

Innovation Workshop with Experts and Companies

Part 2 - Challenge (3):

Sustainable Cultivation of Specialty Coffee

European Photonics Roadshow
New Technologies in agriculture & food industry
16 - 17 May 2019
Barcelona, Spain



Public Privat Partnership

- PPP-Project of a group of international shareholders to create a fully operational ecological/ economical/biodiverse/sustainable demonstration model in Honduras
- To be utilized as best practice for other coffee farmers and coffee professionals
- Priority #1: quality (not quantity), focus on Coffee Excellence
- Close cooperation with the local community and cooperative Cafetalera Capucas Ltd., www.mycapucascoffee.com

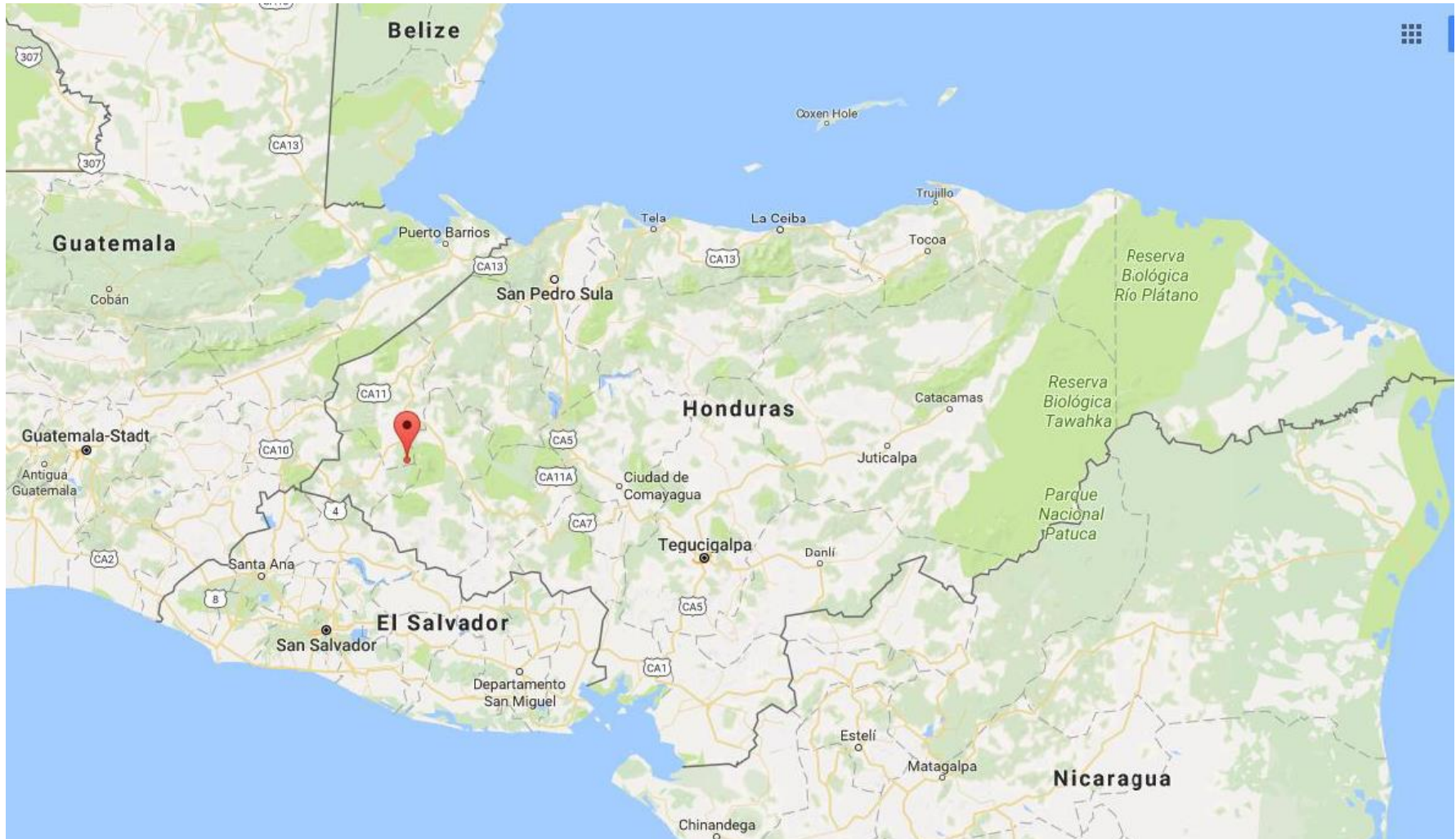




We are in West Honduras



in the area of Santa Rosa de Copan





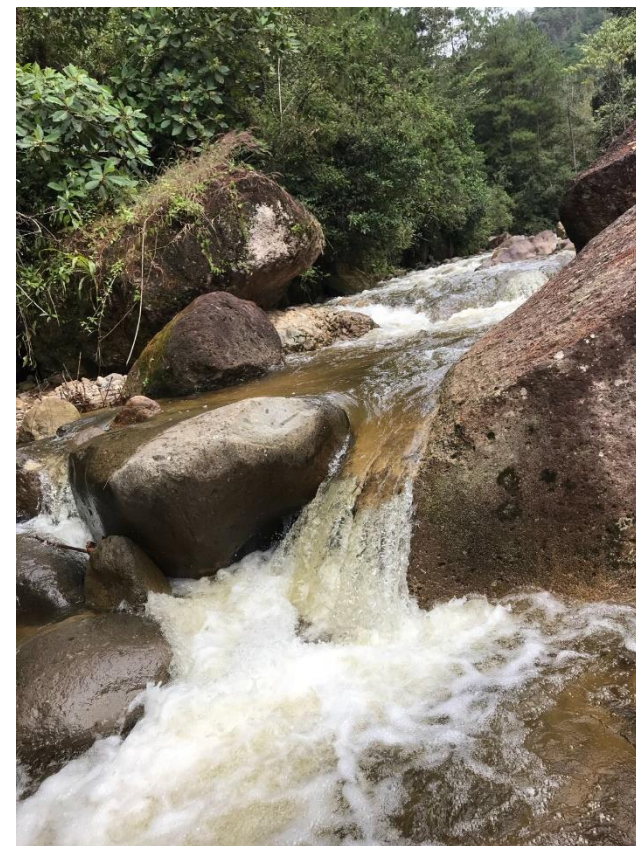
Our Business Modell

- Sociedad Anónima de Capital Variable to Honduran law
- “UMAMI AREA HONDURAS S.A. DE C.V.” owns and operates 1 coffee plantation “Finca Rio Colorado”
- Shares are hold by 31 natural persons
 - 4 from Germany, 6 from Honduras and 21 from Italy
 - representing the entire value chain of coffee
 - coffee growers, coffee professionals, coffee consultants, owners of small and medium sized coffee traders, coffee roasters, coffee enthusiasts)
- Long term investment



Finca Rio Colorado

- Altitude 1,100 m to 1,300 m
- Located in the village Pashapa, Departamento de Ocotepeque, at 20 minutes to Capucas (14°35'4" N 88°47'14" W)
- Total size: ca. 60 mz (ca. 42 hectar)
 - 32 mz already cultivated with coffee plants in good condition (3 to 6 years old)
 - 6 mz partially with small plants or still to be planted
 - 22 mz remaining land: forest, river, etc.
- Adjacent to two rivers
 - Rio Aruco (portable water, comes directly from the “Parque Nacional Celaque” <http://celaque.hn/> (UNESCO heritage, swimming, fishing, ...)
 - Rio Colorado



Current challenges



- Conversion from conventional to organic farming
- Lowest coffee price for the last ten years
- Effects of dramatic Cambio Climatico
- Desease Roya
- Desease Broca

Coffee Price Crisis

<https://www.finanzen.net/rohstoffe/kaffeepreis>



AKTUELLER KAFFEEPREIS IN DOLLAR JE LB.

in USD in EUR in CHF

Kurs	0,870 USD ▲ -1,48%
Kurszeit	20.05.2019 13:36:00 Uhr
Eröffnung / Vortag	0,88 / 0,88
Tagestief / Tageshoch	0,87 / 0,88
52 W. Tief	0,87 (17.05.2019)
52 W. Hoch	1,24 (31.05.2018)

Price threshold for profitability for coffee farmers to be \$2.50 per pound according to research by SCA

<https://sprudge.com/the-sca-announces-new-coffee-price-crisis-response-initiative-138954.html>

Challenge: Broca del Café - Most harmful pest to coffee



- Coffee borer beetle or coffee berry borer (*Hypothenemus hampei*)
- Female drills the berry, lays 35–50 eggs
- Up to 100 beetles can be found in a single fruit
- Shady and moist areas of plantation most affected
- Loss of significant amounts of income due to loss in yield and quality
- Pest management strategies: monitoring, controlled harvest, use of biological control agents, ...



https://en.wikipedia.org/wiki/Coffee_borer_beetle

Challenge: Roya - Coffee leaf rust (1)



- Fungus of the order Pucciniales
- Devastating to susceptible coffee plantations
- No cure at the moment, although farms have managed to reduce their impact by replanting infected plants with hybrids that have a strong genetic resistance to rust
- Ca 17 manzanas affected in Finca Rio Colorado
 - Catuai the most affected variety
 - Variety Lempira affected as well but could be controlled by fumigation
- We had to cut down and renew in Finca Rio Colorado
 - 2 manzanas completely (in El Mirador area)
 - 2 manzanas completely (on the other side of Rio Colorado)
 - selectively 5 other manzanas



https://en.wikipedia.org/wiki/Hemileia_vastatrix

Roya - Coffee leaf rust (2)



- Area along río Aruco: pruning only
- Area of old Finca Rio Colorado without pruning (due to lack of cash)
- Renewing Finca Rio Colorado
 - 10,000 new coffee trees already planted
 - Additional 25,000 coffee trees in the nursery of CoCafCal
 - As soon as rain season starts (expected in May 2019) Panchito will plant the new coffee trees that are currently in nursery (variety Parainema)



Financial impact of Climate Change



- Harvesting season 2018/19 very exceptional
 - Total last year: 375 qq pergamino seco
 - Total this year: 224 qq pergamino seco (-40% compared to previous year)
- Never before such a change in climate was observed
 - In October/November 2018: a lot of coffee cherries on our coffee trees
 - In November 2018: too much sun → the coffee did not mature
 - In December 2018: rain during 8 days → pickers could not harvest
 - In January 2019: a lot of rain. As a consequence:
 - too much coffee matured at the same time
 - not enough pickers available to pick all matured cherries
 - not all coffee could be harvested
 - a lot of cherries did dry on the trees
 - part of the cherries needed to be harvested green because trees were too weak to mature them



Thanks for your attention



What are your suggestions?

What are your ideas?

Please let us know!