



Community firefighters controlling a forest fire in Palmira community, Lomerío. Photo: Territorial Technical Unit of CICOL

Fire management in indigenous territories in Bolivia

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“Fire is life, since without it we would be nothing. Fire is the companion of our people.”

Introduction

The size of the area affected by wildfires in Bolivia has reached historic levels in the last few years. The department of Santa Cruz experienced its greatest environmental crisis, following a prolonged drought and high temperatures. Catastrophic wildfires burned through 3.7 million ha in the country in 2019 and 2.2 million ha in 2020 (FCBC 2020, FAN 2021). These events severely affected the indigenous territory of Lomerío; more than half of its total area was burned in both 2019 and 2020. These fires originated in the border areas, and devastated communities, pastures and agricultural land as well as forests within the Indigenous Territory of Lomerío.

The knowledge and traditions of indigenous communities in lowland Bolivia define a way of life that sustainably uses and manages natural resources in harmony with nature, and contributes to the conservation of land and forests. The use of fire in their worldview is in balance with the environment,



Forest fire in Lomerío, 2020. Photo: Territorial Technical Unit of CICOL

and is key to the well-being of their communities. This is in stark contrast to agro-industrial models, which are currently the greatest threat to the environment, and are leading to the destruction of large areas of forest in the country, the region and the world.

This article presents an analysis of the aspects that guide the management of risks associated with wildfires in territories governed by indigenous communities in Bolivia, and the crucial factors that contribute to the formation of responsive actions. These aspects include (i) indigenous worldviews regarding natural resources and the use of fire; (ii) strengthening of indigenous institutions for risk management; and (iii) autonomous, participatory and democratic indigenous community governance models; e.g., Community Territorial Management Plans (CICOL/ Fundación Tierra 2019).

It also examines the advances, limitations and challenges in addressing wildfire threats at the level of indigenous territories. Its case study is the Indigenous Territory of Lomerío of the Monkoxi People, and the land management approach promoted by the indigenous territorial government, the Central Indígena de Comunidades Originarias de Lomerío (CICOL).

Re-emergence of indigenous land rights

The indigenous peoples of Bolivia, in claiming their rights to ancestral territories, have been able to influence reform processes for the distribution and tenure of land. In 1996, they won the legal right to own their territories under the country's *Agrarian Reform Law*. This includes

indigenous peasant territories, or TIOCs (Territorios Indígenas Originarios Campesinos), which the law defines as “geographical spaces that constitute the territories of indigenous and original peoples and communities, to which they have traditionally had access and where they maintain and develop their own forms of economic, social and cultural organization, so as to ensure their survival and development.” This constitutes collective ownership that is inalienable, indivisible, irreversible, unseizable and imprescriptible. Ownership is managed by communities or associations, who are assigned the right to the exclusive use of renewable natural resources on their land. In addition, they have the right to participate in decision-making processes for non-renewable natural resources on their territorial land, the administration of which is subject to sectoral laws.

Requests for land titles by indigenous peoples since 1996 total 32 million hectares, 21 million of which were for indigenous communities in the lowlands. In 2006 alone, land titles were issued for 8.4 million ha, 6.2 million ha of which were in the Department of Santa Cruz, in favour of 31,653 indigenous people (Osuna and Lopez 2009). These indigenous territories are important in the context of forest conservation, sustainable management, and contribution to poverty reduction, food security, and climate change adaptation and mitigation.

Governance in Lomerío

The indigenous territorial government (*Central Indígena de Comunidades Originarias de Lomerío*, CICOL) was formally constituted in 1997, at the end of a process of structuring

their indigenous autonomy in the search for self-governance. The Monkoxi People adopted instruments of institutional recognition such as autonomous indigenous statutes and tools for territorial management and development. The aim was to establish a model of governance based on their world vision.

After a process that lasted 10 years, the Besiro-speaking Monkoxi People of Lomerío obtained title to their ancestral territory in 2007 — covering an area of 259,188 ha and with a population of 6,481 people — in the name of the (CICOL). It includes 29 communities in the Department of Santa Cruz, in the municipalities of San Antonio de Lomerío, Concepción and San Miguel de Velasco. The territory includes four types of land use: extensive agricultural use, agrosilvopasture, forestry and protected natural areas. The main productive activity in Lomerío is subsistence farming, followed by livestock grazing (mainly on natural silvopasture) and forestry.

CICOL assumes an institutional role to promote sustainable development actions (framed in territorial policies), and to represent the population to all government entities. It developed and validated a community territorial management plan, the Plan de Vida de la Nación Monkoxi Besiro de Lomerío, 2020–24 (CICOL/Fundación Tierra 2019), and the CICOL statutes and regulations document, The Road to Freedom (CICOL 2019a). These instruments support the fulfillment of their collective and individual rights, and reinforce the process of consolidation of their indigenous autonomy.

The Monkoxi People have profound inter-relationships with forests, natural resources and the environment, and their use of fire is based on generations of local knowledge and customs that aim to limit the risk of forest fires. However, changes in weather patterns, increasing pressure on natural resources, generational change, and the effects of agricultural expansion around the territory, have created a situation in Lomerío that requires the development of new processes and initiatives to reduce the risks of forest fires.

This led to the determination of CICOL to urgently address the severity of the situation, based on a clear understanding that wildfires were cyclical. They proceeded to develop internal procedures and mechanisms to significantly reduce wildfire risks through improved fire management.

The worldview of the Monkoxi People on natural resources and fire

The Monkoxi People of Lomerío have a concept of their territory as “the big house.” They believe that it is more than just a geographical space; it is a place where the cultural, social, spiritual and livelihood elements that characterize their identity are present. Their worldview — of being part of a whole, and therefore of the integrality of and balance in the relationship between people and nature — promotes the responsible use and management of natural resources. These concepts were central in developing their territorial management plans, and in



Agricultural productive plot undergoing a controlled burn by the UTT CICOL. Community San Simón, Lomerío, 2020. Photo: IBIF



Environmental monitors from UTT CICOL verifying the deforested area, Lomerío. Photo: IBIF

actions aimed at mitigating and preventing wildfires, as well as those related to fire management.

Fire was described by the First Great Cacique (chieftain) Anacleto Peña as central to existence. *“Fire is life, since without it we would be nothing. Fire is the companion of our people – in the house, for cooking and heating), in the hunt, to light charutos and make campfires to scare away the tiger and the evil spirits of the mountain”* (Anacleto Peña 2021). The use and responsible management of fire is an integral part of sustaining the livelihoods of the Monkoxi People, and forms the backbone of the value they place on their ancestral knowledge and practices. This ancestral tradition is complemented by modern techniques and technology to develop territorial policies for reducing fire risk and implementing procedures for fire management across their communities.

Indigenous governance equals improved management of fire risk

This governance model is based on the traditional organization and customs of the Monkoxi people, and provides legitimacy for the decision-making process. Based on participatory democracy, it is implemented in various mechanisms related to decision-making processes, and in institutionalized consensus. These mechanisms are defined in statutes and regulations, which describe the organizational structure of government and set out responsibilities and procedures that facilitate inclusive deliberation for decision making.

Article 15 of CICOL's statutes and regulations (CICOL 2019a) defines four levels of participation:

- Ordinary general assemblies are the highest authority that define institutional, organic, political, economic, social and cultural life.
- Extraordinary general assemblies are held to deal with emergencies that cannot be resolved by the Board of Directors, and may be convened at the request of one or more of its 29 affiliated communities, or by the Board of Directors or the Council of Elders.
- Zonal assemblies are the highest representative authority at the community level.
- Communal assemblies are the highest representative authority at the communal level.

These assemblies provide feedback to each other regarding the implementation of policies and strategies for integrated territorial management. Strategic agreements that arise from general assemblies define the development approach of the Monkoxi People and approve operational management instruments from the local level (communal plans) to the implementation of a collective vision, or Plan de vida, for the territory as a whole (CICOL/Fundación Tierra 2019).

Application of this governance model has tackled the risks and uncertainties related to wildfires, and ensured that fire management within Lomerío incorporates and maintains ancestral knowledge while also adopting innovations and new technologies. Strategic policies and

guidelines for monitoring wildfire risks were developed and established through consensus between all 29 Monkoxi communities in the territory. Additionally, rules and procedures for fire management were developed, approved and implemented as best practices for conserving natural resources and ensuring livelihoods.

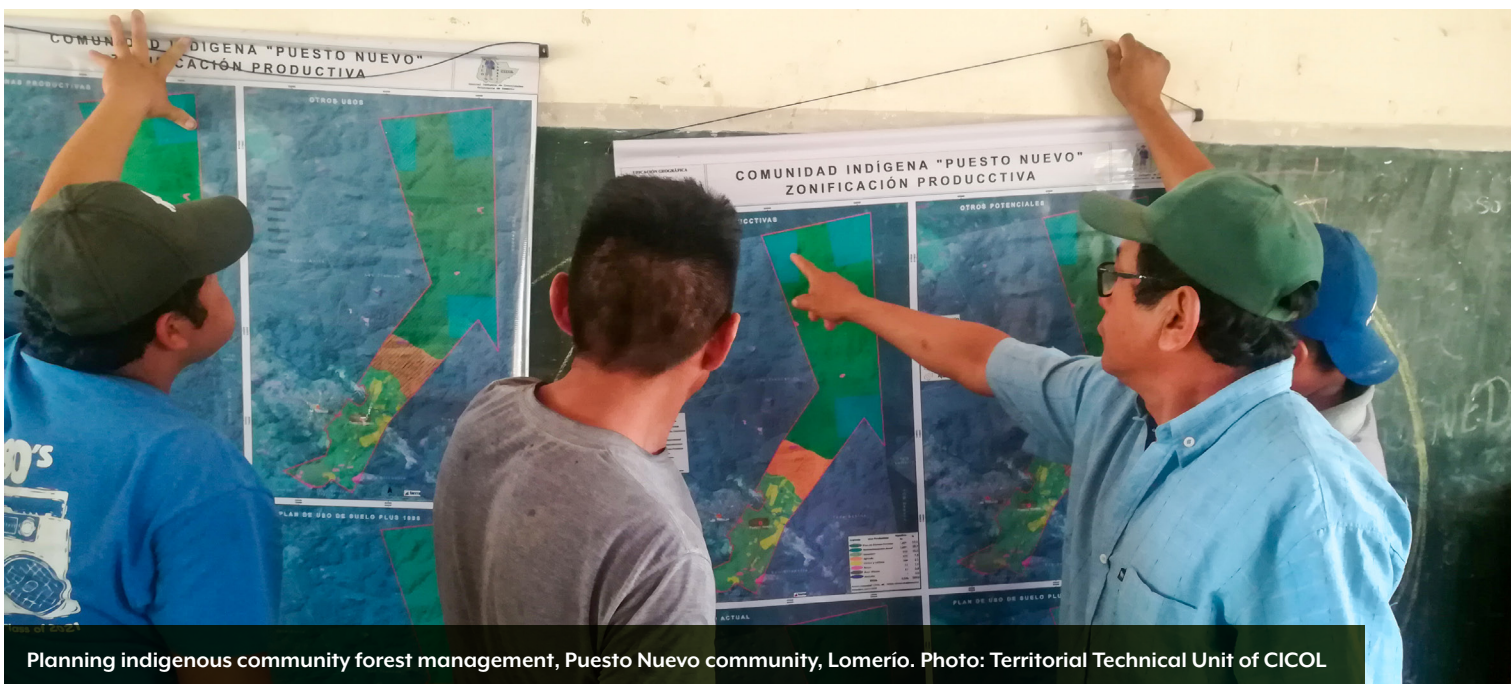
The development of management tools and the implementation of specific actions have involved a variety of external institutions, including the Bolivian Institute for Forestry Research/*Instituto Boliviano de Investigación Forestal* (IBIF). Processes were governed by defined internal operational management plans, including the Monkoxi Community Territorial Management Plan (or Life Plan/*Plan de vida*), and regulations for access, use, management and protection of the land/territory and its natural resources (CICOL 2019b). Plans and regulations include scheduling and procedures for prescribed burns in areas cleared for family farming. These in turn are based on a prescribed burning protocol that is informed by monitoring natural resources, a fire management plan focused on prevention, and rapid response to and contingency measures for illegal burning and forest fires.

CICOL established a technical territorial unit to support and articulate the cooperation between various stakeholders. This was key to the development, establishment and implementation of CICOL's tools for fire monitoring and land management. The unit also implements an organizational system focused on the prevention, monitoring and control of all natural and

human-induced disasters, in coordination with the chief of natural resources, brigades of environmental monitors, community forest firefighters, Monkoxi communities, and the municipality of Lomerío. Additionally, CICOL has established institutional agreements with the Bolivian Forest Service to validate the information provided by the technical territorial unit; this helps to facilitate the legal processing of complaints against illegal burning, deforestation, and the illegal extraction of natural resources.

A variety of institutions have come together to support CICOL in its management of land and natural resources. IBIF is the main provider of knowledge and experience in indigenous forest management; this drives the improvement of management skills by local actors, which in turn supports their territorial governance.

IBIF has implemented three initiatives since 2020 in response to the needs of CICOL and its communities. These initiatives have promoted a process of institutional strengthening and territorial governance associated with forests and natural resources, which is reflected in the agreements made in four aspects of governance: (i) regulation for access, use, harvest, management and protection of the land, territory and natural resources; (ii) plan for monitoring and evaluating natural resources; (iii) fire prevention plan and rapid response and contingency measures for controlled burning and forest fires; and (iv) burn control protocol.



Planning indigenous community forest management, Puerto Nuevo community, Lomerío. Photo: Territorial Technical Unit of CICOL

Conclusions

The governance model is based on internal processes of social cohesion that are framed by the norms and traditions of the Monkoxi people. It is a primary factor in the legitimacy of transformational change in Lomerío and in the reduced fire risk in the region. New initiatives are developed and implemented with the active participation and empowerment of Monkoxi communities.

Supporting and strengthening the legitimacy of CICOL — and the commitment to manage the Monkoxi People's territory according to their cosmovision — were key in the successful implementation of fire measures by the technical territorial unit. The partnership between IBIF and CICOL helped to build on established processes in Lomerío. This resulted in the rapid implementation of procedures for reducing risks from natural and human-caused disasters, as well as monitoring systems to improve the sustainable management of the Monkoxi People's territory.

The technical territorial unit, under the leadership of CICOL, continues to expand its capacity through specialized information studies, development of management tools (plans, regulations and procedures), and support for technical personnel. The unit develops skills and competencies, and provides technical information to inform decision making. This reinforces the institutional framework for integrated territorial management, which in turn leads to the successful implementation of a holistic fire management plan that is innovative and is tailored to the needs of the Monkoxi People.

The governance model of the Monkoxi People — and the respect for and support given to their internal processes through partnerships and collaborations — have improved their control and management of their territory. The legitimacy of CICOL's participatory approach to decision-making processes has empowered it. Additionally, the success of the technical territorial unit

has helped CICOL to significantly improve their control over 300,000 ha of forested land of the Monkoxi People in the neighbouring indigenous territory of Monteverde, which now falls within their monitoring and fire management plans.

Five key aspects are identified for developing long-term responses and solutions to wildfire management in indigenous territories: (i) respecting indigenous worldviews concerning natural resources and the use of fire; (ii) strengthening local indigenous organizations; (iii) supporting governance models based on participatory community democracy; (iv) implementing innovative tools based on local knowledge; and (v) identifying and building on processes of change that are already underway.

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