

## Project title : CARBOVAL - Development of a method to calculate greenhouse gas emissions for a cocoa produced in Madagascar

Project place	Project cost	Role in the project	Technical and financial sponsors	Dates
Madagascar	35 000 €	Carbon Compensation Expertise	VALRHONA	January 2021 - March 2021

### Project's goals and results

#### Main goals

The final aim of Valrhona is the **full scope carbon neutrality by 2025**. Valrhona controls its supply industry via long-term partnerships. For some origins, it seems that to calculate the carbon footprints of Valrhona, used greenhouse gas are far from the reality. Indeed, the **culture system is organic and under shade**, and it seems likely that emissions linked to production of this cocoa are distinctly lower opposed to the global average emissions of 12 kgCO<sub>2</sub>eq

#### Specific objectives

**SO1.** Develop a method to calculate greenhouse gas emission for a cocoa produced in Madagascar on the basis of two established areas from Valrhona's partners to check used hypothesis in the carbon footprints calculation of Valrhona and adjust it

**SO2.** Develop a quantification method, on a more solid basis, from the absorption of the CO<sub>2</sub> of the cocoa parcels of Madagascar to the build of a reasonable and verifiable carbon compensation system

#### Beneficiaries

#### Results

**R1.** Soil inventory results about **carbon storage** in plantations

**R2.** Analysis of **deforestation dynamics** in the area and the impact in terms of greenhouse gas emission

**R3.** The tool **ExACT Value Chain** calibrated with datas of Valrhona allows also to establish a carbon track record the closest to Valrhona's supply reality

**R4.** A strategy proposition of **carbon compensation** is contributing to the carbon neutral objective full scope 2025 of Valrhona

*Cocoa and chameleon in the Millot plantation*

#### Activities

**A1.** Carbon stocks evaluation in agroforestry parcels of Millo plantation on the West and in representatives parcels on the East

**A2.** Historic evaluation of deforestation on parcels to estimate carbon impact linked to deforestation and to change of soils occupation

**A3.** Maps analysis of existing deforestation (Global Forest Watch) to evaluate deforestation to the level of parcels

**A4.** From the results obtained by the cartography analysis, conduct a slight analysis of agricultural dynamics of the area through area studies that could explain deforestation

**A5.** Evaluation of the accompanying producers program towards agroforestry put in place in the East

**A6.** Results integration of the change of use of the soil, agroforestry sequestration and of other emission sources (transport, transformation...) in a recognizable, easily replicable and transparent carbon track record tool

**A7.** Training to take the tool over for using it in other areas if necessary

**A8.** Mixt insetting/offsetting compensation strategy proposition including obtained results from the previous phase