

Developing a future-ready farming solution built on an AI-powered engine to transform smallholder livelihoods in Ghana

Results

Yield prediction model accuracy – **74%**

Black pod disease model – **80%** testing accuracy



The Challenge

In a bid to bring about a change in the way cocoa is farmed in the region and to increase the farmers' profitability and sustainability, the RainForest Alliance (RFA) announced the Ag-Tech Developer Challenge as a part of the **SAT4Farming program**.

The Alliance is an international non-profit organization that aims to bring farmers, forest communities, companies, and consumers together to address some of the most pressing social and environmental challenges of today.

Cropin Innovation

Cropin developed a future-ready farming solution **CocoaSense** that leverages **AI and satellite-imagery** to facilitate cocoa farmers in management and monitoring crops in a more accurate, affordable and scalable manner.

The vision for **CocoaSense** is to bring an integrated offering with structured **data aggregation and finishes with predictive and prescriptive intelligence**: intel that is delivered to the individual growers (agronomy advisory) and to the organizations

Building the **cocoa-specific remote sensing** data product on top of Cropin's already existing platform interface to solve the complexities associated with smallholder livelihoods in a lean manner.

Through our solution 'CocoaSense' to support SAT4Farming's objective to **triple the average yields of Ghanaian cocoa farmers' to 1,500 kg per year**.



Opportunities

Farmers need support over several years to improve and renovate their farms to become sustainable and profitable. Plus, each farm is different, so farmers need a tailored approach, not a one-size-fits-all solution. Farm renovation can be accelerated when farmers have access to credit.

Cocoa companies are willing to make an investment in farmers to use sustainable practices, if this investment leads to higher productivity & sustainably-produced volumes necessary to meet customer demand.