# COST CUTTING FOR SUGARCANE



# OPTIMISE SUGARCANE REVENUES WITH FACTS FROM SPACE

**CostCutting4Sugarcane** aims to optimise mill revenues by **improving harvest logistics** and **fertiliser management**.

eLEAF's sugarcane solutions comprise a suite of services for operational sugarcane monitoring, optimising sugarcane water use and improving productivity. The added value of the different services includes:

Early insight in field heterogeneity allowing for targeted mitigation measures leading to an improvement in crop performance.

GROWTH

Optimal response to agricultural practices and immediate insight in irrigation system defects, resulting in a higher performing crop.

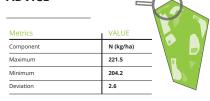
WATER USE

In-sight in fresh cane production supporting logistics and providing insights into expected yields.

**PRODUCTION** 



#### FERTILISER ADVICE



Providing **insights** into how much nutrients have been removed from the soil after harvest, and advising on the appropriate amount of fertiliser to be replenished at the start of the next season.

This information will provide end-users with localised nutrients requirements to optimize fertiliser applications at field level. This will minimize fertiliser stock at estate level.

## YIELD FORECAST



Giving in-season field specific **yield estimates** as early as 4 months into the 12 month long growing season.

It implements meteorological and crop phenology, both sourced from satellite imagery. Mill and Agricultural managers have much better insight into what volumes of cane to expect in the mill at any given time. This guides optimal mill planning and supports the complicated logistics of harvest operations.



As a pioneer in satellite Earth Observation based data and services for agriculture and water management, eLEAF is the developer and owner of a set of algorithms that transform satellite Earth Observation based data into quantitative information on crop, water and climate.

The PiMapping® data components are usable for real-time and historical monitoring of vegetation growth and related water use.

The technology can be used to monitor large areas up to regional or national scale.







**FieldLook** 



All sugarcane services are supported and available through FieldLook platform offering a friendly and flexible environment to visualize fields and estate information even with limited or no internet connectivity.

## **PARTNERSHIP**

The project brings together eLEAF and Colombian partners to work together towards Earth Observation-based competitive solutions. It is supported by the Netherlands Space Office (NSO) and European Space Agency (ESA) via the Space Solutions program.



For detailed information about the project, please visit:

www.business.esa.int/projects/costcutting4sugarcane or contact Ernesto Bastidas : ernesto.bastidas@eleaf.com









