Tsimané Mogetene
Regional Council,
Pilón Lajas
Bolivia

Equator Initiative Case Studies
Local sustainable development solutions for people, nature, and resilient communities
Local and indigenous communities across the world are advancing innovative sustainable development solutions that work for people and for nature. Few publications or case studies tell the full story of how such initiatives evolve, the breadth of their impacts, or how they change over time. Fewer still have undertaken to tell these stories with community practitioners themselves guiding the narrative.

To mark its 10-year anniversary, the Equator Initiative aims to fill this gap. The following case study is one in a growing series that details the work of Equator Prize winners – vetted and peer-reviewed best practices in community-based environmental conservation and sustainable livelihoods. These cases are intended to inspire the policy dialogue needed to take local success to scale, to improve the global knowledge base on local environment and development solutions, and to serve as models for replication. Case studies are best viewed and understood with reference to 'The Power of Local Action: Lessons from 10 Years of the Equator Prize', a compendium of lessons learned and policy guidance that draws from the case material.

Click on the map to visit the Equator Initiative’s searchable case study database.

Editors

Editor-in-Chief: Joseph Corcoran
Managing Editor: Oliver Hughes
Contributing Editors: Dearbhla Keegan, Matthew Konsa, Erin Lewis, Whitney Wilding

Contributing Writers
Edayatu Abieodun Lamptey, Erin Atwell, Toni Blackman, Jonathan Clay, Joseph Corcoran, Larissa Currado, Sarah Gordon, Oliver Hughes, Wen-Juan Jiang, Sonal Kanabar, Dearbhla Keegan, Matthew Konsa, Rachael Lader, Patrick Lee, Erin Lewis, Jona Liebl, Mengning Ma, Mary McGraw, Gabriele Orlandi, Juliana Quaresma, Peter Schecter, Martin Sommerschuh, Whitney Wilding, Luna Wu

Design
Oliver Hughes, Dearbhla Keegan, Matthew Konsa, Kimberly Koserowski, Erin Lewis

Acknowledgements
The Equator Initiative acknowledges with gratitude the Tsimané Mosetene Regional Council, Pilón Lajas, and in particular the guidance and inputs of Clemente Caymani. All photo credits courtesy of the Tsimané Mosetene Regional Council, Pilón Lajas. Maps courtesy of CIA World Factbook and Wikipedia.

Suggested Citation
**PROJECT SUMMARY**

Tsimané Mosetene Regional Council of Pilón Lajas works in Bolivia’s Biosphere Reserve to conserve biodiversity and to protect the rights of the indigenous peoples within the Reserve. The Regional Council jointly manages the Reserve with Bolivia’s National Service of Protected Areas.

In addition to safeguarding wildlife in the protected area by tackling poaching, advancing sustainable agriculture and developing a forestry management plan, the Regional Council group has been involved in the construction of schools in 14 different communities. Additional activities aimed at improving local livelihoods include organic honey production, the establishment of associations for coffee and cocoa growers, and support for local artisans.

**KEY FACTS**

- **EQUATOR PRIZE WINNER:** 2010
- **FOUNDED:** 1992
- **LOCATION:** La Paz and Beni Departments, Bolivia
- **BENEFICIARIES:** 22 indigenous communities
- **BIODIVERSITY:** Pilón Lajas Biosphere Reserve

**TABLE OF CONTENTS**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background and Context</td>
<td>4</td>
</tr>
<tr>
<td>Key Activities and Innovations</td>
<td>6</td>
</tr>
<tr>
<td>Biodiversity Impacts</td>
<td>8</td>
</tr>
<tr>
<td>Socioeconomic Impacts</td>
<td>8</td>
</tr>
<tr>
<td>Policy Impacts</td>
<td>9</td>
</tr>
<tr>
<td>Sustainability</td>
<td>10</td>
</tr>
<tr>
<td>Replication</td>
<td>10</td>
</tr>
<tr>
<td>Partners</td>
<td>11</td>
</tr>
</tbody>
</table>
In 1990, the March for the Dignity and Territory of the Indigenous Lowland Villages in La Paz, Bolivia gave the natives of the Pilón Lajas territory, located in the departments of La Paz and Beni, the opportunity to demand the establishment of Biosphere Reserve (RB) and Communal Lands (TCO) designations in Pilón Lajas. In 1992, their demands were met, resulting in the Indigenous Territory Declaration, Decree No. 23110, which recognizes the existence of the Pilón Lajas Biosphere Reserve and Communal Lands (RB-TCO Pilón Lajas), encompassing 540 square miles of forest in the Pilón Lajas territory. In the same year, the Tsimané Mosetene Regional Council (Consejo Regional Tsimané Mosetene, CRTM) was created with the mission of conserving the biodiversity of Pilón Lajas and improving the living conditions of its local residents, the Tsimané and Mosetene communities. CRTM was founded also as a necessity to protect against the subjugation that the indigenous communities of Pilón Lajas were suffering at the hands of loggers and settlers.

The mountain ranges of Pilón, Chepete, Beu and Muchanes are within the interior of Pilón Lajas, where there is significant plant and bird diversity. In the mountain range of Pilón alone, 332 bird species have been identified. Most of the protected area’s northern portion is formed by the Pilón Mountain Range, while its southern portion extends over the Chepite and Muchanes Mountains, reaching an altitude of 2,000 meters. In addition, there is a protected corridor in the Biosphere Reserve that comprises Pilón Lajas, Apolobamba and Madidi in Bolivia, and Tambopata and Bahuaja Sonene in Peru. This protected corridor is home to a biodiverse mountain forest and is a sanctuary for the spectacled bear (tremarctos ornatus), jaguar (panthera onca) and military macaw (ara militaris).

**Representing indigenous communities**

CRTM is an indigenous organization that represents all of the indigenous communities of RB-TCO Pilón Lajas and its adjoining areas of influence. Specifically, CRTM represents 22 indigenous communities that reside in the Biosphere Reserve. These communities include 336 families (2080 people), belonging mainly to the Mosetene and Tsimané indigenous ethnic groups, along with families from the Tacana and Esse Ejas ethnic groups.

CRTM’s mission is to become the valid and legitimate negotiator for the inhabitants of RB-TCO Pilón Lajas at local, regional and national levels; to defend and strengthen the constitutional rights of the communities; to manage public and private technical and economic support based on integrated land management and human development of the indigenous population that it represents; and to preserve the natural and cultural heritage of the territory.
CRTM's endeavors resulted in the consolidation of the indigenous property rights of nearly 1,500 square miles of land. In addition, CRTM helped to establish a sustainable forestry joint management plan, protected important water basins that supply water to more than 8,000 people in the surrounding region, and leveraged support for the construction of schools for 14 communities.

From 1991 to 2001, CRTM did not operate continuously. Its actions during that time focused on emergency response. In 2001, CRTM underwent a restructuring of its board and since then, with the effort of CRTM leadership and the support of NGOs and public institutions, the organization has had continuity in its management, with significant results to date.

CRTM is governed by three authoritative bodies: the Congress of Communities, the Consultative Assembly and the Assembly of Magistrates. The Congress of Communities is the legal decision-making body of CRTM, and convenes every three years in order to elect CRTM's leadership council. This leadership council comprises a president, a vice-president, an administrator of lands and territories, a health director, an education director and a women's affairs director. The Consultative Assembly meets once a year. The Assembly of Magistrates traditionally convenes three times a year and also holds special meetings when urgent matters arise. CRTM has, throughout the years of its existence, grown in its administrative capability to the point where it now shares administrative responsibilities for the management of protected areas, which are also indigenous territories, with the National Service of Protected Areas (SERNAP).

A document formulated by CRTM, The Management Plan and Life Plan, serves as a guide for the administration of the protected area. This document was drafted in a highly participatory manner with input from all of the communities in the area, under the direction of the leadership council of CRTM, and with the support of qualified professionals. This document sets forth goals and objectives with respect to the conservation of biodiversity and sustainable development, to which each of the communities and CRTM as a governing body are committed, with a ten-year projection. This strategic planning is reflected in annual operating plans, prepared with the participation of the leadership council, municipal authorities and the authorities of the reserve, in which activities are programmed to suit both the mission and the vision of RB-TCO Pilón Lajas, jointly managed by the CRTM and SERNAP.

CRTM works in a coordinated and organized manner to protect the homeland of these indigenous populations, to preserve their cultures and ways of life, and to seek to improve the quality of life of their people in harmony with the environment.
The main objectives of the initiative are to consolidate the territory, productive sector and basic services of the Biosphere Reserve and Communal Lands in order to address the needs of the communities, improve quality of life, and strengthen management capabilities and integrated land management.

The Management Plan and Life Plan for the Biosphere Reserve and Communal Lands established seven main programs:

i. Administration and Management, which focuses on planning, coordination, and training;
ii. Conservation and Biodiversity Protection, involving prevention, conflict resolution, control and surveillance;
iii. Development and Sustainable Use of Natural Resources in Indigenous and Settler Communities;
iv. Tourism, including ecotourism, marketing, promotion and integration of tourism;
v. Participatory and Integrated Monitoring and Scientific Research;
vi. Environmental Training, Education, Communication, and Dissemination;
vii. Equity-building Co-management and Regional Integration, which includes participatory management, organizational building and human development.

The joint management model adopted by CRTM carries forward integrated land management for the conservation of biodiversity through productive projects that help communities increase their incomes. Productive projects are approved by environmental authorities to ensure proper processes of implementation that are harmless to RB-TCO Pilón Lajas.

Cocoa production was developed in seven communities of the Quiquibey River area and in twelve communities along the Yucumo-Rurrenabaque Road. Also by Quiquibey River, a project was implemented to develop the production and management of jatata (a type of palm leaf) in the river. Forest management plans were instituted in three communities along the Yucumo-Rurrenabaque Road to allow forest resources to be used in a sustainable manner. Other projects aimed at diversification of livelihoods include the installation of a small carpentry business, and some small pilot projects to develop activities in fruit-handling and weaving of palm mats.

Developing alternative livelihoods

The organization has been relatively successful in meeting the needs of the population of RB-TCO Pilón Lajas. However, community demands are many and the organization, in its role as manager and transmitter, has only been able to obtain and implement small grants and projects. Between 2006 and 2011, CRTM implemented a number of productive projects many of which have recently begun to bear fruit. These projects aim to develop alternative livelihood options and sources of income for the population of RB-TCO Pilón Lajas to reduce their dependence on forest-risk activities and improve their quality of life.
Potable water supplies in ten Pilón Lajas communities were developed with the assistance of NGOs and the city of Rurrenabaque, while a radio communication system has been made available to all of the communities.

**Combining local knowledge with management innovation**

A key innovation has been the development of the joint management approach for the protected area. This began in 2003 and has subsequently been promoted by CRTM at the national level. As a result, this approach has become a model of participatory management at the national level and is now an institutional policy of SERNAP.

In jointly managing the reserve, CRTM has acquired important expertise on integrated land management, which complements the important traditional and cultural empirical knowledge of the indigenous communities. In doing so, CRTM has established itself as an important point of reference and example for other groups.

The joint management of the reserve resulted in the expulsion of logging companies that were found inside the territory, and the expulsion of illegal land invaders who raided the area, managing to establish a system of joint protection between the SERNAP rangers and the communities that inhabit the reserve communal lands.

“CRTM advises other communities that the entire community must be convinced that they can generate income while maintaining biodiversity conservation. [They must] have identified clearly the resources they have and which ones they can make better use of.”

Clemente Caymani, Tsimané Mosetene Regional Council, Pilón Lajas
Biodiversity Impacts

The administrative activities of CRTM in RB-TCO Pilón Lajas led to the achievement of a number of important results. The reversal of the Berna timber concession in the interior of the protected area avoided direct adverse impacts such as the construction of roads within the reserve, and indirect impacts such as clandestine hunting along the roads leading into the reserve. Collaborative mapping and zoning of the most biodiverse areas was carried out and a strict protection policy was established. Certain areas have been designated for tourism use or low-impact activities such as the gathering of non-timber forest products.

Since the expulsion of logging companies and the instigation of the joint management plan, populations of animals that once were seriously endangered or rarely observed are recovering. It is now common to spot groups of peccaries, monkeys, macaws and other species that were previously difficult to find.

The implementation of conservation-friendly projects, such as ecotourism, has also contributed to the recovery of animal populations. The job of protecting biodiversity is done according to the management zoning established in the Management Plan and Life Plan, with emphasis on protecting vulnerable areas of the eastern sector of the area surrounded by rural settlements located along the Sapecho-Yucumo-Rurrenabaque road.

Developing a biodiversity dataset

While quantitative data is currently unavailable, through a new measurement system that was recently implemented there will soon be accurate data on the change in biodiversity in the territory of the RB-TCO. This participatory monitoring and risk management process measures the impacts on biodiversity. The process of structuring the monitoring system is being conducted in a participatory manner between CRTM, indigenous communities, SERNAP, the Foundation for the Development of the National System of Protected Areas (Fundación para el Desarrollo del Sistema Nacional de Áreas Protegidas – FUNDESNAP) and the Wildlife Conservation Society (WCS) Bolivia. CRTM and the RB-TCO Pilón Lajas administration will be in charge of its implementation.

There has been an increase in knowledge on the part of indigenous inhabitants, as well as increased recognition of threats to the reserve. Resolutions have been enacted by the Assembly of Magistrates demanding respect of the right of free, prior, and informed consent on behalf of indigenous peoples, and demanding strategic evaluation of proposals for hydrocarbon exploration and exploitation, the construction of dams and the construction of paved roads that might threaten the area. The Assembly of Magistrates of CRTM has declared its support for control and monitoring activities on the part of park rangers in order to combat encroachment of forest-risk activities into the park and increase vigilance in the most vulnerable areas.

Socioeconomic Impacts

The Communal Lands of RB-TCO Pilón Lajas are shared by various indigenous communities who are native to the region and were brought together by population growth. CRTM’s beneficiaries are the total TCO population, 100 per cent of the beneficiaries are indigenous. All beneficiaries live in rural areas with their communities. Only the leadership of CRTM is located in the town of Rurrenabaque.

Despite CRTM’s efforts, 60 per cent of beneficiaries live below Bolivia’s national poverty line. The population of the reserve is principally engaged in small-scale agriculture, the collection of berries and forest products, and subsistence hunting and fishing, with a small number of people involved production of jatata and cocoa.
With the consolidation of the reserve and the departure of the logging companies from the territory, collection berries, hunting and fishing now meet subsistence needs. Thus, productive initiatives, such as jatata, cocoa, rice and banana production, are aimed at income generation to improve household welfare and diversify income sources to avoid dependency. Income-generating sustainable production activities give households larger disposable income to spend on education and health services. CRTM estimates that the average household income has risen by 30 per cent since 2005. This is due to an increase in the sale of surplus and to the savings from obtaining fruits and animals from the forest more easily.

In the various projects implemented by CRTM, indirect jobs have been created, including in agriculture at the technical level, in translation in the production of bilingual educational materials, and through the employment of health workers in each community.

In order to capitalize on increased tourism, there are plans to collect income for the communities from tourists’ visits to RB-TCO Pilón Lajas, some of which will be allocated to health and education projects. There are also education grants that can be obtained by those managing the organization. In addition, the government supports the implementation of bilingual education in the region.

As there is no baseline data available regarding the livelihoods of the communities before CRTM’s establishment, it is difficult to measure improvements. However, some estimates can be made based on specific production initiatives. Collectively, jatata producers currently produce approximately 10,000 pieces of jatata per year, and now receive a fair price of 10 bolivianos (USD 1.40) for each piece for a gross income of 100,000 bolivianos (USD 14,265) per year. Previously, they produced approximately 4,000 pieces and were paid 4 bolivianos per piece, for a total of 16,000 bolivianos (USD 2,280) per year. This anecdotal evidence alone is indicative of a significant improvement in the livelihoods of community members touched by CRTM’s projects.

**POLICY IMPACTS**

As mentioned above, CRTM shares administrative responsibility for the management of the protected areas - which are also indigenous territories - with SERNAP, an entity of the Ministry of Water and the Environment.

However, CRTM continues to fight against certain government policies, including the construction of the Bala Dam, the construction of a road on the eastern boundary of the land, and oil extraction. These policies affect the well-being of the territory in many ways. While CRTM is not against development, its stance is that policies at the national level need to be established through consensus, consultation and the direct participation of communities.
The Management Plan and Life Plan have clearly defined social, environmental and economic objectives as well as strategic guidelines for the achievement of these objectives. However, CRTM has faced some difficulty achieving these goals in the short term. Communities are aware of the importance of conservation and sustainable management of resources, but as conservation alone does not provide for basic community needs, it can be difficult to consistently maintain conservation goals. Achieving projects that can develop sustainable production initiatives in the shortest timeframe possible is imperative. It is also important for CRTM to achieve financial sustainability in order to consolidate its management and protection of the land. The objectives and the strategies necessary to achieve sustainability are clear. What are needed now are the resources to do so.

Developing a long term vision

A variety of successful partnerships resulted in the financial stability of CRTM over the past decade, although work needs to be done to ensure its economic sustainability in the longer term. This lack of longer term financial sustainability is a current challenge for CRTM and has the ability to delay its operations. Economic constraints currently prohibit complete sustainability since the development of integrated land management and the generation of environmental benefits requires economic resources. Uncertainty regarding the long term funding of the initiative threatens the conservation of the forest, since, if community members are unable to achieve sufficient revenue through productive activities, there is a risk that they will generate income through the exploitation of natural resources.

However, there is now full community ownership and identification of the organization, thereby ensuring social sustainability of the initiative within the communities it represents and there are many factors that contribute to the sustainability of the territory and of CRTM, such as capacity-building, human resource training and community participation. However, these require continued financial resources and support for the organization until such time as CRTM is capable of sustaining these activities independently.

Undoubtedly the greatest strength of the organization is the willingness and interest of leaders and communities to manage the territory. They are aware that good planning of natural resource use will ensure preservation of biodiversity and their own culture. Socially, it is important to continue to support organizational strengthening and capacity-building by targeting current leadership as well as youth leadership. CRTM has developed, through the support of the German Society for Technical Cooperation (GTZ) under the German Development Service (DED), a training program for young leaders from communities in various areas under its jurisdiction.

Also, strengthening current partnerships and forming new partnerships to contribute technically and financially to the management of the Biosphere Reserve and TCO Pilón Lajas is essential, since alone, neither SERNAP nor CRTM has the economic capacity to address the management of the reserve in the long term.

CRTM emphasizes that, in order to succeed, the entire community must be convinced that they can generate sufficient income while maintaining biodiversity conservation. The community must clearly identify the resources they possess and the resources they could use more efficiently. All this must be agreed upon, as in CRTM’s case, the most difficult challenges arose when the first phase of the project ended and it fell to the community to continue on their own. Sustainability is difficult, especially when there are few financial resources and many needs and demands. A commitment and willingness on the part of community members and their leaders allows for progress, albeit slow, in order to eventually achieve sustainability. Skills, knowledge and experience are increasingly being acquired by CRTM staff, gradually creating a stronger presence and moving toward self-sustainability.
REPLICATION

CRTM is a pioneer in the establishment of the joint management model at the national level. Through the process of regularization of property rights and territorial protection, the organization has influenced other groups by serving as a positive example of land management. The organization’s successes have strengthened its role as a representative of indigenous communities to local and national government agencies, as well as at the structural level of pertinent social organizations such as the Confederación de Pueblos Indígenas de Bolivia (CIDOB).

PARTNERS

The following partner organizations have supported CRTM since its establishment:

WCS Bolivia and the German Development Service have been supporting the sustainability of CRTM mainly through organizational strengthening and capacity-building for land management, homeland defense and the generation of new projects, with both financial and human resources. They are also funding some operational activities to provide sustainability to the organization as well as working on capacity-building and human resource training for young leaders in the communities. The German Society for Technical Cooperation (under the German Development Service) also provided technical assistance in aspects of agricultural production projects.

FUNDESNAP provided financial support for land protection, monitoring, impact mitigation, capacity-building and communication, and in addition, is providing financial support for efforts to strengthen the initiative through advocacy. Servicio Judio Mundial is providing assistance with organizational capacity building, SERNAP has assisted with territorial protection and the PUMA Foundation provided support for the implementation of productive projects.

Other organizations such as Conservation International, the UNDP-GEF Small Grants Programme, the Inter-American Foundation, the Bolivian government program for Climate Change, and the Schmitz Foundation in Germany, are funding or have funded projects and initiatives to improve sustainable productive initiatives to improve household income and thus strengthen the conservation of resources. Conservation International has also provided assistance in elements of organizational capacity building and bilingual education.
The United Nations Development Programme (UNDP) is the UN's global development network, advocating for change and connecting countries to knowledge, experience and resources to help people build a better life.

The Equator Initiative brings together the United Nations, governments, civil society, businesses and grassroots organizations to recognize and advance local sustainable development solutions for people, nature and resilient communities.

©2012 by Equator Initiative
All rights reserved