



Drug traffickers have been spotted using this illegal airstrip on an island in Peru's Madre de Dios River.

THE LAST STAND

Drug runners, gold miners, loggers and others are rapidly invading the deepest reaches of the Amazon. Could science and technology help Indigenous groups to protect their land, their isolated neighbours in the forest and the climate? **By Jeff Tollefson**



the outside world. The COVID-19 pandemic presents yet another threat to these peoples.

Conservation researchers and advocates once focused almost exclusively on protecting the region's biodiversity and locking up carbon in the forests to stave off global warming. But after decades of effort, the destruction of the rainforest continues. Today, scientists, advocates and policymakers increasingly recognize that achieving climate and conservation goals won't be possible unless they're aligned with efforts to help Indigenous communities secure and protect their territories.

This movement raises broader questions about the human rights of Indigenous people and the potential genocide of isolated groups in the forest who have no voice in discussions about policies that control their fate.

In Peru, there has been some progress in the past decade, with the government setting aside vast tracts of land to promote forest conservation and protect isolated groups. But as the hidden landing field shows, the government has struggled to police the forest. Scientists and conservationists, together with established Indigenous communities on the frontier, are working to fill the void with science and technology.

Drones, mobile phones and satellites are all part of the arsenal deployed by Tayori and his companion on the river, Tom Bewick, a former official at the non-profit group Rainforest Foundation US, based in Brooklyn, New York. After packing up, they climb back in the boat and motor upstream. Along the way, the skiff passes the bullet-ridden wreckage of a plane – all that remains after the Peruvian military ambushed drug traffickers on the beach in 2018.

A changed world

In 2019, with support from the Pulitzer Foundation, *Nature* visited the Peruvian Amazon as part of an investigative project looking at threats to Indigenous peoples and the role of science and technology in helping them to protect their lands – and neighbouring isolated groups deep in the forest. Over the course of two weeks, we met scientists and travelled up the Madre de Dios River with Tayori and his team, speaking to government officials and Indigenous people along the way. Since then, threats to the Amazon have increased, in part because of the pandemic. At the same time, scientists interviewed by *Nature* have made progress in evaluating technologies and strategies for protecting territories deep in the jungle.

On the international front, support has grown for the idea that Indigenous communities and Indigenous rights must play a key part in protecting areas such as the Amazon. In September 2021, the International Union for Conservation of Nature voted in favour of a motion from Indigenous groups calling

As the Sun dips towards the distant Andes, Luis Tayori's crew cuts the motor and our skiff makes landfall on a small island deep in the Peruvian Amazon. Tayori collects his gear and makes his way barefoot up a rocky beach. The low roar of the Madre de Dios River fills the air as he sets up a drone on a flat patch of sand.

Thumbs on the controller, he sends the machine skywards, and the shrill buzz of four propellers gradually fades as it disappears over a grove of trees. Tayori is here to check out reports from local Indigenous communities that drug traffickers have been using the island as a base.

Within minutes, the drone's camera captures its target: an illegal airstrip. Even here, in one of the most remote and pristine areas of the Amazon, the cocaine trade is rapidly expanding its reach.

"This is serious," he says.

Tayori is a member of the Harakbut Indigenous group, and his job is to protect the Amarakaeri Communal Reserve, an Indigenous territory nestled against the Andes Mountains in the southern Peruvian Amazon. The Madre de Dios region is a vast landscape that holds massive stocks of carbon and biodiversity, but modernity is quickly encroaching in the form of loggers, gold miners, energy developers and drug traffickers, along with the profound impacts of global warming. Combined, they create an existential threat to the Amazon forest and the Indigenous peoples who live there.

Villagers on this stretch of river fear violent confrontation with armed traffickers on a daily basis, but the biggest risks are to the isolated and nomadic Indigenous populations who roam the area. Any kind of contact could be disastrous for these people, who lack immunological defences against modern diseases and have been decimated by respiratory illnesses when they've come into contact with



Luis Tayori launches his drone on an island in the Madre de Dios River.

for conservation of 80% of the Amazon by 2025. Two months later, at the United Nations climate summit in Glasgow, governments and philanthropic organizations committed at least US\$1.7 billion over 5 years to help Indigenous peoples claim and protect their lands.

On the ground, however, Indigenous representatives say the situation has deteriorated because of rising gold prices and pandemic policies that have hampered law-enforcement activities and limited economic opportunities. Halting the relentless onslaught of illegal activity won't be easy, they say, but Indigenous groups are gearing up for the challenge with help from researchers and advocates.

On the river

Our trip up the Madre de Dios River ran along Peru's flagship Manú National Park, which extends from the lowland rainforests to the Andean peaks that tower in the distance. Established in 1973, the park anchors a collection of protected areas and Indigenous reserves larger than Portugal that stretches all the way to the Brazilian border (see 'An ark of diversity').

This vast tropical wilderness boasts one of the most diverse assemblages of plants and animals on the planet, and is home to numerous established Indigenous communities as well as several hundred isolated people from the Mashco Piro people, also known as Nomole or Yine. To some scientists, the area is an ark of biological, ecological and topographical diversity that might just be large enough to survive the coming climate storm, providing a relatively safe space for the local Indigenous peoples, plants and animal species while humanity figures out how to rein in greenhouse gases.

But this theory works only if Peru is able to safeguard these lands. Given the scale of the challenge and the government's limited capacity to patrol these vast territories, scientists say that both technology and

Indigenous people who live on the front lines will be crucial to protecting the region.

"The government doesn't have the resources to patrol this territory," says Adrian Forsyth, a biologist who has spent the past three years investigating options for protecting what he calls the deep forest, an environment where rain, humidity, clouds and sheer distance from reliable power sources and communications pose challenges for any kind of protection system.

In 2019, as executive director of the Andes Amazon Fund, a philanthropic organization in Washington DC, Forsyth convened nearly two dozen researchers and technology developers in Madre de Dios for a first-of-a-kind meeting. Its focus was on protecting the vast and often inaccessible territories that isolated groups call home. His idea was to convert the deep forest into a smart forest that can detect

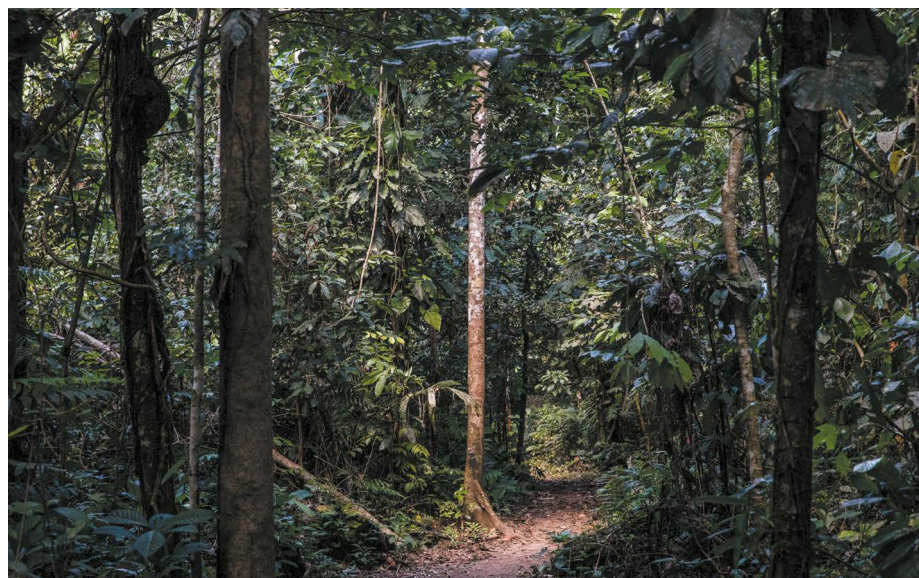
intruders and relay alerts to government authorities and local Indigenous communities – who he thinks are best positioned to speak on behalf of isolated peoples. The conference focused on devices such as microphone and camera systems equipped with artificial intelligence, as well as data from drones and satellites that could be deployed remotely.

Monitoring systems such as these could do more than track drug trafficking and mining: researchers have discussed their potential to keep tabs on isolated Indigenous groups in the forest. Such knowledge could be used to minimize potentially devastating contacts and conflicts with intruders – or with anybody who lives and works in areas adjacent to the protected zones where isolated tribes roam. Questions abound over the use of this technology to monitor people who have opted, out of fear, to shun modern society. But like many other tropical ecologists and conservationists, Forsyth fears that time is running out for the isolated groups.

"We have the technology to look into this place, and probably figure out where people are, how many they are, how they are moving around," Forsyth said as the meeting got under way. "We need to make a decision: do we use it? Or do we just hope for the best?"

Despite decades of social and environmental campaigns aimed at protecting the Amazon, the threats now are greater than they have ever been, thanks to the relentless expansion of activities such as agriculture, mining, energy development, logging and drug trafficking (see 'Conserving the Amazon'). Even in Brazil, which was held up as a model of sustainable development less than a decade ago, illegal deforestation is skyrocketing as the populist government of President Jair Bolsonaro seeks to dismantle long-standing protections for the environment and Indigenous rights.

COVID-19 made things worse. In many places,



A path leads through the forest in the community of Shipetiari.

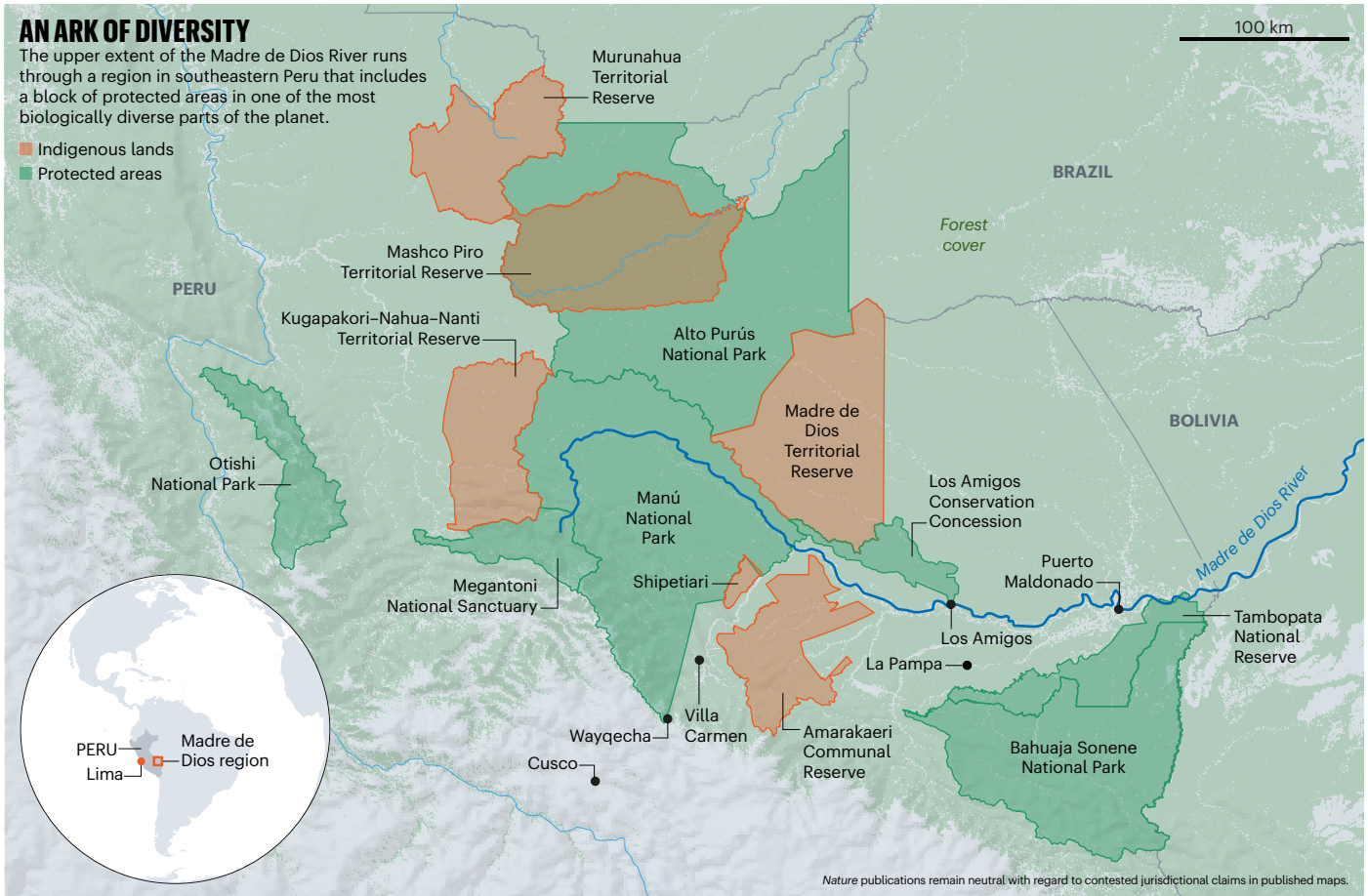
BRETT GUNDLOCK FOR NATURE

BRETT GUNDLOCK FOR NATURE

AN ARK OF DIVERSITY

The upper extent of the Madre de Dios River runs through a region in southeastern Peru that includes a block of protected areas in one of the most biologically diverse parts of the planet.

- Indigenous lands
- Protected areas



SOURCE: ACCA

already limited law-enforcement activities ground to a halt at the height of the pandemic, but scientists and Indigenous representatives say that the criminals didn't take a break. At the same time, the economic downturn made illicit activities, such as mining for gold and cultivating coca plants, all the more enticing for criminal networks and anybody seeking to eke out a living in the forest – Indigenous people included. “It's the perfect storm,” says Bewick, who stepped down in October 2021 as head of Peru operations at the Rainforest Foundation US, which has provided more than \$5 million for Indigenous conservation efforts in Peru over the past decade.

One of the few bright spots in the movement to protect tropical forests has come from Indigenous peoples themselves: a growing body of research shows that Indigenous communities tend to protect their lands from the rampant deforestation that is devastating tropical forests worldwide (see, for example, J. S. Sze *et al.* *Nature Sustain.* 5, 123–130; 2022). An increasingly vocal and organized Indigenous community has seized on the evidence, arguing that Indigenous rights are crucial to maintaining biodiversity and protecting the climate. That argument prevailed at the UN climate summit last November, leading to the record financial commitment by governments and major philanthropic organizations to help Indigenous communities promote conservation.

Indigenous rights are now part of global discussions on both climate and biodiversity, says Victoria Tauli-Corpuz, an activist from the Philippines who served as the UN special



WE'VE GOT TO HAVE THINGS THAT ARE ROBUST ENOUGH TO OPERATE IN THE JUNGLE.”

rappporteur on the rights of Indigenous peoples from 2014 to 2020. But economic interests and demand for resources often collide with Indigenous interests, she says.

“That's really a big problem, and that's what we are seeing in countries where you have governments that don't really believe in human rights,” Tauli-Corpuz says.

Troubled past

It was dark when the skiff carrying our crew landed at Shipetiari, a sprawling forest village

of 130 people on the banks of the Madre de Dios. Things were tranquil when we arrived, but violence erupted there in May 2015, when a 22-year-old resident named Leo Perez was killed by an arrow. The attack came from an incursion by members of the isolated Mashco Piro people, who have been venturing out of the jungle over the past decade, occasionally coming into conflict with established communities.

Gregorio Perez, Leo's father, was consumed by rage when the incident happened: “I wanted to exterminate them all.” But as an evangelical Christian missionary, he told *Nature* he urged family members and fellow villagers not to pursue revenge.

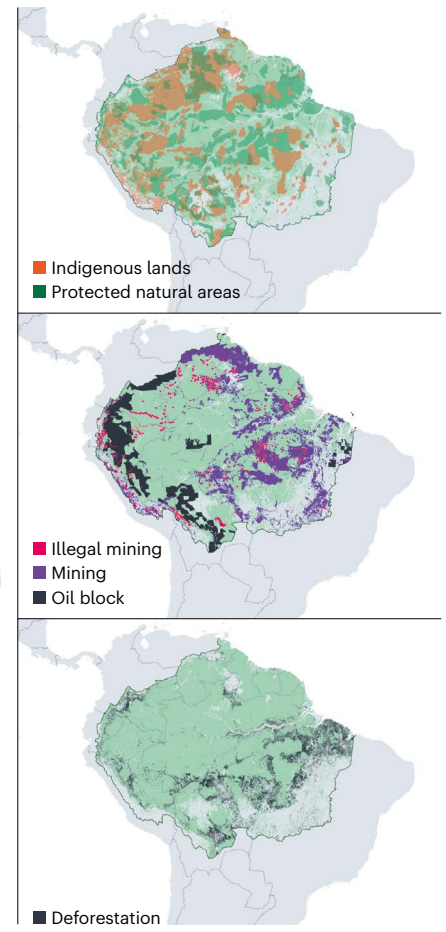
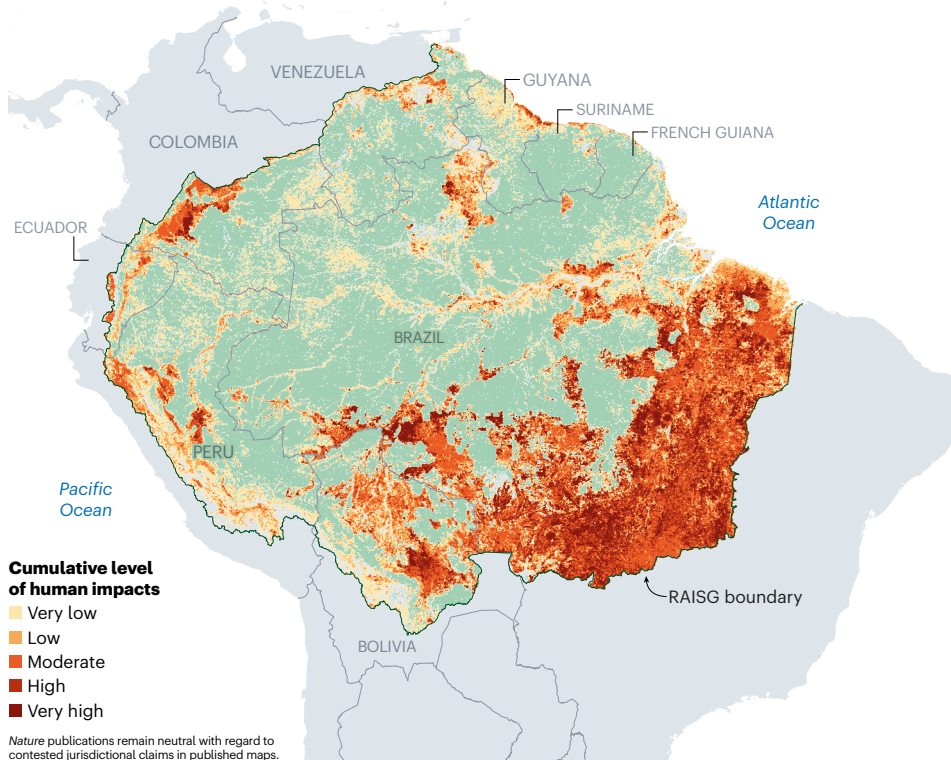
However, others say that the village did take action. Daniel Rodríguez, an anthropologist who advises the Native Federation of the Madre de Dios River and Tributaries (FENAMAD), says the village must have raided a Mashco Piro camp after the death, because he saw the resulting loot in Shipetiari.

At the time of our visit, the village leader, Rufina Rivera, told *Nature* that tensions with the Mashco Piro had eased. Although the potential for dangerous conflict remained, teams of villagers, organized and trained by the Peruvian Ministry of Culture, were regularly patrolling the area, with no signs of intrusions. She and her fellow villagers worried more about encounters with armed drug

Feature

CONSERVING THE AMAZON

At a meeting in Marseille, France, in September 2021, the International Union for Conservation of Nature endorsed an Indigenous proposal calling for conservation of 80% of the Amazon by 2025. Scientists with the Amazon Network of Georeferenced Socio-Environmental Information (RAISG), a consortium of advocacy groups across the Amazon, are working with Indigenous groups to map conservation threats and opportunities across the region.



SOURCES: RAISG; C. AUGUSTO/INST. SOCIOAMBIENTAL

traffickers that roam the area. Nonetheless, she said her community would retaliate if it were attacked again by the Mashco Piro, some of whom were regularly appearing on a beach down river.

When we visited a guard post across the river from that beach early one morning, we met Maximiliano Mamani, an anthropologist at Peru's culture ministry, which operates the guard post jointly with FENAMAD. Several years earlier, Mamani said, government anthropologists had been forced to intervene to defuse a complicated situation created by uncontrolled contact with tourists, loggers and missionaries.

Groups such as the Mashco Piro are often labelled as isolated or even uncontacted, but the terms don't adequately describe the more complicated reality. These communities live in the forest and are mostly separated from the rest of society, but sometimes venture into the outside world for a variety of reasons, whether to barter for food or to take pans and other metal tools.

At times, as in Shipetiari, these forays have turned into violent encounters. Most recently, in late August, the Mashco Piro killed a logger who was fishing with his friends on the eastern side of their territory – outside the Madre de Dios reserve that was established to protect the isolated community.

Having spent time with many individuals

among the Mashco Piro, Mamani said that the people are mostly interested in trade and are curious about the outside world. From time to time, the Mashco Piro still arrived on the beach offering meat. Ministry officials might reciprocate with plantains, but try to minimize



LACK OF GOVERNMENT STABILITY IS A BIG BARRIER IN OUR ABILITY TO DEPLOY THESE KINDS OF TECHNOLOGIES."

their gifts in an effort to prevent dependency.

Mamani said the ministry knew of about 100 Mashco Piro individuals, who appeared to be strong and healthy, if skinny. Once they establish a relationship with ministry personnel, the Mashco Piro often inquire about family members or poke fun if somebody gains weight or cuts their hair. "They like to joke," he said. Some in the ministry had expected that the group was ready to join the

outside world, but that has yet to happen.

Even with the guard post in place, the situation remains precarious for the Mashco Piro, the village of Shipetiari and others in the region. Asked about the drug traffickers' airstrip just minutes upstream from the beach, Mamani merely shook his head, saying that the ministry doesn't have the authority to intervene in such matters.

Tayori later provided video evidence of the airstrip – captured using a drone – to officials at the Peruvian park service. So far, no actions have been taken. When *Nature* contacted Rivera last month, she confirmed that the drug traffickers – "los narcos" – are still operating from the island, and that the Mashco Piro are still roaming the area.

Venturing out of isolation

It is likely that the Mashco Piro and other isolated peoples are not so much 'uncontacted' as traumatized by previous contact. Scientists suspect that they went into hiding more than a century ago when the rise of cars created a rush for Amazonian rubber, which was harvested through a brutal industry that often relied on enslaved Indigenous people.

Although they are known as modern-day hunter-gatherers, the Mashco Piro who have been appearing on beaches in Madre de Dios were probably skilled farmers and traders centuries before the arrival of Europeans,

says Glenn Shepard, an anthropologist at the Emilio Goeldi Museum in Belém, Brazil. “They owe their current lifestyle to modern tyres, just like everybody else,” Shepard says.

The rubber trade wasn’t the only threat to people such as the Mashco Piro. Shepard saw what happened after the company Royal Dutch Shell ploughed roads into the jungle looking for oil northwest of Manú National Park in the early 1980s. Loggers took advantage of the roads after the company pulled out, and the end result for one isolated group, the Nahua, was contact and then disease.

Shepard was studying in Manú at the time, and watched as group members arrived in canoes seeking help, coughing and wheezing.

“The park would treat them and then just take them back up river,” he says. After visiting the group and interviewing survivors in 1996, Shepard calculated that disease wiped out 42% of the population within the first 5 years of contact, but the actual total could be much higher. “Probably whole families died, which I didn’t get registered,” he says.

Similar stories have played out across the Amazon. This ultimately pushed Brazil’s National Indian Foundation (FUNAI) to establish a no-contact policy in the 1980s. That has become the norm in other countries, including Peru.

But threats have only increased over the past few decades, spurring renewed debates about how to protect isolated groups. The COVID-19 pandemic enhanced these concerns as many Indigenous communities across the Amazon were ravaged by the disease, which also made it into the Madre de Dios region.

Deep forest surveillance

Prompted in part by conflicts with the Mashco Piro in Madre de Dios, Peru has expanded its efforts to protect isolated groups over the past



A government guard post across the river from a beach visited by the Mashco Piro people.

decade. In addition to working with local Indigenous groups to monitor and control contact, the government has established seven territories for isolated communities, including two last year, and at least three more are in the works. Designed to protect an estimated 5,000 people who are either living in isolation or who have recently entered into contact with the outside world, these territories cover an area larger than Ireland.

Thus far, however, the government has struggled to make the reserves anything more than lines on a map, and many scientists question whether Peru has the information and resources it needs to properly designate and protect these Indigenous reserves. At the time of our visit, officials with Peru’s culture ministry acknowledged the challenge of protecting 2.6 million hectares of territorial reserve in the Madre de Dios region alone with only a few

dozen field agents. They said they were exploring how science and technology could help.

In addition to studying options such as high-resolution satellite imagery, ministry officials said they were working with the Peruvian Air Force to investigate whether infrared surveys could be used to document isolated communities. Improving understanding of their locations and movements could help the government to predict where encounters are most likely to occur – and hopefully prevent them. The ministry has also partnered with the Association for the Conservation of the Amazon Basin (ACCA), an activist organization in Lima that was co-founded by Forsyth, to assess the legal and ethical issues that arise from the use of any technology to study people who have decided to live in isolation.

But these efforts, Forsyth says, have been hindered by turnover in the culture ministry as well as political turmoil: Peru has cycled through four presidents since late 2020. “The lack of government stability is a big barrier in our ability to test and deploy these kinds of technologies,” he says.

Ministry officials have not responded to requests from *Nature* for comment this year.

Forsyth has spent much of his conservation career working to protect these regions. Over the course of nearly two decades with the Andes Amazon Fund, he helped to direct hundreds of millions of dollars from philanthropic organizations such as the Gordon and Betty Moore Foundation, based in Palo Alto, California, to support social, environmental and Indigenous groups as well as academic research and government conservation programmes in Peru. One success was the establishment, in 2000, of a 146,000-hectare property on the Los Amigos River that is owned by the federal government but managed by the ACCA and dedicated solely to science and conservation.



One of Luis Tayori’s crew guides a boat upstream.

Feature

That protected area, called the Los Amigos Conservation Concession, has become a testing ground for forest surveillance systems in recent years, spurred in part by the 2019 conference on using science to protect isolated groups in the deep forest. With funding from the Gordon and Betty Moore Foundation, Forsyth has since doled out grants totalling around \$2.4 million dollars to develop these technologies.

Following the conference, researchers assessed different types of surveillance system. Topher White, the founder of Rainforest Connection, a conservation technology company in Katy, Texas, tested a solar-powered monitoring system at Los Amigos, featuring cellular listening devices on trees and signal repeaters on a pair of research towers. The system can identify sounds such as chainsaws, motors and gunshots, and then relay alerts to forest rangers, activists and Indigenous groups.

Andy Whitworth, a wildlife ecologist who leads Osa Conservation in Puerto Jiménez, Costa Rica, set up a network of camera traps, which capture images whenever movement triggers the devices. This could monitor the movement of people, or the peccaries and tapirs that isolated groups hunt. The challenge is to create and power durable devices that can withstand the brutal tropical humidity, heat and Sun for months at a time, says Whitworth. As one of Forsyth's grant recipients, he is now working with separate teams to field test

a prototype miniature camera that would use cloud-based artificial intelligence to sift through images. "We've got to have things that are robust enough to operate in the jungle."

Los Amigos has provided a real-life test for these technologies. Beginning in 2016, illegal loggers started building a road through the farthest reaches of the concession. By 2019, they had made it into the adjoining Madre de Dios reserve, where Mashco Piro roam among some of the last remaining stands of valuable old-growth mahogany in the Amazon.

The ACCA launched a concerted effort with authorities to shut down the operation two years ago. Backcountry rangers with military experience worked with Indigenous guides to document the intrusion, in part using drones and satellite data, including high-resolution imagery and data from radar sensors that can peer through clouds and tree foliage.

It worked, says María Elena Gutiérrez, the ACCA's executive director. "I have never been so proud: we have right now zero logging at Los Amigos," Gutiérrez says. "We are now trying to extrapolate this experience to the rest of Madre de Dios."

For Forsyth, the lessons from the past few years are clear. "Eyes in the sky and boots on the ground," he says. "That's the key to success."

Hidden peoples

One thing that the team at Los Amigos did not do is peer deeper into the reserve to try to determine where the Mashco Piro are camped

out. Gutiérrez says the decision on whether to establish some kind of monitoring system for isolated communities rests with governments and Indigenous groups, but few doubt that it is possible.

Some researchers worry about the implications of this kind of work. Greg Asner, an ecologist at Arizona State University in Tempe, regularly captured evidence of encampments of isolated groups more than a decade ago, when his team was surveying the Peruvian Amazon in a plane equipped with a powerful laser-based system that provides 3D images of the forest. He flagged the images to his sources at Peru's environment ministry, but never saw the groups themselves as a legitimate research topic. Even today, he doesn't see the value in actively tracking them.

"It's creepy, like describing the home range of jaguars, but human rights are different than jaguar rights," says Asner. "If we know they are in there, why do we need to know exactly where they are sleeping at night?"

Despite the ethical worries about monitoring, some Indigenous leaders are open to the idea. Knowing where isolated groups are could help surrounding Indigenous communities to prevent unintended and dangerous contact, but "it is the Indigenous organizations that should implement and execute any system of control and surveillance of the Indigenous peoples in isolation," says Julio Cusurichi, president of FENAMAD, which has worked with the Peruvian government to



Illegal gold mining has transformed a once-forested region in La Pampa, Peru, into a wasteland of sand dunes and ponds polluted with mercury.

BRETT GUNDLOCK FOR NATURE

prevent contact and conflict since the Mashco Piro began to emerge.

FENAMAD was also instrumental in pushing for the creation of the Madre de Dios reserve in 2002. Twenty years later, however, the reserve's borders have yet to be finalized, and the Indigenous organization is still pushing to expand the eastern boundary to cover areas where the Mashco Piro are known to roam. The problem is that these same areas are currently occupied by logging concessions, which would be costly for the government to cancel.

For Cusurichi, the killing of the logger in August is yet another reminder of the precarious situation along the border of the reserve and the risks to both outsiders and the Mashco Piro. Too often, he contends, the government is more concerned with protecting economic interests than the rights of isolated peoples.

Tauli-Corpus, the former UN rapporteur, has little doubt that scientists mean well, but she worries about any efforts to document the precise location of isolated groups. "If this information falls into the wrong hands, these people will be disturbed in ways they could never imagine," she says.

Officials from the culture ministry acknowledged these dangers in discussions with *Nature*, and said they were looking at potential regulations to control the flow of information and restrict who can peer into the reserves.

Although Forsyth says the ministry is full of people who want to do the right thing, he is wary of assuming that government officials always mean well. In Brazil, critics have accused President Bolsonaro, a right-wing populist, of sidelining scientists at FUNAI and attempting to appoint a former Christian missionary to head the division that handles isolated peoples. In the Madre de Dios region, the former governor, Luis Hidalgo Okimura, disappeared in February just before he was to be jailed in connection with an investigation into an illegal logging ring.

"In some cases, the government may not be trustworthy," Forsyth warns. He places more faith in Indigenous organizations and their advocates. "Giving them access to whatever information they would like or can't generate themselves ought to be the priority."

An uncertain future

For Gutiérrez, much of the focus is on helping Indigenous organizations to boost their own scientific capacity. For the past few years, her team has been training Indigenous groups to use drones and satellites to patrol their lands and waterways; one of the beneficiaries of that work is Tayori and his team at the Amarakaeri reserve.

On our trip up the Madre de Dios River, Tayori pulled out a smartphone and opened



Flora and Gregorio Perez, whose son was killed in 2015.

GPS software operated in partnership with the Peruvian park service. The software provides deforestation alerts, which are generated by an automated system that uses imagery from US satellites and was developed by scientists at the University of Maryland in College Park. When Tayori checked his phone, several alerts appeared on a map, and we motored upstream.

As the day wore on, our skiff passed the entrance to Manú National Park and then the Indigenous community of Diamante. Tayori says the community fought success-

the Amarakaeri reserve spiked during the pandemic, and Tayori says that problems continue to this day. And even more alarming: deforestation isn't just due to illegal incursions by outsiders, but also to illegal mining and coca cultivation by his own people in the reserve.

What's happening on the Amarakaeri reserve today is a reminder that science and conservation are only parts of a larger equation. Tayori says Indigenous communities and organizations have been looking for ways to protect their lands while promoting sustainable economic development. International funding could help on this front, but he and other Indigenous leaders say that people on the ground have rarely benefited from such aid in the past.

Now he fears that time is running out. The younger generation is increasingly abandoning the traditional way of life and embracing a damaging culture of accumulating wealth and possessions, he says. The result is a fraying of the security cordon that communities across the Amarakaeri reserve have been building to protect their territory in Madre de Dios.

"That's the reality. I can't lie," Tayori says. Although he is pessimistic that traditional Indigenous culture will survive, Tayori expresses some hope that a growing movement of Indigenous activism will generate something new, "another way of life, another form of coexistence and another concept of community".

In essence, Tayori says the Indigenous movement and its partners must devise a sustainable social and economic model that will allow people to thrive in a standing forest, else it will inevitably come down, tree by tree.

Jeff Tollefson reports for *Nature* from New York.



I HAVE NEVER BEEN SO PROUD: WE HAVE RIGHT NOW ZERO LOGGING AT LOS AMIGOS."

fully for construction of a road connecting to a highway up the mountains, which has enabled illegal loggers and drug traffickers to expand into the region. The week before we arrived, the leader of Diamante was arrested for taking bribes from drug traffickers, who had been using the town's airstrip to haul cocaine out.

"They want the road, but they don't want the problems," Tayori said of the Diamante residents. "That's impossible."

Tayori sees similar challenges arising in his home territory. Deforestation on