Rainforest Alert - Brazil

INTRODUCTION

Rainforest Foundation US (RFUS) is working with the Indigenous Council of Roraima (*Conselho Indígena de Roraima*, or CIR) on a forest monitoring pilot program on two indigenous peoples' territories. Our goal is to eventually protect nearly 2,000 square miles (518,000 hectares) of forest and savannah in Roraima from mining and land invasions.

Under the program, we train community leaders and youth in monitoring technologies—including GPS and GIS systems, smartphones, and drones—to document environmental crimes and submit evidence to the appropriate authorities. The program also involves fire brigades, paralegals, and CIR's environment and legal departments, in a holistic effort to address the threats to these territories.

REGIONAL SIGNIFICANCE

46% of Roraima is demarcated indigenous peoples' land, the highest rate of any state in Brazil. There are more than 50,000 Macuxi, Wapichana, Ingarikó, Patamona, Sapará, Taurepang, Wai-Wai, Yanomami and Yekuana people living in a total of 34 demarcated territories covering nearly 39,000 square miles (over 10 million hectares)—an area roughly the size of Virginia. This makes indigenous communities important stakeholders in the state.

RSS is an area of both extensive ecological value and significance for Brazil's indigenous peoples' rights movement. RSS is a vast stretch of savannah and forest, and home to 20,000+ Macuxi, Wapichana, Ingarikó, Taurepang and Patamona people. The demarcation of RSS was opposed by ranchers, rice growers, and others with economic interest in the area, and who in several instances over the years used violence and intimidation. The strength and determination of the communities of RSS, despite the risks, made them an emblematic case for indigenous peoples' rights in Brazil and beyond.

The landscape represented by CIR is unique. It is a mix of natural tropical savannas, wetlands, forests and riparian ecosystems in the center of the Guiana Shield. The Guiana Shield is one of the oldest geological formations on earth and dates back 1.7 billion years to the supercontinent Gondwanaland. Today the Guiana Shield is one of the regions with the highest biodiversity on earth, home to endemic, rare and threatened species—likely including many undocumented species. The Guiana Shield also plays an outsized role in stabilizing weather patterns in the Amazon Basin and South American continent as a whole.

The area is also culturally rich, sharing myths and legends with Guyana and Venezuela, including many stories about Macunaima: a trickster deity who slips among the mountains and canyons, playing practical jokes on his enemies and shepherding his people across dangerous lands. Numerous ancient adobe villages, clay burial pots, and stone tools lace the landscape: evidence of its long-term habitation by indigenous peoples.

THREATS

The northern state of Roraima has a rapidly advancing agricultural frontier, mostly for soy production. In 2015, Roraima had the second-highest rate of deforestation in Brazil, and deforestation increased by 58% that year alone. In 2019, deforestation rose by over 200%. Deforestation and climate change have brought droughts and increasingly regular flooding. At time of print, flooding was devastating Roraima and Guyana—the neighboring country to the east. The main drivers of deforestation and habitat loss in Roraima today include:

Mining

Brazilian President Jair Bolsonaro's words and actions have emboldened some 20,000 miners to settle on Yanomami territory in Roraima. Over 500 miners—with support from local politicians—now operate in RSS, a number that will likely grow despite community opposition. Mining areas in many parts of RSS are contiguous with key geographies in Guyana, where the same miners and operation owners may work on both sides of the border.

Soy

Soy production has expanded exponentially over the past few years, advancing even into indigenous peoples' lands. Indigenous communities have reported aerial pesticide spraying, an uptick in pests, and damage to fish and waterways. Soy is exported via Manaus in the neighboring state of Amazonas, and will likely increase with the opening of an all-weather paved road through Guyana.

Infrastructure development

The paving of the Linden-Lethem road through Guyana will likely lead to a commodity boom in Roraima (and southern Guyana). The government supports large-scale hydroelectric power projects like Tamandua in RSS and Bem Querer on the Rio Branco, which would alter ecosystems across multiple communities and protected areas.

PARTNERS

CIR represents the indigenous peoples of the state of Roraima. It works directly with over 200 geographically- and ethnically-diverse communities. Formed by *tuxauas* (traditional leaders) in the 1970s, CIR has a long history of fighting for indigenous peoples' rights and lands at the local, state, and national levels. For over 30 years, it led the struggle for demarcation of Raposa Serra do Sol (RSS), one of the main indigenous peoples' rights battles in Brazil. It also runs an agroforestry training center for indigenous youth, which earned it the Equator Prize in 2019. Rainforest Foundation US has worked with CIR for twenty years.

PROGRAM DETAILS

The program will build regional data hubs to conduct effective monitoring of indigenous peoples' lands threatened by mining and large-scale soy farms. It will further train and activate a multidisciplinary team of over 150 community forest monitors, paralegals and firefighters, who will collaborate on the regular surveillance of their lands. Their reports will inform local leaders, who will in turn resolve conflicts internally or else seek coordinated action by relevant state authorities. The program will build on CIR's ongoing work and leverage Rainforest Foundation US's experience with monitoring programs in Peru and Guyana, promoting exchanges of technology and information, as well as joint monitoring between teams on the Brazil/Guyana border.

How it works

- Primary data hub located at CIR headquarters in Boa Vista receives satellite deforestation alerts and reviews satellite imagery to detect threats on indigenous peoples' lands. Alternately, these initial indications of a threat frequently come from on-the-ground knowledge.
- Information collected at the primary data hub is passed to field hubs in the respective territories and alerts are verified by community-based monitors via foot patrols.
- Field data hubs compile evidence for the consideration of regional leaders, who decide how to address the threat.
- In the event that local leaders decide to address the threat by engaging with authorities, legal support, or the media, CIR's environmental and legal specialists work with them to build evidence-based cases for their advocacy.

PROGRAM NEEDS

The pilot program has established two data hubs; CIR would like to expand to at least five, prioritizing areas most threatened by encroaching mining operations.

This would include:

- Equipment costs and honoraria for community-based monitoring teams (paralegals, environmental agents, monitors), and data hubs;
- Support for advocacy, including travel and technical support for meetings with government, outreach to public media, and field visits;
- Support for CIR's legal and environmental teams, and for ongoing technical support of Rainforest Foundation US.

Funding needs

- $1,500,000 over 5 years to expand to 5 priority regions; i.e. $60,000/hub per year

Contact

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