**Fed5CC - Interview technical advisor Fedecacao - 26-7-2022**

**Thank you very much for your time. Could you start with a small introduction? Who are you and what is your role in Fedecacao?**

I am agricultural engineer, I work in rural extension services, I accompany farmers, cocoa producers that are concentrated in the coffee axes, consisting of 5 departments, the 3 in the coffee region, Risaralda, Caldas and Quindio, and Norte del Valle and some regions in Choco. What we do now is, we focus on new sowing materials, developed by Fedecacao in the last year. My experience in the sector is based on the 10 years that I work now for the Federation, and we also support the research department of Fedecacao.

**Of those 5 regions, which region produces the most cacao?**

In the coffee region, the department that produces most cacao is Caldas. The production of cacao is concentrated in 2 regions, the Oriente de Caldas, that is composed on municipalities like Norcasia, Victoria, Samana and Bajo occidente de Caldas, with Belalcazar, San Jose, Viterbo, those are the 2 regions within Caldas with the highest production. We have a department that is atypical, which is Quindio, it is a relatively small department, but there we have big plots, that is atypical for Colombia, with an average between 1 and 3 hectares, here they work in cocoa in a more entrepreneurial way, we have plots of around 100 hectares in Quindio, there you don’t see small scale plots like in the rest of Colombia. We see that the area of cocoa is growing in that department, as well as the productivity. So first is Caldas, followed by Quindio, and then Risaralda and Norte del Valle. In that order, based on productivity.

**Ok, thank you. This data on production, can we find that on your website?**

Yes, productivity is on the website of the Federation, and you can also find the reports we make about productivity per department. We also need that data to decide as Federation, departments contribute the most to what we call *quota de fomenta cacaotera,* there is a small percentage of what the farmer sells, that goes to the federation, 3%. In that way the Federation can exist and provide all the services, like transfer of technology, research, support with commercialization.

**And what are your activities as extensionista?**

We have some specific goals, to support different initiatives, initiatives with new planting, initiatives with crops under support, innovation or renewal of plantations. That is wat we support, based on the goals of the producer. There are producers that are starting and establishing a plot, so we assist with that. We have a big goal on a national level, because 60% of the cocoa plantations are older than 25 years, their productivity level is going down and they are plantations that have phytosanitary problems, problems with monilia, and other diseases. What the Federation is doing with the support of the fund and in collaboration with the ministry of agriculture, to carry out some programmes to renew those plantations. In the past few years, we have focused a lot on the renewal of those plantations. And we also do group activities with the producers, that we call demonstrations of methods, in groups of 10-12 farmers, where we offer technical courses of 2 or 3 days, which are more intensive courses, to work on a topic on the management of the crop. We do days in the field, and technical support. We do that in groups in areas where we cannot support individual farmers.

**And for example, with the programmes to renew the cocoa trees, do the producers receive support from Fedecacao for that? Economic support?**

Yes, they receive an economic support, especially to do the pruning. Fedecacao supports a part of the activity, not everything, but basically it is a financial support and an incentive so they can learn how to do it. And the federation also hires qualified people to do the cloning of the trees. Because we have seen that there are not really good results when people learn to do it themselves, so we think it is better to hire qualified people that come to the plot to do it right.

**And in the region that you work, with how many extensionistas do you work?**

Well to be honest, we have a very large region and we are with 3 extensionistas. So our action radius is not very big. That is a necessity that we have, not only in this regions but in the whole country. Cacao has been growing in the past years, and it is difficult to respond to all the demands. So we organize these group activities, and talk about a specific topic that they need, instead of going to the farms individually. This is what we do on those areas where we don’t have a continuous presence.

**And what do you consider the main challenges in the cocoa sector?**

There are many challenges. From an environmental perspective, we need to adapt to climate change. We see now the change, we have a lot of ‘winter’, and we think that we summers will also have more intensity. So we need to work with more sustainable cocoa on the long term, to mitigate the impact of climate change. And we don’t stop promoting agroforestry systems as a way to mitigate climate change. That is one, from the social perspective, it is a crop that generates a sense of roots to a lot of families, like in the cultivation of coffee. It generates a sense of belonging. Depending on the region, there are conflicts related to armed groups. In our region, the only department with those limitations in the department of Choco. The rest of the coffee axes there is no presence of such groups, that limit the development of activities, or that generate problems of displacement. But we do see this in Choco. From the productivity perspective, there are many challenges to increase the productivity. We have very low productivity. In the past years, we have put a lot of effort in terms of research, technology transfer, to increase productivity, but that is still not sufficient. We need to improve the agronomist management. A limitation currently is the costs of inputs, which is much higher and limits the profit that can be made. And also it is difficult to find workforce. A challenge for farmer right now is scarcity of workforce. That is the principal problem to solve, but there is no clear solution yet. So we stay with the problem of scarcity of workforce, that also limits us to improve productive systems. And problems from the perspective of phytosanitary issues, there has been a lot of rain, and that causes fungus and because of that we also need to replace cocoa trees, with clones that are more resistant to those diseases. Well, there are many challenges, but I think these are the principal ones.

**And you said that there is low productivity, what are the causes for that?**

I think there are many causes, it is difficult to mention one cause. The first is the material that is used by the famers, they don’t understand very well how to use it, how to manage. That is one, basically, another topic is, that in general there is no culture, well the majority of the plantations are about 20 to 25 years old, so from productivity point of view, that is old. There are inefficient agricultural practices, where they don’t do work very punctually, or lack planning. The possibilities of farmers to access inputs, also because of the high price, normally farmers use fertilizers on their plots, they use residues like the pruning and the pod husk to bring back nutrients on the soil. So those are some reasons why the productivity is low. Also, on the topic, there are some optimal regions to cultivate cocoa, and sometimes farmers plant cocoa in areas that are not favourable. And they don’t have the technical support to help them with these decisions. We come across cocoa plantations above 1500 meters above sea level, which are limiting conditions.

**And from Fedecacao, do you do projects with the residues of cocoa?**

Maybe there are some initiatives with a university or something, but to be honest, I don’t know them, I don’t have information about it. The only thing I know are the projects of the farmers themselves, that they undertake. But from the federation, I don’t think so, I don’t know why. Maybe there is no clear strategy or intention.

**Because what are the challenges in the management of residues of cocoa?**

The challenges are a bad utilization, or bad management of the residues that we have been observing lately. What we recommend to the majority of the producers is once they do the separation of the husk, the producer leaves the husk in the same field, and the husk starts its slow process of decomposition. What we noticed is, with these rains that we experience now, the husk absorbs a lot of humidity, and there the phytosanitary problems start. So we need to do something with the management of the husks. The farmers know very well that the husks are used by the polliniser to lay its eggs, and that is why they leave the husks in the field, to help the polliniser.

**You said that from Fedecacao you don’t have projects with residues. Why is that?**

We prioritize other topics. It is not that the federation doesn’t find this important, we now focus a lot on the renewal of plantations, research on the topic of cadmium, which is also a limiting factor for international markets. We have scarce human, financial and technical resources, and we prioritize these topics, like renewal of plantations, cadmium, better productivity, find new clones, but the management of residues, that did not receive the importance it deserves.

**So you work a lot with the farmers, also in trainings to transfer knowledge. How does this process go, how do you work with farmers in changing practices for example.**

I think that it a process on long term. We have a very heterogeneous group of farmers. Farmers that are really open to new knowledge, but also farmers that are very traditional, very resistant to change. With them it is more difficult to establish better practices, renewals etc. Because we have such a heterogeneous group, the rhythms are different. It depends on the type of farmer, or region we go to, there is difference in adaption of knowledge. For example, I work in the region of Quindio, and they are more producers, they have more education, because they come from other crops, like coffee. We see that it is more easy for them to adopt changes and improvements. But we also encounter producers in Risaralda, where there are indigenous groups for example, where they are very traditional in the way they cultivate their crops. So it is more complex to achieve some results. And because we are not with that many people, it is difficult to start these processes on the long term. So that is a limiting factor .

**I would like to show an image (show + explain biohub). I want to ask you how do you see this concept and what do you think of the use of the cocoa residues for this system?**

I think that is an excellent alternative for these residues. You need to know that producers don’t know very well how to manage these residues that they generate. So if you can an added value to this, that can serve as an incentive for other process. This project is very relevant for what we are seeing, it depends, there will be the question from small producers who have less necessity to search for alternatives than those with 20 or more hectares, for them the problem is bigger, what to do with the residues. That is what I observe in my field visits. That would be good if there would be an added value for that, and it will solve a problem

**Ok, so it is more needed for those producers with larger plots, like 20 hectares, for them it is a bigger problem.**

Yes I think so, that is my opinion. The small scale producers, you should take into account that there are areas that are small and also volumes that are small, so that is not very significant. But for the larger plots, that we also have here in the coffee axes.

**Do you also see challenges to develop a new value chain in this region?**

I think so yes, challenges are, well I think that the project will think about how you can do the collection of these residues, you need to take into account that the dispersion of the producers is big, we don’t have concentrations of producers like in the coffee producers. In coffee we have full villages of coffee farmers, and with them you can organize a centralized collection of the residues. In cocoa this is more separated. So to collect the residues, that is one of the challenges, that the producer really have access, well the project can solve this, but the producer must have the ease to access these kind of projects.

**Yes, we are also thinking about a system of one central location to do the collection.**

Yes, that you should work really well, because there are some regions where you can do this, where they are working on this, and they facilitate the transport and everything, there are some regions with more difficult access, so that makes it more complicated.

**Which regions do you think are most beneficial for this type of projects? You mentioned Quindio?**

Yes, in Quindio, there are 3 municipalities with the highest amount of land in cocoa production, the mountain areas, there are 4 municipalities with a lot of small scale farmers that are very dispersed, but we have producers in the plain land, like Armenia, La Tebaida, Montenegro, Quimbaya, where the major producers are concentrated, and that can be a central collection point. In the other regions you need to look very carefully if that is possible, because not all producers can be beneficiaries of these kind of central collection points, because there are difficulties with the roads. But in Quindio, that could be a pilot project. And from there on, you can expand. Quindio has the potential to do this.

**And do the majority of the cocoa producers also have other crops? We also saw plantains, or coffee.**

Yes, there are producers who have coffee and cocoa. Normally, there are very few producers who only have 1 crop, they have diverse crops. A lot of them also have coffee.

**Well, thank you very much, these were our questions. Would you like to add anything else?**

No, basically, is the activity of coming Thursday similar to this topic?

**Yes, that is based on this project, we want to discuss it in more detail. We are very grateful if you can assist there.**

Yes, we are planning to go, we think it is an important topic.