional planning, climate change impact, and sustainable development of mountain regions.

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