Blind conservation: The forgotten secondary forests and their inhabitants – a case of the Peruvian Amazon

by Célina Marie Scülfort

On a hot and sunny morning in June 2024, while on fieldwork for my PhD research, I was taking a walk with Miguel, a farmer from an indigenous Kichwa village in the North-Eastern Peruvian Amazon. We were going to see his fields and fallows. While we were passing by his cassava and cocoa plants, I asked him about the old-growth forest the village has on its lands. He talked a while about the forest and how they are connected to the indigenous way of life. Miguel described to me how he manages secondary forests:

"A good purma (secondary forest) is like a virgin forest. But if you cut it down every year, you end up with 'smoke' on the ground. [But] when [you let the trees stay and] the leaves and branches fall down, they become soil. There is a lot of earth when we let the fields rest for 10 years or more […]. That is why we let it rest. […]. I want to conserve the forest."

Miguel has been living in the village for over 20 years. His family fled to the lowland jungle from the Amazonian highlands, an area located between the Andes and the Amazon basin, due to the booming coca economy and Peru's internal insurgent and counterinsurgent wars in the 1990s and 2000s. Nowadays, he shares his forest and farming land with his father and four sons, of which two have already children of their own.

His forest management practices can be described as a circle of fallow regrowth in a type of so-called tropical swidden agriculture in which the farmer actively integrates and reforests deforested or degraded landscapes. This practice is common among the indigenous Kichwa people of the Amazonian region of San Martín. Kichwa, in comparison to other Amazonian indigenous groups, have a long tradition of subsistence farming with high levels of agrobiodiversity (biodiversity found in agricultural fields) and forest regrowth. The Kichwa are one of the 55 officially recognized indigenous ethnicities in Peru, of which 51 are Amazonian and four Andean.

But what exactly is subsistence farming and tropical swidden agriculture?

Subsistence farming refers to an agricultural practice in which most of the food produced will be consumed by the farming households itself. This is usually the case for so-called smallholders, which the United Nations Food and Agricultural Organization defines as *"small-scale farmers, pastoralists, forest keepers and fishers who manage areas varying from less than one hectare to 10 hectares"*.

Swidden agriculture is a type of agriculture in which different patches of land are rotated between forest fallows and agricultural fields. Fallow refers to a land which is left idle after agricultural production.

Miguel's agricultural field with subsistence crops in a swidden farming cycle, e.g. papaya (carica papaya).

(Photo: Célina Marie Scülfort)

Despite its rich flora and fauna, most Amazonian soils are relatively infertile. The thin layer of fertile soil, which is created by decaying plants, is easily exhausted during farming. Smallholders in San Martín therefore let the field rest after some years, which means that vegetation can regrow. As the fallow then becomes a patch of forest regrowth, the soil slowly regains its nutrients due to decaying plant material.

In some of the indigenous villages I visit during my PhD fieldwork, farmers do not "abandon" the idle land per se, but actively enhance forest regrowth by planting different tree species and thereby diversifying and accelerating the regrowth, which is known as improved fallowing. This agricultural practice has long been a focus of research for associate professor Kristina Marquardt at the Department of Urban and Rural Development at SLU, who also happens to be my PhD supervisor.

Improved fallowing is particularly practiced when farm sizes shrink in San Martín due to different factors such as in-migration and expanding commercial agriculture (e.g palm oil) and population increase. Actively planting the forest hence helps the farmer to have the fallow more rapidly ready again for farming.

While this type of farming can come under pressure due to external factors such as the ones described above, the knowledge of the farmer on how to improve forest regrowth is remarkable and can help to intensify the land use in a sustainable way.

Miguel’s reforested fallow of 10 years.

(Photo: Célina Marie Scülfort)

The regrowing forest is often called secondary forest. The concept of a secondary forest is derived from the term “primary” forest. A primary forest is often defined as a forest which was never been cut down. In its most extreme interpretation however, it is believed to not have been subject to human intervention at all - creating a sense of wilderness around forest ecosystems. To protect those forests, humans have therefore no place in them. This might seem like a foreign concept to Swedish people for who *“allemansrätten”* – the freedom to roam - is part of the Swedish cultural identity.

Miguel’s old-growth secondary forest of 23 years.

(Photo: Célina Marie Scülfort)

This stance might not only seem odd but is also easily contestable. The idea of a primary forest with no human intervention has been refuted by diverse ecological, anthropological and other social science studies. In the Amazon, findings such as the Amazonian Dark Earths show that already ancient humans have altered the world's biggest rainforest to create more productive soils for human use. In this sense, the strict idea of a wild, pristine rainforest, i.e. a "primary" forest, is misleading.

The "primary" forest (with *Macrolobium acaciaefolium* tree species) Miguel has never cut down and uses for hunting and collection of medicinal plants –a forest with minor human intervention.

(Photo: Célina Marie Scülfort)

This extreme view of forest ecosystems has contributed to exclusionary conservation models discriminating against local people. It has fed into a long-lasting widespread narrative, often pushed by colonial and post-colonial governments in world regions such as Africa and Latin America, blaming local users for environmental degradation. If you would like to know more about this scientific discussion, the field of political ecology questioning environmental degradation narratives could be of interest. Already in the 1990s, there were studies that showed how nature conservation goals were often not aligned with the need to decrease social inequalities and alleviate poverty.

Peru is not an exception here. The official line from the Peruvian government is that 90 % of deforestation is caused by small-scale farmers such as Miguel due to their subsistence farming. However, this claim was found to be highly flawed on several counts. To give just one example: The government's study looked at frequency of deforestation patches rather than total area deforested. So if a smallholder would deforest the same hectare of land on two different occasions, it would actually count as a higher deforestation rate than if a palm oil company would deforest 100 hectares at once according to the methods used in the government's study!

Additionally, this narrative is highly problematic from a social justice perspective. It identifies one particular group of society as responsible for deforestation: small-scale farmers. This view totally ignores the complexity around heterogenous deforestation processes and who are the underlying drivers behind those. It is not the smallholder per se, but a combination of market factors and legal and illegal activities which affect the Peruvian Amazon. Examples are palm logging, cattle ranching, palm oil expansion, mining and coca cultivation.

The narrative further attacks the livelihood basis (subsistence farming) of rural forest-dependent populations. These inhabitants of the Amazon are often part of marginalized segments of Peruvian society, which continues to be shaped by significant social and systemic inequalities.

It has long been known that Amazonian tropical forests are of crucial importance for mitigating climate change due to the particular capacity of these tropical forests to capture large amounts of carbon dioxide – one of the greenhouse gases causing our climate to warm. International forest governance has focused for decades to fight against increasing deforestation rates in tropical regions across the globe. For instance, The UN Sustainable Development Goal (SDG) 15.2 promotes *"the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests, and substantially increase afforestation and reforestation globally"*.

But how do we achieve this then?

Peru is a relatively important player if we look at tropical forest conservation. According to the Rainforest Foundation *"[m]ore than 60% of Peru is covered by tropical forests, making it the country with the fourth largest area of these vital ecosystems in the world. 94% of these forests—covering over 193 million acres—are part of the Amazon rainforest. It is the second-largest Amazonian national territory, surpassed only by Brazil."*

Most forest protection in Peru has its focal point on enclosing primary forest areas for nature conservation following restrictive conservation narratives discriminating against local people. Tensions between conserving Peru's rainforest and finding strategies to not compromise the needs of rural populations and indigenous peoples are therefore widespread (See for example this article.)

Some scientists, both ecologists and from the social science, therefore, argue nowadays that instead of focusing on solely enclosing primary forest areas, we need to find more socially inclusive conservation models and take into account other type of forest ecosystems such as Miguel's secondary forests. In fact, the invisibility of secondary forests in current conservation strategies, despite their significance in supporting marginalized communities and covering 70 % of tropical forest areas globally, is therefore a notable flaw and should be changed. In San Martín, zoning policies do not consider the category of secondary forests reforested by indigenous smallholders per se.

Indigenous federations in Peru have also argued that the government needs to do better in demarcating indigenous forest territories and help the indigenous communities fight against land invasions causing forest clearcutting in their territories. During my current fieldwork, I could interview some government officials who see the need for this - such as a person from the regional environmental authority overviewing crimes of deforestation in San Martín:

"[The indigenous communities are] important for us because they are the ones who are in the place of the event. Although it is true that we are the regional environmental authority, we cannot always [oversee] the entire territory. So it is important [...] that they can notify us if there is any problem with deforestation [and land invasions] in their territory. So we immediately can [go] with the police."

Further, our research team argues that the specific knowledge indigenous farmers in San Martín have on forest regrowth should be implemented in governmental reforestation efforts. One informant from the non-governmental organization Conservation International working in San Martín told me that past reforestation efforts by regional authorities have failed as they worked with non-Native species such as eucalyptus trees. Last, but not least, it will be important to incentivize smallholders and indigenous people further in conserving their forest with increased benefit sharing instead of excluding them. This does not only apply to San Martín but Peru and beyond. Here, questions of climate justice, local understanding of environmental politics and the benefits of local people should be considered. As Miguel points out:

They [the government] tell us that our air is pure because of our forests. That is why other countries [want us to conserve it]. But we don't receive anything for taking care of the forests for other countries. But the government tells us to not deforest.

Even though Miguel expressed in the beginning that he wants to conserve his forests, he expresses his concerns if it is fair to ask a marginalized smallholder like him to do so for the sake of fighting climate change for the rest of the world without receiving anything back. I would therefore like to finish this article with a question for you, the reader, to reflect on: How can we ensure forest protection if we do not attempt to understand the local people's views and their land use practices more in detail?

(Photo: Célina Marie Scülfort)

Célina Marie Scülfort is a PhD student at the Department of Urban and Rural Development within the Division of Rural Development focusing on the Global South. Her PhD research is part of a bigger project called *"Secondary forests, commodity frontiers and the micro-politics of land claims: Struggling to build smallholder forest futures"*, which is led by Kristina Marquardt, Célina's main PhD supervisor. Before starting her PhD studies, Célina had participated in a related project entitled *"What is secondary about secondary forest? Building smallholder forest futures in Peru's Amazonian frontier"* – both as a research assistant and later as a master student, which resulted in a Master of Science degree in Sustainable Development from Uppsala University.

Prior to embarking on an academic career, Célina worked in the German renewable energy sector and also volunteered in forest conservation management in Peru. It was this experience that sparked her interest to pursue a career in this field. When Célina is not working on her PhD research, she likes to read books, play badminton – and to hike and explore the Swedish and Peruvian forests. If you would like to learn more about Célina's research, you can visit her LinkedIn profile or check out her profile page on the SLU website.