

Valle de la Estrella

Covering the entire territory of Talamanca and Valle de la Estrella, I just started working in the Sixaola River Basin. The area that I covered goes from Bríbrí to Sixaola. My first indication that there may be a problem here was when I was working to plant tree coverings in order to provide shade along the banks of the Sixaola River. I began finding out there were great concerns about chemical usage and the exploitation of banana as a monoculture. I have learned that there have been various actions towards improving protections and producing a healthier river system here in the mid-lower basin for citizens. Actions have been taken to mitigate and lessen the extent of climate-induced change over the years.



COMMERCIAL BANANA CROPS, MIDDLE BASIN, THE SIXAOLA RIVER BASIN

Actions are being taken to support the residents here, such as reforestation, crop diversification and introducing grain commodities to provide food security. At this time, we are touring the Shirroles indigenous

community to learn about their practices and how we might incorporate them into our management planning of the basin's natural resources.



BANANA FLOWERING, MIDDLE BASIN, THE SIXAOLA RIVER BASIN

Here I also started in the Sixaola River. We continued with the Telire, renamed but still the binational territory covering both Panamá and Costa Rica. This river system has embraced multicultural populations since its inception. Many are indigenous to this place, and are also Nicaraguan migrants and indigenous Panamánians working in Costa Rican territory.

There are situations that are worrisome for our ministries from both countries tasked with protection of the river: Over the years there has been a great increase in the use of agrochemicals. The greatest export demand is banana and a learned practice is that this requires the use of *bolsas* (plastic bags) for protection from insect damage and the burning sun.



PLASTIC BAGS USED IN BANANA FARMING, MIDDLE BASIN, THE SIXAOLA RIVER BASIN

Here, insecticides are used to maintain the crops. Bananas fall to the ground, full of these chemical. There are also very frequent and excessive rains in this region. With these events, the river grows and causes all of these plastic bags and quantities of agrochemicals applied to the bananas to be swept away by the currents and pollute the waters of the Sixaola River, and well, everything ends at the mouth of the Sea.

This has been a pressing concern for the institutions and basin residents that have been training villagers on the use of these products.

There are other alternatives, including times when it is not necessary for these bags to come impregnated with insecticide. However, promoting the use of these bags without chemicals has been a problem. The idea is to lessen the need for these products and to gradually replace them with lower toxicity products and alternating with organic inputs to increase soil fertility after overharvesting— the greatest impact on pollution would be if we add these agricultural practices to an overall decreased use of agrochemicals,

Maybe it's from ignorance that people use recommended chemicals without knowing much about them. It is easier to tell people what to use than what not to use. And what do I tell small farmers if only agrochemicals used by big, agribusiness farms are available, for example? Should they use them, too?

Within my training, I am an environmental ecologist. I believe very much in symbiosis, protection and that sort of thing, but I'm also an agronomist. So, I try to get good returns with the least possible impact. I'm not an extremist. But I think you have to do something when you see something is wrong.

This is important, because this valley is a lung for the area and across the country, and the for the Sixaola River Basin, and it is in need of a good rescue right now. From what I can see, I think they many here are using chemicals without controls. I question if the governmental agencies that regulate these practices, if they have begun to think about any of this? I can answer this question, no. They have not considered the critical need for rescuing this area. I was surprised that they (agencies) will deliver chemicals to community members that do not understand these

chemicals, what the effects are. If the political will in the eyes of the government is to be more organic, and to be environmentally conscious because of global warming, for example, but they will continue to apply chemicals... it makes no sense. It makes me shamed and gives me grief that they still are delivering chemicals in this way. It benefits one, and damages all.



TRIBUTARY OF THE TELIRE RIVER, MIDDLE BASIN, THE SIXAOLA RIVER BASIN

The people whose land and territory this originally was, and some are still here, Bríbrí, its tragic to see the poor state of some of the land and the waters. When they share with me how the rivers should be, how they were, but how they look now following so much destruction when Chiquita came in and took up residence here, and continue still with their practices on neighboring lands – it's heartbreaking.

Understandably, all of this that I am making an account of sounds ugly. But there are at least indicators that within working groups and other

governments around the world, that are giving value to indigenous people, listening to them, and learning from their inputs of what we might change within our human-environmental interactions. I welcome these initiatives here, and everywhere. The knowledge exchanges between myself and the communities across the basin on the soils, the water and the growth cycles, are rich. We are able to share and compare practices, and find ways for community members to not use chemical if possible, as they don't want to.

These disjointed actions at the governmental level that I discuss, I believe only inspire and ignite the current local initiatives taking place by basin residents. I hear from the community members that I am working with on their farms, that there are working groups talking about these important issues: water resources, chemicals, flooding, water security and others, and are making efforts to get people involved. I am new to the Sixaola River Basin, but I would be interested in learning what projects these groups are tackling, and maybe, I could help in some way? I don't know... I look forward to learning more about the Sixaola River and these lands surrounding it.

This text is an excerpt from "*Navigating Cultural Currents: The Sixaola River Basin Story*, that can be found here:

http://ir.library.oregonstate.edu/convern/graduate_thesis_or_dissertations/w9505499c