

Water and weather monitoring services for cocoa farmers in Ghana



Summary

To help cocoa farmers better manage their crops, it's necessary to have a reliable weather forecast based on data from on-the-ground weather monitoring stations. Currently this data is unavailable in large parts of Africa.

In this project a self-supporting climate observation system will be deployed in Ghana, based on low-cost, high-precision, weather sensors, sending information to a web-based data server using cellphone technology. These innovative weather stations will measure meteorological and water resource variables, which will subsequently be communicated to farmers via mobile information services.

The combination of these two innovations: low-cost weathers station combined with mobile information services will foster economic development and food security by enabling local smallholders to better manage their limited resources and increase productivity.

Furthermore, this data combined with current satellite-data will help fill the gaps in current hydrological models, improve meteorological forecasts and provide more insight into the water cycle, while modernizing agriculture in Ghana.