

Mission report French Guiana
Projet BREEDCAFS
Thierry Leroy 15 mai-20 juin 2018

Agenda of the mission

15 mai: Montpellier-Paris-Cayenne-Kourou

16-19 mai: Kourou, meeting with the staff Bernard Perthuis, Abel Kyriacou, planning field visits.

18 mai: Visit of the fields Combi

21-25 mai : Apatou, farmer's field of the project, harvesting coffee beans and post harvest processing.

25 mai: meeting with J. Beauchêne, Director of Cirad in FG

28 mai-29 mai : Combi, field of the project, harvesting coffee beans and post harvest processing. Kourou: preparing coffee samples to be sent

30-31 mai: meeting in Apatou with the town council to present our project. Farmers' fields, harvesting and post harvesting process

01 juin: Kourou

4-8 juin, Apatou, farmers' fields of the project: harvest and post-harvest with farmers

11-15 juin : samples' preparation in Kourou laboratories, cup tating with Cirad teams in Kourou

17 juin: meeting with M. Torbay, working on Agroforestry systems at Maripasoula

18- juin: assessment of the mission

19 juin: meeting on Agroecology/Agroforestry in Iracoubo, organised by FG region

20 -21 juin : travel back to Montpellier

People met during the mission

- Jacques Beauchêne, correspondant Cirad en Guyane
- Bernard Perthuis, coffee scientist in French Guiana
- Michel Boccara, cacao scientist in French Guiana
- Master 2 students, Antoine Quesnel and Abel Kyriacou
- Farmers in Apatou district
- Julien Ducat, head of Agricultural union in FG (FDSEA)
- Marie Torbay, Project leader in Maripsoula.

Introduction and context

Following previous missions in March and April, the present mission aims to:

- Harvest coffee beans with the farmers and on the Combi station,
- Define a valuable post-harvest processing, adapted to the field conditions and the climatic conditions in FG
- Collect and prepare Samples from the four farms and the Combi field. The samples should be available for most clones at the end of July, after the last Pierre's missions,
- Discuss with Mr Chaulet, local roaster, in order to initiate on the short term a strategy for the commercialization of Arabusta in FG
- Define the economic, sociologic and agronomic conditions for the implementation of a coffee industry based on Arabusta in Apatou region.

I worked with the help of a Master 2 student (Abel Kyriacou), who will stay in FG until August, 18. We tried to contact M. Chaulet, local roaster in FG, but had not any contact with him (phone or email).

Parcel on the Cirad Research station in Sinnamary-Pointe Combi

This field is about one ha (six blocks). Only two blocks have been cleaned properly, but we harvest some beans in the four other blocks.

Samples have been collected for at least three clones (4, 6 and 7) and an additional blend will be sent for analyses in Europe.

Parcels in the Apatou region

Most of the clones in the farmers' fields were ripe during our stay. We harvested with the farmers the cherries, with separation between clones for Alma and Albert's fields. Main clones harvested during May-June were the clones 4, 6 and 7.

The farmers signed the consent form (translated in French) and the MTAs during our stay.

Post harvest processing

The post-harvest processing is very different depending the farmers.

Harry Welline uses a wood pestle. He used working like that, and the quality of coffee is fair.

Thomas Alia uses to pulp the beans manually, this technics is time consuming, but some people help him for this action

Albert and Alia use the mechanic-pulping machine that Cirad bring them.

All farmers are working with a 24 h soaking with water. We propose that, during the wet season where the temperature could be lower (about 23°C during the night), the soaking time could increase until 48h, if necessary.

Washing is the key action. Some of the growers are not washing well their coffees; we tried to adjust that during the mission.

Finally, samples are sun dried for a while (about 3 to 4 days). We get back the samples, and dry them until correct dry matter content at Kourou station. During the wet season, it is quite impossible to dry correctly the samples in the air and then we dry them in a sterilizer at 60°C until the correct water content (10-12%).

Post-harvest processing is the key point for coffee quality, and we discussed with famers for an optimal processing in their specific conditions. When sorting the samples from the farms, we observed a very low quality of the samples (broken beans, black beans) for most of them. We have to complete their training for this key point, to avoid the poor quality observed.

We wrote a joined document, in French, following our discussions with farmers.

Pruning

Most of the trees are actually more than 2.5 meters high, and harvesting is not easy. During our stay, we decide to realize a pruning by cutting the trees at 1.7 m high. This action will facilitate the harvest and will increase the secondary branching of the trees.

In relation with pruning, we propose to the farmers fertilize their fields. Theoretically, an amendment of 100 g of 12-24-24 three times a year is necessary. We have discussed with the famers, to know how proceed for the fields' fertilization.

A joined document in French describes the way for the maintenance of the coffee plots, and the way to improve the coffee production in the existing plots (remove some clones and replace by the best ones).

Cup tasting

Abel Kyriacou prepared some samples and the people from the Kourou Campus participated to Cup tasting experiences. The first results pointed out some differences between clones, but not significantly between locations. Scientists from Kourou appreciated the Arabusta coffee and considered it as a good coffee.

Beyond the BREEDCAFS project

We must consider that, at this moment, it does not exist any possibility for coffee commercialization in French Guiana. The farmers cannot sell the coffee produced from their field, since nobody, roaster or buyer, should buy any quantity of this “unknown” coffee.

On 30 May, we had a meeting with the Apatou Council. We presented the project and the possible perspectives for coffee in Apatou district. We discussed on the way to implement a coffee sector in Apatou in the coming years.

We insisted on the necessary mutual help of the farmers for the coffee cultivation, and the necessity that trained Technicians help them.

As discussed with the town council and Julien Ducat (Agricultural Union), the key point, for the moment, are the following:

- Land availability
- Implementation of a network of farmers concerned by coffee. As some people from the council proposed, Apatou could be a nice place to implement specific sectors focused on Wasai, Quack (manioc) and coffee
- Implementation of roasting and commercialization process for the coffee from Apatou (coordinated or not with a local buyer and/or roaster)
- In order to implement such sectors, specific funds are necessary (RITA, FEADER funds, ...), and the full acceptance and funding help from the town is necessary.

We wrote a first tentative agenda for the implementation of a coffee sector in Apatou (joined, in French)

Abel, during his training, will define the agronomic and socioeconomic limits for the implementation of a durable and economically viable coffee sector in Apatou, using Agro forestry systems.

I Had a meeting with Marie Torbay, leader for an agricultural project in West part of FG (Maripasoula), who tries to implement agro forestry systems on fields that were already used before for a long time. It could of interest to work jointly with her for a construction of Agroforestry systems in the Western part of FG.

Forthcoming actions

- Continue preparing samples for each clone and mixed from all the coffee plots
- Pruning in the famers' fields
- Define a strategy for the commercialization of coffee.

Conclusions

This project mission in FG has been very productive. With Abel, we harvested a large amount of coffee beans. We worked on a clear and easy protocol for post harvesting with the farmers.

We sorted all the beans, by removing defective beans. We will send samples of good quality for the roasters overseas.

We continue testing some of the samples in Kourou, in order to evaluate their organoleptic quality locally, and compare with data from European roasters.

In addition, we will propose the farmers ways to increase the durability of their existing plots (shade, pruning) for the short and medium term.

The key issue for the project is to try to propose a strategy for the implementation of a coffee sector in FG. This implementation should be possible if the farmers are really implicated and work jointly, if the town of Apatou supports the project, and if additional funds are available. People from other institutions (FDSEA, Biosavane) could be interested in the coffee production; they should be associated to a future project.