**A2CF - Interview Manager Asociacion - Belen de Umbria - 30-6-2022**

**You could give an introduction on the association and give a more personal introduction. What is your education, what is your…**

Well, my name is [name]. I’m a coffee farmer, agroindustries technologists. I’ve also been a guild representative. I’m a manager in the [name] association. I also belong to the coffee farmers’ cooperative as an associate and I belong to the surveillance board of the cooperative at the department’s committee, as a representative of Belen de Umbria and I’ve had the experience of working 7 years in the association. Looking for alternatives on commercialization, on social, environmental sustainability, and economical for the producers.

**How many hectares of coffee do you have?**

We have an average of… we are 100 farmers with an average of three hectares.

**Did you say you were a coffee farmer, too?**

Yes.

**And how many hectares do you have?**

I have 2.5 hectares.

**Here in this region?**

Here in Belen de Umbria.

**Could you introduce the association? When did it originate and how is the…**

The association was created in 2008 and legally assembled in 2009 with 30 producers. Then the associated started growing with different projects, one of them on production alliances with the agriculture ministry, growing to 81 producers. Then new farmers joined the association up to approximately 100. Yes. We got to 100 producers and we continued with a project to implement technology from Comil, created by Semicafe, which is to reduce water consumption in the production of coffee from 40 liters per kilo of dry *pergamino* to only 0.5 per kilo of dry pergamino, through a *cereza* coffee *beneficio* center. That has given us the possibility to scale the commercialization. Taking care of the environmental side and aside from that, a better coffee commercialization. That has given us the opportunity to sell large volumes to Canada, we’ve also sold to Japanese clients. Here, at the national level. And we have been growing with projects like the quality lab, here where we are. And we are also going to have a roasting, threshing, grinding and packing, dosage, here in these same facilities, with a Dutch roaster. The Giesen, that you have.

**Giesen? I don’t know it.**

It is a high-quality roaster. We have already tested it, we have roasted in it, and it is very good. It is of Dutch origin. And other German equipment. Several equipment is imported and it is high-quality equipment to provide the farmers the opportunity to make a change from their coffees and to also make a consumption, a self-consumption of high-quality coffee from their own plot.

That was weird in the 2009, 2010. That was not seen. Before we would always take the subproducts that were left. The *pasillas*… What was left from exportation. What was left from residues, from low quality substrates. That was what we would consume here in the national level. Nowadays the chip has changed and now we are consuming coffee of very good quality. National consumption. And we have changed the chip so that people are able to identify which is a bad coffee and which is a good one. Which is a *pasilla*, and which is a very good coffee. We have taught that and we have instructed people here in this lab. We trained around 1000 people, which keeps this lab working. That has been made through agreements with different public and private entities.

The association has also received resources from the Rotary International Club. They have also had the opportunity to participate with us and we have had the chance to access to resources by the Rotary Club to implement technology in the plant. At pulping, increasing the capacity, and getting a better coffee quality compared to the obtained before. I mean, introducing new equipment in the plant.

We also have a group of women, now diving into the environmental aspect, where they are processing pulp by means of vermicompost. Growing vermis. They are a group of women, within the association, that wanted to make an independent group in the association, they’re still part of the association Cuchilla, and they use the incoming material from Cuchilla. But they assembled, a group of women, a base group to process part of the pulp and part of the honey. Within all of that process alternatives to process the by-products… That has been made a lot at the private level as an alternative… Let’s say, they are generating drinks, animal food, and a lot of stuff. That is something we want to explore, too, but through the institution. I think that educational institutions like the technological university and you, who are doing research, we need of your help to find new alternatives of commercialization and research, mostly. Because there… We are underperforming in research. I mean, there are many things that the private sector does with their own money and all of that, but at the institutional level we are lacking on expanding the investigation range. For them to ally with with organizations such as ours and for them to help us in that field. Research, because research in the private sector is hard. It is highly costly. For us to invest highly costly resources in those processes of research, we couldn’t afford it. That’s why we need of the educational institutions that have the tools, the labs on microbiology, in many other things, and they have the tools to support these organizations, to look for alternatives. Since we have the raw materials we could create a new commercialization line with these by-products. But we are lacking that. For example, this thing you’re doing where you come and ask us stuff, we should already been doing research with the institutions. We have looked for channels but they only get so far and we need that the research conducted in universities won’t stay only there. They should come out to be used commercially and to be used by the private sector. That’s one of the things that we should start. Right? Sometimes the research stays in the universities but we need to get it out. I mean, everything the young people and the professors do there, in the university, we need it to become reality in the private sector. But, let’s say, sometimes the research stays stored. We don’t implement them, we don’t change. And we also need investment from the governmental sector. If they, let’s say, do research with the students and they generate an opportunity for a product, it becomes true through means of what? Machinery, equipment, products, packaging, boxing, all the aspects that form a commercial thing. And the topic of marketing. Right? For all of it to become an integral issue. That’s something I’ve been thinking a lot and I’ve expressed it at the federation level. We have a research lab in SemiCafe but they only reach certain point and they don’t… They don’t… The by-products only go towards creating organic fertilizers. But beyond that, there are bigger opportunities to explore. Which many have done but they’ve lacked the financial muscle to go ahead and we really haven’t. And they’re taking advantage from it. For example, you can find teas, teas of coffee with its shell, already commercialized and even more expensive than the coffee.The shell being sold at a higher price than coffee. And we have energizing drinks, too, with coffee or with coffee subproducts. With the honey. With the mucilage. But that has been made by the private sector but they are really hermetic. They won’t explain how they did it nor will they share it with other. They would become the competition.

What do we need? That it doesn’t become… That they become good alternatives for commercialization and to improve the environmental topic. Right? That’s what I would think we should share. Not being too hermetic but to share.

**And why did you create the association?**

The association sought to improve the area of sustainability in a group of members that notice that by getting together they had better opportunities. Commercially, environmentally, and to go ahead with their families. And we’ve achieved it in some aspects, right? In many levels because we have created, we have generated through the association, we are creating formal jobs. Solutions for the producers. Because, let’s say, they arrive to the central *beneficio*… There are farmers who can’t do the *beneficio* at their own plots because of problems, let’s say physical. So the central does the process for them and it pays them very good for the coffee. And it gives them an additional alternative because, let’s say, within the commerce there is a lot of people who pays very well for the coffee and others don’t. And there they have the possibility to sell wet coffee, which is not dry, and others don’t. And we are an additional alternative within that range of opportunities. *Unintelligible*. And we are providing it not only to the members but also to the no members.

**How is the relationship with the cooperative and with the federation.**

We are a little of everything. I mean… We don’t have, let’s say, nor discussions nor we have had any problems with them. If anything, they are allies to the association to work together. Whenever there is a project, we invite all of the actors, either public and private ones. And cooperatives and the federation, to work with us and we have had their company economically as well as in projects that benefit the general public, as it is the federation, the association and the government. This lab, as I have said, has prepared many young people who stop doing bad things. They come and start studying coffee flowers, they find an alternative for them to start preparing for their own entrepreneurship. A coffee brand. Not only ours, but people from other brands come here. Or an alternative to other producers who are not associated, to bring a client and serve them here. Here we have served people from all over the world. From all over the world. Koreans, British, have come here. From all over the world they have come here. And not only to buy the coffee from the association but also coffee from other producers who are from the region. And from Mistrato, from Guatica, from many places, and we provide the space for them so that they can conduct their businesses. So we accompany them through all of that process without any cost.

They have the possibility to use this high-end equipment. The lab. Here they have all the tools, which we didn’t had. And that was obtained by the association through agreements with the federation, the cooperative, the government. Everyone who wants to help this kind of entrepreneurships. We are a non-lucrative organization. What we want is to provide people with services. We don’t need to generate large amounts of money. We need to provide work, development, educational, and many types of opportunities that are not related to filling their pockets but to prepare people to manage their plots. To manage their plots as a company. To generate a space for them so that they can generate better prices for their coffee. And also to be the bridge to make negotiations and generate added value. Which is by industrializing or by commercializing it in a better way, which is not in commerce. Which in commerce you normally wouldn’t find for large volumes. Right?

We have also been trying a lot to explore the by-products. And that is something we’ve been wanting properly. But as I said, we all have to coordinate. Even you, now with this visit, you could do something. If you are professors, you are working with universities… From there, where you are working with universities, make some agreements but they should come all the way from the research of the subproduct to the final product. And for that alternative, for that subproduct, which are plenty, that could be researched from your side, gets to be commercialized by a non-lucrative organization like this one. So that it becomes an extra income for a small family. And for that income generated through there, to improve the conditions of that family. That’s it. Because coffee producers like us, which are small, we don’t have big incomes. We simply generate a stability for that small family. That’s what we are after as an association and the people who join it. If we have an alternative, research, where we are going to improve the environmental part, we are going to improve the social and economic areas of this small family we have here through research done by you, that’s very good. But that this research, that you performed here, won’t go elsewhere where it will become a commercial thing for one or two people. That the group of producers where all of this process was done are left… Then what happened? What happened to all the assessment you did with us? And at the end it was generated… Or that an investigation is done, and a conclusion is created, and it works and then commerce… And that would work anywhere but it just stays there because machinery was missing, equipment in order to get that working. And at the end nothing is achieved but a research that will be taken by someone in the private market and won’t really generate employment, development, any added value. No.

**Do you have many experiences like this, then? With researchers.**

Yes. There have been things that I don’t think that… Because they become… How can it tell you? There are experiences because we’ve been around for many years and I’ve seen and I’ve noticed, and I’m not talking about the technological or anything because has been a good experience, but I’ve known of experiences and we’ve also had some… The idea of these experiences is towards something integral. I don’t want it to stay there. That the association comes, makes a research, says “it is this many millions”, they get generated and taken from the governmental sector or from a sector that supports an NGO, they get some resources, they take it to some professionals and that’s as far as it gets. No. If you’re going to make a project as this one that you are doing, research, go all the way in. No that you come, did research, take that information and at the end you develop it with a private actor. That’s what I don’t agree on. That the association becomes a… For you to utilize is for that kind of things. But if a research is going to be made get all the way to the bottom. Something integral. Get to know the association. Know the purpose of the association. And if a research is going to be made and it can go all the way to the bottom of it, investigate what products could be developed. Let’s look for the resources to implement what was investigated. Because nothing… A lot of money is spent in research but at the end it lands on nothing. Tell me what the… No. For me projects should be “we start here, we investigate this, and this was the outcome and we will implement it there”. Everything, complete. To close the cycle. But we don’t earn anything from investigating and just staying there. That’s something I’ve been bringing people’s attention to a thousand times. Calling their attention in a positive way. Not calling them out, no. It is calling people’s attention for them to get to the bottom of everything. Well, let’s implement, let’s say take the example of this research you’re conducting, but get all the way to the bottom. Generate a product from that investigation. Don’t stop at the paper. Get to the bottom and look for… There are many possibilities and you know more than we do. What doors to knock on to obtain resources to get all the way to the end of… Let’s say, let’s work with the mucilage, with the coffee. Let’s go all the way to the bottom. Let’s investigate, how many hours… Do the research. The association will help with all related to that research but at the end they are left with an input and a product, to this organization. To put it in few words, that’s it. But not doing that where it stays only on the paper, knowing there are possibilities for it to become an environmental measure, right? An environmental measure, an alternative with added value, and a product that could be sold on the national and international level. And there the investigation… That’s when I think an investigation is successful. I think at the end that is success. When it provides a product to these organizations, like us. Right? That’s how I think would be the dynamics of an integral research. Well, I think from my side. And that it won’t become a private interest thing. That at the end, the research that you performed with so much effort, spending so much money visiting everywhere, investigating, and finally for it to be left there. *Unintelligible.* That’s what I… And look more into the bottom and get to know the organization that are really worth it. There are many organizations, like ours, that national and international entities… They have invested in organizations like ours. Nothing has been lost. Everything has been optimal. An optimal investment that has been exploited properly. That’s why we earned a prize called *Emprender Paz*, which is a prize given by the Swedish and national Colombian government. I will bring it so you can see it. We earned it after one year of them getting to know the organization. At the organizational level… in all the aspects. With interviews like the one you’re doing to me but to other producers. In general. All the producers from the organization… Many of the producers were interviewed and they realized the impact the organization has on their families is very positive. Then, that’s what I think. A research should me composed by all of that, for it to go all the way until a final product. A raw material being utilized optimally and getting to a final product, to commercialization. That I think is very positive. That it won’t stay, many researches get stranded in the way, and nothing. At the end an added value nor anything is achieved. And that is reality. You know many times it ends like that. That’s why… I don’t know how far your thing goes but it would be nice if that research you’re doing gets to the public sector and that people can take advantage of it. And that it was and alternative for coffee and cacao producers. Which are small because at the end, the majority of cacao and coffee producers are small. The national average is 1.9 hectares. In the federation there are some medium ones and one or two big ones. But most of Colombian coffee producers are small ones. You will see producers with half a hectare, one hectare. That’s the average, small. We are all small. But that would be a very good alternative. A very good one. That at the end, organizations of small producers, like ours, really end up with a good product from that research. And that they really get to the bottom of it. Because resources can be obtained. They’re not resources impossible to get. We have knocked on the doors and we have managed to accomplish many things. The last resources we got were from the Rural development agency and the United Nations. The is a project of 500 million pesos, 600 million pesos, it goes all. In total, 1 300 million pesos for roasting, threshing, grinding, packing. All of that, we didn’t have. It was an alternative. If it is a project to transform a by-product, and we arrive with an investigation and… We have all the tools there, we have the raw materials. Getting to a final product, that would be ideal. For that research you do, and it doesn’t have to be with us, you could do it with any other organization, but for it to become publicly available and people can get a benefit from it. That’s the idea. Right?

**Yeah, that’s what we want. And what do you consider to be the main challenges in the sector?**

That. That’s the challenge. By-product transformation. To get… Because with coffee many things have been already been invented. With the coffee, the bean. With the bean you make coffee… Nowadays it even works for losing weight, when green. They do a lot of things. And there are even more products that could be created. But with by-products there are very few things. What you are doing right now, there is very little of that. There is very little of that and we are missing a lot. We are missing a lot. There has been a lack of research about that. And even though we have a research center, we are lacking. I’ve told them. I’ve told them at ServiCafé “you’re lacking, you got stuck there. You’re lacking”. Universities are lagging behind when investigating on cacao and coffee by-products. What you are doing is very good. But get all the way… Finish it. I know you have resources, as a university you can develop integral projects that land on a final project. With some organization. But that research must go to the bottom. I don’t know if it is positive or negative, what I’m telling you, but for me it is the most positive thing there is. Because we get nothing from doing a research and it remaining on paper. On paper everything is possible. But to get to an end point, researched, to get to the end where you can generate something real, something… That’s it. And if it becomes a control, in the environmental aspect, that would be nice. And, let’s say, I know many beneficio centers throughout the country where they haven’t been able to create different products yet, and they have a lot of raw materials but they haven’t been able to… Other than transforming it to organic fertilizer. That’s as far as we get. That’s as far as we get. And there is a lot of raw materials. Imagine all of these raw materials being utilized and making it marketable throughout the whole world, making a product well accepted in the market? This product would even be a better alternative than coffee. There I see a lot of potential. A big potential, huge, with the shells and the cobs. The shells and honey from coffee. But research is needed and us, as small producers, don’t have the possibility nor the economic muscle to look into hiring a group of professional and tell them “Come and investigate the honey that comes out of this and what can I get at the end”. I can’t even do some lab tests. How expensive is it to rent a lab? If I go to any lab, they are going to charge me a lot of money and we don’t have it to do that kind of stuff.

**In your introduction you were telling us about a project you were doing, where they collect the coffee fruit and…**

The beneficio central.

**Could you tell us more about this?**

The beneficio central is communal. It is where we centralize the coffee beneficio. To *beneficiar* the coffee is to pulp it, to wash it and to dry it, ok? That’s up to where the beneficio plays a role. That’s where this women aggrupation walks in for the pulp.

**And how many producers are involved in this initiative?**

It is the 100 producers, the producers in this central.

**All these 100 producers take all of their fruit to one…**

Throughout the year we buy from 200 different producers. Associated and not associated. This is the administrative part, and a kilometer and a half down from here is the central.

**Then the producers don’t do this beneficio in their own plot but here.**

They do it here with us.

**Oh, ok. That’s something new. It is something…**

In the country there are only a few. But the reference on the national level is us. Almost all of the country comes and sees us. Because buying everything is very had, the administration of the central is hard. The machinery is more complex, bigger. But we’ve done everything as projects, and we have gotten into debt from the bank.

**And how was the change for the producers? Because traditionally they would do the beneficio and now they have to take it to the central**

Exactly, they have to bring it every day, the cherries. They have to bring the cherries every day and it becomes a whole new culture, different, on how coffee is sold.

**And how was this process like?**

This was a process together with SemiCafe, and we trained the producers a lot beforehand. When I… When someone wants to create a central, they come and asks us. And I always tell them “Before building the central, teach. Educate the people a lot. Tell them about the advantages and then go into building it. But design it properly. Without mistakes. I can teach you”. I would spend up to three days, teaching them how to manage it, to every group, three days in a row, all day long, explaining them and it was not enough days. On how it is organized, how it is administrated. I’ve already helped many centrals, advising on how to design the beneficios. I’ve help them with many things, too. But we are raw on the field of by-products. We are raw on that, and that’s why research should go more towards there.

**So, you do this with the 100 producers. And how many hectares are the in total?**

300 hectares. And there are producers who own 300 hectares, one alone. But that doesn’t change the fact that elsewhere… but the majority has a hectare, at the national level, 1 or 1.9 hectares in average. The majority of us are small.

And what is the cherries volume that you collect a year?

**We buy 2 million kilos a year.**

**2 million kilos of cherries?**

And we produce 800 thousand kilos of pulp. And we produce around almost the same amount of mucilage. We produce around 500 thousand liters of mucilage.

**And all in the same place.**

At the central. Then there is… If a product is launched, there is raw materials to do something big. Something big. The thing is that we don’t have the financial muscle to take that step from the by-products. There are many alternatives. Organic fertilizer is one, right? It is one alternative. And a good one, because it restores the soil. Organic fertilizer, that is made by vermiculture, is very good because you apply it to the soil, it helps on the absorption of nutrients and all of that. It is very good for the sowing, new sowing. You throw it to the hole, you mix it with the soil, you… it is very good. It is one of the alternatives. But there are thousands of alternatives that could be done if it is researched. *Unintelligible*. I mean, there are alternatives for consumers products, beverages, medicines. There a lot of products that could be done through… from the mucilage and the pulp.

**And what’s the price that the producers get for the cherries or, I don’t know, how do the producers get paid?**

It is as if they were selling it to me already dried and we do it with a formula, which is the SemiCafe’s one. Yes. A SemiCafe formula. What that formula does is… What that formula does is to convert he cherry as if it was dry pergamino. So I pay it to them as if it was already dry. And it respects the conversions, the payment method. It is a very fair price. When there are commercialization overprices the producers get money back. We charge very little for the beneficio. It keeps the producers who come here very happy.

**That we can find it in SemiCafe or can we…**

What?

**The prices that the producers receive for the cherries. Per cherries’ kilo, I don’t know.**

Oh, that. That varies a lot. It depends a lot on the quality of their coffee. Because you also have to identify the quality. Because you are careful with your coffee, you do a good beneficio with it, then you deserve a better price, right? You do a better control of your plagues, manual, I don’t know. And you don’t fumigate on time, you don’t fertilize on time, you don’t do *rered?*, and the coffee is of lower quality then I won’t recognize the same from you than from you. That’s fair. Then that is seen in the coffee analysis. When they analyze the coffee like this, it is one of the characteristics. For it to be a fair price. A fair price for the one who does a good…

**And what is the process? The producers bring their cherries here and what do they do afterwards?**

Afterwards, we take it, it now belongs to the association, and the association seeks a better commercialization for the cherry. That’s how we have been paying off a credit of 6, 7 million pesos, which we’ve had… We still have this year and two more fees. And with that we have paid. But on most cases, it is an overprice and we give it back to the producers.

B**ut the cherries come here and then they will be characterized and separated or how does it…**

We can separate it, depending on the negotiation at hand. Depending on the business at hand.

**So you generate a lot of pulp and mucilage. And then you produce composting.**

Composting. And we take it to a biodigester and in that biodigester you undergo a control. But that biodigester is missing… it hasn’t produced gas. It needs additional products for it to generate the gas that serves for combustion. So far it hasn’t… It needs something like manure, other ingredients, but in reality, that mucilage could be used in something different. I believe there are alternatives but they should be investigated. And we don’t have…

**And the composting production process is the thing you do with the women.**

The women.

**Only with the women? And why? Why not…**

Because they wanted to take over that area and they wanted to generate a new income for themselves specifically. And despite that it hasn’t brought them money yet because they had to do an investment, since there was nothing, they have looked for international alternatives such as Yara. Yara the fertilizers company, Norwegian, that company provided them with 50 million pesos. The government gave them a little more. The association has given them some. Like that, because they don’t have much. And the little they generate they re-invest it in making a new bed. And such. Then they go and sell their… after doing their chores at the plots, they take some days a week to go and feed the worms. They feel they are, and they are women, they feel they’re doing something different on top of their plots and they generate added value. But that added value they have re-invested it and re-invested it, making their project grow. And they have acquired debt and everything to put some bricks to make a drier, to do worm processor. They have had to… But they need a lot of investment and that we are seeking it through means of projects.

**So a lot of the financing for the association and projects comes from outside, from institutions…**

We don’t generate money in large quantities but we want that the farmer directly gets… We set up projects to be able to grow through projects. Both from public and private entities. And NGOs. Do you know rotary club, don’t you?

**No.**

Rotary club.

**Ah, yes, yes.**

It is at the global level. In the Netherlands and everywhere, the Rotary club is present. They finance environmental projects, social projects. We were one of the beneficiaries.

**And do you also have projects specifically for young people?**

This is one of those projects. Here. Today, after noon, they’re here getting trained. On the technical level, baristas, tasting. They come after noon to study. Sometimes they come already in the morning to practice barista, to learn how to make coffee drinks for their entrepreneurships, to taste coffee. They come here and constantly they are…

**Do young people want to get into farming and coffee production or…**

**Audio drowned by motorcycles from 38:22 until 38:36**

…Coffee makers and producers. And that brand has reached all over the world through visitors. Here you can see it.

**Since when have you been doing this? Since 2008?**

Since 2012 we commercialized a brand called *Café Cuchilla de San Juan* and we now have changed it, because of a consultancy we had, they said it was better to not share the same name as the association but to be a different brand. And *Mokatan* has a double meaning. Moka because coffee tends to be chocolate-like, sweet, therefore the moka is related to that. And Mokatan was the name of an ancestor from the regional tribe. A tribe which is Mokatan. And that was the name of the first streets in Belen de Umbria, Mokatan. So it is a tradition, too. A local tradition. And we have it in English and Spanish. Everything to be commercialized anywhere. And it has reached, it has reached everywhere. Japan… They send us pictures from everywhere like “look, it is here”. It has been liked a lot. We commercialize it at restaurants, hotels, cafes, supermarkets, everywhere. There are orders from everywhere, also with a company that exports it too. Not in such large volumes but we do. It is a coffee which is costly, although it is not even that costly, right now it isn’t; because raw materials are very expensive. But it is a coffee that has been liked a lot. It has been liked a lot.

**Since when have you been doing this initiative with the centralization of the beneficio?**

It has been working since 2016.

**How many people work in the association?**

9 people. With all the law benefits, social security, the RL. In these towns all of these benefits… the people who have them is usually because they work in public institutions but the work in these areas is very informal. But the association has tried that the people who work for the association to always have all the benefits in law. And we have generated employment for the children of members, too.

**I would like to show you an image. This is the concept we work with, called the biohub, which is like a cluster. And the idea is that there are different communities that produce biomass that is not being utilized, for example the coffee residues. They are transporter to a biorefinery where different products can be generated, like biocrude, which at the end can be used by the maritime sector, for example. But that same process also generates different subproducts such as biocarbon that could be used again in the region. And biogas and water. And we want to understand with our field research if it is possible to develop such a system in Colombia, and what conditions or requirements are necessary to develop it in an inclusive way. Which would also be a benefit for the region.**

For this… The biomass… For a project like this you need volume of biomass, right? And that’s what we have in the central. Volume. And to concentrate that volume in a single place is very hard. It is very hard that a small producer would generate biomass in large quantity. The advantage of the central is what you obtain as a beneficio central. The concentrated biomass in a single place. And, let’s say, this was being analyzed in the municipality. Lately we’ve done discussions on concentrating biomass. Pulp. Mucilage. Banana skins and stems. Municipality organic by-products that we produce in the municipality. Concentrate it all in a single place and transform it in a product generated… I don’t know. That’s what we have… But as I told you, that requires research. We’ve been wanting it and that’s the thing we have been talking about. The last time in a meeting 8 days ago. About gathering biomass. Biomass. About creating a biomass plant but the issue is that requires a large investment. And I don’t know what would come out of it… It could be fuel, right? From that biomass, I don’t know, based on the research you have conducted; what could come out from it. From a mixture of all of these products.

**That’s something we want to investigate and we have a colleague in the Netherlands that is doing experiments in the lab, and we are going to get some samples from here to do some experiments to see if it is possible, but the idea is that a biocrude could be generated from this biomass.**

A bio-what?

**A biocrude. Sort of a biofuel.**

To move…

**A biocrude like this.**

And that would move…

**The biocrude could be used as biofuel for ships and…**

This product could work for…

**Or it could be transformed into bioplastic or that kind of things.**

There it is. Look at that. That is not far away from what I was telling you. But the idea is for this no to just stay there but for it to become a reality. Yes? For it to become something physical. Or better said, a good pilot would be for you to implement that in a beneficio central, like here. It doesn’t necessarily have to be here but that idea you’re bringing today is what we have been wanting. To produce something different with that by-product. And we have in volume, which is the most essential thing to make this sustainable. Because if you have a single producer alone, somewhere there, this doesn’t become… It is not… It is not massive. But if every producer is united, like us, which is an association, we… I don’t know if I have told you but Belen is an associative capital. We do all projects in association. Even during the violent times there were, because Belen was a conflict area, a red area, the alternatives after the de-movilization of armed groupds, the alternative which push forward this town the most were the association. We have banana associations, quince associations, berries associations, coffee associations, horse… Of anything you can imagine. Therefore we know how to work together and we have demonstrated that by working together we can move these projects forward. And now we are working together on these alternatives like the one you brought today. I see it and it is what I have told you. By-products from all of this, that we are generating and could be contamination and could be many things, but could become added value. Here a plant for this fuel could be created to sell it and generate an added value to the small families. And we are doing an environmental control.

**Then this is a topic you are discussing with the municipalities?**

With Belen de Umbria and with the associations.

**And also with the committee?**

With the committee… Well, I represent the committee… But we always land on a conclusion. We are small producers and we don’t have the financial muscle required to do that sort of… We are a non-lucrative organization and so we always look for alternatives for financing or management. Resource management in order to do these projects. But we don’t know how to… We know where to knock on many doors but in this environmental topic, despite the fact that is a global worry… Sometimes it won’t get enough attention. And at the end of the day, it is always a commercial thing. If it doesn’t generate money or it doesn’t… And it just stays on the paper, or it is taken by private sector and the producers don’t get benefits at the end. There are many investigations which ideas are taken by the private sector and that generates a lot of impotence. To have lended much information, handing in experiences and then leaving without getting to hear anything about the topic.

This project agrees with what we have been studying. And we count with the volume to… The raw material is there to do any of these things that you have been researching. And we are organized for that. What is needed is research and investment in something physical because we really woulnd’t have anything to do it.

**Then, the association might have a role in this system. What role could it have?**

No, we are just talking. We are just talking about biomass and such. We have the product. If you… Where are you going to go now? How did you get here?

**In a spark car.**

A spark? Do you think that spark can get into the beneficio central? I think it can.

**Would it be possible to see the…**

Let’s go so you can see what it really looks like… But it would have to be… I have a meeting now and I had already made the… Why don’t we go… I have to be back here before 12. It is 11:30. If we leave now, we have enough time to see the central and we come back up. It won’t take long. So you get a vision of it.

**Yes, it would be very interesting to see. Yes. Yes. I don’t know how our program is today because we also have other appointments in the afternoon but we would really like to see.**

Let’s go see it. It is a plant. It is a kilometer and half away…

PART 2

Here I have gotten… Do you know what a dump truck is? From there I have generated up to 70 dump truck of the big ones. That is biomass. It is mass that can be uptaken by this project.

**And you’ve said that the producers come here every day?**

Every day. If you would like to see them delivering coffee you would have to stay until the afternoon. If you can stay until the afternoon, at 4, 5 in the afternoon… at 5 in the afternoon the farmers start arriving. Or you can do the planning to come back another day at that time.

**Do you think it is possible to talk to any of the women in this project?**

If they’re down there, we interview them. If not, I’ll show you. I’ll show you what is that they do. It is another model. Another business model different to the mass. But the thing is, there is much biomass that it is enough for them and for this. And if we unify many products around that biomass… I mean, creating biomass not only from the pulp and the honey but also the banana’s, the quince’s, the berries’ residues. There is so much here. You know what the issue is? We are packed and they want to introduce mining here. The large scale mining. Not mining because mining can also be small scale. For quarry, clay, gold… Craftmanship. But large-scale mining is trying to get in and they have asked for the 97% of the municipality. Could you imagine a multinational doing open mining in these landscapes? No, no.

**What type of mining? For what resources?**

Gold and copper. The thing is that this town is full of gold and copper. That’s why they want it. You know that with technology nowadays they don’t need to dig anything but by satellite they know where they can find metals. And in this municipality… But this is a coffee growing landscape, we are not going to eat from gold, nor from copper. Not even in the coming years we are going to eat from that. The water and everything… And they are going to do large-scale mining. The urban areas and everything, up to here, it has been requested. Three Canadian multinationals are asking for the municipality.

**And what is the position of the municipality?**

Obviously, no. Nothing. We are making meetings and moving the ground and sky to avoid that from happening. Because that has nothing to do with the major. The major, if they come to exploit this, has to allow it. But we are not going to allow it. We are trying to make projects to clean water, the environmental part, but the large-scale mining kills the soil. I mean, you might have a plot, very beautiful land. Now do a tunnel there and… The water starts to… The water… To affect, it affects everything no matter how you look at it. Our culture. By changing our culture, everything starts changing. And that is not possible, how are we going to change? Maybe if the soil wasn’t capable of producing food. But it does, we have prepared our soil for many years. What did we learn from the pandemic? We didn’t really feel the pandemic that much because, what will you feel in a plot if you are isolated? A family at much would have to buy salt during the pandemic because they had vegetables, they had produce. They had a chicken, they had poultry. The problem was in the cities, living in a fifth floor apartment, without being able to go out to buy milk or anything else. And if you would find it, it would have been expensive. On the other hand you, in the rural area, look, people moved back to the rural area. That taught us a lot of things. So we have to take care of the soil. That piece of land that you saw there, the water produced by that mountain… We can’t let them damage it. Then, we are fighting all of that. We are fighting for all these things.