



The Integrated Systems proposal, which Pedro Nogueira, a graduate of ESCAS MBA, developed jointly with Thiago Nogueira, student of the ESCAS master's degree and Alexandre Tozzo, is among the initiatives selected in two disputes: in the Agroforestry Challenge, the Vale Fund and the Reserve Natural Vale and in the national stage of the Global Competition of Green Business Ideas, held by ClimateLaunchpad, held by Climate Ventures, in Brazil.

**Check out this story, the results already obtained and the next steps.**

“We entered a proposal to develop a business model based on the recovery of degraded pastures for the implementation of more productive and efficient systems of dairy farming integrated with the production of cumbaru - native almond from the cerrado - also known as baru”, explains Pedro, who reconciles Integrated Systems with the work of a researcher at IPAM - Institute for Environmental Research in the Amazon.

### **Acceleration**

The Agroforestry Challenge seeks to strengthen innovative solutions in agroforestry businesses and the process enabled the team to go through an acceleration process. “We concluded the Agroforestry Challenge with a more structured business model, already making connections with potential customers and investors. Networking and support for the development of a business model are among the highlights of the Agroforestry Challenge. The focus of our project at the beginning will be the Cerrado, but the model is fully adjustable for different regions of Brazil and biomes”, adds Pedro.

## **Green Business**

The group also entered the proposal in the national stage of the Green Business Ideas Competition and won third place in August. “In a way, it is also a validation, the recognition of what we believe. Our expectation was to participate, to have this experience, to know the processes, but throughout each stage we were recognizing our value and our ability to advance further ”, comments the forest engineer, Thiago Nogueira, environmental manager at Pecsá - Pecuária Sustentável da Amazônia.

The achievement puts the Integrated Systems project in the regional dispute, which will take place at the beginning of the second half of September. In this phase, Brazil's three initiatives will compete with projects in Argentina, Uruguay, Colombia, Jamaica and Canada. The seven selected projects from the Americas will participate in the Global Final, with a prize of 10,000 euros. The top 16 in the global competition will be accelerated by the Climate-k1C Accelerator. The Global Green Business Ideas Competition aims to find and foster ideas and businesses with a positive impact on the climate.

According to Pedro, the Integrated Systems business model, in addition to contributing to the social sphere, through the diversification of producers' sources of income, also brings benefits in the environmental field. “One of the major reasons for thinking about this arrangement - with degraded pasture reform, the use of the forestry component and also of agricultural crops - is related to the climatic impact. More efficient production systems emit less carbon, mainly due to pasture reform and rotational grazing; this helps a lot in reducing carbon emissions. In our business model, the forestry component - the inclusion of trees - and agricultural species also contribute to fixing carbon in the system. In this context, in the balance sheet, the system changes from a carbon emitter to a system that fixes more carbon. Another key point is avoided deforestation in our business model, focused on increasing productive efficiency in consolidated areas. This is very important, since theoretically if pastures are not recovered, producers tend to advance in native vegetation to increase productivity. ”

Among the main results so far, Pedro highlights three points. “We developed our pitch, a presentation in a well-summarized and objective format that makes it possible to present the proposal in five minutes; it was great, a very interesting exercise to identify the key

points. We also made connections with potential customers, investors, business and technical partners. Another highlight is the visibility obtained in the media. And that was just the first phase ...”

### **Integrated systems**

In addition to versatility in terms of biomes, the model can be applied to both small, medium and large farms, but the focus at the beginning will be on working with small producers in the municipality of Poconé, about 100 km from Cuiabá, in the state Mato Grosso, in the Cerrado biome. “My family has a farm in the municipality, so we know the region and the producers. It is a municipality with great potential for the production of cumbaru, mainly native. In the first phase, we will focus on the cumbaru, but there is the possibility of arrangement with other native species, such as, for example, pequi - also native to the Cerrado. We must start the beginning of our operations in 2021/2022, during the rainy season in the Cerrado. At first, the idea is to sell the fruit in natura, but at a certain moment, we want to work with minimally processed cumbaru, as a way to add value”.

In the system, they also included species of short and semi-perennial cycles, as Pedro explains. "The idea is to accelerate the recovery of investment, through short-cycle species, such as rice, corn, beans, in addition to bananas and lemons, from the group of semiperenes". As for degraded pasture, the methodology to recover the area begins with the analysis of the soil, preparation, with possible correction of nutrients - if necessary - and planting of grass (brachiaria or mombaça) in the paddocks with the implementation of the rotated system.

For Pedro, the ESCAS MBA contributes to the submission of a proposal that was among those selected. “The MBA brought me the bases of important themes in the scope of the management of socioenvironmental businesses, mainly the question of socioenvironmental impact and how to present the proposal. All this logic of socioenvironmental business helped me to have more subsidies, information to present it and be with a more attractive proposal”, he says.

Thiago highlights the sharing of knowledge between the two during this period. “When I entered the master's degree, Pedro was already in the MBA. We worked together at

Pecsa and learned about the master's degree from him. The master's degree is very rich, inspiring, and fertile and helped me a lot in my professional identity. Pedro and I talked a lot about the concepts and experiences presented in class. In these conversations, we also talked about integrated systems, the experiences we already had and even though in an unpretentious way we needed to make these ideas become business, do something like that”.



Pedro Nogueira at the family site in Poconé / MT, municipality where the team will start implementing Integrated Systems / Photo credit: Personal file.