



Coffee Innovation Fund – Kenya

Supporting innovative and scalable solutions to increase profitability and market access of small-holder coffee farmers

Maximizing the benefits of sustainable wastewater management

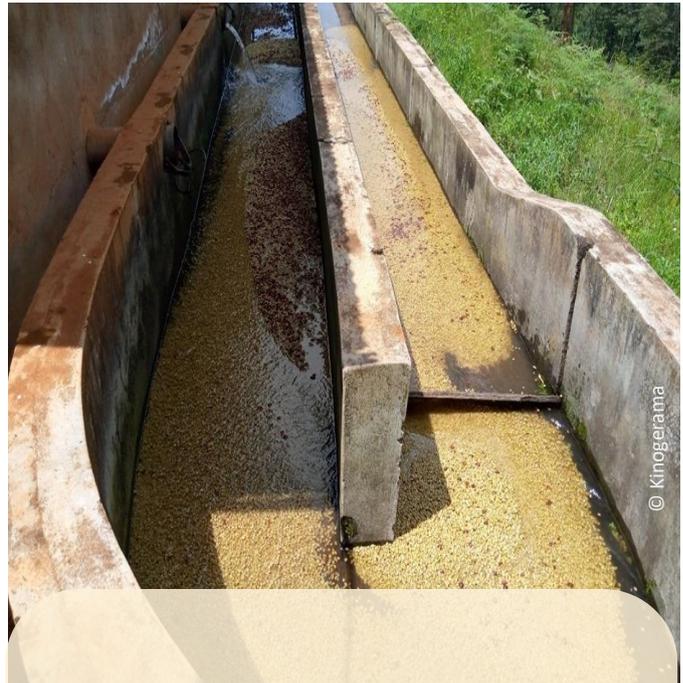
Coffee mills face high operational and maintenance costs to manage wastewater resulting from wet mill processing. Wet mills demand high water volumes, which are typically channeled through diesel water pumps. Despite many efforts to manage water effluents, wastewater run-off often still ends up polluting and discoloring nearby water bodies and is poorly monitored or regulated.

Rwegetha Coffee Factory is a nonprofit center managed by Kinogerama Farmers' Cooperative Society. It will address these challenges through a multi-pronged initiative to manage environmental pollution and increase operational efficiency. An innovative wastewater treatment system and subsequent recirculation of the treated water will require less volumes of water – which leads to reduced operational costs and pump maintenance, while drawing less water from local water sources. This in turn results in less effluent discharged to the environment which can be easily managed. Furthermore, the process can generate byproducts that are beneficial to the society and diversify income sources for the cooperative. Potential byproducts from the recycling process that will be explored include biogas, animal feed, wine, vinegar, ethanol, and fertilizer, among others.

A cleaner environment for 9000 Kenyans

The project in consultation with stakeholders will conduct an environmental impact assessment and design the wastewater recirculation system and initial structure. Staff and society management will receive capacity building focused on system operations. The project also includes an information sharing component.

Once the project is implemented, the volume of water pumped from the river will decrease by 84% and thereby reduce the cost of processing coffee by 40%. A total of 3000 members of the Kinogerama Farmers' Cooperative Society will benefit from the efficient operations of the system and more than 9000 people in Rwegetha and the surrounding areas will enjoy a cleaner environment.



Project overview

Term: 2021-2022
Region: Gatanga Sub County, Murang'a County, Kenya
Partner: Kinogerama Farmers' Cooperative Society, Rwegetha Coffee Factory
Volume: EUR 50,000 (supported by the Fund)
EUR 100,150 (total volume)

Goals

- ❖ Reduce environmental pollution through reduction of wastewater effluent and replication of the water recycling system across five coffee societies.
- ❖ Improve the operation efficiency of wet coffee processing, thereby reducing costs and increasing profitability.
- ❖ Diversify income sources to bring greater profitability to farmers.

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