## °AHoRa: Application to improve the management and yields of musaceae plantations in family farming.

The project seeks to improve the planning and decision-making of agronomic practices in Musaceae (plantain and banana) plantations in the face of climate variability focused on family farming in Colombia, Peru, and the Dominican Republic.





210

Producers surveyed



15 Workshops



**494**Trained people



2 Demo



## The implemented initiative

This consultancy is financed by FONTAGRO and executed by AGROSAVIA (Colombia), IDIAF (Dominican Republic), and Universidad de Piura and INIA (Peru). The aim is to generate a web-mobile application that improves the planning and decision-making of

agronomic practices in Musaceae plantations (plantain and banana) in the face of climatic variability, especially regarding family farming of producers in Colombia, Peru, and the Dominican Republic. The App will be called °AHoRa and will be freely available.

Agtech °AHoRa, decision support tool for musaceae crop management

## The technological solution

°AHoRa, an application based on a calculation platform that takes data (temperature, solar radiation, precipitation and evapotranspiration) from nearby weather stations and converts them into indicators of the productive potential of the musaceae crop (leaf emission rate, flowering to harvest period, potential

bunch weight, nutrient demand, and water requirements). °AHoRa is a tool aimed at adapting to and mitigating the effects of climate change, enabling farmers to achieve higher yields, crop quality and profitability. A business plan for sustainability and the App's operational manuals are included.



## Results

In 2021: 1. Closed webinar with specialists for the formulation of the platform; 2. Public webinar to launch the project; 3. Five equations, which integrate agroclimatic and ecophysiological information on the crop, to estimate the rate of leaf emission, flowering time to harvest, potential weight of the bunch, nutrients to be returned to the soil after harvest, and water needs of the crop; 4. Diagnosis of the production and methods for monitoring the behaviour of the crop in the three

countries; 5. Study of the use of similar applications on the market; 6. Preliminary business plan for the sustainability of the application; 7. Demo version 1.0 of the App. In 2022 we achieved: 8. Demo 2.0 version; 9. Training workshops (13) on the management of the application in the test areas; 10. Updated business plan; 11. Operational manuals for the application; 12. The Demo 2.0 App is in the process of being validated with beneficiaries and researchers in the field.

Participating Organizations







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**MÁS INFO**