

The Surui Forest Carbon Project

A CASE STUDY

Steve Zwick

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Forest Trends
1203 19th Street, NW
4th floor
Washington, DC 20036
www.forest-trends.org

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INTRODUCTION

Indigenous people have contributed less to climate change than has any other segment of the population, yet they are among those most vulnerable to its impacts.¹ At the same time, agriculture and forestry generate roughly 30 percent of all greenhouse gas emissions, while traditional land-management practices, such as agroforestry and permaculture, can dramatically improve the ability of forests, farms, and fields to absorb emissions.² This has spawned the creation of a variety of mechanisms designed to support indigenous land stewardship. REDD+ is one of these mechanisms.

REDD+ stands for “Reducing Emissions from Deforestation and Degradation, plus conservation, sustainable management of forests, and enhancement of forest carbon stocks,”³ and in the strictest sense it refers to a specific set of mechanisms created under the United Nations Framework on Climate Change (UNFCCC) and enshrined in the 2015 Paris Climate Agreement.

The term also applies generically to voluntary initiatives developed outside the UNFCCC to support sustainable land management and conservation in developing countries. These projects often work by helping indigenous or other rural communities implement sustainable land-use strategies that both improve their livelihoods and reduce greenhouse-gas emissions. In such cases, they finance themselves by using recognized carbon standards to document the net impact on greenhouse gas emissions and generate certified carbon offsets that can be sold to emitters interested in reducing their carbon footprints. The Surui Forest Carbon Project is an example of such a voluntary initiative.

The project was launched in 2009 by the Paiter-Surui indigenous people of the Brazilian Amazon, with technical support from Forest Trends’ Communities Initiative and other partners. Project developers sought to use carbon finance to support sustainable land management within the Paiter-Surui homeland, the Sete de Setembro Indigenous Territory (TISS). They hoped ultimately that the project could “nest” within larger programs that would evolve under the UNFCCC, meaning that its outcomes would be included in Brazil’s carbon accounting.

The Surui Forest Carbon Project was the first indigenous-led conservation project financed through the sale of carbon offsets.⁴ It dramatically reduced deforestation within the territory during its first five years of operation (2009-2014), but was suspended in 2018 after the discovery of large gold deposits in the territory sparked a surge in deforestation.

Before being suspended, the project generated 299,895 carbon offsets certified under the Verified Carbon Standard (VCS), with each offset representing the equivalent of one metric ton of carbon dioxide kept out of the atmosphere. This is equal to removing 64,000 cars from the road for a year.⁵ The project also became the first VCS-certified project to receive a Gold certification from the Climate, Community & Biodiversity Alliance (CCB), which evaluates social and environmental benefits beyond carbon. The Paiter-Surui used proceeds from offset sales to finance six sustainable community development initiatives that generate income and support traditional practices, such as the harvesting of medicinal plants, the creation of artisanal handicrafts, and other activities that enable indigenous peoples to live off the land while maintaining the forest.

In this case study, we first offer a brief history of the Paiter-Surui people, which sets the stage for a history of the project itself. We then provide an analysis of the challenges the project faces to this day, and implications for implementing REDD+ in other contexts.

The Paris Agreement and Natural Climate Solutions

The Paris Agreement aims to prevent average global temperatures from rising more than 2 degrees Celsius (3.6 degrees Fahrenheit) above pre-industrial levels, with a preferred target of 1.5 degrees Celsius (2.7 degrees Fahrenheit).⁶

The consensus among scientists participating in the Intergovernmental Panel on Climate Change (IPCC) is that we must dramatically improve global management of natural carbon sinks like forests, farms, and fields if we're to meet the more ambitious 1.5-degree target.⁷ Research published in the *Proceedings of the National Academy of Sciences* in 2017 shows that better land stewardship can cost-effectively deliver 37 percent of the mitigation needed to meet the 2 degree target.⁸

REDD+ is enshrined in Article 5 of the Paris Agreement, which mandates that parties "take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases...including forests."⁹ It also encourages the use of "results-based payments" between countries to accelerate action on the ground.

Although often perceived as a new mechanism, REDD+ evolved over more than 60 years of experimentation,¹⁰ both within agencies like the World Bank and in voluntary carbon markets. The PCFS is a key part of this evolution. It was created in voluntary markets, outside the UNFCCC process, but with an eye towards informing the UNFCCC process and ultimately nesting within a broader effort to reverse deforestation.

The Paiter-Surui: A Brief History

Up until the 1970s, the Paiter-Surui called themselves "Paiter", or "the real people", while their eastern rivals referred to them as "Hurui", or "the enemy".¹¹ The 1960s, however, brought waves of non-indigenous settlers, who were lured into the "empty" western Amazon with promises of wealth and prosperity. The settlers – whom the indigenous people refer to as "invaders" – came with guns and machetes, but found indigenous peoples willing to defend their territories with bows and arrows.

Into the ensuing carnage stepped agents of the newly-formed government agency the National Indigenous Foundation (FUNAI), who were charged with first earning the trust of various indigenous peoples, and then negotiating peace. The name "Surui" emerged at this time, and it's likely the FUNAI agents simply misunderstood the term "Hurui."

Whatever its origin, the term "Surui" became the name applied to the people who long called themselves "Paiter," and the people initially adopted the term as well. Over the past decade, however, they have begun to resurrect the term "Paiter", and to promote the term "Paiter-Surui" outside the territory. For this reason, we will use their preferred term, "Paiter," in this case study.

CONTACT BEFORE FIRST CONTACT

Although 1969 marked their first official contact with Brazilian authorities, Paiter histories describe contact – and conflict – with Europeans going back centuries. These histories have a profound impact on how the Paiter and other indigenous people interact with outsiders.

In stories recounted by elders, the Paiter were once comprised of 13 clans, as opposed to the current four, and they lived in a land of lakes and rivers that closely resembles the Pantanal, roughly one thousand kilometers southeast of TISS.¹² At some point in the distant past, however, European invaders arrived in the original Paiter homeland seeking gold. This led to a series of skirmishes that culminated with a peace summit that ten of the clans attended.

In what has come to be called “The Great Betrayal,” all of the attendees were poisoned to the point of incapacitation, then tortured and slaughtered, leaving just three clans remaining. For the next century, these clans moved deeper and deeper into the Amazon, where they developed the agroforestry practices that enabled them to live sustainably within the forest.

The stories recount decades of constant battle as the Paiter migrated from one hostile territory to another, becoming, essentially, invaders themselves, before finally settling into the area they occupied before First Contact. At some point, they began replenishing their numbers by kidnapping and “marrying” female members of a curly-haired people with whom they often engaged in territorial disputes. These were the people now known as the Cinta Larga, and the offspring became the Kaban, or the “fruit of the forest,” one of four clans that comprise the Paiter today. Many Kaban are distinguished by their curly hair.

Although well-established in their new homeland by the late 1800s, the Paiter continued to have occasional contact with people of European descent. Many of these were skirmishes with rubber-tappers, but the Paiter also had peaceful encounters with surveyors laying the Cuiabá-Santo Antonio telegraph line between 1907 and 1915.¹³ Interestingly, construction of the telegraph line was overseen by Cândido Rondon, who later founded the organization that became FUNAI, and for whom the state of Rondônia is named.

In the 1960s, the government began construction of the BR-364, a 1,500 kilometer (930 mile) mud road carved out of the forest along the path of the telegraph line. Partially funded by the World Bank, the BR-364 connected Cuiabá in the south to Porto Velho in the north, opening the interior of the Amazon to settlers and ushering in the violent clashes that culminated with official First Contact in 1969.

FIRST CONTACT

As tensions between Paiter and invaders increased, FUNAI agents opened a “contact front” to establish a dialogue with the Paiter. This involved surreptitiously leaving machetes, pans, and other tools as gifts to the Paiter warriors, who in turn began leaving bows, arrows, and pottery. Eventually, the overall Paiter Chief, Jiki-Boba, ordered his men to formally engage the FUNAI team, in the mistaken belief that they were interested in forming an alliance against the settlers.¹⁴

This formal engagement took place on the 7th of September, 1969, the 147th anniversary of Brazil’s independence from Portugal. The Paiter thus lost their independence on Brazilian Independence Day, and when the Sete de Setembro Indigenous Territory was officially demarcated over a decade later, it was named for that date.

AFTER FIRST CONTACT: DEATH AND THE LOGGING PACT

In the years after First Contact, the Paiter suffered from smallpox, measles, and respiratory ailments against which they had no immunity, and their population plunged from 5,000 in 1969 to 290 in 1973.¹⁵ In addition to losing people, the Paiter seemed to lose their spirit as traditional medicines, so bound up in culture, failed to protect them, while new medicines brought by invaders did. This opened the door to missionaries, who converted many of the Paiter to

Christianity, while an entire generation of chiefs fell to disease, and longstanding governance structures ceased to exist.

During this period, a young Kaban chief named Itabira formed a friendship with a FUNAI agent named Apoena Meireles, who helped Itabira and other young chiefs navigate the Brazilian system. This made it possible for the Paiter to win demarcation of a small portion of their land in 1983 – far earlier than most other indigenous peoples – but it came at a price.

To secure their rights, the young Paiter leaders required frequent travel to the capital city of Brasília. They financed these trips by letting loggers harvest the lucrative mahogany that grew in their territory. Even after demarcation, the Paiter continued to depend on informal logging – at first to support travel, but gradually as a means of sustenance. Village chiefs eventually began negotiating with loggers unilaterally, further eroding what remained of the old communal governance structures.¹⁶

EXTERNAL ACTORS, INTERNAL POLITICS

In the 1980s and 1990s, two massive rural development initiatives brought new actors into the territory.

The first came in 1981, when the World Bank launched the \$1.5 billion Northwest Brazil Integrated Development Program (*Polonoroeste*), which included conditional finance for paving the BR-364. Among the conditions was that the federal government would demarcate indigenous lands and that the states would implement environmental reforms. Unfortunately, both federal and state agencies failed to follow through, and the World Bank halted payments amidst pressure from environmental NGOs.¹⁷

This led to the second development initiative, called *Planafloro*, which emerged in the euphoria around the 1992 Earth Summit and attempted to correct the mistakes of Polonoroeste.¹⁸ Toward that end, Planafloro incorporated dozens of local NGOs, as well as global nongovernment organizations (NGOs) like the Environmental Defense Fund and WWF, into its governing structure.

The local NGOs participating in Planafloro also formed an alliance called the **Forum of Rondônian NGOs and Social Movements**, which successfully sued the powerful government agency **National Institute of Colonization and Agrarian Reform** (*Instituto Nacional de Colonização e Reforma Agrária*, or **INCRA**), over its practice of awarding land titles in areas designated as extractive reserves and conservation units.

The Paiter created an organization called **Metareilá** to represent the people's interests outside the territory, and a **Forum of the Clans** to act as a deliberative body inside the territory. This was eventually replaced by the **Surui Parliament**. The Forum was comprised of 18 chiefs: four representing the clans, and 14 representing individual villages.

Three chiefs feature prominently in the creation of the Surui Forest Carbon Project.

Itabira Surui is the oldest of the three. A member of the Kaban clan, he was an early proponent of limited logging, but would eventually turn against the practice as he saw its environmental toll.

Henrique Surui, a member of the Gameb clan, is younger than Itabira and made a name for himself as a tough negotiator willing to use force against logging interests that tried to exploit the Paiter. At one point, Henrique and Itabira succeeded in persuading logging operations to conduct business through Metareilá instead of directly with individual chiefs. This ensured fairer prices while sharing income.

Finally, **Almir Surui**, also of the Gameb, opposed logging from an early age, and in 1988 he became the first member of his people to attend university. In the early 1990s, he began representing the Paiter in an indigenous federation called **CUNPIR** (Coordination of Nations of Indigenous Peoples of Rondônia, Southern Amazonas and North Mato Grosso (*Coordenação das Nações de Povos Indígenas de Rondônia, Sul do Amazonas e Norte do Mato Grosso*)). He would eventually become the proponent of the forest carbon project.

CUNPIR was backed by a Catholic organization called the Indigenist Missionary Council (**CIMI**), which had earlier played a key role in helping indigenous people earn demarcation for their lands. By the time Almir joined CUNPIR, however, CIMI had formally adopted a policy of opposing indigenous engagement with the larger market economy,¹⁹ and it often worked through indigenous organizations like CUNPIR to execute this policy. As Almir became increasingly engaged with Planaflo and the World Bank, he found himself frequently at odds with CIMI.

EXTRACTIVE INDUSTRIES AND THE FIFTY-YEAR PLAN

By 2005, more than 10 percent of the Paiter's territory had been logged, and several clan chiefs began exploring the potential for other extractive activities – primarily the mining of diamonds and gold. At the time, Paiter leadership concluded that both logging and mining were economically unviable and environmentally destructive.

Almir, meanwhile, had learned about “Life Plans” that were being developed by other indigenous peoples across the Amazon. Life Plans are as diverse and varied as the people of the Amazon themselves, but they almost all focus on ways of developing a sustainable indigenous economy by reviving dead and dying traditions. Many of these traditions are related to agricultural practices that evolved over thousands of years and have proven to be more resilient (but less efficient) than modern agricultural methods that was introduced into the Amazon in the last century.

Working with two NGOs, the Amazon Conservation Team (Equipe de Conservação da Amazonia, or **ECAM**) and the Association of Ethnic and Environmental Defense (**Kanindé**), Almir created an ambitious plan for developing a Paiter Life Plan that incorporated the Forum of the Clans (and, later, the Surui Parliament). ECAM (Called ACT Brazil at the time²⁰) secured a \$250,000 grant from the Annenberg Foundation to begin the work of mapping resources, traditional hunting grounds, and areas of cultural significance across the territory. These were essential first steps in developing a bottom-up Life Plan.²¹

The Annenberg grant would provide income to Paiter members who participated in the mapmaking process, and Almir saw it as an opportunity to wean the community off of logging as a source of income. He presented the idea to the Forum of the Clans in late 2004, and 14 out of 18 chiefs endorsed a moratorium on logging that would last throughout the mapping process. Logging quickly ground to a halt, prompting some of the loggers to pool their resources and put a bounty on Almir's head.

Such threats were not taken lightly. Loggers had earlier assassinated a high-profile Paiter chief named Jamne, and Apoena Meireles had been murdered in 2004. The indigenous rights campaigner Dorothy Stang, who was a Catholic nun, was murdered by ranchers in February 2005.

In order to secure funding for further development of the Life Plan, and to keep Almir out of harm's way, ECAM began sending him on fundraising journeys abroad.

The Surui Forest Carbon Project

While in San Francisco for one of these fundraising trips, Almir approached Beto Borges of **Forest Trends Association**, initially with the goal of securing a grant. Borges instead suggested using carbon finance to secure long-term funding for reforestation, with proceeds used to subsidize other sustainable land-management practices, such as fish farming and the harvesting of non-timber forest products.

Forest Trends hired the law firm of Trench, Rossi and Watanabe (the Brazilian affiliate of Baker McKenzie) to determine whether indigenous people could, under Brazilian law, earn income from carbon sequestration. The firm concluded that indigenous people have ownership rights for carbon sequestration within their territories, as well as the right to income from them. Jacob Olander of Forest Trends asked the Institute for the Conservation and Sustainable Development of Amazonas (**Idesam**) to help Metareilá and Kanindé conduct a feasibility study for a carbon offset project.

Idesam initially explored the possibility of earning income by generating offsets for planting trees (“afforestation/reforestation”) under the Kyoto Protocol’s Clean Development Mechanism (CDM), but concluded that the process was too cumbersome and the payments came too far into the future to be of any value.

The consultants also suggested, however, that the threats to existing forest were so clear and present that the Paiter could possibly generate “avoided deforestation” (the term in vogue before “REDD+”) offsets. But there was a catch: avoided deforestation was not recognized under the CDM, so the Paiter would have to pilot untested methodologies in the voluntary carbon market.

To develop a new voluntary carbon offset methodology that will be recognized by buyers as legitimate, project proponents must design a system for rigorously defining the drivers of deforestation. The methodology also has to outline how the project will stop forest loss, and how project developers will provide evidence of their results. The Paiter’s methodology had to be reviewed by a panel of experts operating under a credible carbon standard organization. If the panel gave its approval, the methodology could then be used by other projects across the Amazon.

The project developers decided to develop a methodology under the emergent VCS, which focuses almost exclusively on carbon stocks.²² The project would seek concurrent certification under the CCB Standards, which focuses on social and broader environmental impacts beyond carbon.

By this time, a number of NGOs including Forest Trends, ECAM, Metareilá, Kanindé, Idesam, and the Brazilian Biodiversity Fund (*Fundo Brasileiro da Biodiversidade*, or Funbio) were on board. The project also had backing from a number of funders: the United States Agency for International Development, the Norwegian Agency for Development Cooperation, the Gordon and Betty Moore Foundation, the David and Lucile Packard Foundation, the Overbrook Foundation, the Blue Moon Fund, the World Bank Development Grants Facility, the Global Environment Facility, the Citi Foundation, and the United Kingdom Department for International Development.

FREE, PRIOR, AND INFORMED CONSENT

Despite their diversity, all known indigenous communities across the Amazon practice some form of the principle of “*Buen Vivir*” or “*Sumaj Kausay*,” roughly translated as “Living Well,” for governance of their natural resources, based on communal decision-making. The central goal is

the use of community resources in a way that reflects cultural values and self-determination. In accordance with this principle, the project partners drafted and signed a Memorandum of Understanding to pilot a forest carbon project. The Paiter clans designated Metareilá as the lead, with other organizations playing supporting roles.

The partners drafted a plan for executing the project, and for holding all income in a segregated trust fund, maintained by Funbio on behalf of the Paiter people, as exercised through Metareilá.

Almir presented the proposal to the Forum of the Clans, and it was overwhelmingly approved. Henrique Surui, the leading proponent of increased logging in the territory, was absent, on an extended sabbatical due to health issues.

In June of 2009, all of the acting chiefs signed a cooperation agreement, launching an extensive process of education and engagement to ensure the free, prior, and informed consent (FPIC) of all the Paiter people. This involved visits to all 26 villages. In 14 of the villages, a series of 10 educational seminars were hosted by ECAM, Kanindé, and Metareilá, with buses made available to bring people from isolated villages to the meetings.²³

At the same time, the project partners invited state and federal authorities, including FUNAI, to join the process. The idea was to ensure that the project was being developed in ways that would conform to Brazilian government policies and objectives.

DEVELOPING A BASELINE

To generate offsets, the project developers would first have to create a “business as usual” deforestation scenario showing what would happen to the forest under prevailing conditions, then create a plan to counter the expected deforestation. Finally, they needed to show that income from the offsets was necessary to carry out the plan. In carbon parlance, this final criterion is referred to as “additionality.”

Idesam and Forest Trends began mapping the drivers of deforestation using a simulation model called SimAmazonia, which uses factors such as current rates of deforestation, planned road paving investments, and agricultural expansion.²⁴ They found that SimAmazonia couldn’t account for certain deforestation pressures that are common in indigenous territories, such as illegal logging and unregulated agriculture. Working with Brazil’s National Institute of Amazonian Research and France’s AgroParis Tech, Idesam developed a model called SimSurui which was customized for the TISS and is applicable to other indigenous territories as well.²⁵

Simulation models generate a range of potential scenarios. Project developers may be tempted to pick a high-deforestation scenario for their project, since this yields a larger number of offsets that can be sold. The developers of the Surui Forest Carbon Project adopted a very conservative baseline deforestation assessment, known as a “reference level,” largely out of concern that this high-profile project’s environmental integrity could be cast into doubt. In hindsight, the reference level was overly conservative.

Although the TISS covers 248,147 hectares, they settled on an estimate that only 13,575 hectares would be deforested over the next 30 years – an amount that translates into 7.8 million tons of carbon dioxide. If the Paiter instead saved that forest, they could expect to earn credits for roughly five million tons of carbon, after accounting for uncertainty. In the near-term, the project was expected to deliver at least 300,000 offsets by 2012, and more than two million by 2020.

In June 2012, VCS auditors “validated” the project, meaning they signed off on its design and recognized the baseline. The TISS straddles two states, Rondônia and Mato Grosso, both of which

endorsed and approved the project. At the federal level, FUNAI and the Attorney General's Office formally endorsed and approved the project. Although the Ministry of Environment was encouraging behind the scenes, it declined to either endorse or criticize the project, saying it lacked the jurisdiction to do so.

To earn CCB certification, the project had to go beyond standard FPIC procedures and ensure that all four of the Paiter clans (the Gãbgir, the Kaban, the Makor, and the Gameb) were engaged in the project, and were able to set the terms of their own contributions to avoided deforestation. All of the clans took part in agroforestry training. But the Gãbgir won approval to lead an online communications and archiving initiative, while the Makor led an effort to restore lost knowledge of medicinal plants. Others pursued fish farming, organic coffee, and the commercialization of various non-timber forest products.

VERIFICATION AND SALE OF CREDITS

The next step was the “verification” phase, where auditors from the Institute for the Management and Certification of Forests and Farms (Imaflora) and the Rainforest Alliance verified that the Paiter were, in fact, executing the plan as validated. Here the project encountered its first challenge.

To support the process, Idesam began reviewing satellite images and found that a 2010 fire in the territory had destroyed more forest than the Paiter had realized. As the verification process continued, the number of offsets was adjusted downward. The first tranche of offsets was verified in June 2013.

The sale of offsets proved to be another challenge – largely because the world had failed to reach a binding global agreement under the UNFCCC, meaning there was little demand for offsets. Fortunately, the charismatic nature of the project made it possible to sell offsets at above-market prices and attractive terms with high-profile buyers, including Brazilian cosmetics giant Natura Cosméticos and the 2014 Football World Cup in Brazil.^{26,27}

In total, the project generated 299,895 carbon offsets. The Paiter sold 251,530 and placed the remaining 48,366 in the VCS buffer pool.

Proceeds from the sale went into the Surui Fund, a trust fund housed by Funbio. The money was kept in a segregated account, and used to pay for forest monitoring and protection as well as the myriad projects chosen by the clans outlined above. Some was used to provide management training and capacity building for Metareilá.

SETBACKS AND CHALLENGES

Although the Paiter government had endorsed a logging moratorium to support the carbon offset project, this was broken when Henrique Surui returned from sabbatical in 2011 and resumed his logging operations, mostly along an entryway known as Line 14.²⁸

Paiter patrols operating on behalf of Metareilá discovered the operation soon after it began. They traced the logging trucks to nearby mills, and identified the small group of Paiter, including Henrique, who were collaborating with the loggers. Lacking law enforcement authority of his own, Almir presented the evidence to local authorities, who refused to act.²⁹

The Paiter-Surui Parliament then formally called Henrique to account in 2012. When he refused to cooperate, they appealed to President Dilma Rousseff and to Marta Azevedo, then president of FUNAI. Those appeals were also ignored, and logging continued along Line 14.

The pro-logging faction also had tremendous support from CIMI. By its own admission, CIMI sought to undermine the project because it believed that carbon offsets and the green economy

distorted the relationship that indigenous people have with the land³⁰ – despite the irony that supporting logging exacerbated wealth distortion among the Paiter, while the conservation faction that CIMI opposed was trying to share resources equitably.

Meanwhile, some of the chiefs complained that Funbio was slow to disburse payments from the Surui Fund, and that too much authority had been concentrated in Metareilá.³¹ Almir conceded that the payments had been slow, which he attributed to a lack of documentation provided by the clan seeking funds. Still, he agreed to make the accounting process more transparent. Henrique, however, accused Almir of siphoning off funds – an accusation that proved unfounded, but which caused some of the chiefs in the logging faction to drop out of the project.

In 2014, CIMI financed a trip by Henrique and other Paiter to Brasília, where they protested the project with a blend of legitimate critique and outright fabrication. In an interview for CIMI's magazine, *Porantim*, for example, Henrique claimed that the project created the community schism which had, in fact, existed since the early days of logging.³² He also said that the project forced the Paiter to abandon their traditional way of life. In reality, the only activity it forbade was industrial logging. He also pointed to the slow disbursement of project funds to restate his accusations of theft.

Metareilá responded with a scathing point-by-point rebuttal that was endorsed by seven of the nine Paiter community associations. It criticized Henrique and CIMI by name, and in uncharacteristically blunt terms.

“We know that CIMI has deep ideological divergence in relation to environmental compensation projects, and we are able to follow the debate on this subject, and even participate in it,” they wrote. “However, we hoped that the members of that entity knew the difference between debating an environmental issue and conducting an outright smear campaign against the name and reputation of an entire indigenous people.”

The letter also reiterated Almir's pledge to introduce more transparent accounting. A revamped accounting process was initiated in February 2015.³³

In March of that year, a coalition of 600 Brazilian NGOs also criticized CIMI's actions and its coverage of the dispute in *Porantim* magazine.³⁴

GOLD AND DIAMONDS

Unbeknownst to other members of the Paiter, the logging faction had continued to explore the possibility of gold and diamond mining. It often worked with outsiders who had entered the territory illegally. In February 2015, Metareilá documented and reported several instances of illegal alluvial mining (known as *garimpo* in Portuguese). *Garimpo* is environmentally devastating. It involves digging up massive amounts of soil, using mercury to draw out any gold, and then burning the residue.

This time, authorities responded, first with a surveillance mission by FUNAI, and then with a raid on an illegal timber operation outside the territory. But by then the mining operations were too widespread to control. At some undetermined point in 2016, diamonds were also discovered, and Paiter authorities again alerted the federal police, who in turn raided the mines and documented extensive environmental damage.³⁵

According to *The Guardian* newspaper, the police placed blame for the activities squarely on the shoulders of Henrique Surui and the logging faction.³⁶

Deforestation accelerated in 2016 and 2017, as Paiter members who colluded with miners used the resulting income to purchase cattle and clear forest for pasturelands within the TISS. The forest loss forced the Paiter to put the carbon project on hold, since they could no longer guarantee the results set out in their project plan. The new mining and agriculture ventures also created massive income discrepancies in the community.

In September 2018, after extensive deliberation, the project partners formally suspended the offset project, concluding that it would be impossible to proceed.³⁷

Conclusions and Lessons Learned

The Surui Forest Carbon Project dramatically reduced deforestation within the TISS during the first five years of its operation. It also funded six self-sufficient community development initiatives that continue to provide income to this day. It achieved these successes despite the lack of compliance-driven demand for carbon offsets, as well as a lack of law enforcement and the presence of criminal enterprises and ideologues intent on undermining the project by sowing conflict among the people.

In the end, however, the project succumbed – for the time being, at least – to the tragedy of the commons that REDD+ was created to assuage. Although the project required, and received, near-unanimous support from the Paiter people, it was undermined by a small contingent of loggers, miners, missionaries, and colluders pursuing their own individual interests.

A number of lessons can be extracted for similar projects. These include:

The Importance of Nesting within a National or Jurisdictional Approach

The project was always designed to ultimately “nest” within a national or jurisdictional approach, meaning that its outcomes would be incorporated into a statewide forest conservation program aligned with accounting programs that would developed under the UNFCCC at some point in the future. Such an approach would have linked the project’s success to the success of state-level initiatives and may have created an incentive for the state government to provide more support, assuming adequate international payments for performance. Even without nesting, however, the project delivered tangible social and environmental benefits, and showed that stand-alone projects can provide value if leakage is properly accounted for. (Leakage is the term for deforestation that merely relocates to other areas.)

The Need for Adaptable Baselines and Methodologies

It was ultimately the discovery of high-value minerals and the subsequent dramatic acceleration in deforestation pressures that proved to be the undoing of the project. Future initiatives must find ways to incorporate unforeseen circumstances into a project baseline, so that the impact of human action to support conservation is still rewarded and encouraged.

The Need for Formalized Resolution Procedures

The project never implemented a formal resolution chamber, which led to unresolved friction between Metareilá and some participants when Almir sought to impose performance metrics. It’s clear the project would have benefitted greatly from a more transparent and formalized resolution apparatus overseen by elders.

The Need for More Governmental Cooperation

The Paiter complained repeatedly of incursions into their lands. Although authorities did respond on six occasions, overall law enforcement proved inadequate to stop illegal mining and agriculture. Environmental markets are often presented as an alternative to command-and-control regulations protecting natural resources. But markets ultimately depend on strong institutions and effective law enforcement.

The Need to Simplify Projects

The significant complexities of getting a project like this to market were a major drawback. The project was delayed by long periods of methodological and institutional review. Then funds were delayed by complex commercial negotiations and disbursement procedures. After nearly five years of workshops, legal analyses, and training, these delays were a final straw for many community members, who lost confidence in the project.

The need for diversified finance streams: In recent years, new avoided deforestation projects blend offsetting with long-term uptake agreements for sustainably-harvested products, often in combination with certification programs such as the Roundtable on Sustainable Palm Oil (RSPO). Such multipronged “blended finance” efforts can help ensure income streams from non-timber forest products and other sustainably-harvested products, increasing benefits for community members and giving projects a hedge against failure of any single financing strategy.

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