## The Traditional Agricultural System of the Upper Negro River Region<sup>104</sup>

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I was born in the city of Santa Isabel do Rio Negro, state of Amazonas, and belong to the Piratapuia people. My parents came from the upper Negro river to Santa Isabel, bringing with them their way of life, in which two very important habits for our diet stand out: eating fish and planting.

Thanks to my family, I had access to traditional farming knowledges, and also had the opportunity of studying and getting a licentiate degree in Visual Arts by the Federal University of Amazonas and a master's degree in Sustainable Development by the University of Brasilia. Combining traditional and scientific knowledges, I worked as a researcher of the Traditional Agricultural System of the Upper Negro River Region which was registered as a Brazil cultural heritage in 2010. Currently, I collaborate with the actions for safeguarding this heritage and have a leadership role in the indigenous movement.

In relation to the recognition of the Traditional Agricultural System of the Upper Negro River Region as heritage, I highlight that we consider food as a cultural and natural phenomenon. It is cultural because it is transmitted from generation to generation. This transmission actually occurs from the moment we are conceived until when we grow up: when pregnant with us, our mother knows how she should behave, what to eat and not to eat, what is bad for her and bad for the child; what a woman must do when getting her first period, and so forth.

We can also say that food is natural because our way of eating is based on what exists in nature: fish with tucupi, steamed fish, game... This is our way of eating, it is natural. What is not natural is for us to consume products that come from outside. Unfortunately, now there are many products from outside that we didn't know about – frozen foods, especially, we hadn't known them before. Currently, in the market there are many frozen products, and fish, which is our main dish, becomes scarce. Here, there aren't many people fishing for a commercial purpose: there are only some fishermen who sell some fish and go back to their community, they are not dedicated to working in fairs.

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There is also another dimension of the extremely strong connection between our food and nature, because, in addition to dealing with fishing, our traditional swiddens are based on knowledges that contributes to keeping alive not only the indigenous population, but also the products harvested. All of them are treated with no chemicals, no pesticides, and this keeps the soil, the rocks, the plants alive. In this sense, we have a very different line of work than the one from white people. We never learned to plant with chemicals, so it is very rare for traditional farmers to use any type of poison to kill or eliminate a pest in nature, there is no such thing.

Equally, our traditional knowledges applied to farming contribute to keep alive the relations between people, because they cooperate with each other and for the strength of our agricultural system. People are always planting, both in swiddens and in backyards, and collaborate with each other, strengthening bonds between relatives, neighbors and friends. There is individual and collective pleasure in planting, because people are formed this way. I mean, you can even go to school, but always keep one foot set on the swidden. You may travel, leave the town you were born, but you don't forget how you eat – for example, eating with flour, because manioc flour is part of the main dish from the Negro river region.

This is valid for downstream Negro river, where the city of Barcelos is located; for midstream Negro river, where Santa Isabel do Rio Negro is located; and for upstream Negro river, where the city of Sao Gabriel da Cachoeira stands out. All these places have a large indigenous population, and this population is keeping alive the line for transmitting traditional knowledges associated to crops along the river. Therefore, we can say that our agricultural system, like our food, is cultural and natural at the same time. It also is a trademark for us, something from the Negro river people.

What we call Traditional Agricultural System of the Upper Negro River Region is a heritage shared by 23 indigenous peoples: Arapaso, Bakuna, Baniwa, Bará, Barasano, Baré, Desana, Dow, Hupda, Karapanã, Kotiri, Kubeo, Kuipako, Muriti-Tapuya, Nadob, Pira Tapuya, Siriano, Tariana, Tukano, Tuyuka, Yanomami, Yuhupde, and Wereken. Our knowledges circulates, just like we exchange species of plants, seeds, yuccas, peppers. It is very gratifying to know that, wherever you go, there are people planting a diversity of products. When I was in the Upper Negro river, for example, I was dying to bring some seeds we don't have midstream, and this is how we exchange. In fact, most people on midstream come from upstream, bringing their plants to grow there. Then, someone comes midstream, sees, asks and takes the seeds, and this is how plants multiply along the Negro river.

Exchanging happens all the time. For example: I was born here and I know someone who came from the Upper Negro River region, close to the border; if I go there, I will take my knowledge with me, my way of farming, making flour, all my utensils, everything about the way I work. We share what is ours and learn from others; this is how it works.

In 2017, I traveled to Ecuador for a seminary to present the Traditional Agricultural System of the Upper Negro River Region. I showed a bit of what we develop, and I had the pleasure of learning about two local indigenous communities and a bit about their food. I saw them plant and eat sweet manioc and have something like ice-cream-bean, but did not have cassava, so they didn't eat flour. In the end, it was funny: I brought two kinds of sweet manioc and planted them in my town, but they didn't grow, because these are plants accustomed to cold weather and it is very hot where I live. In other words, we learn by trial and error.

When we get married, we also marry the person's family. You take what you own, the knowledge you have, what comes from your family, and bring to the other family. This new family has children who will pass on knowledge and plants to their own children, and the cycle continues. This is how it spreads.

The traditional agricultural system also has major economic importance for indigenous populations, because it can meet our food needs while concurrently preserving the forest. We only take down plants in the area necessary to plant enough for our family, we don't use mechanized farming, and always diversify products, such as yucca and fruit, to keep the soil healthy. Additionally, we bless the land in a ritual before planting processes, because we acknowledge that everything in life has a meaning – everything we have has history, everything we have has tradition. This is definitely very laborious, but it is equally gratifying, because we plant our own food.

A fundamental aspect is that each person has a role in the agricultural system. First, women with knowledge about farming are the "swidden owners". This is an essentially feminine role. Women are the ones who know the yucca qualities and know the fruits that will be planted. When opening the swidden, the man's role is to simply select the land. When it comes to taking down slashing, hoeing, burning and clearing the land, women also do this job. Then, women cut the yucca. At this moment, they also observe and select yuccas from other people to exchange with theirs.

It usually goes like this: if someone is burning the land, and I know this person has some kind of yucca I'm interested in, I ask them for some yuccas. The yuccas we want to bring to our new swidden are usually the ones that give good yucca, they are yellow or white yucca – there are countless qualities to yucca. However, there is currently interesting data that indicates a change. Some owners of the agricultural system are only planting yucca that gives plenty of manioc, but this didn't exist before: people planted yucca with different qualities. Why? They made a point of having every kind of yucca: paca yucca, tucunaré yucca, ourinho yucca. This is changing.

In this context, the loss of biodiversity is one of the biggest threats to the food sovereignty of indigenous peoples, in my opinion, and avoiding it is one of the main goals for safeguarding the intangible cultural heritage related to the Traditional Agricultural System from Negro River. Twenty years ago, in the 1990s, when we started researching this agricultural

system, there was an immense diversity of yuccas and maniocs, because indigenous farmers did not want to plant only those that grew a lot of roots. They wanted to plant more qualities – the more varieties they had, the better they were.

This applied not only to manioc, the primary food crop from the swidden, but also to fruits and other tubers, such as yams. There were various types of yams, including white yam, purple yam, yam with purple peel and white core, among others. Now, if you go to a swidden, the farmer only has one type of yam, and some don't even have yam anymore! Concerning sweet potatoes, few people have it on their swidden. Despite this fact, many varieties of peppers, ingas and bananas are still cultivated, but bananas are also threatened, because the farmers are only planting those with high yield. The biodiversity that existed 20 years ago is actually being lost due to changes in farmers' values and behaviors.

Another thing that changed is the expansion of açaí crops. Five years ago, açaí was only found in urban area backyards. Nowadays, açaí is being planted in farmyards. One barely has finished planting and harvesting, the secondary vegetation comes and açaí is planted again, because it is generating income. The problem is that, when you plant açaí, there almost is no other place left for planting, because açaí takes up the ground. In my point of view, this is also a threat to our food sovereignty. Does it generate income? It does, in its harvesting, but you lose land space and, within a short period, there are no longer suitable conditions to plant plenty of açaí.

Climate change has also threatened our traditional agricultural system. The rain and drought regime is deregulated. The weather is no longer the same. In the past, we had a virtually certain weather with each season; now, it is very different. It no longer is a weather we can say: "oh, this year, month and day there will be rain and then the sun will come out and we'll be able to swidden and plant." This no longer exists.

For example, in 2021 and 2022 there were heavy rains on Negro river, and people who work with farming nearly gave up on swidden farming. In 2023, the opposite is happening, it is very dry. At this precise moment, we are facing the worst drought in our history. The rivers and streams have dried out, so it's not possible to swidden and it is difficult to make flour, because we also need water for this. In fact, all people, just like plants, need water.

The visible result of the changes is that the number of people dedicated to working on swidden has decreased considerably over the past ten years. Many inhabitants of Santa Isabel no longer have a swidden, because they have no plot of land to plant on. Without swidden, they cannot meet their family's needs, cannot make their flour, and are at the mercy of traders. To give an idea, five years ago the can (of approximately 15 liters) of manioc flour cost 80 reais; currently, it costs 180 reais. Tapioca flour is sold for 200 reais! Yes, the flour price improved because many people consume it, but they don't produce it, so they form a market for outside traders.

We have come to an impasse, worsened by the fact that young people no longer want to swidden, but we also have responsibility, we need to show our children that there is also money in the swidden. If we plant, produce and sell flour, we can support our family. As my mother said, swidden is like a job, because if you go to a plot to swidden every day from 7 AM to 4 or 5 PM, you are working. Who is the owner? You are. You are your boss; you make your hours. You go back to the furnace house, take a little break, check out what work is left to do – this is the system. This is our system and we need to keep it alive, to forward it to our children.

We have worked with this goal since the first phase of research for heritage and safeguarding of the Traditional Agricultural System from Upstream Negro River. Many people have been dedicated to this. The association we belong to, the Association of Indigenous Communities from Midstream Negro, headquartered in the city of Santa Isabel, has over 1,000 associates, most of them indigenous farmers.

At the time the registration was prepared, we gathered several people who own traditional swidden knowledges, the "swidden owners", to be part of a committee we named "swidden council". People from several places, several communities, around Santa Isabel, Barcelos, upstream Negro river, everyone came to give their contributions and demands. The request for registration was made in the city of Santa Isabel, but all Negro river peoples were included.

The process for safeguarding this agricultural system also has a managing committee composed of members from different locations. They are the swidden councilors, people who have worked in the process of protecting this cultural heritage since the beginning of research, like Mrs. Cecília and Mrs. Tereza. These people are always thinking about getting the best for the system and can request help from local, national and international partners to try to improve the situation of indigenous farmers.

Now, the government must pay more attention to this segment of traditional agriculture, because there is a large market looking for traditional products. Here at the Negro river, each people has its own traditional craft. In our farms, we put into practice indigenous knowledge passed from generation to generation. We try to swidden the same way our ancestors planted, and this has a cultural and economic value that needs to be better recognized.