

BEST PRACTICES AND TECHNOLOGIES

Reducing our Water Footprint

El Agua Nos Une – SuizAgua América Latina



Harvesting and recovery of rainwater

SDG: 6.4 Water Efficiency



Company / implementer

Buencafé

Sector: ISIC 1063. Production of coffee extracts and concentrates and lyophilized coffee.

Location:

Chinchiná, Caldas 4.988483, -75.610597

Update: 19 Jan. 2018



Results

- We expect a reduction in the monthly use of water from the Campoalegre aqueduct of Chinchiná in Caldas equivalent to **9,490 m³/year**.



Other benefits:

Savings:

- We estimate annual savings equivalent to **USD\$3,796** as a result of replacing water from the aqueduct with rainwater.



Supplier Information:

Supplier:

Hydraulic Design (2016): A&A Ingeniería y Construcción.

Phase 1 of Construction (2017): Jose Ignacio Londoño G. S.A.S.

Contact Information: <http://www.aia.com.co/es/>



Implementing Company

Company in charge of implementing

the solution: Buencafé Liofilizado de Colombia
Federación Nacional de Cafeteros
de Colombia.

Contact Information: José Luis Ocampo Pérez

Environmental Management Engineer

E-mail: Jose.Ocampo@cafedecolombia.com



Description

Separation, harvesting and recovery of rainwater harvested in **2,330 m²** of roofing: **996 m²** of plant roofing, **880 m²** of service area roofing and **454 m²** of cooling area roofing. The areas described have an average harvesting capacity of **9,490 m³/year**, maximum capacity of **51,100 m³/month** and a minimum capacity of **4,015 m³/month**. The water is led through a rainwater sewer system to a storage tank with a capacity of **300 m³**. The water is then used in the production process, which requires treatment to guarantee compliance with the applicable quality standards.

Due to the cost of the project and the impact caused to the plant's operations, the project will be completed in stages, starting with the main harvesting networks and storage structures in 2017 and with a completion date set for 2019.



Investment and Operating Costs

Investment Costs: USD\$92,317.68 plus VAT in three years. USD\$6,778.23 were invested in 2017.

Operating Costs: treatment costs for the estimated volume of rainwater are expected to reach **USD\$1,576.67 per year**.



Recommendations and Limiting Factors

The main limitation to the implementation of this project is the occurrence/frequency and intensity of rainfall.



Cases of Application:

N/A



References

N/A